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BUREAU OF AIR REGULATION

**TITLE V PERMIT RENEWAL APPLICATION
FLORIDA POWER & LIGHT COMPANY
CUTLER PLANT
MIAMI, FLORIDA**

Handwritten initials/signature

**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 2002
0237560**

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June 28, 2002

Scott M. Sheplak
Bureau of Air Regulation
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

fol

002

Re: Title V Permit Renewal Application: Culter Power Plant, 0250001-001-AV:

Dear Scott,

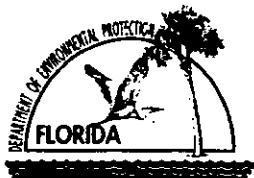
Enclosed are four copies of the Title V Permit renewal application for the Cutler Power Plant. Included in a separate mailing is a CD-ROM disk containing the Microsoft Word permit application with associated attachments (graphics and text).

Thanks for your assistance in this matter, and, if you should have any questions, please do not hesitate to contact me at (561) 691-2894.

Sincerely,

John Hampp
FOR

John Hampp
Senior Environmental Specialist
Florida Power and Light Company



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

I. APPLICATION INFORMATION

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BUREAU OF AIR REGULATION

Identification of Facility

1. Facility Owner/Company Name:	Florida Power & Light Company		
2. Site Name:	Cutler Plant		
3. Facility Identification Number:	0250001	[]	Unknown
4. Facility Location:	Street Address or Other Locator: 14925 SW 67 Avenue City: Miami County: Miami-Dade Zip Code: 33158		
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: **0250001-001-AV**

Reason for revision: **Title V Renewal, Current Permit Expires December 31, 2002.**

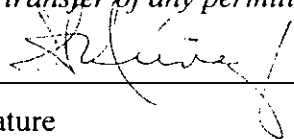
Air Construction Permit Application

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

2
6

1. Name and Title of Owner/Authorized Representative or Responsible Official: H. O. Nunez - Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Florida Power & Light Company Turkey Point Fossil Plant Street Address: 9700 SW 344 Street City: Homestead State: FL Zip Code: 33035
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (305) 242- 3822 Fax: (305) 242- 3821
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 [X], 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 July 1, 2002 _____ Date

* 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 [], 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 [X], 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. Erby

Signature

6/30/02

Date *PCV*

(seal) *KE*

* Attach any exception to certification statement.

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Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
003	Fossil Fired Steam Generator #5		
004	Fossil Fired Steam Generator #6		
XXX	Painting and Solvent Cleaning		
XXX	Mobile Equipment and Engines		
XXX	Emergency Diesel Generator		

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 Cutler Title V Air Operating Permit. The facility consists of two natural gas and fuel oil fired conventional steam electric generating stations, designated as Units #5 (EU1) and #6 (EU2) by the Florida Power and Light Company. Unit #5 is comprised of a Combustion Engineering outdoor-type boiler/steam generator and a Westinghouse outdoor reheat condensing steam turbine which drives a hydrogen-cooled generator with nameplate rating of 75 megawatts. Unit #6 is comprised of a Combustion Engineering outdoor-type boiler/steam generator and a General Electric tandem compound single reheat turbine generator with generator nameplate rating of 160 megawatts. Also included as EU3 in this permit are miscellaneous unregulated emissions units and/or activities.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 570.364 North (km): 2,834.904			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 25 / 37 / 52 Longitude (DD/MM/SS): 80 / 17 / 56			
3. Governmental Facility Code: O	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: Gary Andersen, Environmental Specialist		
2. Facility Contact Mailing Address: Organization/Firm: Florida Power & Light Cutler Plant Street Address: 9700 SW 344 Street City: Homestead State: FL Zip Code: 33035		
3. Facility Contact Telephone Numbers: Telephone: (305) 242-3826 Fax: (305) 242-2821		

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 type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input 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):	

List of Applicable Regulations

See Attachment PCU-A	

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		

Additional Supplemental Requirements for Title V Air Operation Permit Applications

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

ATTACHMENT PCU-A
LIST OF APPLICABLE REGULATIONS

[**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.

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

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

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

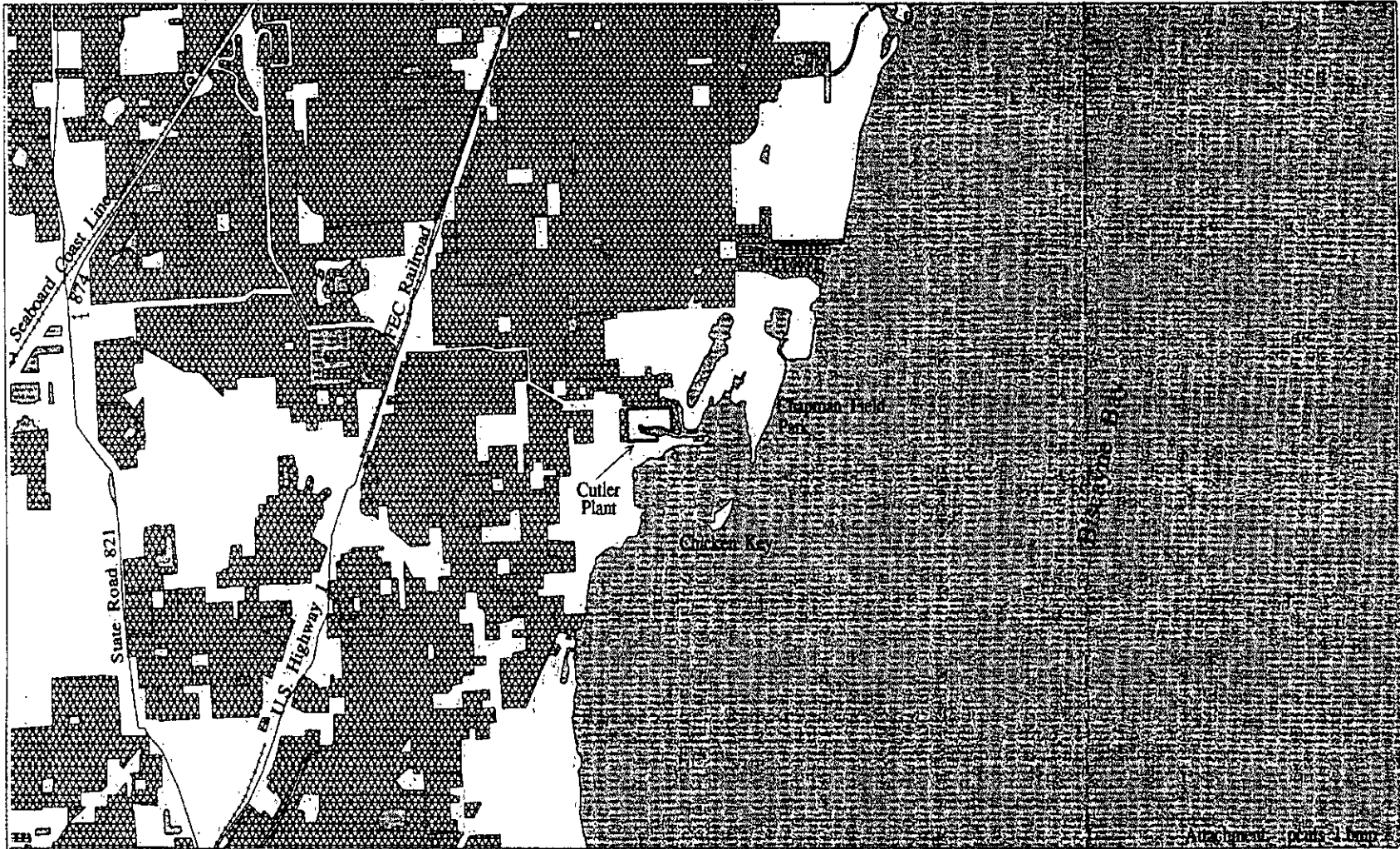
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

