Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

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

Identification of Facility Addressed in This Application

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

1. Facility Owner/Company Name:	Florida Power Corporation
2. Site Name:	Anclote Power Plant
3. Facility Identification Number:	1010017 [ ] Unknown
4. Facility Location Information: Street Address or Other Locator:	Anclote Road, West of US 19
City: Tarpon Springs	County: Pasco Zip Code: 33589
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	2/11/2000
2. Permit Number:	1010017-005-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Owner/Authorized Representative or Responsible Official

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

   W. Jeffrey Pardue, CEP - Director, Environmental Services

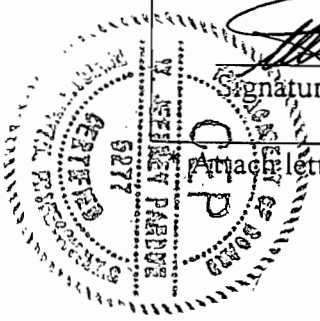
2. Owner/Authorized Representative or Responsible Official Mailing Address:

   Organization/Firm: Florida Power Corporation
   Street Address: 263 13th Avenue South
   City: St. Petersburg State: FL Zip Code: 33701

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (727) 826 - 4301 Fax: (727) 826 -4216

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*



Signature

2/10/00
Date

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	Steam Generator Unit 1	
002	Steam Generator Unit 2	

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

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

Current construction permit number: Final Permit No. 1010017-004-AC

Operation permit to be revised: Final Title V Permit No. 1010017-003-AV

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

Operation permit to be revised/corrected: _____

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

Operation permit to be revised: _____

Reason for revision: _____

_____

Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): _____

[ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

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

Operation permit to be revised: _____

Reason for revision: _____

_____

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

This Application for Air Permit is submitted to obtain:

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

Current operation permit number(s), if any: _____

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

Current operation permit number(s): _____

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

Application Processing Fee

Check one:

[ ] Attached - Amount: $_____ [ ] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

   Anclote Units 1 and 2 were modified to accommodate the firing of natural gas. This enables either one or both units to co-fire gas and the currently permitted fuel oils (No. 6 and higher) as well as on-spec used oil.

2. Projected or Actual Date of Commencement of Construction:

   October 24, 1998

3. Projected Date of Completion of Construction:

   Unit 2 completion on December 11, 1998, Unit 1 on May 1, 1999.

Professional Engineer Certification

1. Professional Engineer Name: Jennifer A. Stenger
   Registration Number: 52125

2. Professional Engineer Mailing Address:

   Organization/Firm: Florida Power Corporation
   Street Address: 263 13th Avenue South
   City: St. Petersburg State: FL Zip Code: 33701

3. Professional Engineer Telephone Numbers:
   Telephone: (727) 826 - 4132 Fax: (727) 826 - 4216

4. Professional Engineer Statement:

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

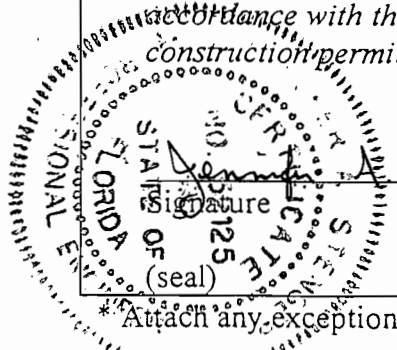
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions 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.



Signature 2/10/2000
Date

(seal)

* Attach any exception to certification statement.

* I am certifying the technical content of the permit application, but not the design/construction of the natural gas conversion on Units 1 and 2.

Application Contact

1. Name and Title of Application Contact:

   Scott H. Osbourn, Senior Environmental Engineer

2. Application Contact Mailing Address:

   Organization/Firm: Florida Power Corporation
   Street Address: 263 13th Avenue South
   City: St. Petersburg State: FL Zip Code: 33701

3. Application Contact Telephone Numbers:
   Telephone: (727) 826 - 4258 Fax: (727) 826 - 4216

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:
   Zone: **17** East (km): **324.4** North (km): **3118.7**

2. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): **28 / 48 / 17** Longitude: (DD/MM/SS): **82 / 47 / 8**

3. Governmental Facility Code:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
0	**A**	**49**	**49**

7. Facility Comment (limit to 500 characters):

Facility Contact

1. Name and Title of Facility Contact:
   D.T. Buell, Plant Manager

2. Facility Contact Mailing Address:
   Organization/Firm: **Florida Power Corporation**
   Street Address: **1729 Baileys Bluff Road**
   City: **Holliday** State: **FL** Zip Code: **34691**

3. Facility Contact Telephone Numbers:
   Telephone: **(813) 938-2418** Fax: **(813) 866-4972**

Facility Regulatory Classifications

1. Small Business Stationary Source? [ ] Yes [x] No [ ] Unknown
2. Title V Source? [x] Yes [ ] No
3. Synthetic Non-Title V Source? [ ] Yes [x] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? [x] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs? [ ] Yes [x] No
6. Major Source of Hazardous Air Pollutants (HAPs)? [x] Yes [ ] No
7. Synthetic Minor Source of HAPs? [ ] Yes [x] No
8. One or More Emissions Units Subject to NSPS? [ ] Yes [x] No
9. One or More Emissions Units Subject to NESHAP? [ ] Yes [x] No
10. Title V Source by EPA Designation? [x] Yes [ ] No
11. Facility Regulatory Classifications Comment (limit to 200 characters):

B. FACILITY REGULATIONS

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

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

Refer to Attachment AN-FE-B

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted		2. Pollutant Classification
VOC	Volatile Organic Compounds	A
HCL	Hydrogen Chloride	A
FL	Fluorides - Total	A
SAM	Sulfuric Acid Mist	A
H133	Nickel Compounds	A
HAPS	Total Hazardous Air Pollutants	A
SO2	Sulfur Dioxide	A
PM	Particulate Matter - Total	A
PM10	Particulate Matter - PM10	A
NOX	Nitrogen Oxides	A
CO	Carbon Monoxide	A
H107	Hydrogen fluoride	A

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location:
   [x] Attached, Document ID: AN-FE-1
   [ ] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [x] Attached, Document ID: AN-FE-2
   [ ] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [x] Attached, Document ID(s): AN-FE-3
   [ ] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [x] Attached, Document ID: AN-FE-4
   [ ] Not Applicable [ ] Waiver Requested

5. Fugitive Emissions Identification:
   [x] Attached, Document ID: AN-FE-5
   [ ] Not Applicable [ ] Waiver Requested

6. Supplemental Information for Construction Permit Application:
   [ ] Attached, Document ID: _____
   [x] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities:
   [ ] Attached, Document ID: _____
   [x] Not Applicable

8. 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

9. Alternative Methods of Operation:
   [ ] Attached, Document ID: _____
   [x] Not Applicable

10. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID: _____
    [x] Not Applicable

11. Identification of Additional Applicable Requirements:
[X] Attached, Document ID: _____ [ ] Not Applicable
Final Permit No. 1010017-004-AC

12. Compliance Assurance Monitoring Plan:
[ ] Attached, Document ID: ____ [X] Not Applicable

13. Risk Management Plan Verification:

[ ] Plan Submitted to Implementing Agency - Verification Attached, Document ID: _____

[ ] Plan to be Submitted to Implementing Agency by Required Date

[X] Not Applicable

14. Compliance Report and Plan:
[X] Attached, Document ID: _____ [ ] Not Applicable
Test reports dated 4/12 and 13, and 4/13 and 14, 6/23 and 24, 6/22 and 25, 1999

15. Compliance Certification (Hard-copy Required):
[X] Attached, Document ID: AN-FE-15 [ ] Not Applicable

ATTACHMENT AN-FE-B

FACILITY REGULATIONS

ATTACHMENT AN-FE-B
FACILITY REGULATIONS

Master Applicable Requirements Listing - Power Plants (5/13/96)

FACILITY: FPC Anclote Plant

FDEP Rules:

General Permits:

62-4.030	
62-4.040(1)(a)	- Exemptions from permitting
62-4.040(1)(b)	- Exemptions from permitting
62-4.100	
62-4.130	

Asbestos NESHAP:

62-204.800(8)(b)8.(State Only)	- Asbestos Removal
62-204.800(8)(d) (State Only)	- General Provisions (Asbestos)

Stationary Sources-General:

62-210.300(2)

Exemptions - Plant Specific:

62-210.300(3)(a)4.	- comfort heating < 1 mmBtu/hr
62-210.300(3)(a)5.	- mobile sources
62-210.300(3)(a)7.	- non-industrial vacuum cleaning
62-210.300(3)(a)8.	- refrigeration equipment
62-210.300(3)(a)9.	- vacuum pumps for labs
62-210.300(3)(a)10.	- steam cleaning equipment
62-210.300(3)(a)11.	- sanders < 5 ft^2 or less surface area
62-210.300(3)(a)12.	- space heating equip.; (non-boilers)
62-210.300(3)(a)14.	- bakery ovens
62-210.300(3)(a)15.	- lab equipment
62-210.300(3)(a)16.	- brazing, soldering or welding
62-210.300(3)(a)17.	- laundry dryers
62-210.300(3)(a)20.	- emergency generators, limited to 32,000 gal/yr
62-210.300(3)(a)21.	- general purpose engines, limited to 32,000 gal/yr
62-210.300(3)(a)22.	- fire and safety equipment
62-210.300(3)(a)23.	- surface coating $>5\%$ VOC; 6 gal/day or less, averaged month.
62-210.300(3)(a)24.	- surface coating $<5\%$ or less VOC
62-210.300(3)(b)	- temporary exemptions
62-210.370(3)	- AORs
62-210.900(5)	- AOR Form

Title V Permits:

62-213.205(1)(a)	- Fees

62-213.205(1)(b)	
62-213.205(1)(c)	
62-213.205(1)(e)	
62-213.205(1)(f)	
62-213.205(1)(g)	
62-213.205(1)(i)	
62-213.205(1)(j)	
62-213.400	- Permits/Revisions
62-213.410	- Changes without permit revisions
62-213.420.(1)(b)2.	- Permits-allows continued operation
62-213.420.(1)(b)3.	- Permits-additional information
62-213.460	- Permit Shield
62-213.900(1)	- Fee Form

Open Burning:

62-256.300	- Prohibitions
62-256.500	- Land Clearing
62-256.700	- Open burning Allowed

Asbestos Removal:

62-257.301	- Notification and Fee
62-257.400	- Fee Schedule
62-257.900	- Form

Stationary Sources-Emission Standards:

62-296.320(2) (State Only)	- Odor
62-296.320(3)(b)(State Only)	- Emergency Open Burning
62-296.320(4)(b)	- General VE Standard
62-296.320(4)(c)	- Unconfined Emissions of Particulate Matter

Stationary Sources-Emission Monitoring

62-297.310(7)(a)10.	- Exemption of annual VE for 210.300(3)(a) sources/Gen. Per.

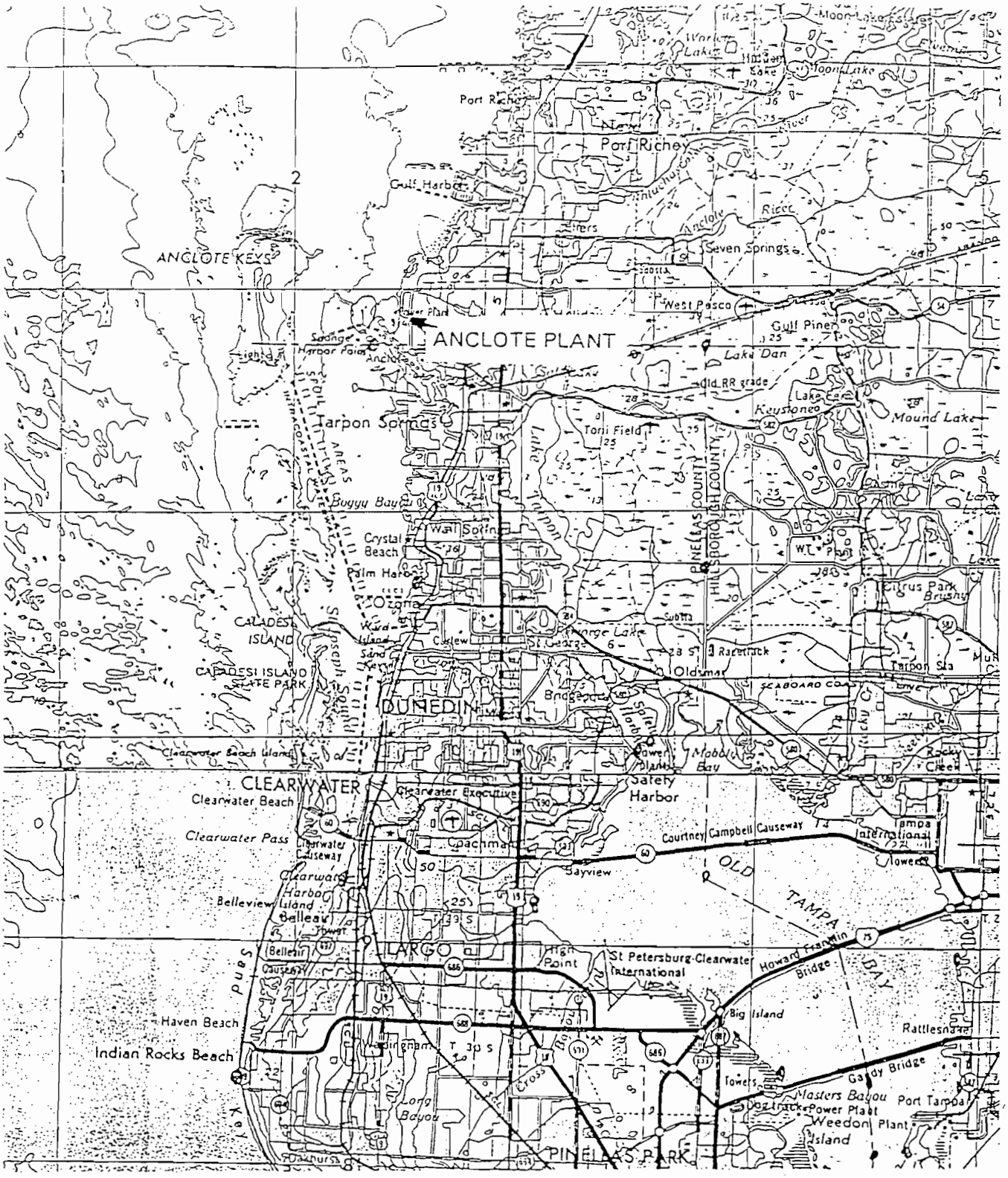
Federal Regulations:

