



RECEIVED

JUL 01 2002

BUREAU OF AIR REGULATION

June 27, 2002

Mr. Scott Sheplak, P.E.  
Florida Department of Environmental Protection  
Bureau of Air Regulation, Title V Section  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Re: SUBMITTAL OF TITLE V PERMIT RENEWAL APPLICATION  
AVON PARK FACILITY NO. 0550003 - FLORIDA POWER

Dear Mr. Sheplak:

Enclosed for your review is an original and three copies of the Title V application for Florida Power's Avon Park Facility. An additional copy has been sent to the FDEP's South District Office.

If you have any questions regarding any of the information contained in this application, please do not hesitate to contact Matt Lydon at (727) 826-4152 or Jamie Hunter at (727) 826-4363.

Sincerely,

Martin J. Drango, P.E.  
Plant Manager/Responsible Official

Enclosures

c: Ron Blackburn, DEP South District (w/enc)  
Ken Kosky, Golder Associates Inc.

jhb/JJH038

enclosures

**RECEIVED**

JUL 01 2002

BUREAU OF AIR REGULATION

**TITLE V OPERATION PERMIT  
RENEWAL APPLICATION FOR  
AVON PARK PLANT  
HIGHLANDS COUNTY, FLORIDA**

*[Handwritten signature]*

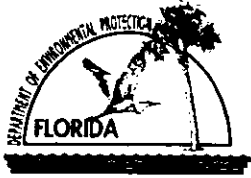
**Prepared For:  
Florida Power  
263 13<sup>th</sup> Street South  
St. Petersburg, Florida 33701-5511**

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

**June 2002  
0237531**

**DISTRIBUTION:**

- 4 Copies – FDEP Bureau of Air Regulation**
- 1 Copy – FDEP South District Office**
- 1 Copy – Avon Park Plant**
- 1 Copy – Florida Power – Progress Energy**
- 1 Copy – Golder Associates Inc.**



# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

#### I. APPLICATION INFORMATION

##### Identification of Facility

1. Facility Owner/Company Name: <b>Florida Power</b>	
2. Site Name: <b>Avon Park Plant</b>	
3. Facility Identification Number: <b>0550003</b> [   ] Unknown	
4. Facility Location: Street Address or Other Locator: <b>1415 South Highlands Avenue</b> City: <b>Avon Park</b> County: <b>Highlands</b> Zip Code: <b>33825</b>	
5. Relocatable Facility? [   ] Yes      [ <b>X</b> ] No	6. Existing Permitted Facility? [ <b>X</b> ] Yes      [   ] No

##### Application Contact

1. Name and Title of Application Contact: <b>Matthew Lydon, Associate Environmental Specialist</b>	
2. Application Contact Mailing Address: Organization/Firm: <b>Florida Power</b> Street Address: <b>100 Central Avenue, Mail Code BB1A</b> City: <b>St. Petersburg</b> State: <b>FL</b> Zip Code: <b>33701</b>	
3. Application Contact Telephone Numbers: Telephone: <b>( 727 ) 826 - 4152</b> Fax: <b>( 727 ) 826 - 4216</b>	

##### Application Processing Information (DEP Use)

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

**Purpose of Application**

**Air Operation Permit Application**

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


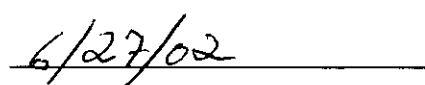
- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.  
Current construction permit number: \_\_\_\_\_
- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.  
Current construction permit number: \_\_\_\_\_  
Operation permit number to be revised: \_\_\_\_\_
- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)  
Operation permit number to be revised/corrected: \_\_\_\_\_
- Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.  
Operation permit number to be revised: 0550003-001-AV  
Reason for revision: Title V Renewal, Current Permit Expires December 31, 2002.

**Air Construction Permit Application**

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

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

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Martin J. Drango, Plant Manager Avon Park</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: <b>Florida Power</b> Street Address: <b>100 Central Avenue, Mail Code IC44</b> City: <b>St. Petersburg</b> State: <b>FL</b> Zip Code: <b>33701</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>( 863 ) 679 - 3020</b> Fax: <b>( 863 ) 678 - 4453</b>
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [ ], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>   Signature  Date

\* Attach letter of authorization if not currently on file.