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 PCU-1.JPG

AREA MAP SHOWING FACILITY LOCATION








Cutler Plant Area Map

Dade County



**Environmental
FPL Affairs**



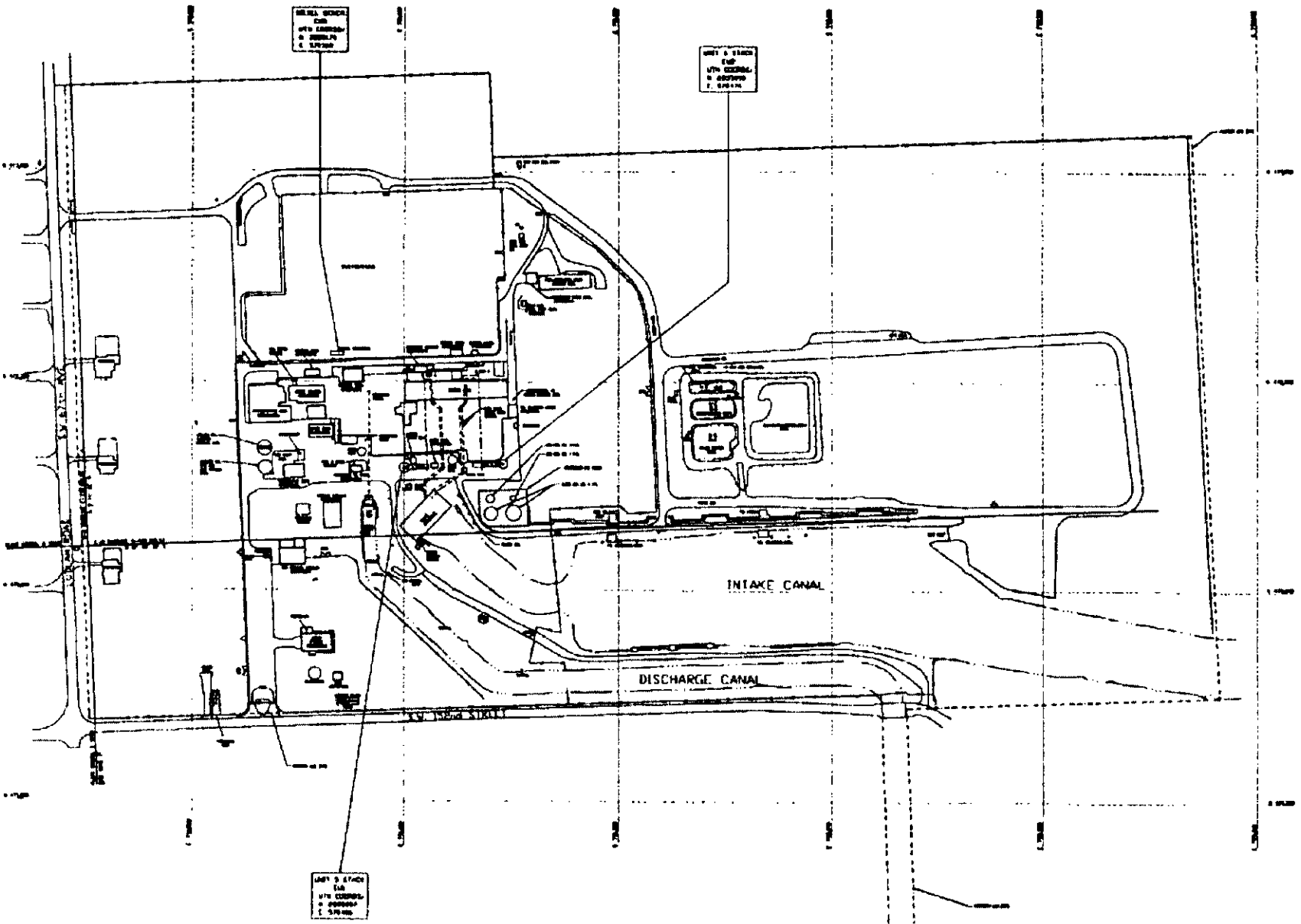
-  Water
-  Residential
-  Plant Site
-  Major Roads
-  Railroads

No expressed or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made. The materials contained herein are provided "as is" and may contain inaccuracies and user is warned to utilize the material's accuracy independently and assumes the risk of any and all loss.

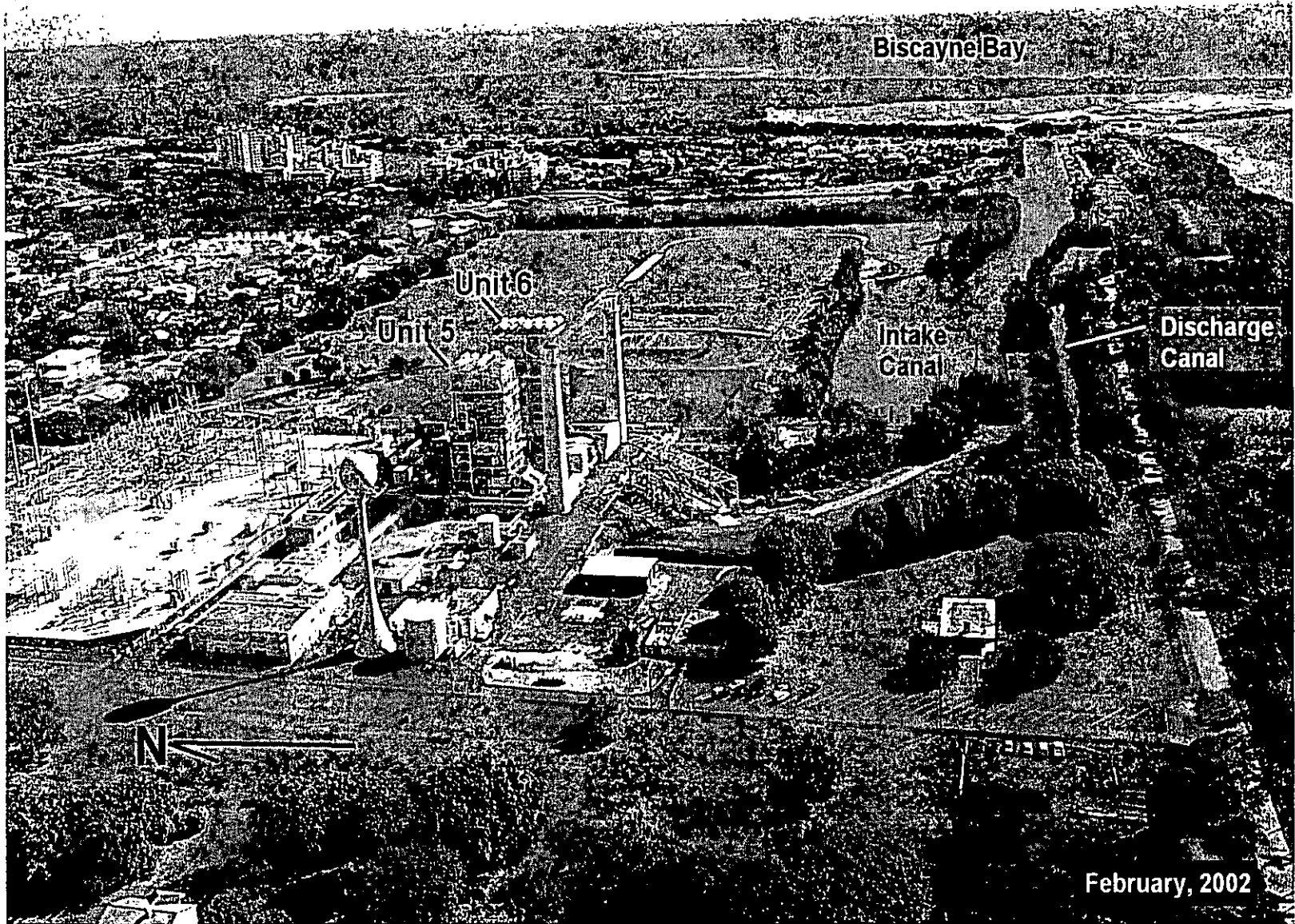
SOURCE: Land use data provided by the South Florida Management District - 1993.

filepath:cutler/cutlermap/fpl-040299 (3-99)

ATTACHMENT PCU-2.JPG
FACILITY PLOT PLAN (DRAWING)



ATTACHMENT PCU-2-1.JPG
FACILITY PLOT PLAN (PHOTOGRAPH)