Asbestos Removal:

40 CFR 61.05	- Prohibited Activities
40 CFR 61.12(b)	- Compliance with work practice standard
40 CFR 61.19	- Circumvention
40 CRF 61.145	- Demolition and Renovation
40 CFR 61.148	- Standard for Insulating Material

ATTACHMENT AN-FE-1

AREA MAP

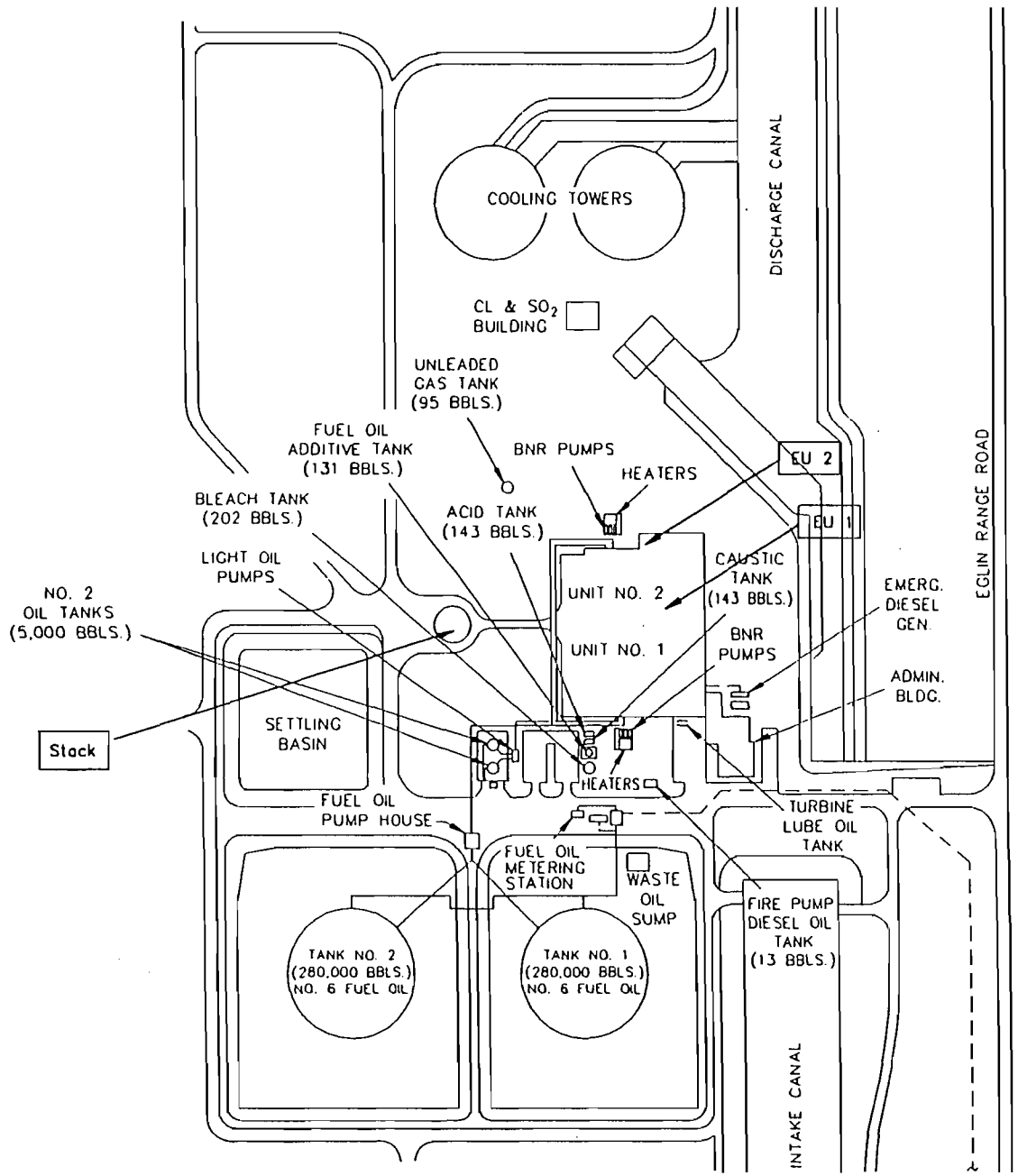


Attachment AN-FE-1
Florida Power Corporation, Anclote Plant

KBN

ATTACHMENT AN-FE-2

FACILITY PLOT PLAN



Key
EU 1 – Fossil Fuel Steam Generator No. 1
EU 2 – Fossil Fuel Steam Generator No. 2
EU 3 – Facility-wide Fugitive/Deminimus Emissions (not shown)
EU 4 – Diesel Generator (not shown)

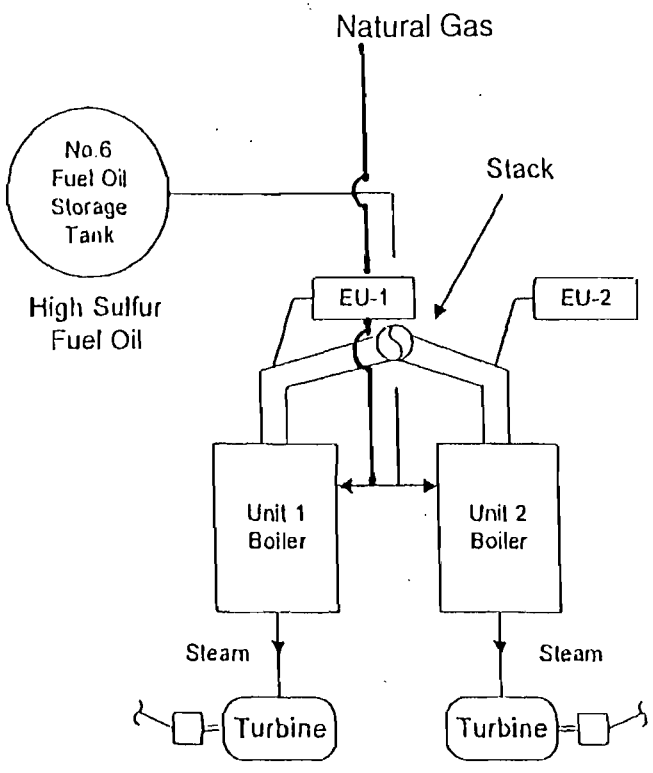
N

ANCLOTE

ANCCOMP1.DWG

ATTACHMENT AN-FE-3

PROCESS FLOW DIAGRAM



Notes:

EU1 & EU2 share a common stack.
EU = Emission Unit Number
See segment section for the operating rate of each emission unit
Fuel Oil No.2, 3, 4, 5, and 6 and on-spec Used Oil are permitted for use in Units No. 1 and 2 boilers.
EU3- Facility-wide Fugitive/Deminimus Emissions
EU4- Diesel Generators (3)

ATTACHMENT AN-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT AN-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of particulate matter include:

- Fugitive dust from paved and unpaved roads, and
- Fugitive particulates from the use of bagged chemical products.

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296.310(3), F.A.C.:

- Maintenance of paved areas as needed,
- Regular mowing of grass and care of vegetation, and
- Limiting access to plant property by unnecessary vehicles.

ATTACHMENT AN-FE-5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT AN-FE-5
FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities" (as presented in EPA's memorandum, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995). As a result, these activities are not included as part of this permit application. For example, emissions from general plant maintenance and upkeep activities at the facility would be considered fugitive emissions, but have been judged to be trivial since these activities are not conducted as part of a manufacturing process, not related to the source's primary business activity, and do not otherwise trigger a permit modification.

Fugitive emissions that may result from the operation of activities that are not trivial at the facility are addressed in Emission Unit No. 3. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive/*de minimis* emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

FPC has not identified fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive/*de minimis* emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation. VOCs are also emitted by the various fuel oil storage tanks on the plant property, and generator and turbine lube oil vents.

Fugitive HAPs Emissions

The following hazardous air pollutants are or may be present on the facility property and are potential sources of fugitive HAPs emissions:

- asbestos
- benzene
- chlorine
- hydrazine
- hydrochloric acid
- mercury compounds
- methyl ethyl ketone
- toluene
- xylene

Asbestos - Present in gasket material, pipe insulation, and various other locations. The facility complies with the federal NESHAPS (40 CFR 61 Subpart M) and state rules (62-257, F.A.C.) governing the abatement of asbestos-containing materials. No releases of asbestos are expected for the facility.

Benzene - Present in unleaded gasoline. The facility maintains a storage tank for unleaded gasoline. These emissions have been calculated to be significantly less than 1 TPY.

Chlorine - Used for water treatment at the facility.

Hydrazine - Hydrazine solution may be used for the treatment of boiler water.

Hydrochloric Acid - The facility may utilize hydrochloric acid in the chemistry laboratory for use in analytical procedures.

Mercury Compounds - The facility uses mercury-containing compounds in the chemistry laboratory for use in analytical procedures and flow-measuring equipment.

Methyl Ethyl Ketone, Toluene, Xylene - The facility uses paint thinners and solvents (which may contain MEK, toluene, or xylene) for use in plant maintenance activities. These containers are kept closed and are stored in weather-tight buildings. These emissions as a whole are addressed in the VOC section (preceding page).

<u>Regulated Toxic or Flammable Substances</u>

The following regulated toxic or flammable substances are or may be present at the FPC facility:

- ammonia (aqueous, concentration 20 percent or greater)
- chlorine
- hydrazine
- hydrochloric acid
- nitric acid
- acetylene

Ammonia - Used for boiler water treatment.

Chlorine, Hydrazine, Hydrochloric Acid - Considered on the preceding page.

Nitric Acid - Nitric acid may be used in the chemistry laboratory for use in analytical procedures.

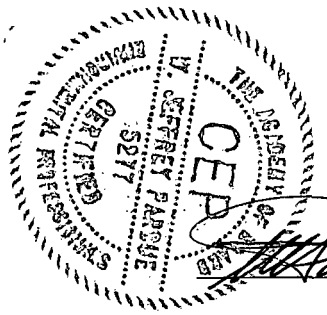
Acetylene - Present on the facility property in 250-lb cylinders which are used for plant maintenance (welding and cutting).

ATTACHMENT AN-FE-15

COMPLIANCE STATEMENT

ATTACHMENT AN-FE-15
COMPLIANCE STATEMENT

I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.



2/10/00

Signature, Responsible Official — Date

W. Jeffrey Pardue, C.E.P., Director, Environmental Services

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions 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.

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Oil Fired Steam Generator Unit 1**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **001**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [X] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **1. Tangential-fired unit. 2. Nameplate rating - winter rating dependent upon condenser cooling water intake temperature 540 MW; summer rating - 535 MW.**		

Emissions Unit Control Equipment Information

A.

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

B.

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

C.

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

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

Emissions Unit Details

1. Initial Startup Date:	16 Oct 1974
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	Model Number:
4. Generator Nameplate Rating:	540 MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	5,212	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters): Gen. Rating - Winter		

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24	hours/day	7	days/week
52	weeks/yr	8,760	hours/yr

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

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

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

See Attachment AN-EU1-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **01**	
2. Emission Point Type Code: [ ] 1 [x] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unit 1 and Unit 2 share a common stack.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **001, 002**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**499** feet
7. Exit Diameter:	**24** feet
8. Exit Temperature:	**320** °F

9. Actual Volumetric Flow Rate:	**1,699,026** acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: **17** East (km): **324.4** North (km): **3118.7**	
14. Emission Point Comment (limit to 200 characters):	

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

Segment Description and Rate: Segment 1 of 6

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

   Ext. Comb. electric generating distillate oil No.1 and No.2

2. Source Classification Code (SCC):

   1-01-005-01

3. SCC Units:

   Thousand Gallons Burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
35.97	315,106

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
0.5	0.1

9. Million Btu per SCC Unit:

   138

10. Segment Comment (limit to 200 characters):

    No. 2 fuel oil used during start-up and for boiler stabilization during startup/shutdown. Unit is tangentially fired. Heat content - HHV. Max. hour rate based on max. capacity.

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Ext. Comb. Boiler, electric generating residual oil No. 6.	
2. Source Classification Code (SCC): 1-01-004-04	
3. SCC Units: Thousand Gallons Burned	
4. Maximum Hourly Rate: 32.66	5. Maximum Annual Rate: 286,080
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 1.8	8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit: 152	
10. Segment Comment (limit to 200 characters): Unit is tangentially fired. Heat Content - HHV. Sulfur content of 1.5%, based on 12-month rolling average.	

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

Segment Description and Rate: Segment 3 of 6

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

Ext. Comb. Boiler, electric generating residual oil No. 5

2. Source Classification Code (SCC):

1-01-004-06

3. SCC Units:

Thousand gallons burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
32.66	286,080

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
1.8	0.1

9. Million Btu per SCC Unit:

152

10. Segment Comment (limit to 200 characters):

1) Unit is tangentially fired. 2) Heat content - HHV.

Sulfur content of 1.5%, based on 12-month rolling average.