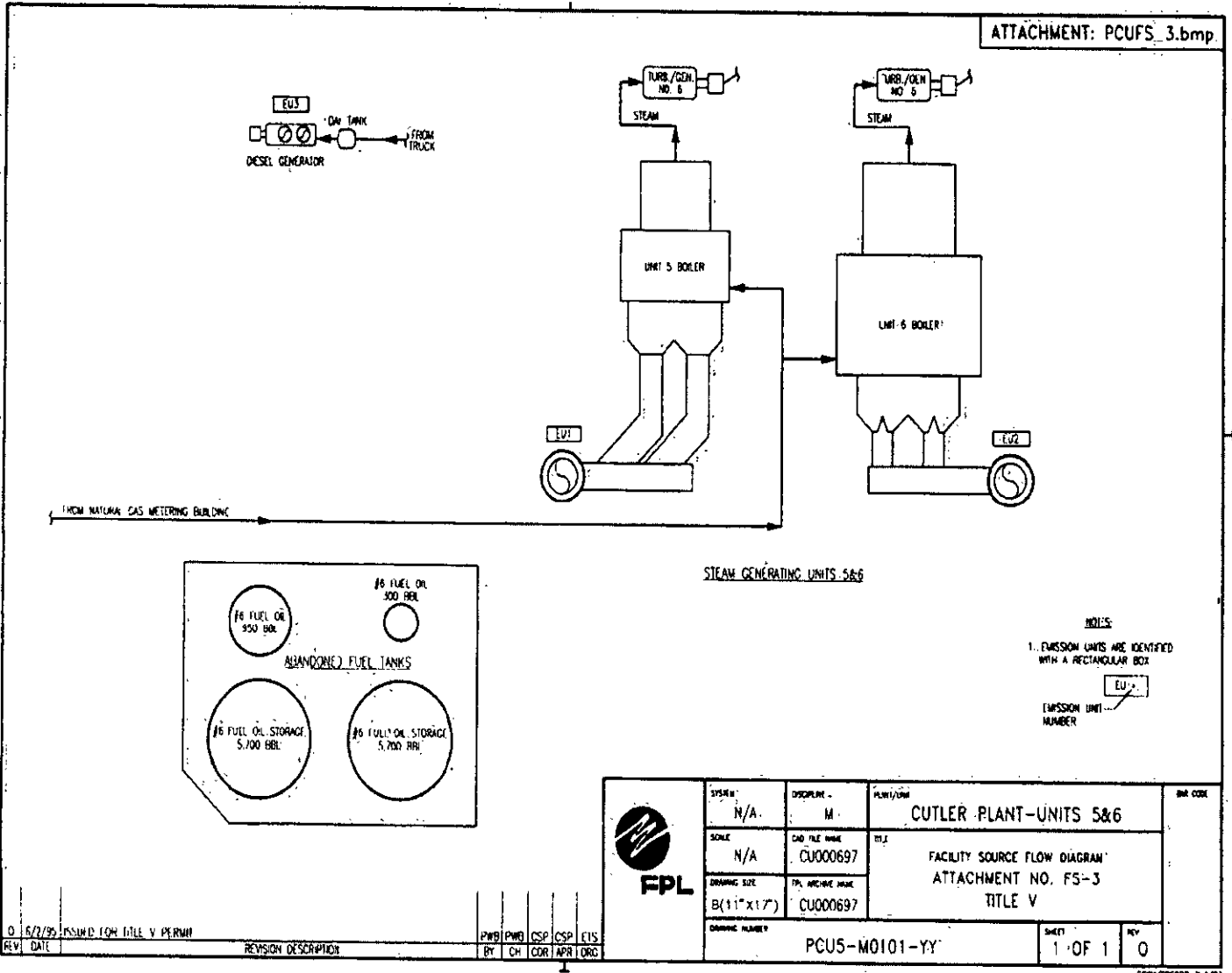
PCU-2-1.jpg

ATTACHMENT PCU-3.JPG
PROCESS FLOW DIAGRAM

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

SCALE: 3/8" = 1'-0"

SCALE: 1/4" = 1'-0"



PCU-3.jpg

ATTACHMENT PCU-4.TXT

**PRECAUTIONS TO PREVENT EMISSIONS
OF UNCONFINED PARTICULATE MATTER**

Attachment PCU-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 PCU-5.TXT
FUGITIVE EMISSIONS IDENTIFICATION

Attachment PCU-5.txt

Fugitive Emission Identification

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PCU_1.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 PCU-8.TXT

LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

Attachment PCU-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	Portable Unleaded Gasoline Tank
10	Portable Diesel Fuel Tank - 2" Vent
11	Evaporation of Boiler Chemical Cleaning Waste

ATTACHMENT PCU-12
IDENTIFICATION OF ADDITIONAL
APPLICABLE REQUIREMENTS

Florida Power and Light Company
Cutler Plant
Facility ID No.: 0250001
Dade County

Initial Title V Air Operation Permit
FINAL Permit No.: 0250001-001-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344
Fax: 850/922-6979

September 9, 1997

Compliance Authority:
Dade County
Department of Environmental Resources Management
Suite 900
33 Southwest Second Avenue
Miami, Florida 33130-1540
Telephone: 305/372-6925
Fax: 305/372-6954

Initial Title V Air Operation Permit
FINAL Permit No.: 0250001-001-AV

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Permittee:
Florida Power and Light Company
9700 SW 344 Street
Florida City, Florida 33034

FINAL Permit No.: 0250001-001-AV
Facility ID No.: 0250001
SIC Nos.: 49, 4911
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Cutler Plant. This facility is located at 14925 SW 67 Avenue, Miami, Dade County; UTM Coordinates: Zone 17, 570.4 km East and 2834.9 km North; Latitude: 25° 37' 52" North and Longitude: 80° 17' 56" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix E-1, List of Exempt Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-1, TITLE V CONDITIONS (version dated 08/11/97)
APPENDIX SS-1, STACK SAMPLING FACILITIES
Phase II Acid Rain Application/Compliance Plan received December 6, 1995
Alternate Sampling Procedure: ASP No. 97-B-01
Order Extending Permit Expiration Date

Effective Date: January 1, 1998
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/tc

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two natural gas and fuel oil fired conventional steam electric generating stations, designated as Units #5 and #6 by the Florida Power and Light Company. Unit #5 is comprised of a Combustion Engineering outdoor-type boiler/steam generator and a Westinghouse outdoor reheat condensing steam turbine which drives a hydrogen-cooled generator with nameplate rating of 75 megawatts. Unit #6 is comprised of a Combustion Engineering outdoor-type boiler/steam generator and a General Electric tandem compound single reheat turbine generator with generator nameplate rating of 160 megawatts. Also included in this permit are miscellaneous unregulated emissions units and/or activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-003	Fossil Fuel Fired Steam Generator #5
-004	Fossil Fuel Fired Steam Generator #6

Unregulated Emissions Units and/or Activities

-xxx	Painting and Solvent Cleaning
-xxx	Mobile Equipment and Engines
-xxx	Emergency Diesel Generator

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit, however, are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

- Table 1-1, Summary of Air Pollutant Standards and Terms
- Table 2-1, Summary of Compliance Requirements
- Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
- Appendix H-1, Permit History/ID Number Changes

These documents are on file with permitting authority:

Initial Title V Permit Application received June 12, 1996
Additional Information Request dated December 18, 1996
Additional Information Response received April 4, 1997
DRAFT Permit issued April 24, 1997
Comments on DRAFT PERMIT received June 16, 1997
PROPOSED PERMIT DETERMINATION dated July 15, 1997

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]
3. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
4. Exempt Emissions Units and/or Activities. Appendix E-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

7. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1., & 4., F.A.C.]

8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following:

- a. In order to perform sandblasting on fixed plant equipment, sandblasting enclosures are constructed and operated as necessary.
- b. Maintenance of paved areas is performed as needed.
- c. Mowing of grass and care of vegetation are done on a regular basis.
- d. Access to plant property by unnecessary vehicles is controlled and limited.
- e. Bagged chemical products are stored in weather tight buildings until they are used. Spills of powdered chemical products are cleaned up as soon as practical.
- f. Vehicles are restricted to slow speeds on the plant site.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 12, 1996.]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Dade County Department of Environmental Resources Management (DERM) office:

Dade County
Department of Environmental Resources Management
Suite 900
33 Southwest Second Avenue
Miami, Florida 33130-1540
Telephone: 305/372-6925
Fax: 305/372-6954

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11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4

Air, Pesticides & Toxics Management Division

Operating Permits Section

61 Forsyth Street

Atlanta, Georgia 30303

Telephone: 404/562-9099

Fax: 404/562-9095



Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U.

ID No. Brief Description

-003 Fossil Fuel Fired Steam Generator #5

-004 Fossil Fuel Fired Steam Generator #6

Fossil Fuel Fired Steam Generator #5 is a nominal 75 megawatt (electric) steam generator designated as Cutler Unit #5. The emission unit is fired on No. 2 or No. 6 fuel oil with a maximum heat input of 170 MMBtu per hour, or natural gas with a maximum heat input of 940 MMBtu per hour. It commenced commercial operation in November 1954.

Fossil Fuel Fired Steam Generator #6 is a nominal 160 megawatt (electric) steam generator designated as Cutler Unit #6. The emission unit is fired on No. 2 or No. 6 fuel oil with a maximum heat input of 290 MMBtu per hour, or natural gas with a maximum heat input of 1620 MMBtu per hour. It commenced commercial operation in July 1955.

Fuel additives such as, but not limited to, magnesium hydroxide are used to enhance combustion and facilitate furnace cleaning, in a manner consistent with Best Operational Practices.

Both emissions units consist of a boiler/steam generator which drives a single reheat turbine generator, and are equipped with a 150 foot exhaust stack. The control devices consist of multiple cyclones.

{Permitting note: the emissions units are regulated under Acid Rain, Phase II, and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input.}

The following specific conditions apply:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum operation heat input rates are as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
5	940	Natural Gas
	170	No. 2 or No. 6 Fuel Oil
6	1620	Natural Gas
	290	No. 2 or No. 6 Fuel Oil

[Rules 62-4.160(2), 62-210.200 (PTE), and 62-296.405, F.A.C.; AO13-173751; AO13-173753]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.27.
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuels.

- a. Startup: The only fuels allowed to be burned are natural gas, No. 2 fuel oil, or No. 6 fuel oil, both with a 0.5% maximum sulfur content by weight.
- b. Normal: The only fuel allowed to be burned is natural gas.

[Rule 62-213.410, F.A.C.; AO13-173751, Specific Condition No. 1; AO13-173753, Specific Condition No. 1]

A.4. Emergency Operation.

No. 2 fuel oil or No. 6 fuel oil may be burned during emergency conditions, as authorized by Metropolitan Dade County.

[AO13-173751; AO13-173753]

A.5. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200 (PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.6. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.

[Rule 62-296.405(1)(a), F.A.C.]

A.7. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[Rule 62-210.700(3), F.A.C.]

A.8. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.

[Rule 62-296.405(1)(b), F.A.C.]

A.9. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

A.10. Not federally enforceable. Sulfur Dioxide. Sulfur dioxide emissions when burning liquid fuel shall not exceed 0.55 lb/MMBtu heat input, and 93.5 pounds per hour for Unit #5, and 159.5 pounds per hour for Unit #6, as measured by applicable compliance methods.
[AO13-173751 and AO13-17353, based on Metropolitan Dade County Code Sec. 24-17(2)(c)(iii).]