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Ext. Comb. Boiler, electric generating residual oil No. 4**	
2. Source Classification Code (SCC): **1-01-005-05**	
3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **34.472**	5. Maximum Annual Rate: **301,977**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.7**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **144**	
10. Segment Comment (limit to 200 characters): **1) Unit is tangentially fired. 2) Heat content - HHV. 3) Also, No. 3 fuel oil.**	

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

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **On - specification used oil.**	
2. Source Classification Code (SCC): **1-01-013-02**	
3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **35.97**	5. Maximum Annual Rate: **31,511**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **2.5**	8. Maximum Percent Ash: **0.9**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment (limit to 200 characters): **Heat content - HHV. Limited to 10% annual heat input.**	

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural Gas	
2. Source Classification Code (SCC): 1-01-006-04	
3. SCC Units: Million Cubic Feet Burned	
4. Maximum Hourly Rate: 4.964	5. Maximum Annual Rate: 43,483
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1,050	
10. Segment Comment (limit to 200 characters): Heat content - HHV. Sulfur content - 1 grain/100cf. Based on a maximum heat input of 5,212 MMBtu/hr.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
PM10			NS
SO2			EL
NOX			NS
CO			NS
VOC			NS
H107			NS
H133			NS
HAPS			NS
FL			NS

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: **0** %
3. Potential Emissions: **1,489.2** lb/hour **2,717.8** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.3 lb/MMBtu** Reference: **FDEP Rule 62-210.700**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment AN-EU1-H8**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **1) Potential lb/hr based on sootblowing while burning oil. 2) Potential TPY based on 0.125 lb/MMBtu (0.1 lb/MMBtu during normal 21 hrs; 0.3 lb/MMBtu during sootblowing 3 hrs) in a 24-hr period.**

Emissions Unit Information Section 1 **of** 4

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/MMBtu**
4. Equivalent Allowable Emissions: **496.4** lb/hour **2,174.2** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **1) Based on oil firing during normal operations. 2) Rule 62-210.700**

B.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.3 lb/MMBtu**
4. Equivalent Allowable Emissions: **1,489.2** lb/hour **815.3** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **1) Based on sootblowing while firing oil (3 hours in 24 hours). 2) Rule 62-210.700.**

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: **0** %

3. Potential Emissions: **13,651** lb/hour **59,791** tons/year

4. Synthetically Limited? [ ] Yes [**X**] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor: **2.75 lb/MMBtu**

   Reference: **FDEP 62-296.405(1)**

7. Emissions Method Code:

   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment AN-EU1-H8.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   1) Based on oil firing (No. 6).

Emissions Unit Information Section 1 of 4
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	**RULE**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**2.75 lb/MMBtu**
4. Equivalent Allowable Emissions:	**13,651** lb/hour **59,791** tons/year
5. Method of Compliance (limit to 60 characters):	**Fuel analysis during emission testing.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**1) Firing No. 6 fuel oil. 2) Rule 62-296.405(1).**

B.

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

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 4

1.	Visible Emissions Subtype: **VE40**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **40** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **EPA Method 9 - Annual Compliance Test.**
5.	Visible Emissions Comment (limit to 200 characters): **1) 40% emission limit as specified in OGC File No. 82-0514 dated 11/7/82. 2) Visible emission limit at steady state. 3) Rule 62-296.405(1).**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 4

1.	Visible Emissions Subtype: **VE60**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **24** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1) 60% opacity allowed during load changing and boiler cleaning for 3 hours in a 24-hour period. Unlimited opacity allowed for 4 six-minute periods during 3 hours. 2) Rule 62-210.700(3).**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: **Best operational practices**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-210.700(1). Excess emissions allowed for 2 hr in 24 hr, malfunction.**

Visible Emissions Limitations: Visible Emissions Limitation 4 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: **Best operational practices**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-210.700(2). Excess emissions for startup/shutdown.**

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 3 of 5

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 42 Serial Number: 42-45969-274	
5. Installation Date: 28 Dec 1994	
6. Performance Specification Test Date: 28 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6.	

Continuous Monitoring System Continuous Monitor 4 of 5

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: United Sciences Model Number: Ultra Flow 100 Serial Number: 9303413	
5. Installation Date: 28 Dec 1994	
6. Performance Specification Test Date: 28 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Second monitor - Ser. No. 9303512	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 5 of 5

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 29849	
5. Installation Date: 28 Dec 1994	
6. Performance Specification Test Date: 28 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor _____ of _____

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

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

Supplemental Requirements for All Applications

1. Process Flow Diagram [X] Attached, Document ID: AN-EU1-L1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: AN-EU1-L2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: AN-EU1-L4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: Submitted July 29, 1999 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: AN-EU1-L6 [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable
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

Additional Supplemental Requirements for Category I Applications Only

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: AN-EU1-H12 [ ] Not Applicable
Permit No. 1010017-004-AC

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT AN-EU1-D

EMISSION UNIT REGULATIONS

ATTACHMENT AN-EU1-D

EMISSION UNIT REGULATIONS

Master Applicable Requirements Listing - Power Plants (5/13/96)

EMISSION UNIT: EU1: Unit 1- FPC Anclote Plant

FDEP Rules:

Air Pollution Control-General Provisions:

62-204.800(12) (State Only)	- Acid Rain Program
62-204.800(13) (State Only)	- Allowances
62-204.800(14) (State Only)	- Acid Rain Program Monitoring

Stationary Sources-General:

62-210.700(1)	- Malfunction only for FFSG
62-210.700(2)	- FFSG; startup/shut down
62-210.700(3)	- FFSG; sootblowing/load change
62-210.700(4)	- maintenance
62-210.700(6)	

Acid Rain:

62-214.300	- Acid Rain Units (Applicability)
62-214.320	- Acid Rain Units (Application Shield)
62-214.330	- Compliance Options (if 214.430)
62-214.340	- Exemptions (new units, retired units)
62-214.350(2);(3);(6)	- Acid Rain Units (Certification)
62-214.370	- Acid Rain Units (Revisions; correction; potentially applicable if a need arises)
62-214.430	- Acid Rain Units (Compliance Options)

Stationary Sources-Emission Standards/RACT:

62-296.405(1)(a)	- FFSG;VE
62-296.405(1)(b)	- FFSG; PM
62-296.405(1)(c)1.j.	- FFSG;Oil-SO2 (general limit)
62-296.405(1)(e)	- FFSG;Test Methods
62-296.405(1)(f)1.a.(i)	- FFSG; Opacity CEMS exempted for oil/gas units
62-296.405(1)(f)1.b.	- FFSG; SO2 CEMS exempted for non-controlled units (oil/gas)

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(c)	- Required Flow Rate Range-PM/H2SO4/F

62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Comp. Tests (Fuel Sampling)
62-297.310(8)	- Test Reports

Federal Rules:

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO2 Allowances-violation
40 CFR 72.9(c)(3)(iii)	- SO2 Allowances-Phase II Units (listed)
40 CFR 72.9(c)(4)	- SO2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)
40 CFR 72.32	- Application Shield
40 CFR 72.33(b)	- Dispatch System ID;unit/system ID
40 CFR 72.33(c)	- Dispatch System ID;ID requirements
40 CFR 72.33(d)	- Dispatch System ID;ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield

40 CFR 72.90	- Annual Compliance Certification
Monitoring Part 75:	
40 CFR 75.4	- Compliance Dates
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(1)	- Primary Measurement; SO2; except 75.11&.16; Subpart D
40 CFR 75.10(a)(2)	- Primary Measurement; NOx; except 75.12&.17; Subpart E
40 CFR 75.10(a)(3)(i)	- Primary Measurement; CO2; monitor
40 CFR 75.10(a)(4)	- Primary Measurement; Opacity; except 75.14&.18
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(d)	- Primary Measurement; Hourly Operating ; Opacity; SO2
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.11(e)	- SO2 Monitoring Gaseous Firing
40 CFR 75.12(b)	- NOx Monitoring; Determination of NOx emission rate; Appendix F
40 CFR 75.13(a)	- CO2 Monitoring; Continuous monitor
40 CFR 75.14(a)	- Opacity Monitoring; Coal and oil units
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Addendix D & E
40 CFR 75.21	- QA/QC; CEMS
40 CFR 75.21(b)	- QA/QC; Opacity
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.21(d)	- QA/QC; Notice of RATA
40 CFR 75.21(e)	- QA/QC; Audits
40 CFR 75.21(f)	- QA/QC; CEMS
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(1)	- General Missing Data Procedures; SO2
40 CFR 75.30(a)(2)	- General Missing Data Procedures; flow
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NOx
40 CFR 75.30(a)(4)	- General Missing Data Procedures; CO2
40 CFR 75.30(d)	- General Missing Data Procedures; SO2
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Procedures
40 CFR 73.35	- Missing Data Procedures for CO2 Data
40 CFR 75.36	- Missing Data Procedures for Heat Input
40 CFR 75.53	- Monitoring Plan
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(c)	- Recordkeeping-SO2
40 CFR 75.54(d)	- Recordkeeping-NOx
40 CFR 75.54(e)	- Recordkeeping-CO2

40 CFR 75.54(f)	- Recordkeeping-Opacity
40 CFR 75.55(c);(e)	- Recordkeeping (Appendix D)
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement
40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
40 CFR 75.65	- Opacity Reports
40 CFR 77.3	- Offset Plans (Future)
40 CFR 77.5(b)	- Deductions of Allowance (Future)
40 CFR 77.6	- Excess Emissions Penalties SO2 and NOx
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NOx & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO2; from combustion sources
Appendix H	- Traceability Protocol

ATTACHMENT AN-EU1-H8

CALCULATION OF EMISSIONS

ATTACHMENT AN-EU1-H8

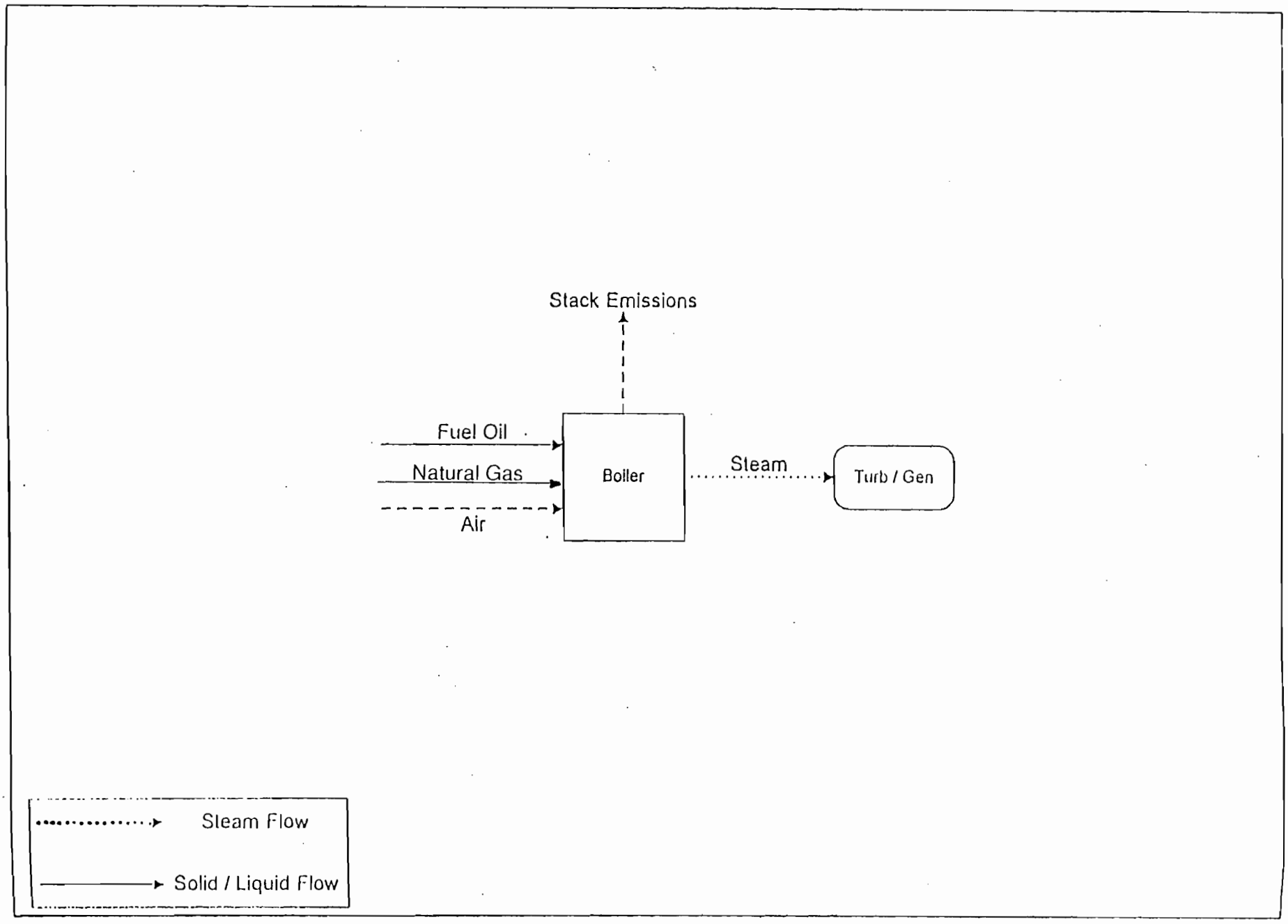
Table 1. Maximum Emissions for Emissions Limited Pollutants for Anclote Unit 1 and 2.

	No. 6 Fuel Oil	
Pollutant	Unit 1	Unit 2
Hours of Operation	8760	8760
Sulfur Dioxide (lb/hr) (Oil) = EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)		
Basis	DEP Rules	DEP Rules
EF (lb/MMBtu)	2.75	2.75
HIR (MMBtu/hr)	4964	4850
lb/hr	13651	13338
TPY	59791	58418
Particulate Matter (lb/hr) (Oil) = EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)		
TPY(normal+sootblowing) = lb/hr(normal) x 21/24 + lb/hr(sootblowing) x 3/24		
Basis (1)	DEP Rules	DEP Rules
EF (lb/MMBtu) (Oil; Sootblowing, load changing; annual)	0.3	0.3
EF (lb/MMBtu) (Oil; normal; annual)	0.1	0.1
HIR (MMBtu/hr)	4964	4850
lb/hr (normal)	496.4	485
lb/hr (sootblowing)	1489.2	1455
TPY (normal + sootblowing)	2717.8	2655.4

(1) FDEP Rule 62-296.405(1) and 62-296.800; 0.3 and 0.1 lb/MMBtu for soot-blowing and normal operations.

ATTACHMENT AN-EU1-L1

PROCESS FLOW DIAGRAM


Stack Emissions
Fuel Oil
Natural Gas
Air
Boiler
Steam
Turb / Gen
Steam Flow
Solid / Liquid Flow

ATTACHMENT AN-EU1-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT AN-EU1-L2

Fuel Analysis

Fuel	Density (lb/gal)[a]	Maximum % Weight Content			
		Sulfur	Nitrogen	Ash[b]	Heat Capacity
No. 1, 2 Fuel Oil	7.1	0.5	0.025 - 0.03	0.1	19,500 BTU/lb 138,000 Btu/gal
No. 3, 4 Fuel Oil	7.6	0.7	0.18	0.1	19,000 BTU/lb 144,000 Btu/gal
No. 5, 6 Fuel Oil	8.12	1.8	0.25 - 0.50	0.1	18,300 BTU/lb 152,000 BTU/gal
On-specification used oil	7.4	2.5	0.3	0.9	18,700 Btu/lb 138,000 Btu/gal

[a] At 60 degrees F; data from laboratory analysis
[b] Data from FPC procurement specification.