A.11. Sulfur Dioxide.

a. When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.1 pounds per million Btu heat input, as measured by applicable compliance methods.

b. The No. 2 or No. 6 fuel oil sulfur content shall not exceed 0.5 percent, by weight. See specific condition **A.25.**

[Rules 62-296.405(1)(c)1.i. and 62-296.405(1)(e)3., F.A.C.; AO13-173751 and AO13-173753]

A.12. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 0.20 pounds per million Btu heat input, and 188 pounds per hour for Unit #5 and 324 pounds per hour for Unit #6, as measured by applicable compliance methods.

[Rule 62-296.570(4)(b)4., F.A.C.; AO13-173751 and AO13-173753]

Excess Emissions

A.13. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.14. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

A.15. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

A.16. A written quarterly report shall be submitted to the Department's Southeast District Office and the Dade County Department of Environmental Resources Management of all opacity exceedances of emissions limitations. The report shall state the cause, period of non-compliance, and steps taken for corrective action and/or prevention of recurrence. The Department shall also be notified when there are no exceedances for a quarter. All recorded data shall be maintained on file by the permittee for no less than two (2) years and made available to the Department upon request.

[AO13-173751 and AO13-173753, Specific Condition No. 5]

Monitoring of Operations

A.17. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **A.11**, **A.24** and **A.25**.

[Rule 62-296.405(1)(f)1.b., F.A.C.]

A.18. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

A.19. A continuous monitoring system for NOx shall be calibrated, maintained, operated, and output recorded for determining compliance with the emissions limits.

[AO13-173751 and AO13-173753]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.20. Visible Emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition **A.21**.

[Rule 62-296.405(1)(e)1., F.A.C.]

A.21. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

A.22. Particulate Matter. Testing of particulate matter emissions shall be conducted if unit operation on oil, exclusive of start-up, exceeds 400 hours per year. [Rule 62-297.310(7), F.A.C.; AO13-173751, AO13-173753, Specific Condition No. 2]

A.23. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 (Orsat analysis) or 3A shall be used when the oxygen based F-factor is computed according to EPA Method 19 is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

A.24. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery.** See specific conditions A.11 and A.25.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO13-173751 and AO13-173753]

A.25. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.26. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.27. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.28. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

A.29. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	2%
		Comparison check	5%

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

A.30. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]

A.31. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

A.32. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

A.33. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Record keeping and Reporting Requirements

A.34. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Dade County Department of Environmental Resources Management (DERM) in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by DERM.
[Rule 62-210.700(6), F.A.C.]

A.35. Submit to DERM a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.36. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with DERM on the results of each such test.
- (b) The required test report shall be filed with DERM as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow DERM to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.
 13. Data related to the required calibration of the test equipment.
 14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.
 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for DERM, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
- [Rules 62-213.440 and 62-297.310(8), F.A.C.]

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power and Light Company

ORIS code: 610

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain Part, Phase II.

E.U. ID

<u>No.</u>	<u>Description</u>
-003	Fossil Fuel Fired Steam Generator #5
-004	Fossil Fuel Fired Steam Generator #6

1. The Phase II permit application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995.
 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-003	PCU5	SO ₂ allowances, under Table 2 or 3 of 40 CFR 73	0*	0*	0*
-004	PCU6	SO ₂ allowances, under Table 2 or 3 of 40 CFR 73	0*	0*	0*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

4. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.
{See condition No. 51., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

5. Comments, notes, and justifications: None.

How
...

Appendix E-1. 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 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	Portable Unleaded Gasoline Tank
10	Portable Diesel Fuel Tank - 2" Vent
11	Evaporation of Boiler Chemical Cleaning Waste

Appendix U-1. List of Unregulated Emissions Units and/or Activities.

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘exempt emissions units’.

Emissions Unit	Description
-xxx	Painting and Solvent Cleaning
-xxx	Mobile Equipment and Engines
-xxx	Emergency Diesel Generator

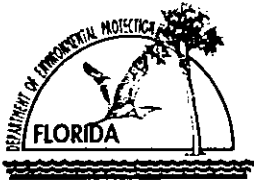
ATTACHMENT PCU-14.TXT
COMPLIANCE REPORT AND PLAN

Attachment PCU-14.txt

**Cutler 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.

ATTACHMENT PCU-15.TXT
COMPLIANCE CERTIFICATION



Department of
Environmental Protection
Division of Air Resources Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

Facility Owner/Company Name: FLORIDA POWER & LIGHT COMPANY

Site Name: Cutler Plant County: Dade

Title V Air Operation Permit No.: 0250001-001-AV ORIS CODE # 000610

REPORTING PERIOD	REPORT DEADLINE*
<u>JANUARY 1</u> through <u>DECEMBER 31</u> of <u>2001</u> (year)	<u>MARCH 1, 2002</u>

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

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:

*** SEE ATTACHMENTS**

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


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. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number.
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.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., 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.



(Signature of Title V Source Responsible Official)

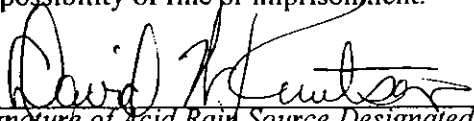
February 15, 2002
(Date)

Name: H. O. Nunez

Title: PLANT GENERAL MANAGER

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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



(Signature of Acid Rain Source Designated Representative)

2-26-02
(Date)

Name: DAVID W. KNUTSON

Title: DESIGNATED REPRESENTATIVE

{Note: Attachments, if required, are created by the responsible official or the designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by the 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. EPA (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

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)			
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
[] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
[] 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)			
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
[] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fuel Fired Steam Generator #5			
4. Emissions Unit Identification Number:			
ID: 003		[] No ID	[] ID Unknown
5. Emissions Unit Status Code: A	6. Initial Startup Date: NOVEMBER 1954	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [X]
9. Emissions Unit Comment: (Limit to 500 Characters) Emission Unit 03 (Cutler Unit 5) is a nominal 75 MW (electrical) steam generator that is fired on natural gas or No.2 or No.6 fuel oil and consists of a boiler/steam generator driving a single reheat turbine generator.			

Emissions Unit Control Equipment

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

Multiple Cyclone w/o Fly Ash Reinjection2. Control Device or Method Code(s): **008****Emissions Unit Details**

1. Package Unit:	
Manufacturer: Combustion Engineers	Model Number:
2. Generator Nameplate Rating: 74.5 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:	940	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):		
<p>Maximum Heat Input Rate based on firing Natural Gas provided as a permitting note for purpose of particulate testing information when applicable.</p>		

**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

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
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)2 , Emiss. Monitoring	FFSG Excess Emissions
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4a , 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)6 , Emiss. Monitoring	PM FFSG semi annual test requirement if greater than 200 hrs
FAC 62-297.310(7)(a)7 , Emiss. Monitoring	PM Quarterly Monitoring if operation is greater than 100 hours per year
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

List of Applicable Local Regulations

Miami-Dade County DERM Chp 24-14	State only
Miami-Dade County DERM Chp 24-24	State only
Miami-Dade County DERM Chp 24-26(1)(e)	State only
Miami-Dade County DERM Chp 24-37(1),(3)	State only
Miami-Dade County DERM Chp 24-39	State only
Miami-Dade County DERM Chp 24-54(3)	State only
Miami-Dade County DERM Chp 24-25.4	State only

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 Attachment PCU-2		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Units exhaust through a single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 150 feet	7. Exit Diameter: 14 feet	
8. Exit Temperature: 285.4 °F	9. Actual Volumetric Flow Rate: 467,837 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): 570.406 North (km): 2,835.087			
14. Emission Point Comment (limit to 200 characters): Values for fields 8 and 9 derived from compliance tests (EPA Method 17) (March 2, 1984)			

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): External Combustion Boilers – Electric Generation – Natural Gas – Boilers > 100 Million Btu/hr except Tangential		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 0.895	6. Maximum Annual Rate: 7,840.2	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 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 5 Boiler Chemical Cleaning waste evaporation. This process may be undertaken while firing natural gas.		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur:	8. Maximum % Ash:	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)		

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): External Combustion Boilers – Electric Generation – Residual Oil – Grade 6 Oil: Normal Firing		
3. Source Classification Code (SCC): 1-01-004-01		3. SCC Units: Thousand gallons
4. Maximum Hourly Rate: 5.92	5. Maximum Annual Rate: 51,859.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5 %	8. Maximum % Ash: 0.1 %	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): See Permit 0250001-001-AV Condition III.A.3 and III.A.4. Oil may be burned during emergency conditions. At present, oil is only fired during startup.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
3. Source Classification Code (SCC):		3. SCC Units:
6. Maximum Hourly Rate:	7. Maximum Annual Rate:	6. Estimated Annual Activity Factor: %
8. Maximum % Sulfur:	8. Maximum % Ash:	11. Million Btu per SCC Unit:
12. 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
PM	076		EL
SO2			EL
NOx			EL
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: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 112.5 lb/hour 492.75 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.1 lb/mmBtu Reference: DEP Rule 62-296.405(1)(b) and 62-210.700(3)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmBtu * 900 mmBtu/hr = 112.5 lb/hr (112.5 lb/hr * 8760 hr/yr) / 2000 lb/ton = 492.75 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County Section 24-17(2)(c) limits fuel oil firing to startup only. Emis. Rate of 0.125 lb/mmBtu is a weighted average of 21 hr @ 0.1 (steady state) + 3 hr @ 0.3 lb/mmBtu (sootblow).	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
4. Requested Allowable Emissions and Units: 0.1 lb/mmBtu steady state (ss) 0.3 lb/mmBtu sootblow (sb)	4. Equivalent Allowable Emissions: 94 lb/hour 411.72 tons/year (ss) 270 lb/hour 147.8 tons/year (sb)
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 62-296.340(1)(e)], 0.3 lb/mmBtu = reg. Limit for sootblow based on 3hr/24hr limit [62-210.700(3)]. Emis. Test required only when fuel oil fired > 400hrs.	