Source: The values are based upon information gathered by laboratory analysis and FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any point in time may vary from those listed.

Attachment AN-EU1-L2

Fuel Analysis

Natural Gas Analysis

Parameter	Typical Value	Max Value
Relative density	0.58 (compared to air)	
heat content	950 - 1124 Btu/cu ft.	
% sulfur	0.43 grains/CCF [1]	1 grain/100 CF
% nitrogen	0.8% by volume	
% ash	negligible	

Note: The values listed are "typical" values based upon information supplied to FPC 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

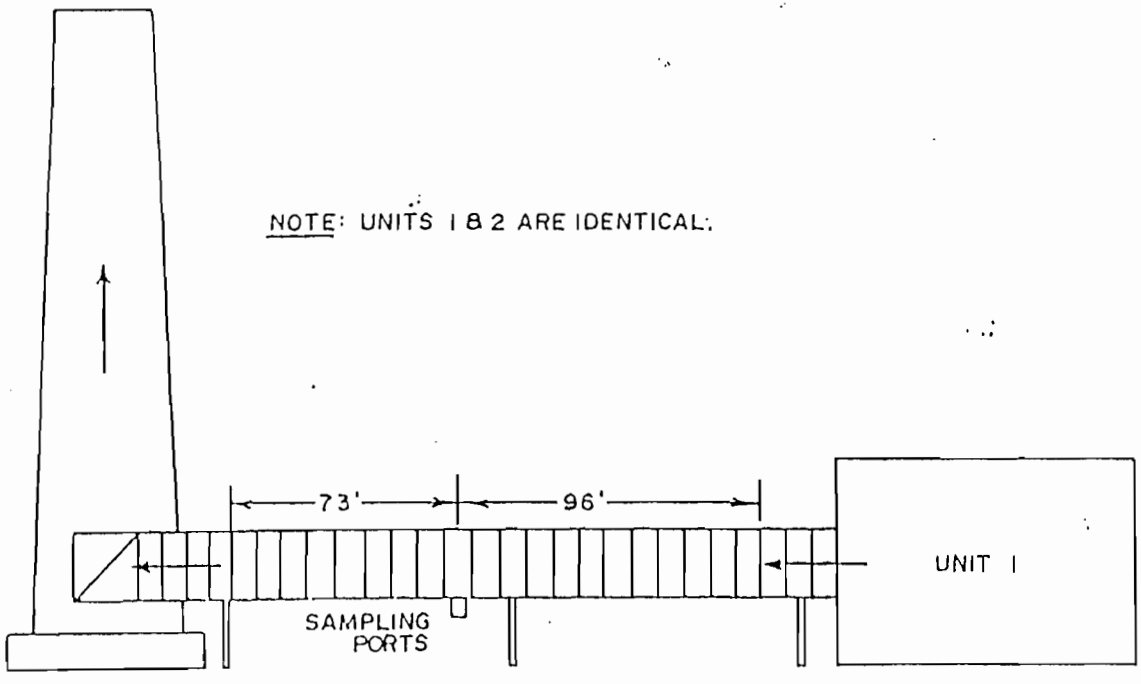
ATTACHMENT AN-EU1-L4

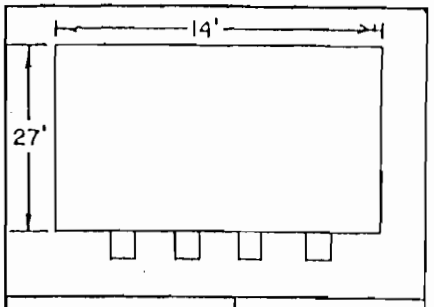
DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT AN-EU1-L4
DESCRIPTION OF STACK SAMPLING FACILITIES

The Anclote Plant Steam Generator Unit No. 1 and 2 are required by Permit AO51-254492A and AO51-169340 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to FAC 62-297.345, the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by rule, the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports meet FAC 297-345 (3)(a)(3) requirements (i.e., 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances).
- At least two sampling ports, 90 degrees apart have been installed on the circular stack.
- The working platform is at least 24 square feet in area, at least three feet wide, extends 180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety cage.





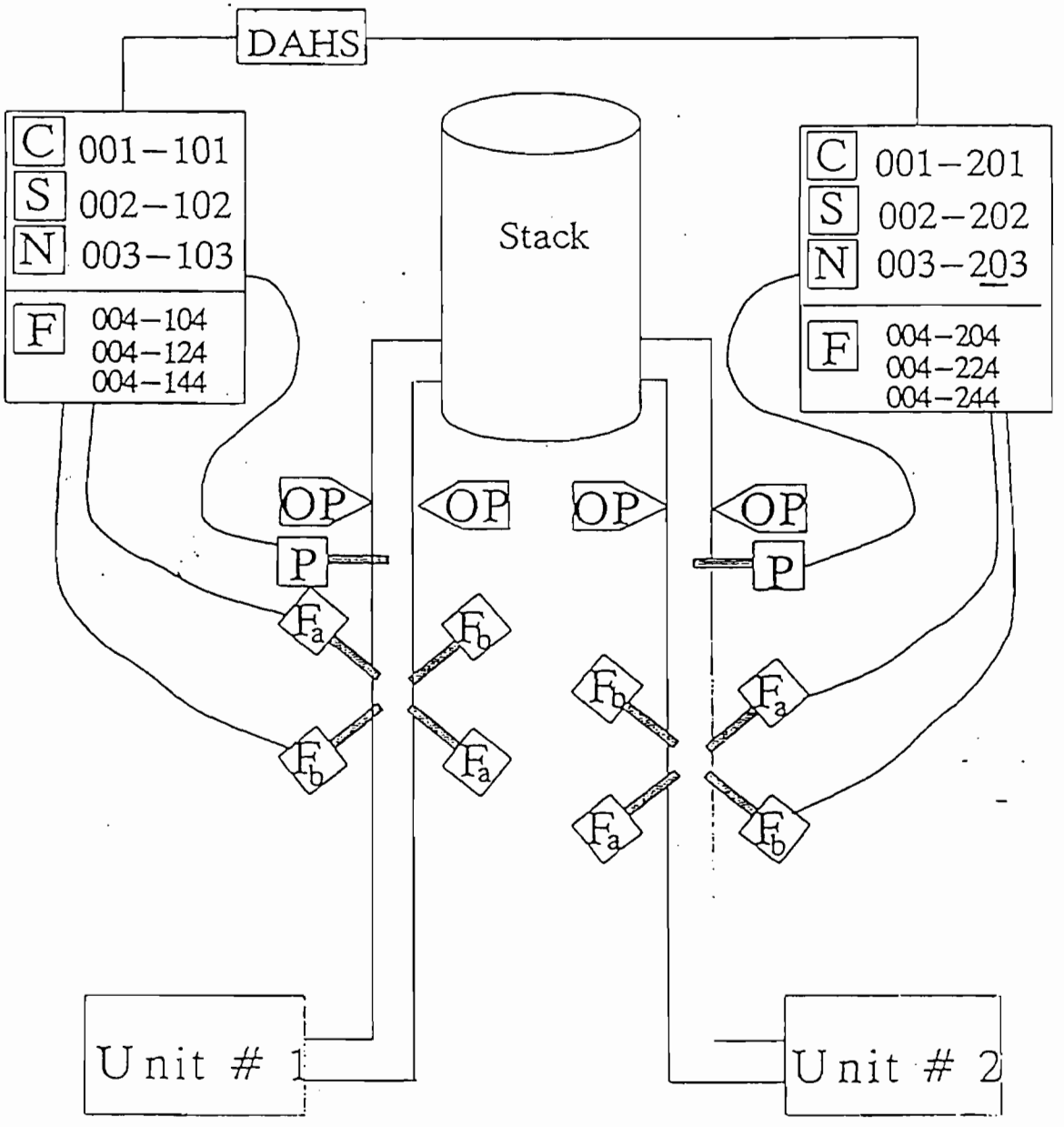
TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
1	32.4
2	97.2
3	162.0
4	226.8
5	291.6

FIGURE 1.
EXHAUST SYSTEM SCHEMATIC
ANCLOTE PLANT UNITS 1 & 2
FLORIDA POWER CORPORATION
TARPON SPRINGS, FLORIDA

AIR CONSULTING
and
ENGINEERING

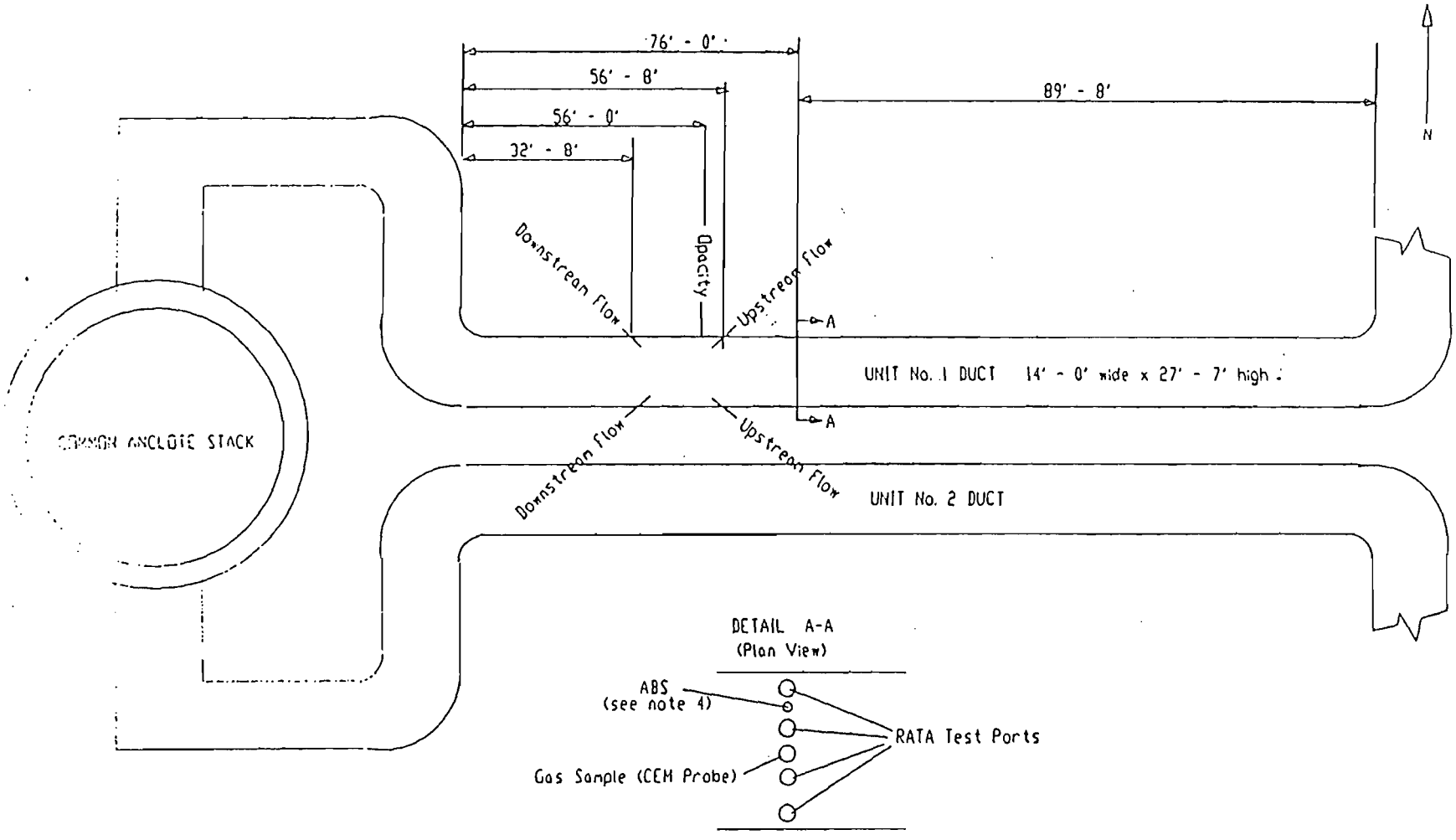
Attachment No. 1.

ANCLOTE Units No. 1 & 2
Florida Power Corp., Tarpon Springs,FL
EPA Monitoring Plan Location Information (Part 2)



ORIS code : 8048

NADB Boiler ID : **1, & **2



ATTACHMENT NO. 2

NOTES

1. DUCT LINER CROSS SECTIONAL AREA AT FLOW PROBE LOCATION IS 386.2 SQFT.
2. EXIT OF DUCT CROSS SECTIONAL AREA IS 386.2 SQFT.
3. CEM MEASUREMENT POINT IS > 1.0 METER FROM THE LINER WALL.
4. ABS = ATMOSPHERIC PRESSURE PORT.

FLORIDA POWER CORPORATION ANCLOTE UNIT No. 1
ORIS NO. 8048 NADB NO. xx1

Florida Power
CORPORATION

bcc: D. T. Buell
J. M. Kennedy
J. A. Gridley
T. R. Reinhart
J. T. Long

File: Anclote/Air/Corresp.
k:\user\sosbourn\1999\anctst.doc
927-616100-AIRAN

July 29, 1999

Mr. William Proses
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Dr.
Tampa, Florida 33619-8318

Dear Mr. Proses:

Re: FPC Anclote Facility
Initial and Annual Compliance Testing

Florida Power Corporation (FPC) had previously been issued a construction permit (No. 1010017-004-AC) for the installation of natural gas-firing capability at the above-referenced facility. Further, particulate and visible emissions tests are also required annually on the Anclote units. Testing was conducted on Unit 1 during the period of June 22-25, 1999, to fulfill the requirements of both the construction and operating permits.

This letter serves to transmit two copies each of test reports for both the initial and the annual tests (four copies total). The test results indicate that compliance was demonstrated for all applicable requirements.

If you should have any questions concerning this request, please do not hesitate to contact me at (727) 826-4258.

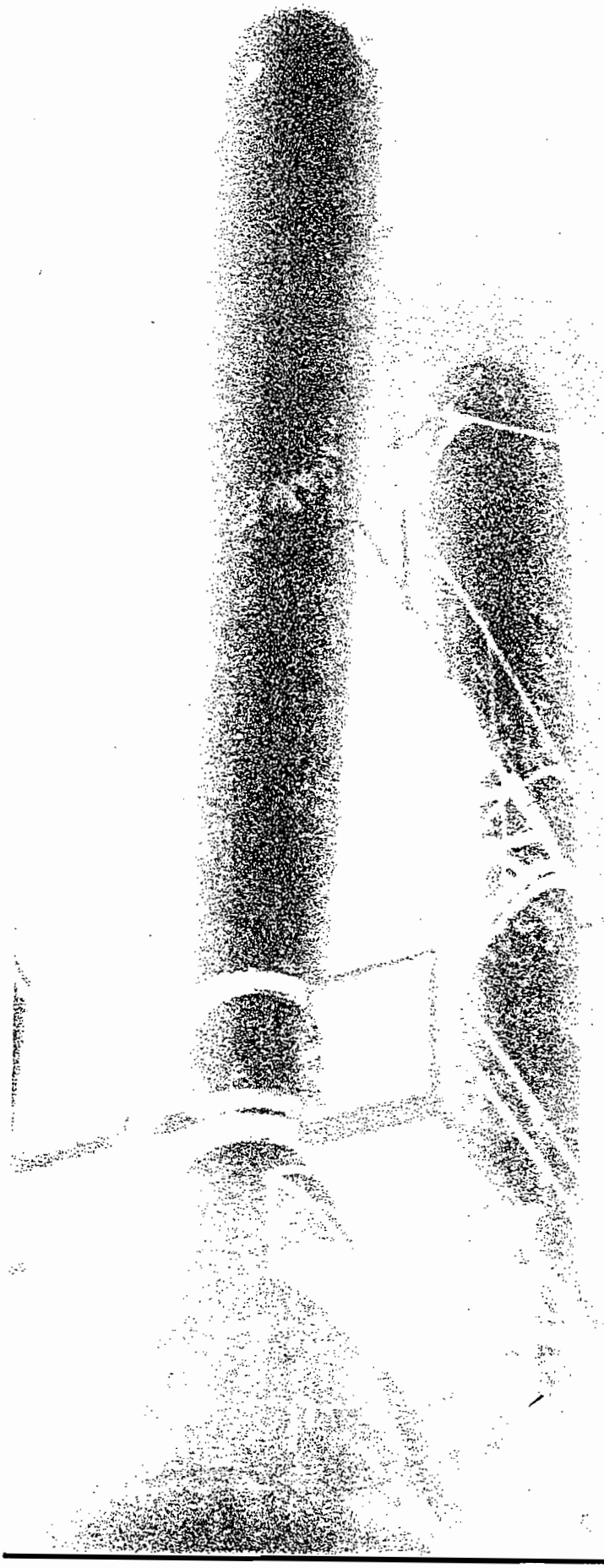
Sincerely,

Scott H. Osbourn
Senior Environmental Engineer

Enclosure

cc: Martin Costello, DEP (w/ enclos.)
Pete Burnette, ACE Testing

ONE POWER PLAZA, 263 - 13th Avenue South, BB1A, St. Petersburg, FL 33701-5511 •
P.O. Box 14042, BB1A • St. Petersburg • Florida 33733-4042 • (727) 866-5151
A Florida Progress Company



SOURCE TEST REPORT
FOR

PARTICULATE AND VISIBLE EMISSIONS

FROM THE
FLORIDA POWER CORPORATION
ANCLOTE PLANT - UNIT 1
HOLIDAY, FLORIDA

FDEP PERMIT NUMBER
AO51-160331

JUNE 23 AND 24, 1999

PREPARED FOR:

FLORIDA POWER CORPORATION
ONE POWER PLAZA
263 13TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33701

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

162-99-08

1.0 INTRODUCTION

On June 23 and 24, 1999, Air Consulting and Engineering, Inc. (ACE), conducted particulate and visible emissions compliance testing on Unit 1 of Florida Power Corporation's (FPC) Anclote Plant in Holiday, Florida.

Testing was conducted to satisfy conditions in Florida Department of Environmental Protection (FDEP) Permit Number AO51-160331. Tests were conducted in both the soot blowing and normal operating modes using United States Environmental Protection Agency (EPA) Method 17 for particulates and EPA Method 9 for visible emissions.

Mr. Scott Osbourn of FPC coordinated testing and provided unit operating parameters and Mr. Robert Soich of the FDEP observed testing.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Unit 1 at the Anclote Plant was found to be operating in compliance with FDEP particulate and visible emission limiting standards in both the soot blowing and normal operating modes.

Unit 1 averaged 0.0601 pounds per million BTU's (lbs/MMBTU) of heat input to the boiler in the soot blowing mode and 0.0508 lbs/MMBTU in the normal operating mode.

Limiting standards are 0.3 lbs/MMBTU while blowing soot and 0.1 lbs/MMBTU during normal operations.

Table 1 summarizes particulate emissions and flue gas parameters.

Particulate emissions in terms of lbs/MMBTU were calculated using the EPA "F" factor method with the following formula:

$$E = CF \frac{20.9}{20.9 - \%O2}$$

Where:

E = particulate emissions in lbs/MMBTU

C = particulate concentration in lbs/Standard Cubic Foot (SCF)

F = 9190 SCF/MMBTU for oil

% O2 = flue gas oxygen content

Complete emission data are presented in Appendix A. Field data sheets and laboratory data are presented in Appendices B and C, respectively.

Visible emissions averaged 45.4% opacity for the highest consecutive six minute period in the soot blowing mode and 32.5% during normal operating conditions and were in compliance with the permitted limits of 60% opacity in the soot blowing mode and 40% in the normal operating mode. Emissions were observed concurrently with particulate Runs Number 2 and 5. The visible emissions data sheets and observer's certification are included in Appendix E.

Table 1 Particulate Emissions Summary
Florida Power Corporation
Anclote Plant - Unit 1
Holiday, Florida
June 23 and 24, 1999

Run Number	Time	Flow Rate		Stack Temp	Moisture	Oxygen	Actual Emission Rate	
		Actual (ACFM)	Standard (SCFMD)	(°F)	(%)	(%)	Actual lbs/MMBTU	Allowable lbs/MMBTU
Normal Operating Mode (6/23/99)								
1	1242-1353	1728045	1018781	336	11.3	2.55	0.0530	0.1
2	1411-1523	1681733	997492	338	10.6	2.50	0.0493	0.1
3	1538-1647	1695107	994110	343	11.1	2.52	0.0502	0.1
Average		1701628	1003461	339	11.0	2.52	0.0508	0.1
Soot Blowing Mode (6/24/99)								
4	1227-1336	1700313	1010038	339	10.6	2.6	0.0673	0.3
5	1348-1501	1706148	1014472	338	10.6	2.4	0.0679	0.3
6	1524-1634	1667806	989015	339	10.7	2.6	0.0450	0.3
Average Runs		1691422	1004508	339	10.6	2.5	0.0601	0.3

3.0 PROCESS DESCRIPTION AND OPERATION

During testing Anclote Unit 1 was 100% oil fired and operated at the following permitted parameters during the test periods:

		Heat Input (MMBTU/Hr)		SO2 Emissions (lbs/MMBTU)*	
Date	Megawatts	Actual	Permitted	Actual	Permitted
6/23/99	509	4724.9	4850.0	1.75	2.75
6/24/99	509	4727.4	4850.0	1.52	2.75

These values were calculated from fuel analyses in Appendix E and fuel consumption of 511 gallons per minute (GPM) on June 23, 1999 and 512 GPM on June 24, 1999.

* lbs/MMBTU SO_2 = %S x density x consumption/Hr x $\frac{MW\ SO_2}{MW\ S}$ x $\frac{1}{MMBTU/Hr}$

SOURCE TEST REPORT
FOR

PARTICULATE, CARBON MONOXIDE AND VISIBLE EMISSIONS

FROM THE
FLORIDA POWER CORPORATION
ANCLOTE PLANT - UNIT 1
HOLIDAY, FLORIDA

FIRING 100% OIL
JUNE 23, 1999

FIRING 60%OIL/40% GAS
JUNE 22 & 25, 1999

FDEP PERMIT NUMBERS
AO51-160331
1010017-004-AC

PREPARED FOR:

FLORIDA POWER CORPORATION
ONE POWER PLAZA
263 13TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33701

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

162-99-08

1.0 INTRODUCTION

On June 22, 23 & 25, 1999, Air Consulting and Engineering, Inc. (ACE), conducted particulate, Carbon Monoxide (CO) and visible emissions compliance testing on Unit 1 of Florida Power Corporation's (FPC) Anclote Plant in Holiday, Florida.

Testing was conducted to satisfy conditions in Florida Department of Environmental Protection (FDEP) Permit Numbers AO51-160331 and 1010017-004-AC. Tests were conducted while the Unit was firing 100% oil and repeated on a 60% oil/40% natural gas combination. United States Environmental Protection Agency (EPA) Method 17 was used for particulates; EPA Method 9 was used for visible emissions; and EPA Method 10 was used for CO emissions.

Mr. Scott Osbourn of FPC coordinated testing and provided unit operating parameters and Mr. Bob Soich of the FDEP observed a portion of the test.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Anclote Unit 1 emission results are as follows:

Date	Fuel	Heat Input* MMBTU/Hr	Particulate lbs/MMBTU	Carbon Monoxide lbs/MMBTU	Opacity %
June 23, 1999	100% Oil	4724.9	0.0508	0.208	32.5
June 22 & 25, 1999	60% Oil/40% Gas	4738.5	0.0402	0.066	18.3

Tables 1 and 2 summarize emissions and flue gas parameters.

Emissions in terms of pounds per million BTUs (lb/MMBTU) were calculated using the EPA "F" factor method with the following formula:

$$E = C\,F\,(20.9)/(20.9 - \%\,O_2)$$

Where E = emissions in lbs/MMBTU

C = concentration in lbs/Standard Cubic Foot (SCF)

F = 9190 SCF/MMBTU for Oil

= 8710 SCF/MMBTU for Gas

= 8998 SCF/MMBTU for 60% Oil/40% Gas

$\%\,O_2$ = Flue gas oxygen content

Allowable emissions on 100% oil in the normal operating mode are 0.1 lbs/MMBTU of particulates and 40% opacity.

Complete emission data are presented in Appendix A. Field data sheets and laboratory data are presented in Appendices B and C, respectively. Carbon Monoxide data is located in Appendix G.

Visible Emissions were observed concurrently with particulate Runs Number 2 on June 23, 1999 (on 100% oil) and 3 O/G on June 25, 1999 (on 60% oil/40% gas). The visible emissions data sheets and observer's certifications are included in Appendix E.

* See Section 3.0

Table 1 Particulate and Carbon Monoxide Emission Summary
Florida Power Corporation
Anclote Plant - Unit 1 - 100% Oil
Holiday, Florida
June 23, 1999

Run Number	Time	Flow Rate (ACFM)	Flow Rate (SCFMD)	Temp (°F)	Moisture (%)	Oxygen (%)	Particulate Emissions gr/SCF	Particulate Emissions lbs/Hr	Particulate Emissions lbs/MMBTU
Normal Operating Mode									
1	1242-1353	1728045	1018781	336	11.3	2.55	0.0354	309.4	0.0530
2	1411-1523	1681733	997492	338	10.6	2.50	0.0330	282.4	0.0493
3	1538-1647	1695107	994110	343	11.1	2.52	0.0336	286.5	0.0502
Average		1701628	1003461	339	11.0	2.52	0.0340	292.8	0.0508

Run Number	Carbon Monoxide Emissions ppm_d	Carbon Monoxide Emissions lbs/Hr	Carbon Monoxide Emissions lbs/MMBTU
1	249.47	1108.0	0.190
2	281.66	1224.8	0.214
3	291.11	1261.6	0.221
Average	274.08	1198.1	0.208

Table 2 Particulate and Carbon Monoxide Emission Summary
Florida Power Corporation
Anclote - Unit 1 - 60% Oil/40% Gas
Holiday, Florida
June 22 (Run 1 O/G) and 25, 1999

Run Number	Time	Flow Rate (ACFM)	Flow Rate (SCFMD)	Temp (°F)	Moisture (%)	Oxygen (%)	Particulate Emissions gr/SCF	Particulate Emissions lbs/Hr	Particulate Emissions lbs/MMBTU
Normal Operating Mode									
1 O/G	1604-1723	1712588	989965	339	12.8	2.50	0.0289	245.3	0.0422
2 O/G	1302-1412	1777146	1008737	345	13.6	2.41	0.0313	270.6	0.0455
3 O/G	1505-1619	1763651	1017282	337	13.0	2.41	0.0227	198.1	0.0330
Average		1751128	1005328	340	13.1	2.44	0.0276	238.0	0.0402

Run Number	Carbon Monoxide Emissions ppm_d	Carbon Monoxide Emissions lbs/Hr	Carbon Monoxide Emissions lbs/MMBTU
1 O/G	138.95	599.69	0.103
2 O/G	65.38	287.52	0.048
3 O/G	63.90	283.39	0.047
Average	89.41	390.20	0.066

3.0 PROCESS DESCRIPTION AND OPERATION

On June 22, 1999 (Run 1 O/G) the Unit generated 510 MW while consuming an average of 307 gallons per minute (GPM) of oil and 1,866,000 Standard Cubic Feet per Hour (SCF/Hr) of natural gas. Fluctuations in the natural gas pipeline pressure were experienced throughout the day. Eventually, all pressure was lost and the natural gas fired testing was discontinued until June 25, 1999. On June 25, 1999 (Runs 2 O/G and 3 O/G) the Unit generated 510 MW while using 308 GPM of oil and 1,812,000 SCF/Hr of natural gas.

On June 23, 1999 Anclote Unit 1 was fueled with 100% oil consuming an average of 511 GPM and generating 509 Megawatts (MW).

Using fuel analyses data from Appendix E the total heat input was calculated to be 4724.9 MMBTU/Hr on June 23, 1999; and 4773.0 MMBTU/Hr and 4721.2 MMBTU/Hr on June 22 and 25, 1999 respectively (weighted average 4738.5 MMBTU/Hr). The permitted maximum heat input is 4850 MMBTU/Hr.

ATTACHMENT AN-EU1-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT AN-EU1-L6

PROCEDURES FOR STARTUP AND SHUTDOWN MINIMIZING EXCESS EMISSIONS

Startup of the fossil-fuel boilers begins when fuel (No. 2 and No. 6 fuel 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 and above 10 percent load.