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: 990 lb/hour	4. Synthetically Limited? [] 4,336.2 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 1.1 lb/mmBtu; Reference: F.A.C. 62-296.405(1)(c)i	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 900 mmBtu/hr * 1.1 lb/mmBtu = 990 lb/hr (990 lb/hr * 8760 hr/yr) / 2000 lb/ton = 4,336.2 ton/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County code section 24-17(c)(2) limits fuel oil firing to startup only and limits SO2 emissions to 0.55 lb/mmBtu, but this is not a federally enforceable limitation.\	

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: 1.1 lb/mmBtu	4. Equivalent Allowable Emissions: 990 lb/hour 4,336.2 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. 0.55 lb/mmBtu is the current non-federally enforceable limit on SO2 emissions [Miami-Dade County code section 24-17(2)(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: 180 lb/hour 788.4 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.2 lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)4	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.2 lb/mmBtu * 900 mmBtu/hr = 180 lb/hr (180 lb/hr * 8760 hr/yr) / 2000 lb/ton = 788.4 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County Code Section 24-17(2)(c) limits fuel oil firing to startup only	

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: 0.2 lb/mmBtu	4. Equivalent Allowable Emissions: 180.0 lb/hour 788.4 tons/year
5. Method of Compliance (limit to 60 characters): 40 CFR Part 75 CEM	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.2 lb/mmBtu is the current reg. Limit [Rule 62-296.570(4)(b)4] on NOx emissions [30 day rolling average - Rule 62-296.570(4)(a)4]. Equivalent allowable emissions are given for liquid fuel firing.	

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 checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: Annual VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): See Permit No. 0250001-001-AV Condition III.A.6.	

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): NO_x
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : NO_x = TECO CO₂ = California Analytical Model Number: NO_x = 42 CO₂ = 3300 Serial Number: NO_x = 42-49686-284 CO₂ = N3L2497T	
5. Installation Date: 10/11/1994	6. Performance Specification Test Date: 05/25/95
7. Continuous Monitor Comment (limit to 200 characters): NO_x CEM Required by 40 CFR 75.10(a)2; CO₂ provides % O₂ data to NO_x monitor per 40 CFR 75 Appendix E. CO₂ data is calculated using 40 CFR 75 Appendix G equation G-4.	

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

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

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: Annual VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(1) and (2) allows up to 100% opacity for an unlimited time for excess visible emissions from start-up, shut-down, and up to 2 hrs/24 hrs for malfunctions. See Permit No. 0250001-001-AV Condition III.A.7.	

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

Continuous Monitoring System: Continuous Monitor _____ of _____

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:	
6. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

2. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
6. Method of Compliance: Annual VE Test (EPA Method 9)	
7. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) limits load-changing conditions to 60% opacity for up to 3 hrs/24 hours with up to 4 6-minute periods up to 100% if unit has an operational CEM. See Permit No. 0250001-001-AV Condition III.A.7.	

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

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [] Other
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
7. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements

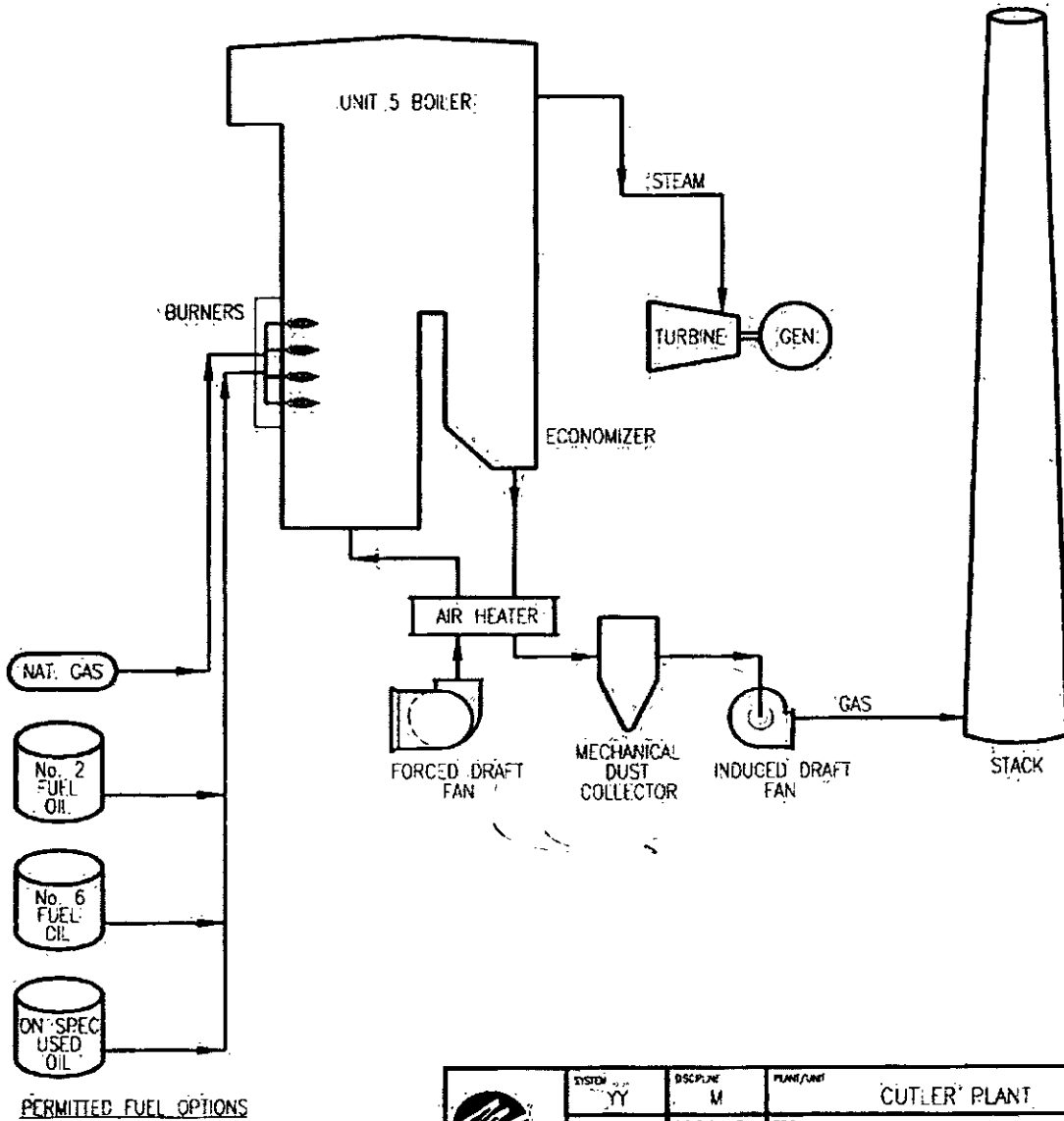
1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PCUU1-1.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PCUU1-2.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PCUU1-3.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>PCUU1-4.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>PCUU1-6.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>PCUU1-11.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>PCUU1-13.txt</u> [] Not Applicable
14. Compliance Assurance Monitoring Plan [X] Attached, Document ID: <u>PCUU1-14</u> [] 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>PCU-12.txt Section IV.A</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

ATTACHMENT PCUU1-1.JPG
PROCESS FLOW DIAGRAM

Attachment PCUU1-1.jpg



	SYSTEM	DISCIPLINE	PLANT/UNIT
	YY	M	CUTLER PLANT
	SCALE	CD FILE NAME	ROLE
	N/A	CU000698	EMISSION UNIT PROCESS FLOW DIAGRAM
DRAWING SIZE	FPL ARCHIVE NAME		
A (8.5X11)	CU000698		STEAM GENERATOR/BOILER
			ATTACHMENT NO. EU1

ATTACHMENT PCUU1-2.TXT

FUEL ANALYSIS

Attachment PCUU1-2.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.

Fuel Analysis **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	none	0.5 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.