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

Emissions may be detected during all modes of boiler operation by various continuous emissions monitors. Continuous monitors are currently in place for NO_x, CO_2, and opacity. Audible and visual alarms are activated whenever the permitted value for opacity is approached.

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

- burner elevation loading
- 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 (load control)
- reduction of unit megawatt load
- stopping and restarting of boiler cleaning devices
- lowering load ramp rate
- pressure rate changes
- placing boiler controls on manual
- adjusting burner dampers to increase windbox/furnace air pressure

Knowledge of the appropriate countermeasures to take when excess emissions occur is a part of the routine operator training for those who operate the boilers. Topics include current permit

limits, maximum allowable duration of excess emissions, appropriate countermeasures for excess emissions, duty to notify, and fuels and combustion training.

ATTACHMENT AN-EU1-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

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).

Anclote permit? Air

RECEIVED
OCT 15 1998
Environmental Svcs Department

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit

Mr. W. Jeffrey Pardue
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

DEP File No. 1010017-004-AC
Pasco County

Enclosed is the FINAL Permit Number 1010017-004-AC for the installation of natural gas burners and natural gas supply equipment at the Anclote Power Plant Units 1 and 2 located at Anclote Road, West of U.S. 19, Tarpon Springs, Pasco County. This permit is issued pursuant to Chapter 403.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

C.H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10-13-98 to the person(s) listed:

Mr. W. Jeffrey Pardue, FPC*
Mr. Doug Neeley, EPA
Mr. John Bunyak, NPS
Mr. Bill Thomas, DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 10-13-98 (Date)

Final Determination
Florida Power Corporation Anclote Facility
Natural Gas Co-Firing Units 1 and 2
Permit No. 1010017-004-AC

An Intent to Issue Air Construction Permit to install natural gas burners and natural gas supply equipment at the Anclote Power Plant Units 1 and 2 located at Anclote Road, West of U.S. 19, Tarpon Springs, Pasco County, Florida was distributed on September 4, 1998 The Public Notice of Intent to Issue Air Construction Permit was published in the Pasco Times on September 10, 1998. Copies of the draft construction permit and related documents were available for public inspection at the Department's offices in Tallahassee and Tampa. No comments were received.

FPC representative Mike Kennedy talked to Clair Fancy of the Bureau of Air Regulation in person on September 23 regarding sulfur fuel sampling and analysis. It was agreed to address this in the Title V permit.

Therefore, the final action of the Department will be to issue the final permit in accordance with the draft permit.

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

PERMITTEE:

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

Permit No.	1010017-004-AC
SIC No.	4911
Expires:	December 1, 1999

Authorized Representative:
W. Jeffrey Pardue
Director Environmental Services

PROJECT AND LOCATION:

Permit for the installation of natural gas burners and natural gas supply equipment at the Anclote Power Plant Units 1 and 2, located at Anclote Road, West of US 19, Tarpon Springs, Pasco County, Florida.

UTM: Zone 17 ; 324.4 km E ; 3118.7 km N

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-214, 62-296 and 62-297. The above named Permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendix made a part of this permit:

Appendix GC Construction Permit General Conditions

for Howard L. Rhodes, Director
Division of Air Resources
Management

SECTION I. FACILITY INFORMATION

FACILITY DESCRIPTION

This permit authorizes the installation and testing of natural gas burners to utility boilers unit 1 and unit 2. Unit 1 is a nominal 535(summer)/540(winter) megawatt (electric) steam generator. Unit 2 is a nominal 525(summer)/530(winter) megawatt (electric) steam generator. Both units share a common 499 foot exhaust stack. There is no air pollution control equipment on these units.

REGULATORY CLASSIFICATION

The Anclote Generating Station is classified as a major air pollutant emitting facility. Units 1 and 2 are regulated under Rule 62-296.405 F.A.C., Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input.

This facility is regulated under Title IV and Title V of the Clean Air Act Amendments of 1990.

This facility is classified as a major source of Hazardous Air Pollutants (HAPs).

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action but do not supersede the conditions given in this permit. These documents are on file with the Department.

Application received by DEP on 2/26/98
Department's letters dated 3/26/98, and 5/19/98
FPC response letters and faxes dated 3/23/98 4/28/98, 6/5/98, and 6/23/98
FPC letter dated 9/1/98
Department's Intent to Issue dated 09/04/98 and associated documents
Department's Final Determination accompanying permit

SECTION II. EMISSION UNITS ADMINISTRATIVE REQUIREMENTS

1. Regulating Agencies: All documents related to applications for permits to operate, and associated reports, tests, minor modifications and notifications or for permits to construct or modify an emission unit(s) should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP) mailing address: 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Mail Station 5505, and phone number (850) 488-0114.

The Permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office:

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6458

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

U. S. Environmental Protection Agency - Region 4
Air, Pesticides & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 32303
Telephone: 404/562-9099
Fax: 404/562-9095

2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in *Appendix GC* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

4. Forms and Application Procedures: The Permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

5. Expiration: This air construction permit shall expire on December 1, 1999.

SECTION III. SPECIFIC CONDITIONS

A. General Operation Requirements

1. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application and supplemental information referenced in Section I, Subsection C with the exception of used oil firing. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

2. Unit 1 is authorized to fire fuel oils No. 1 through No. 6 with a maximum heat input of 4964 MMBtu per hour. Unit 2 is authorized to fire fuel oils No. 1 through No. 6 with a maximum heat input of 4850 MMBtu per hour. Pipeline quality natural gas may be fired alone or cofired with fuel oil in either boiler and shall be limited to a maximum heat input of 2300 MMBtu per hour per boiler. Unit 1 is authorized to co-fire natural gas with fuel oils No. 1 through No. 6 with a maximum heat input of 5073 MMBtu per hour. Unit 2 is authorized to co-fire natural gas with fuel oils No. 1 through No. 6 with a maximum heat input of 4957 MMBtu per hour.

   The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.

3. Anclote Power Plant Units 1 and 2 may operate continuously (i.e., 8760 hours per year).

4. Only pipeline quality natural gas or No. 1 - 6 fuel oils with an as-fired maximum sulfur content of 1.8% by weight shall be fired in Units 1 and 2.

5. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Permitting Authority as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the Permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

6. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. [Rule 62-4.070(3), F.A.C.]

B. Emission Limits and Standards

1. The following is a summary of emission limits applicable to Units 1 and 2:

Table 1. Emission Limits

Pollutant	Standard
SO2	1.5% sulfur content by weight, based upon 12 month rolling average
PM/PM10	0.1 lb/MMBtu
Visible Emissions	40 percent opacity

2. Visible Emissions. Visible emissions (VE) shall not exceed 40 percent opacity. Owners or operators shall conduct a compliance test for particulate matter emissions and opacity annually. Failure to demonstrate compliance with the particulate matter standard or the opacity standard of this condition shall constitute grounds for immediate revocation of this 40% standard in which case the standard from Rule 62-296.405(1)(a) F.A.C. shall apply (20% opacity limit except for one six-minute period per hour during which opacity shall not exceed 27%). [Rule 62-296.405(1)(a), F.A.C.; and, OGC File Nos. 86-1574 and 86-1575/Orders dated December 11, 1986.]

3. Visible Emissions - Soot Blowing and Load Change.
Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60 percent opacity, and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized. 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. Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes on Units 1 and 2 which are required to operate continuous opacity monitors. [40 CFR 75 and Rule 62-210.700(3), F.A.C.]

4. Sulfur Dioxide. The sulfur content of fuel oils burned shall not exceed 1.8% by weight, as fired at the plant. The 12 month rolling average shall not exceed 1.5% by weight.

5. Particulate Matter. Particulate matter emissions shall not exceed 0.1 lb/MMBtu as measured by Method 5 or Method 17. 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) or load change.

6. To minimize acid smut, at low load operation (less than 80 MW per unit), the use of natural gas shall be at least 40 % of the heat input to the unit or 7,000 MMBtu/day, whichever is less.

C. Excess Emissions

1. Excess emissions resulting from malfunction shall be permitted provided that best operational practices 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 DEP Southwest District Office for longer duration. 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.]

2. 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]

3. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Southwest District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Excess emissions shall be reported in accordance with 40 CFR 60.7. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

D. Compliance Determination

1. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate for natural gas firing, but not later than 180 days from the initial operation date on natural gas, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 version), and adopted by reference in Chapter 62-297, F.A.C.

   Initial (I) compliance tests for VE and particulate emissions shall be performed on Units 1 and 2 while cofiring the maximum capacity of natural gas (approximately 40% to 44% of total heat input) and No. 6 Fuel oil. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C., on Units 1 and 2 as indicated. The following reference methods shall be used:

   - DEP Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A).
   - EPA Method 17 or Method 5. The minimum sample volume shall be 30 dry standard cubic feet.

   For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. EPA Method 3A shall be used with the oxygen based F-factor and emission rates (lb/MMBtu) shall be computed according to EPA Method 19. Acetone wash shall be used with EPA Method 5 or 17. Stack testing shall be conducted using the fuel (and additive injection levels) which is representative of worst case for particulate emissions rate (i.e. using the fuel or fuel blend representative of that which has been fired during the past federal fiscal year which results in the highest potential emissions rate). (I, A) [Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

   Note: No other methods may be used for compliance testing unless prior DEP approval is received in writing. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated. The DEP's Southwest District office shall be notified, in writing, at least 30 days prior to the initial and annual compliance test(s)

2. Testing of emissions shall be conducted with each boiler operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the heat input limit to 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity.

3. EPA Method 6C may be used to determine compliance with the SO_2 emission limit. The following fuel sampling and analysis protocol may be used as an alternate sampling procedure authorized by this permit to demonstrate compliance with the sulfur dioxide standard: Determine and record the fuel sulfur content, percent by weight, for fuel oil delivered to the facility using either ASTM D2622-924, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-95 (or latest editions).

Co-firing natural gas with fuel oil having more than 1.8% sulfur content by weight as-fired is prohibited. [Rules 62-213.440(1), 62-4.070(3), 62-296.405(1)(e)3., 62-296.405(1)(f)1.b., 62-297.440, F.A.C., and FPC's letter dated 9/1/98].

4. An initial test for CO is required while co-firing No. 6 fuel oil and natural gas at the design maximum capacity for gas operation (approximately 40% to 44% of total heat input) and within 90 -100% of the permitted overall heat input rate for each unit. The initial CO test results shall be the average of three valid one-hour runs using EPA method 10. A second test for CO shall be conducted firing only No. 6 fuel oil within 90-100% of the overall heat input rate for comparison. This test is not required annually.

5. All fuel oil delivered to the facility shall be analyzed using ASTM D240-76 (or equivalent) to record the gross heating value (HHV). Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

6. Compliance with the liquid fuel sulfur limit shall be verified by a fuel analysis provided by the vendor or performed by FPC upon each fuel delivery with the following exception: in cases where No. 6 fuel oil is received with a sulfur content exceeding 1.5% by weight, and blending is required to obtain a fuel mix equal to the applicable percent sulfur limit, an analysis of a fuel sample representative of fuel from the fuel storage tanks shall be performed by FPC prior to firing oil at the plant. Reports of percent sulfur content of these analyses shall be maintained at the power plant facility.

The owner or operator shall maintain records of the as-fired fuel oil heating value, density or specific gravity, and the percent sulfur content. fuel sulfur content, percent by weight, for liquid fuels shall be determined by either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the fuel oil.
[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C., and applicant agreement with DEP on September 1, 1998.

E. Notification, Reporting and Recordkeeping

1. All measurements, records, and other data required to be maintained by FPC shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.

2. Compliance Test Reports: A test report indicating the results of the required compliance tests shall be filed with the DEP Southwest District Office as soon as practical, but no later than 45 days after the last sampling run is completed. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

F. Monitoring Requirements

1. The Permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides, sulfur dioxide emissions and opacity from Units 1 and 2. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards in Table 1 following the format of 40 CFR 60.7 (1998 version).

2. The following monitoring schedule for No. 1 - 6 fuel oil shall be followed: For all shipments of fuel oil received at the Anclote Power Plant Station, an analysis which reports the sulfur and ash content and heat content (HHV) of the fuel shall be provided by the fuel vendor or other sources which follow the appropriate fuel test methods listed in Specific Condition D1. The analysis record shall specify the origin of the fuel sample, the methods by which the analyses were conducted, the person conducting the sampling and analysis, and date of sampling and analysis.

4. Determination of Process Variables:

   (a) The Permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

   (b) Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh 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]

G. Rule Requirements

1. The emission unit shall be operated in compliance with all applicable requirements of Rules 62-4, 204, 210, 212, 214, 296, and 297 except as otherwise specified herein. All notifications and reports specified in this section shall be submitted to the DEP's Southwest District office.

2. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62-210.300(1), F.A.C.).

3. Except as otherwise specified herein, the emission unit shall be operated in compliance with all applicable provisions of Rule 62-210.700, F.A.C.: Excess Emissions; Chapter 62-297, F.A.C.: Stationary Sources - Emissions Monitoring; and, Rule 62-4.130, F.A.C.: Plant Operation - Problems.

SECTION III. SPECIFIC CONDITIONS

4. Quarterly excess emission reports, in accordance with 40 CFR 60.7 (7) (c) (1998 version), shall be submitted to the DEP's Southwest District office.

5. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the Permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Southwest District office by March 1st of each year.

6. Stack sampling facilities shall be available in accordance with Rule 62-297.310(6), F.A.C.

7. The Permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

H. Modifications

1. The Permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change.

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

(a) Have access to and copy and records that must be kept under the conditions of the permit;
(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of non-compliance; and
(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This permit also constitutes:

(a) Determination of Best Available Control Technology *( )*
(b) Determination of Prevention of Significant Deterioration *( )*; and
(c) Compliance with New Source Performance Standards *( )*.

G.14 The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The dates analyses were performed;
4. The person responsible for performing the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions 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.

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Oil Fired Steam Generator Unit 2**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **002**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [X] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **Tangential-fired unit**		

Emissions Unit Control Equipment Information

A.

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

B.

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

C.

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

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

Emissions Unit Details

1. Initial Startup Date:	31 Oct 1978
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	Model Number:
4. Generator Nameplate Rating:	525 MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	5,092	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters):		

Gen. rating - Summer. Winter rating - 530 MW

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24	hours/day	7	days/week
52	weeks/yr	8,760	hours/yr

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

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

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

See Attachment AN-EU2-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **01**
2. Emission Point Type Code: [ ] 1 [x] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unit 1 and Unit 2 share a common stack.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **001, 002**
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W
6. Stack Height: **499** feet
7. Exit Diameter: **24** feet
8. Exit Temperature: **320** °F

9. Actual Volumetric Flow Rate:	**1,692,307** acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: **17** East (km): **324.4** North (km): **3118.7**	
14. Emission Point Comment (limit to 200 characters):	

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

Segment Description and Rate: Segment 1 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Ext. Comb. boiler electric generating distillate oil No. 1 and No. 2.**	
2. Source Classification Code (SCC): **1-01-005-01**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **35.15**	5. Maximum Annual Rate: **307,870**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment (limit to 200 characters): **1) No. 2 distillate oil is burned during startup and for boiler stabilization during load changes. 2) Unit is tangentially fired. 3) Heat Content - HHV.**	

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Ext. Comb. Boiler electric generating residual oil No. 6.**	
2. Source Classification Code (SCC): **1-01-004-04**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **31.91**	5. Maximum Annual Rate: **279,513**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **1.8**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **152**	
10. Segment Comment (limit to 200 characters): **1) Unit is tangentially fired. 2) Heat Content - HHV.** Sulfur content of 1.5%, based on 12-month rolling average.	

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

Segment Description and Rate: Segment 3 of 6

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

Ext. Comb. Boiler, electric generating residual oil No. 5

2. Source Classification Code (SCC):

1-01-004-06

3. SCC Units:

Thousand gallons burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
31.91	279,513

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
1.8	0.1

9. Million Btu per SCC Unit:

152

10. Segment Comment (limit to 200 characters):

1) Unit is tangentially fired. 2) Heat content - HHV.
Sulfur content of 1.5%, based on 12-month rolling average.

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Ext. Comb. Boiler, electric generating residual oil No. 4	
2. Source Classification Code (SCC): 1-01-005-05	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 33.681	5. Maximum Annual Rate: 295,042
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 0.7	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 144	
10. Segment Comment (limit to 200 characters): Maximum Percent Ash: 0.01. 1) Unit is tangentially-fired. 2) Heat content - HHV. 3) Also, No. 3 fuel oil.	

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

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **On - specification used oil**
2. Source Classification Code (SCC): **1-01-013-02**
3. SCC Units: **Thousand gallons burned**

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
35.15	**30,787**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
2.5	**0.9**

9. Million Btu per SCC Unit:
138
10. Segment Comment (limit to 200 characters): **Heat content - HHV. Limited to 10% annual heat input.**

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural Gas
2. Source Classification Code (SCC): 1-01-006-04
3. SCC Units: Million Cubic Feet Burned

4. Maximum Hourly Rate: 4.849	5. Maximum Annual Rate: 42,482
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1,050	

10. Segment Comment (limit to 200 characters):

Heat content - HHV. Sulfur content - 1 grain/100cf.

Based on a maximum heat input of 5,092 MMBtu/hr.

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
PM10			NS
SO2			EL
NOX			NS
CO			NS
VOC			NS
H107			NS
H133			NS
HAPS			NS
FL			NS

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **1,455.1** lb/hour **2,655.4** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.3 lb/MMBtu** Reference: **FDEP Rule 62-210.700**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment AN-EU1-H8**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **1) Potential lb/hr based on sootblowing while burning oil. 2) Potential TPY based on 0.125 lb/MMBtu (0.1 lb/MMBtu during normal 21 hrs; 0.3 lb/MMBtu during sootblowing 3 hrs) in a 24-hr period.**

Emissions Unit Information Section 2 of 4

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	RULE
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	0.1 lb/MMBtu
4. Equivalent Allowable Emissions:	485 lb/hour 2,124.3 tons/year
5. Method of Compliance (limit to 60 characters):	Annual compliance test, EPA Method 5 or 17
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	1) Based on oil firing during normal operations. 2) Rule 62-210.700.

B.

1. Basis for Allowable Emissions Code:	RULE
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	0.3 lb/MMBtu
4. Equivalent Allowable Emissions:	1,455 lb/hour 796.6 tons/year
5. Method of Compliance (limit to 60 characters):	Annual compliance test, EPA Method 5 or 17
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	1) Based on oil firing during sootblowing operations (3 hours in 24 hours). 2) Rule 62-210.700.

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: **0** %

3. Potential Emissions: **13,338** lb/hour **58,418** tons/year

4. Synthetically Limited? [ ] Yes [**X**] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor: **2.75 lb/MMBtu**

   Reference: **FDEP 62-296.405(1)**

7. Emissions Method Code:

   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment AN-EU1-H8

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   1) Based on No. 6 oil firing.

Emissions Unit Information Section 2 of 4
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **RULE**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **2.75 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**13,338** lb/hour **58,418** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Analysis during emission test.**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **1) Firing No. 6 fuel oil. 2) Rule 62-296.405(1).**	

B.

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

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 4

1.	Visible Emissions Subtype: **VE40**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **40** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **EPA Method 9 - annual compliance test.**
5.	Visible Emissions Comment (limit to 200 characters): **1) 40% opacity allowed by OGC File No. 86-1575 dated 12/11/86. 2) Visible emission limit at steady state. 3) Rule 62-296.405(1).**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 4

1.	Visible Emissions Subtype: **VE60**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **24** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1) 60% opacity is allowed during load changing and boiler cleaning 3 hours in a 24-hour period and unlimited opacity allowed for 4 six-minute periods during 3 hours. 2) Rule 62-210.700(3).**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: **Best operational practices**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-210.700(1). Excess emissions allowed for 2 hr/24 hr, malfunction.**

Visible Emissions Limitations: Visible Emissions Limitation 4 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: **Best operational practices**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-210.700(2). Excess emissions for startup and shutdown.**

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 1 of 5

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 41 H Serial Number: 41 H-45741-274	
5. Installation Date: 02 Dec 1994	
6. Performance Specification Test Date: 02 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 2 of 5

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 43B Serial Number: 43B-46127-275	
5. Installation Date: 02 Dec 1994	
6. Performance Specification Test Date: 02 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 3 of 5

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 42 Serial Number: 42-45964-275K	
5. Installation Date: 02 Dec 1994	
6. Performance Specification Test Date: 02 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6.	

Continuous Monitoring System Continuous Monitor 4 of 5

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: United Sciences Model Number: Ultra Flow 100 Serial Number: 9303515	
5. Installation Date: 02 Dec 1994	
6. Performance Specification Test Date: 02 Dec 1994	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Second Monitor - Ser. No. 9303514.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 5 of 5

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 29857	
5. Installation Date: 02 Dec 1994	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor _____ of _____

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[X] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[X] Unknown
	SO_2	[ ] C	[ ] E	[X] Unknown
	NO_2	[ ] C	[ ] E	[X] Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO_2	lb/hour		tons/year
	NO_2			tons/year
5.	PSD Comment (limit to 200 characters):			
	Baseline emissions not known			

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

Supplemental Requirements for All Applications

1. Process Flow Diagram [X] Attached, Document ID: AN-EU1-L1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: AN-EU1-L2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: AN-EU1-L4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: Transmitted May 24, 1999 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: AN-EU1-L6 [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable
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

Additional Supplemental Requirements for Category I Applications Only

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: AN-EU2-L[2] Not Applicable
Permit No. 1010017-004-AC

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT AN-EU2-D

EMISSION UNIT REGULATIONS

ATTACHMENT AN-EU2-D

EMISSION UNIT REGULATIONS

Master Applicable Requirements Listing - Power Plants (5/13/96)

EMISSION UNIT: EU2: Unit 2- FPC Anclote Plant

FDEP Rules:

Air Pollution Control-General Provisions:

62-204.800(12) (State Only)	- Acid Rain Program
62-204.800(13) (State Only)	- Allowances
62-204.800(14) (State Only)	- Acid Rain Program Monitoring

Stationary Sources-General:

62-210.700(1)	- Malfunction only for FFSG
62-210.700(2)	- FFSG; startup/shut down
62-210.700(3)	- FFSG; sootblowing/load change
62-210.700(4)	- maintenance
62-210.700(6)	

Acid Rain:

62-214.300	- Acid Rain Units (Applicability)
62-214.320	- Acid Rain Units (Application Shield)
62-214.330	- Compliance Options (if 214.430)
62-214.340	- Exemptions (new units, retired units)
62-214.350(2);(3);(6)	- Acid Rain Units (Certification)
62-214.370	- Acid Rain Units (Revisions; correction; potentially applicable if a need arises)
62-214.430	- Acid Rain Units (Compliance Options)

Stationary Sources-Emission Standards/RACT:

62-296.405(1)(a)	- FFSG;VE
62-296.405(1)(b)	- FFSG; PM
62-296.405(1)(c)1.j.	- FFSG;Oil-SO2 (general limit)
62-296.405(1)(e)	- FFSG;Test Methods
62-296.405(1)(f)1.a.(i)	- FFSG; Opacity CEMS exempted for oil/gas units
62-296.405(1)(f)1.b.	- FFSG; SO2 CEMS exempted for non-controlled units (oil/gas)

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(c)	- Required Flow Rate Range-PM/H2SO4/F

62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if < 400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Comp. Tests (Fuel Sampling)
62-297.310(8)	- Test Reports

Federal Rules:

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO2 Allowances-violation
40 CFR 72.9(c)(3)(iii)	- SO2 Allowances-Phase II Units (listed)
40 CFR 72.9(c)(4)	- SO2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)
40 CFR 72.32	- Application Shield
40 CFR 72.33(b)	- Dispatch System ID;unit/system ID
40 CFR 72.33(c)	- Dispatch System ID;ID requirements
40 CFR 72.33(d)	- Dispatch System ID;ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield

40 CFR 72.90	- Annual Compliance Certification
Monitoring Part 75:	
40 CFR 75.4	- Compliance Dates
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(1)	- Primary Measurement; SO2; except 75.11&.16; Subpart D
40 CFR 75.10(a)(2)	- Primary Measurement; NOx; except 75.12&.17; Subpart E
40 CFR 75.10(a)(3)(i)	- Primary Measurement; CO2; monitor
40 CFR 75.10(a)(4)	- Primary Measurement; Opacity; except 75.14&.18
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(d)	- Primary Measurement; Hourly Operating ; Opacity; SO2
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.11(e)	- SO2 Monitoring Gaseous Firing
40 CFR 75.12(b)	- NOx Monitoring; Determination of NOx emission rate; Appendix F
40 CFR 75.13(a)	- CO2 Monitoring; Continuous monitor
40 CFR 75.14(a)	- Opacity Monitoring; Coal and oil units
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Addendix D & E
40 CFR 75.21	- QA/QC; CEMS
40 CFR 75.21(b)	- QA/QC; Opacity
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.21(d)	- QA/QC; Notice of RATA
40 CFR 75.21(e)	- QA/QC; Audits
40 CFR 75.21(f)	- QA/QC; CEMS
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(1)	- General Missing Data Procedures; SO2
40 CFR 75.30(a)(2)	- General Missing Data Procedures; flow
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NOx
40 CFR 75.30(a)(4)	- General Missing Data Procedures; CO2
40 CFR 75.30(d)	- General Missing Data Procedures; SO2
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Procedures
40 CFR 73.35	- Missing Data Procedures for CO2 Data
40 CFR 75.36	- Missing Data Procedures for Heat Input
40 CFR 75.53	- Monitoring Plan
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(c)	- Recordkeeping-SO2
40 CFR 75.54(d)	- Recordkeeping-NOx
40 CFR 75.54(e)	- Recordkeeping-CO2

40 CFR 75.54(f)	- Recordkeeping-Opacity
40 CFR 75.55(c);(e)	- Recordkeeping (Appendix D)
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement
40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
40 CFR 75.65	- Opacity Reports
40 CFR 77.3	- Offset Plans (Future)
40 CFR 77.5(b)	- Deductions of Allowance (Future)
40 CFR 77.6	- Excess Emissions Penalties SO2 and NOx
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NOx & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO2; from combustion sources
Appendix H	- Traceability Protocol

ATTACHMENT AN-EU1-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT AN-EU1-L4
DESCRIPTION OF STACK SAMPLING FACILITIES

The Anclote Plant Steam Generator Unit No. 1 and 2 are required by Permit AO51-254492A and AO51-169340 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to FAC 62-297.345, the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by rule, the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports meet FAC 297-345 (3)(a)(3) requirements (i.e., 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances).
- At least two sampling ports, 90 degrees apart have been installed on the circular stack.
- The working platform is at least 24 square feet in area, at least three feet wide, extends 180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety cage.

Florida Power
CORPORATION

bcc: D. T. Buell
J. M. Kennedy
J. A. Gridley
T. R. Reinhart
J. T. Long

File: Anclote/Air/Corresp.
k:\user\sosbourn\1999\anctst.doc
927-616100-AIRAN

May 24, 1999

Mr. William Proses
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Dr.
Tampa, Florida 33619-8318

Dear Mr. Proses:

Re: FPC Anclote Facility
Initial and Annual Compliance Testing

Florida Power Corporation (FPC) had previously been issued a construction permit (No. 1010017-004-AC) for the installation of natural gas-firing capability at the above-referenced facility. Further, particulate and visible emissions tests are also required annually on the Anclote units. Testing was conducted during the period of April 12-14, 1999, to fulfill the requirements of both the construction and operating permits.

This letter serves to transmit two copies each of test reports for both the initial and the annual tests (four copies total). The test results indicate that compliance was demonstrated for all applicable requirements.

If you should have any questions concerning this request, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn
Senior Environmental Engineer

Enclosure

cc: Martin Costello, DEP (w/ enclos.)
Pete Burnette, ACE Testing

ONE POWER PLAZA, 263 - 13th Avenue South, BB1A, St. Petersburg, FL 33701-5511 •
P.O. Box 14042, BB1A • St. Petersburg • Florida 33733-4042 • (727) 866-5151
A Florida Progress Company

SOURCE TEST REPORT
FOR

PARTICULATE AND VISIBLE EMISSIONS

FROM THE
FLORIDA POWER CORPORATION
ANCLOTE PLANT - UNIT 2
HOLIDAY, FLORIDA

FDEP PERMIT NUMBER
AO51-169340

APRIL 12 AND 13, 1999

PREPARED FOR:

FLORIDA POWER CORPORATION
ONE POWER PLAZA
263 13TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33701

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

162-99-03

1.0 INTRODUCTION

On April 12 and 13, 1999, Air Consulting and Engineering, Inc. (ACE), conducted particulate and visible emissions compliance testing on Unit 2 of Florida Power Corporation's (FPC) Anclote Plant in Holiday, Florida.