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

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

Fuel Analysis **No. 2 Distillate oil (typical)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 spec's

ATTACHMENT PCUU1-3.TXT

**DETAILED DESCRIPTION OF
CONTROL EQUIPMENT**

Attachment PCUU1-3.txt
Detailed Description of Control Equipment

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

<u>Particle Range</u> <u>(micron)</u>	<u>Mean Diameter</u> <u>(micron)</u>	<u>Estimated Efficiency</u> <u>(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

ATTACHMENT PCUU1-4.JPG

**DESCRIPTION OF STACK
SAMPLING FACILITIES**

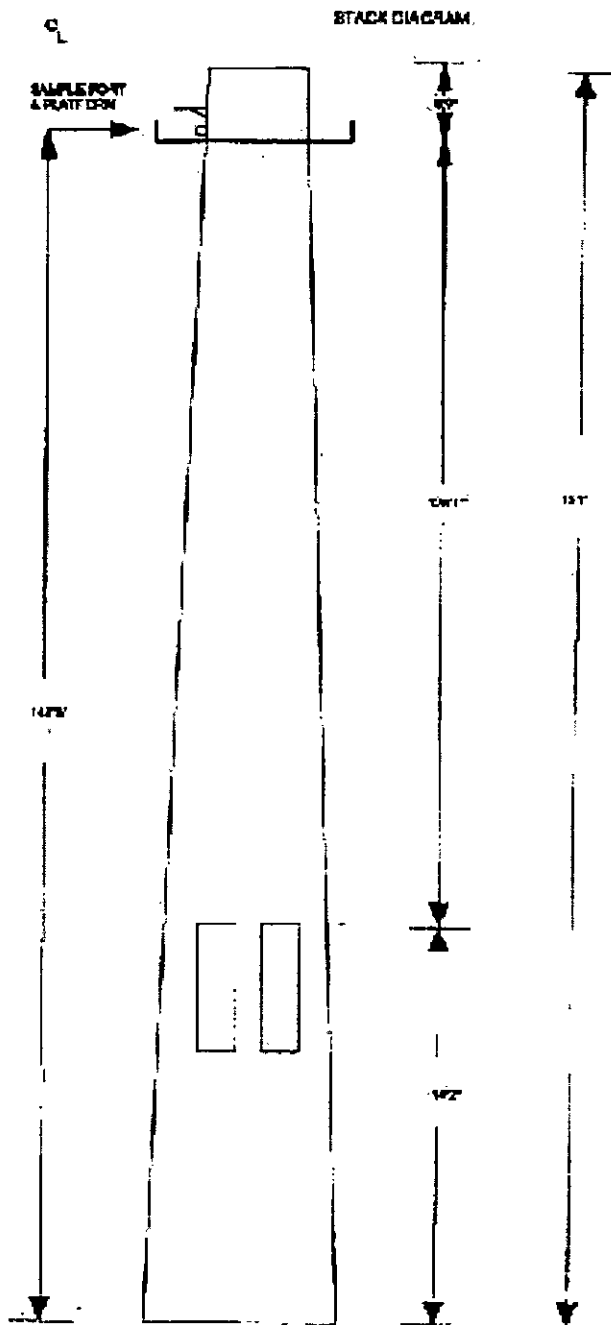
Attachment PCUU1-4.jpg

FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES CUTLER

FOSBIL FUEL & STEAM GENERATORS UNIT 6

STACK SPECIFICATIONS

SAMP. DIA. (METERS) 2.00 m.
SAMP. DIA. (FEET) 6.56 ft.
SAMPLING PORT DEPTH 95.0 m.
NO. OF PORTS 1
NOTE: DRAWING IS NOT TO SCALE



Access to the sampling ports is provided by a ladder. Chassis for walk-in trucks is also available for probe support. AC power is available on the platform and at the base of the stack.

ATTACHMENT PCUU1-6.TXT
PROCEDURES FOR STARTUP/SHUTDOWN

Attachment PCUU1-6.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 PCUU1-11.TXT
ALTERNATIVE METHODS OF OPERATION

Attachment PCUU1-11.txt
Alternative Methods of Operation

Operation at Various Capacities and Heat Input Rates

The Cutler Unit 5 boiler may be operated up to 8,760 hours per year at heat input rates from zero to 170 MMBtu per hour on No.#6 oil, and from zero to 940 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	0.55 lb/MMBtu
Nitrogen oxides	0.2 lb/MMBtu (30-day rolling average)

Soot blowing

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

Utilization of Additives

Additives such as Magnesium hydroxide $Mg(OH)_2$ are added to the boiler periodically at various loads. When magnesium hydroxide is used, it 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. 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 Cutler Unit 5 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

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

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

ATTACHMENT PCUUI-13.TXT

**IDENTIFICATION OF ADDITIONAL
APPLICABLE REQUIREMENTS**

Attachment PCUU1-13.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).

NOx RACT (A013-173751) - Three items were identified as action to be undertaken by FPL in order to satisfy RACT requirements:

1. The boiler fuel-firing rate shall not exceed 290 mmBtu/hr during fuel oil firing (start up) or 940 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). *FPL uses fuel sampling and analysis to monitor the heat input rate to the boiler.*

2. NOx emissions from the boiler stack shall not exceed the following limits 0.2 lbs/mmBtu or 188 lbs/hr on an average of 30 days. These limit shall apply at all times expect during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700. *FPL has a continuous emission monitor (CEM) to comply with this condition.*

3. Installation of a continous monitoring system for NOx emission. *This system has been installed.*

A013-173751 Permit contains the following conditions:

1. During start-up the boiler shall be fired either with no.6 residual oil with 0.5 percent maximum sulfur content or no.2 fuel oil with 0.5 percent sulfur content or 100 percent natural gas. *FPL fires the fuels as specified, and maintains records to demonstrate this.*

2. Operation other than start-up - 100 percent natural gas shall be fired. *FPL maintains records to demonstrate this.*

4. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSION LIMITS			
Pollutant	Fuel	lb/mmBtu	Test Method
Particulate Matter (Steady state)	Oil	0.1	EPA Method 5 or 17
SO2	Oil	0.55	Monthly fuel analysis

For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis as specified. Records are maintained to demonstrate compliance.

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

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

ATTACHMENT PCUU1-14
COMPLIANCE ASSURANCE MONITORING PLAN

Attachment PCUU1-14 Compliance Assurance Monitoring Plan

The provisions of the Compliance Assurance Monitoring Plan apply to the multiple cyclones without fly ash reinjection emission controls on Fossil Steam Units #5 and #6. However, the units operate primarily on natural gas with fuel oil allowed during startup only. The units have not fired oil since the initial Title V Operating Permit had become effective. FPL proposes that CAM not be applicable if the units are burning gas only. If oil is fired, CAM will be developed.

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): Fossil Fuel Fired Steam Generator #6			
4. Emissions Unit Identification Number: ID: 004		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
5. Emissions Unit Status Code: A	6. Initial Startup Date: JANUARY 1955	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input checked="" type="checkbox"/>
9. Emissions Unit Comment: (Limit to 500 Characters)			
Emission Unit 04 (Cutler Unit 6) is a nominal 160 MW(electrical) steam generator fired with Natural Gas or using No.2 or No.6 fuel oil and consists of a boiler/steam generator driving a single reheat turbine generator.			

Emissions Unit Control Equipment

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

Multiple Cyclone w/o Fly Ash Reinjection

2. Control Device or Method Code(s): **008**

Emissions Unit Details

1. Package Unit:		
Manufacturer: Combustion Engineers	Model Number:	
2. Generator Nameplate Rating:	162	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:	1,620	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
8. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p>Maximum Heat Input Rate based on firing Natural Gas provided as a permitting note for purpose of particulate testing information when applicable.</p>		

**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; SO₂ & 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 SO₂ Emissions Protocol for Gas Fired Units

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
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)2 , Emiss. Monitoring	FFSG Excess Emissions
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4a , 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)6 , Emiss. Monitoring	PM FFSG semi annual test requirement if greater than 200 hrs
FAC 62-297.310(7)(a)7 , Emiss. Monitoring	PM Quarterly Monitoring if operation is greater than 100 hours per year
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 Attachment PCU-2		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Units exhaust through a single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 150 feet	7. Exit Diameter: 14 feet	
8. Exit Temperature: 285.3 °F	9. Actual Volumetric Flow Rate: 560,464 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): 570.476 North (km): 2,835.090			
14. Emission Point Comment (limit to 200 characters): Values for fields 8 and 9 derived from compliance tests (EPA Method 17) (March 2, 1984)			

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): External Combustion Boilers – Electric Generation – Natural Gas – Boilers > 100 Million Btu/hr except Tangential		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.543	5. Maximum Annual Rate: 13,516.7	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 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 5 Boiler Chemical Cleaning waste evaporation. This process may be undertaken while firing natural gas.		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur:	8. Maximum % Ash:	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)		

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): External Combustion Boilers – Electric Generation – Residual Oil – Grade 6 Oil: Normal Firing		
2. Source Classification Code (SCC): 1-01-004-01		3. SCC Units: Thousand gallons
4. Maximum Hourly Rate: 10.2	5. Maximum Annual Rate: 89,352	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5 %	8. Maximum % Ash: 0.1 %	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): See Permit 0250001-001-AV Condition III.A.3 and III.A.4. Oil may be burned during emergency conditions. At present, oil is only fired during startup.		

Segment Description and Rate: Segment ___ of ___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 		
3. Source Classification Code (SCC):		3. SCC Units:
6. Maximum Hourly Rate:	7. Maximum Annual Rate:	6. Estimated Annual Activity Factor: %
8. Maximum % Sulfur:	8. Maximum % Ash:	11. Million Btu per SCC Unit:
12. Segment Comment (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: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 193.75 lb/hour		4. Synthetically Limited? [] 848.6 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.1 lb/mmBtu Reference: DEP Rule 62-296.405(1)(b) and 62-210.700(3)		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $0.125 \text{ lb/mmBtu} * 1,550 \text{ mmBtu/hr} = 193.75 \text{ lb/hr}$ $(193.75 \text{ lb/hr} * 8760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 848.6 \text{ tons/yr}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County Section 24-17(2)(c) limits fuel oil firing to startup only. Emis. Rate of 0.125 lb/mmBtu is a weighted average of 21 hr @ 0.1 (steady state) + 3 hr @ 0.3 lb/mmBtu (sootblow).			

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: 0.1 lb/mmBtu steady state (ss) 0.3 lb/mmBtu sootblow (sb)		4. Equivalent Allowable Emissions: 155 lb/hour 678.9 tons/year (ss) 465 lb/hour 254.6 tons/year (sb)	
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 62-296.340(1)(e)], 0.3 lb/mmBtu = reg. Limit for sootblow based on 3hr/24hr limit [62-210.700(3)]. Emis. Test required only when fuel oil fired > 400hrs.			

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: 1,705 lb/hour	4. Synthetically Limited? [] 7,467.9 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 1.1 lb/mmBtu; Reference: F.A.C. 62-296.405(1)(c)i	6. Emissions Method Code: 0
7. Calculation of Emissions (limit to 600 characters): 1,550 mmBtu/hr * 1.1 lb/mmBtu = 1,705 lb/hr (1,705 lb/hr * 8760 hr/yr) / 2000 lb/ton = 7,467.9 ton/yr	
8. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County code section 24-17(c)(2) limits fuel oil firing to startup only and limits SO2 emissions to 0.55 lb/mmBtu, but this is not a federally enforceable limitation.\	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
4. Requested Allowable Emissions and Units: 1.1 lb/mmBtu	4. Equivalent Allowable Emissions: 1,550 lb/hour 7,467.9 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. 0.55 lb/mmBtu is the current non-federally enforceable limit on SO2 emissions [Miami-Dade County code section 24-17(2)(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: 310 lb/hour	4. Synthetically Limited? [] 1,357.8 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.2 lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)4	9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): 0.2 lb/mmBtu * 1,550 mmBtu/hr = 310 lb/hr (310 lb/hr * 8760 hr/yr) / 2000 lb/ton = 1,357.8 tons/year	
11. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Miami-Dade County Code Section 24-17(2)(c) limits fuel oil firing to startup only	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
4. Requested Allowable Emissions and Units: 0.2 lb/mmBtu	4. Equivalent Allowable Emissions: 310.0 lb/hour 1,357.8 tons/year
5. Method of Compliance (limit to 60 characters): 40 CFR Part 75 CEM	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.2 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)4] on NOx emissions [30 day rolling average - Rule 62-296.570(4)(a)4]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
2. Method of Compliance: Annual VE Test (EPA Method 9)	
3. Visible Emissions Comment (limit to 200 characters): See Permit No. 0250001-001-AV Condition III.A.6.	

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 = California Analytical Model Number: NOx = 42 CO₂ = 3300 Serial Number: NOx = 42-49390-284 CO₂ = N3L2500T	
9. Installation Date: 10/11/1994	6. Performance Specification Test Date: 05/30/95
7. Continuous Monitor Comment (limit to 200 characters): NO_x CEM Required by 40 CFR 75.10(a)2; CO₂ provides % O₂ data to NO_x monitor per 40 CFR 75 Appendix E. CO₂ data is calculated using 40 CFR 75 Appendix G equation G-4.	

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

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

4. 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: Annual VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(1) and (2) allows up to 100% opacity for an unlimited time for excess visible emissions from start-up, shut-down, and up to 2 hrs/24 hrs for malfunctions.	

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

Continuous Monitoring System: Continuous Monitor _____ of _____

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:	
10. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

5. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
6. Method of Compliance: Annual VE Test (EPA Method 9)	
7. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) limits load-changing conditions to 60% opacity for up to 3 hrs/24 hours with up to 4 6-minute periods up to 100% if unit has an operational CEM. See Permit No. 0250001-001-AV Condition III.A.7.	

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

Continuous Monitoring System: Continuous Monitor _____ of _____

2. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[<input type="checkbox"/>] Rule [<input type="checkbox"/>] Other
4. Monitor Information Manufacturer:: Model Number: Serial Number:	
11. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

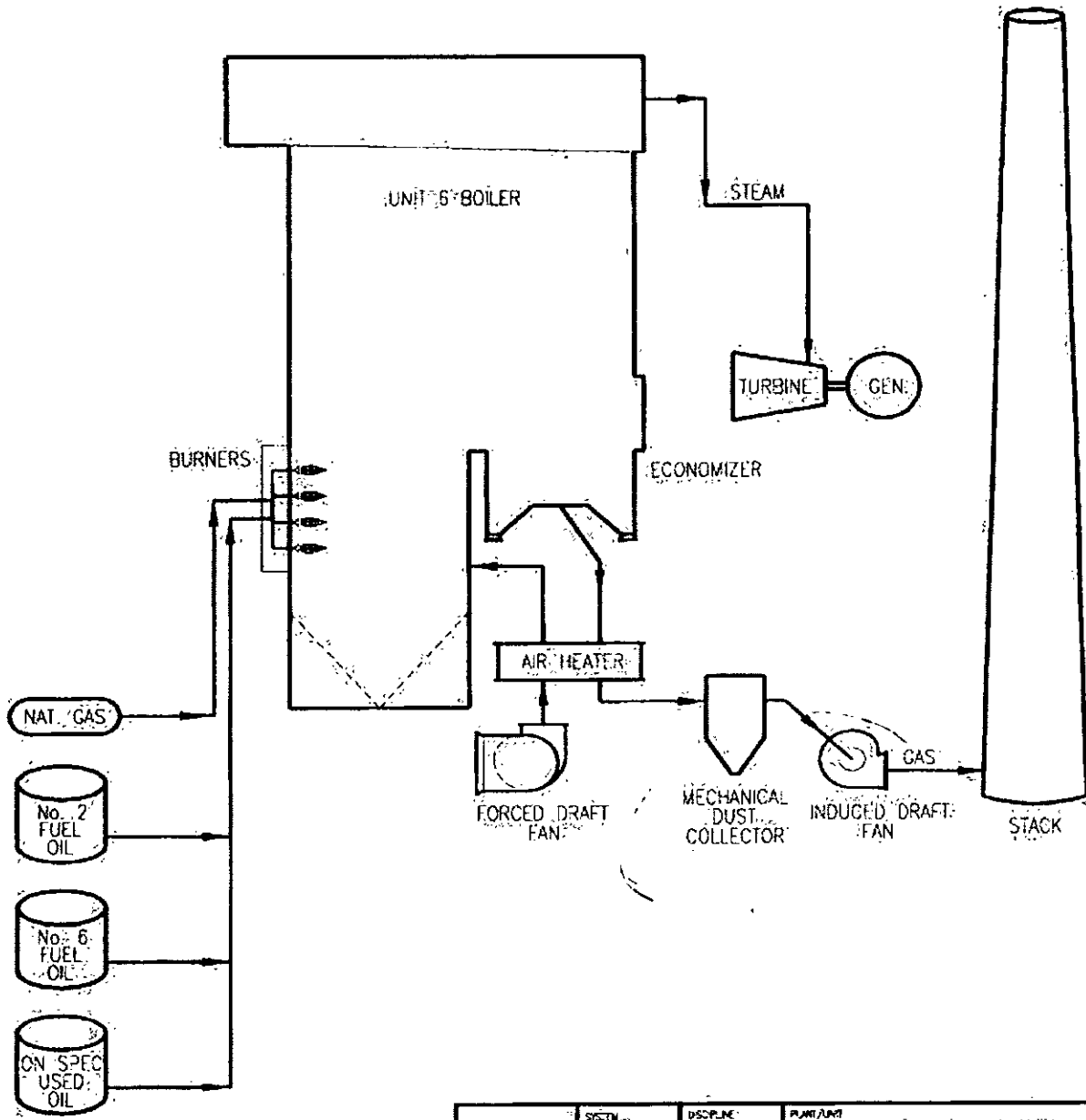
1. Process Flow Diagram [X] Attached, Document ID: <u>PCUU2-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: <u>PCUU1-2.txt</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>PCUU1-3.txt</u> [] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: <u>PCUU2-4.jpg</u> [] 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>PCUU1-6.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 [X] Attached, Document ID: <u>PCUU2-11.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>PCUU2-13.txt</u> [] Not Applicable
14. Compliance Assurance Monitoring Plan [X] Attached, Document ID: <u>PCUUI-14</u> [] 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>PCU-12.txt Section IV.A</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

ATTACHMENT PCUU2-1.JPG
PROCESS FLOW DIAGRAM

Attachment PCUU2-1.jpg



PERMITTED FUEL OPTIONS

	SYSTEM: YY	DISCIPLINE: M	PLANT/AREA: CUTLER PLANT
	SCALE: N/A	CAD FILE NAME: CU000699	TITLE: EMISSION UNIT PROCESS FLOW DIAGRAM STEAM GENERATOR/BOILER
	DRAWING SIZE: A (8.5X11)	PLC/MACHINE NAME: CU000699	ATTACHMENT NO. EU2