Testing was conducted to satisfy conditions in Florida Department of Environmental Protection (FDEP) Permit Number AO51-169340. Tests were conducted in both the soot blowing and normal operating modes using United States Environmental Protection Agency (EPA) Method 17 for particulates and EPA Method 9 for visible emissions.

Mr. Scott Osbourn of FPC coordinated testing and provided unit operating parameters and Mr. Robert Soich of the FDEP observed testing.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Unit 2 at the Anclote Plant was found to be operating in compliance with FDEP particulate and visible emission limiting standards in both the soot blowing and normal operating modes.

Unit 2 averaged 0.1181 pounds per million BTU's (lbs/MMBTU) of heat input to the boiler in the soot blowing mode and 0.0492 lbs/MMBTU in the normal operating mode.

Limiting standards are 0.3 lbs/MMBTU while blowing soot and 0.1 lbs/MMBTU during normal operations.

Run 4 was conducted at less than 90% of permitted capacity. Data from Run 4 is provided in this report but is not included in the average emission rate.

Table 1 summarizes particulate emissions and flue gas parameters.

Particulate emissions in terms of lbs/MMBTU were calculated using the EPA "F" factor method with the following formula:

$$E = CF \frac{20.9}{20.9 - \%O2}$$

Where:

E = particulate emissions in lbs/MMBTU

C = particulate concentration in lbs/Standard Cubic Foot (SCF)

F = 9190 SCF/MMBTU for oil

% O2 = flue gas oxygen content

Complete emission data are presented in Appendix A. Field data sheets and laboratory data are presented in Appendices B and C, respectively.

Visible emissions averaged 52.3% opacity for the highest consecutive six minute period in the soot blowing mode and 35.0% during normal operating conditions and were in compliance with the permitted limits of 60% opacity in the soot blowing mode and 40% in the normal operating mode. Emissions were observed concurrently with particulate Runs Number 3 and 7. The visible emissions data sheets and observer's certification are included in Appendix E.

Table 1 Particulate Emissions Summary
Florida Power Corporation
Anclote Plant - Unit 2
Holiday, Florida
April 12 and 13, 1999

Run Number	Time	Flow Rate		Stack Temp	Moisture	Oxygen	Actual Emission Rate	
		Actual (ACFM)	Standard (SCFMD)	(°F)	(%)	(%)	Actual lbs/MMBTU	Allowable lbs/MMBTU
Soot Blowing Mode (4/12/99)								
1	1211-1328	1649704	1002897	342	8.2	2.2	0.2490	0.3
2	1350-1506	1648358	982095	341	10.2	2.1	0.0593	0.3
3	1525-1645	1638212	982890	341	9.5	2.2	0.0461	0.3
Average		1645425	989294	341	9.3	2.2	0.1181	0.3
Normal Operating Mode (4/13/99)								
*4	1211-1324	1574065	955422	338	8.7	2.2	0.0512	0.1
5	1339-1453	1630927	968941	343	10.1	2.1	0.0463	0.1
6	1509-1623	1660194	993712	344	9.4	2.1	0.0528	0.1
7	1637-1753	1641139	969884	344	10.6	2.2	0.0484	0.1
Average Runs 5, 6, & 7		1644087	977512	344	10.0	2.1	0.0492	0.1

* Run 4 was conducted at less than 90% of permitted capacity and is not included in the Average.

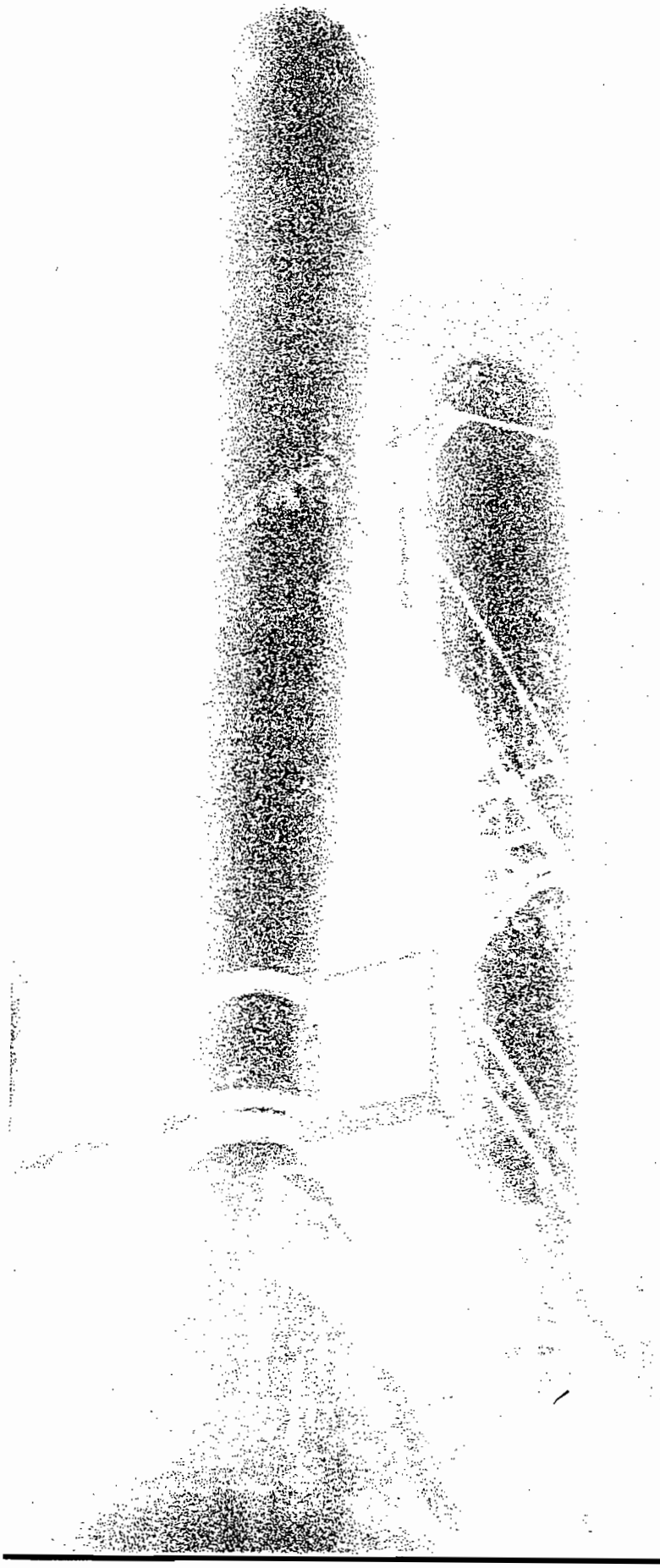
3.0 PROCESS DESCRIPTION AND OPERATION

During testing Anclote Unit 2 was 100% oil fired and operated at the following permitted parameters during the test periods:

		Heat Input (MMBTU/Hr)		SO2 Emissions (lbs/MMBTU)*	
Date	Megawatts	Actual	Permitted	Actual	Permitted
4/12/99	508	4690.2	4850.0	1.62	2.75
4/13/99	509	4606.1	4850.0	1.60	2.75

These values were calculated from fuel analyses in Appendix E and fuel consumption of 510 gallons per minute (GPM) on April 12, 1999 and 504 GPM on April 13, 1999.

* lbs/MMBTU SO_2 = %S x density x consumption/Hr x $\frac{MW\ SO_2}{MW\ S}$ x $\frac{1}{MMBTU/Hr}$



SOURCE TEST REPORT
FOR

PARTICULATE, CARBON MONOXIDE
AND VISIBLE EMISSIONS

FROM THE
FLORIDA POWER CORPORATION
ANCLOTE PLANT - UNIT 2
HOLIDAY, FLORIDA

FIRING 100% OIL
APRIL 13, 1999

FIRING 60%OIL/40% GAS
APRIL 14, 1999

FDEP PERMIT NUMBERS
AO51-169340
1010017-004-AC

PREPARED FOR:

FLORIDA POWER CORPORATION
ONE POWER PLAZA
263 13TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33701

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

162-99-03

1.0 INTRODUCTION

On April 13 & 14, 1999, Air Consulting and Engineering, Inc. (ACE), conducted particulate and visible emissions compliance testing on Unit 2 of Florida Power Corporation's (FPC) Anclote Plant in Holiday, Florida. Mr. Jim Long of FPC concurrently tested the Unit for Carbon Monoxide (CO) emissions.

Testing was conducted to satisfy conditions in Florida Department of Environmental Protection (FDEP) Permit Numbers AO51-169340 and 1010017-004-AC. Tests were conducted while the Unit was firing 100% oil and repeated on a 60% oil/40% natural gas combination. United States Environmental Protection Agency (EPA) Method 17 was used for particulates; EPA Method 9 was used for visible emissions; and EPA Method 10 was used for CO emissions.

Mr. Scott Osbourn of FPC coordinated testing and provided unit operating parameters and Mr. Bob Soich of the FDEP observed a portion of the test.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Anclote Unit 2 emission results are as follows:

Date	Fuel	Heat Input* MMBTU/Hr	Particulate lbs/MMBTU	Carbon Monoxide lbs/MMBTU	Opacity %
April 13, 1999	100% Oil	4606.1	0.0484	0.0738	35
April 14, 1999	60% Oil/40% Gas	4842.7	0.0392	0.0418	20

Particulate Run 4 was conducted at less than 90% of permitted capacity. Data form Run 4 is provided in this report but is not included in the average.

Tables 1 and 2 summarize emissions and flue gas parameters.

Emissions in terms of pounds per million BTUs (lb/MMBTU) were calculated using the EPA "F" factor method with the following formula:

$$E = C\,F\,(20.9)/(20.9 - \%\,O_2)$$

Where E = emissions in lbs/MMBTU

C = concentration in lbs/Standard Cubic Foot (SCF)

F = 9190 SCF/MMBTU for Oil

= 8710 SCF/MMBTU for Gas

= 8998 SCF/MMBTU for 60% Oil/40% Gas

$\%\,O_2$ = Flue gas oxygen content

Allowable emissions on 100% oil in the normal operating mode are 0.1 lbs/MMBTU of particulates and 40% opacity.

Complete emission data are presented in Appendix A. Field data sheets and laboratory data are presented in Appendices B and C, respectively. Carbon Monoxide data is located in Appendix G.

Visible Emissions were observed concurrently with particulate Runs Number 7 and 10. The visible emissions data sheets and observer's certifications are included in Appendix E.

* See Section 3.0

Table 1 Particulate and Carbon Monoxide Emissions Summary
Florida Power Corporation
Anclote Plant - Unit 2 - 100% Oil
Holiday, Florida
April 13, 1999

Run Number	Time	Flow Rate (ACFM)	Flow Rate (SCFMD)	Temp (°F)	Moisture (%)	EPA 3 Oxygen (%)	Particulate Emissions gr/SCF	Particulate Emissions lbs/Hr	Particulate Emissions lbs/MMBTU
*4	1211-1324	1574065	955422	338	8.7	2.2	0.0349	285.536	0.0512*
5	1339-1453	1630927	968941	343	10.1	2.1	0.0318	263.732	0.0463
6	1509-1623	1660194	993712	344	9.4	2.1	0.0362	308.368	0.0528
7	1637-1753	1641139	969884	344	10.6	2.2	0.0330	274.016	0.0484
Average Runs 5, 6, & 7		1644087	977512	344	10.0	2.1	0.0337	282.039	0.0492

			EPA 3A Oxygen (%)	Carbon Monoxide Emissions ppm_d	Carbon Monoxide Emissions lbs/Hr	Carbon Monoxide Emissions lbs/MMBTU
1	1351-1451	(see Particulate Run 5)	2.093	141.349	597.09	0.1049
2	1510-1610	(see Particulate Run 6)	2.257	83.547	361.94	0.0625
3	1632-1732	(see Particulate Run 7)	2.202	72.444	306.32	0.0541
Average			2.184	99.113	421.78	0.0738

*Run 4 was conducted at less than 90% of permitted capacity and is not included in the average

Table 2 Particulate and Carbon Monoxide Emission Summary
Florida Power Corporation
Anclote - Unit 2 - 60% Oil/40% Gas
Holiday, Florida
April 14, 1999

Run Number	Time	Flow Rate (ACFM)	Flow Rate (SCFMD)	Temp (°F)	Moisture (%)	EPA 3 Oxygen (%)	Particulate Emissions gr/SCF	Particulate Emissions lbs/Hr	Particulate Emissions lbs/MMBTU
8	1222-1339	1677545	971150	347	11.9	2.30	0.0301	250.941	0.0435
9	1427-1542	1723109	981773	346	13.4	2.10	0.0266	224.209	0.0381
10	1557-1714	1727065	983262	345	13.6	2.20	0.0251	211.494	0.0361
Average		1709240	978728	346	13.0	2.20	0.0273	228.881	0.0392

Run Number	Time		EPA 3A Oxygen (%)	Carbon Monoxide Emissions ppm_d	Carbon Monoxide Emissions lbs/Hr	Carbon Monoxide Emissions lbs/MMBTU
1	1217-1317	(see Particulate Run 8)	3.504	55.424	234.66	0.0435
2	1422-1522	(see Particulate Run 9)	2.228	58.899	252.10	0.0431
3	1556-1656	(see Particulate Run 10)	2.237	52.903	226.78	0.0387
Average			2.656	55.742	237.85	0.0418

3.0 PROCESS DESCRIPTION AND OPERATION

On April 13, 1999 Anclote Unit 2 was fueled with 100% oil consuming an average of 504 gallons per minute (GPM) and generating 509 Megawatts (MW).

On April 14, 1999 the Unit generated 507 MW while consuming an average of 310 GPM of oil and 1,886,600 Standard Cubic Feet per Hour (SCF/Hr) of natural gas.

Using fuel analyses data from Appendix E the total heat input was calculated to be 4606.1 MMBTU/Hr on April 13, 1999 and 4842.7 MMBTU/Hr on April 14, 1999. The permitted maximum heat input is 4850 MMBTU/Hr.