ATTACHMENT PCUU2-4.JPG

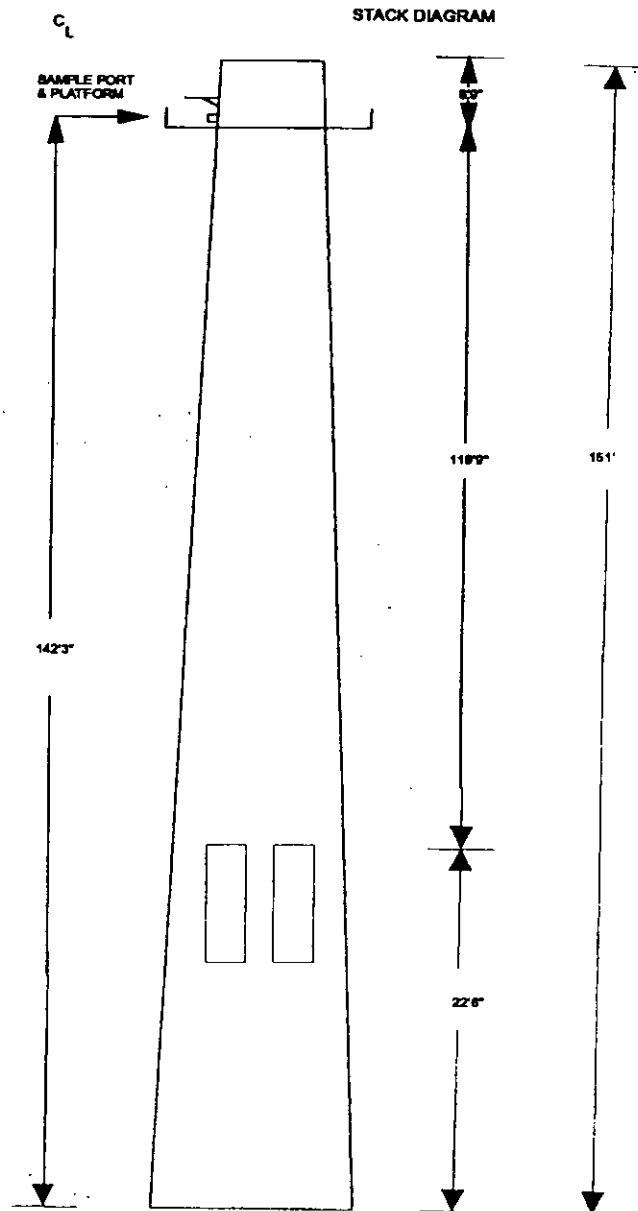
**DESCRIPTION OF STACK
SAMPLING FACILITIES**

Attachment PCUU2-4.jpg

FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
CUTLER
FOSSIL FUEL STEAM GENERATORS
UNIT 6

STACK SPECIFICATIONS

SAMPLING DIAMETER: 168 in.
SAMPLING AREA: 163.9 sq. ft.
SAMPLING PORT DEPTH: 22.0 in.
No. OF PORTS: 1
NOTE: DRAWING IS NOT TO SCALE



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

FILE PCU6TR
08/18/95

ATTACHMENT PCUU2-11.TXT
ALTERNATIVE METHODS OF OPERATION

Attachment PCUU2-11.txt
Alternative Methods of Operation

Operation at Various Capacities and Heat Input Rates

The Cutler Unit 6 boiler may be operated up to 8,760 hours per year at heat input rates from zero to 290 MMBtu per hour on No.#6 oil, and from zero to 1,620 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	0.55 lb/MMBtu
Nitrogen oxides	0.2 lb/MMBtu (30-day rolling average)

Soot blowing

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

Utilization of Additives

Additives such as Magnesium hydroxide $Mg(OH)_2$ are added to the boiler periodically at various loads. When magnesium hydroxide is used, it 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. 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 Cutler Unit 6 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

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

If the spent cleaning solution and rinses are determined to be non-hazardous, they are then disposed 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, 40 percent opacity).

ATTACHMENT PCUU2-13.TXT

**IDENTIFICATION OF ADDITIONAL
APPLICABLE REQUIREMENTS**

Attachment PCUU2-13.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).

NOx RACT (A013-173751) - Three items were identified as action to be undertaken by FPL in order to satisfy RACT requirements:

1. The boiler fuel firing rate shall not exceed 290 mmBtu/hr during fuel oil firing (start up) or 1,620 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). *FPL uses fuel sampling and analysis to monitor the heat input rate to the boiler.*

2. NOx emissions from the boiler stack shall not exceed the following limits 0.2 lbs/mmBtu or 324 lbs/hr on an average of 30 days. These limit shall apply at all times expect during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700. *FPL has a continuous emission monitor (CEM) to comply with this condition.*

3. Installation of a continous monitoring system for NOx emission. *This system has been installed.*

A013-173751 Permit contains the following conditions:

1. During start-up the boiler shall be fired either with no.6 residual oil with 0.5 percent maximum sulfur content or no.2 fuel oil with 0.5 percent sulfur content or 100 percent natural gas. *FPL fires the fuels as specified, and maintains records to demonstrate this.*

2. Operation other than start-up - 100 percent natural gas shall be fired. *FPL maintains records to demonstrate this.*

4. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSION LIMITS			
Pollutant	Fuel	lb/mmBtu	Test Method
Pariculate Matter (<i>Steady state</i>)	Oil	0.1	EPA Method 5 or 17
SO2	Oil	0.55	Monthly fuel analysis

For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis as specified. Records are maintained to demonstrate compliance.

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

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

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 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 checked="" 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>4. 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 ID: <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>10. Emissions Unit Comment: (Limit to 500 Characters) These emission units are exempt under 62-210.300, F.A.C. as either a categorical exemption or emissions of less than 5 TPY per criteria pollutant. Emission unit includes Emergency Diesel Generator, Painting and Solvent Cleaning, Mobile Equipment and Engines, and other miscellaneous equipment not otherwise regulated or exempt at the facility.</p>			

Emissions Unit Control Equipment

4. 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: Detroit Diesel (<i>emerg. Gener.</i>)	Model Number: 16V-71N
2. Generator Nameplate Rating:	0.5 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:	4.62 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
7. Operating Capacity/Schedule Comment (limit to 200 characters):	
<p>Information provided is for the diesel generator, which is limited to 400 hours/yr of operation.</p> <p>Other equipment may operate up to 8,760 hrs/yr.</p>	

**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. 62-296.310(2)(a)

**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? EDG-1.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: H	6. Stack Height: 12.3 feet	7. Exit Diameter: 0.417 feet	
8. Exit Temperature: 960 °F	9. Actual Volumetric Flow Rate: 3,990 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): North (km):			
14. Emission Point Comment (limit to 200 characters): Values for mobile diesel unit.			

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 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: 1.0	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
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
PM			NS
SO ₂			NS
NO _x			NS
CO			NS
VOC			NS
PM ₁₀			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? []
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.		

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:
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The emergency diesel generator does not currently have an emissions limit for NOx.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

6. 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	
3. Method of Compliance: None Proposed	
4. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [] Rule [] Other	
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PCUU3-1.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>PCUU3-2.txt</u> <input 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 checked="" type="checkbox"/> Attached, Document ID <u>PCUU3-6.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:

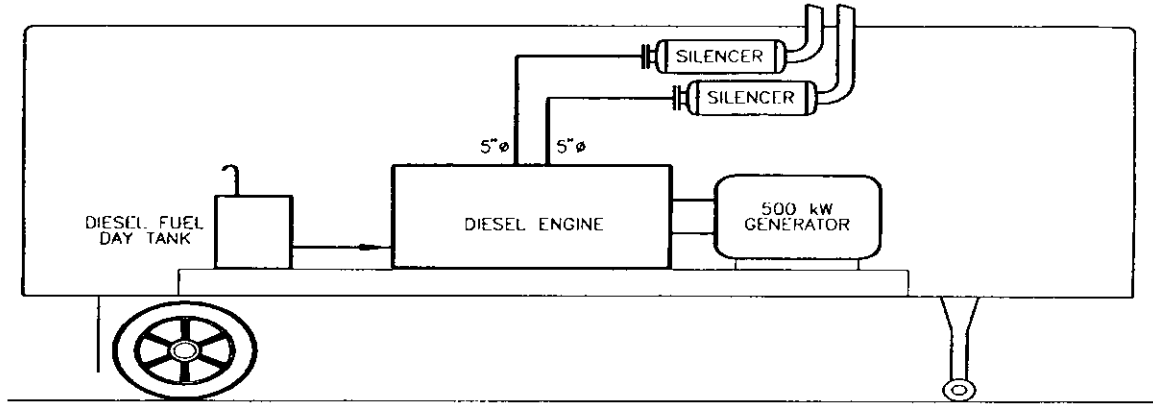
Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" 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: _____ <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


ATTACHMENT PCUU3-1.JPG

PROCESS FLOW DIAGRAM

Attachment PCUU3-1.jpg



MOBILE DIESEL GENERATOR

7-14/95 ISSUED FOR TITLE V PERMIT		PWB	PWB	CSP	CSP	ETS		SYSTEM YY	DISCIPLINE M	PLANT/LINE# CUTLER PLANT		
DATE	REVISION DESCRIPTION	BY	CH	CDR	APR	ORC		SCALE N/A	CAD FILE NAME C0000700	TITLE EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU3		
							DRAWING NUMBER	PCU5-M0104-YY			SHEET 1 OF 1	REV
										FPC02M/FPC02R		

ATTACHMENT PCUU3-2.TXT

FUEL ANALYSIS

Attachment PCUU3-2.txt

Fuel Analysis

Light Distillate oil (typical)*

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

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

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

Footnotes:

1 Data taken from the FPL fuel purchasing specification

2 Data from laboratory analysis

ATTACHMENT PCUU3-6.TXT
PROCEDURES FOR STARTUP/SHUTDOWN

Attachment PCUU3-6.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.