**Professional Engineer Certification**

1. Professional Engineer Name: <b>Kennard F. Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address: Organization/Firm: <b>Golder Associates Inc.</b> Street Address: <b>6241 NW 23rd Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>( 352 ) 336 - 5600</b> Fax: <b>( 352 ) 336 - 6603</b>

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 [, 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.*

*Thomas J. Kelly*  
\_\_\_\_\_  
Signature

*6/26/02*  
\_\_\_\_\_  
Date

(seal) *144*

\* Attach any exception to certification statement.

**Scope of Application**

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
003, 004	Gas Turbine Peaking Units No. 1 and No. 2		
--	Facility Wide Fugitive/De Minimis Emissions		

**Application Processing Fee**

Check one:  Attached - Amount: \$: \_\_\_\_\_  Not Applicable

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

**Application Comment**

**This application is a renewal of the current Title V Air Operating Permit No. 0550003-001-AV. The facility contains 2 peaking units (No. 1 and No. 2) that can fire natural gas or No. 2 fuel oil having a maximum sulfur content of 1.0 percent by weight. Facility wide fugitive/de minimis emissions are addressed as a separate emission unit section. The fossil fuel fired steam generator (FFFSG) EU ID No. 002 is a permanently retired unit and should be excluded from all future permitting.**



## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: <b>17</b> East (km): <b>451.4</b> North (km): <b>3050.5</b>			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): <b>27 / 34 / 45</b> Longitude (DD/MM/SS): <b>81 / 29 / 33</b>			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4911</b>
7. Facility Comment (limit to 500 characters):  <b>The Avon Park facility consists of 2 gas turbine peaking units fired with No. 2 fuel oil with a maximum sulfur content of 1.0 percent by weight or natural gas.</b>			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Martin J. Drango, Plant Manager Avon Park</b>
2. Facility Contact Mailing Address: Organization/Firm: <b>Florida Power</b> Street Address: <b>100 Central Avenue, Mail Code IC44</b> City: <b>St. Petersburg</b> State: <b>FL</b> Zip Code: <b>33701</b>
3. Facility Contact Telephone Numbers: Telephone: <b>( 863 ) 679 - 3020</b> Fax: <b>( 863 ) 678 - 4453</b>

**Facility Regulatory Classifications**

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	
<p><b>CTs are not subject to any federal requirements, NSPS – 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines or Acid Rain. The units began commercial service in 1968.</b></p>	

**List of Applicable Regulations**

See Attachment AP-FI-A	

## B. FACILITY POLLUTANTS

### List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
SO <sub>2</sub>	A				Sulfur Dioxide
PM	A				Particulate Matter-Total
PM <sub>10</sub>	A				Particulate Matter-PM <sub>10</sub>
NO <sub>x</sub>	A				Nitrogen Oxides
CO	A				Carbon Monoxides
SAM	A				Sulfuric Acid Mist

### C. FACILITY SUPPLEMENTAL INFORMATION

#### Supplemental Requirements

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C1</u> [   ] Not Applicable [   ] Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C2</u> [   ] Not Applicable [   ] Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C3</u> [   ] Not Applicable [   ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C4</u> [   ] Not Applicable [   ] Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C5</u> [   ] Not Applicable [   ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [   ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable
7. Supplemental Requirements Comment:

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

8. List of Proposed Insignificant Activities: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C12 Appendix I-1</u> <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FI-C12</u> <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FL-C14</u> <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input checked="" type="checkbox"/> Attached, Document ID: <u>AP-FL-C15</u> <input type="checkbox"/> Not Applicable

**ATTACHMENT AP-FI-A**  
**LIST OF APPLICABLE REGULATIONS**

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

**Federal:** (description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

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

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

**State:** (description)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

62-210.350, F.A.C.: Public Notice and Comment.  
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.  
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.  
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.  
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.  
62-210.400, F.A.C.: Emission Estimates.  
62-210.650, F.A.C.: Circumvention.  
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.  
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.  
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.  
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

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

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

62-213.205, F.A.C.: Annual Emissions Fee.  
62-213.400, F.A.C.: Permits and Permit Revisions Required.  
62-213.410, F.A.C.: Changes Without Permit Revision.  
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.  
62-213.415, F.A.C.: Trading of Emissions Within a Source.  
62-213.420, F.A.C.: Permit Applications.  
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.  
62-213.440, F.A.C.: Permit Content.  
62-213.450, F.A.C.: Permit Review by EPA and Affected States  
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.  
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.  
62-213.900(7), F.A.C.: Statement of Compliance Form.



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

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

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

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

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

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

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

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

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

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

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

**Miscellaneous:**

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

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

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

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

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

**ATTACHMENT AP-FI-C1**  
**AREA MAP SHOWING FACILITY LOCATION**



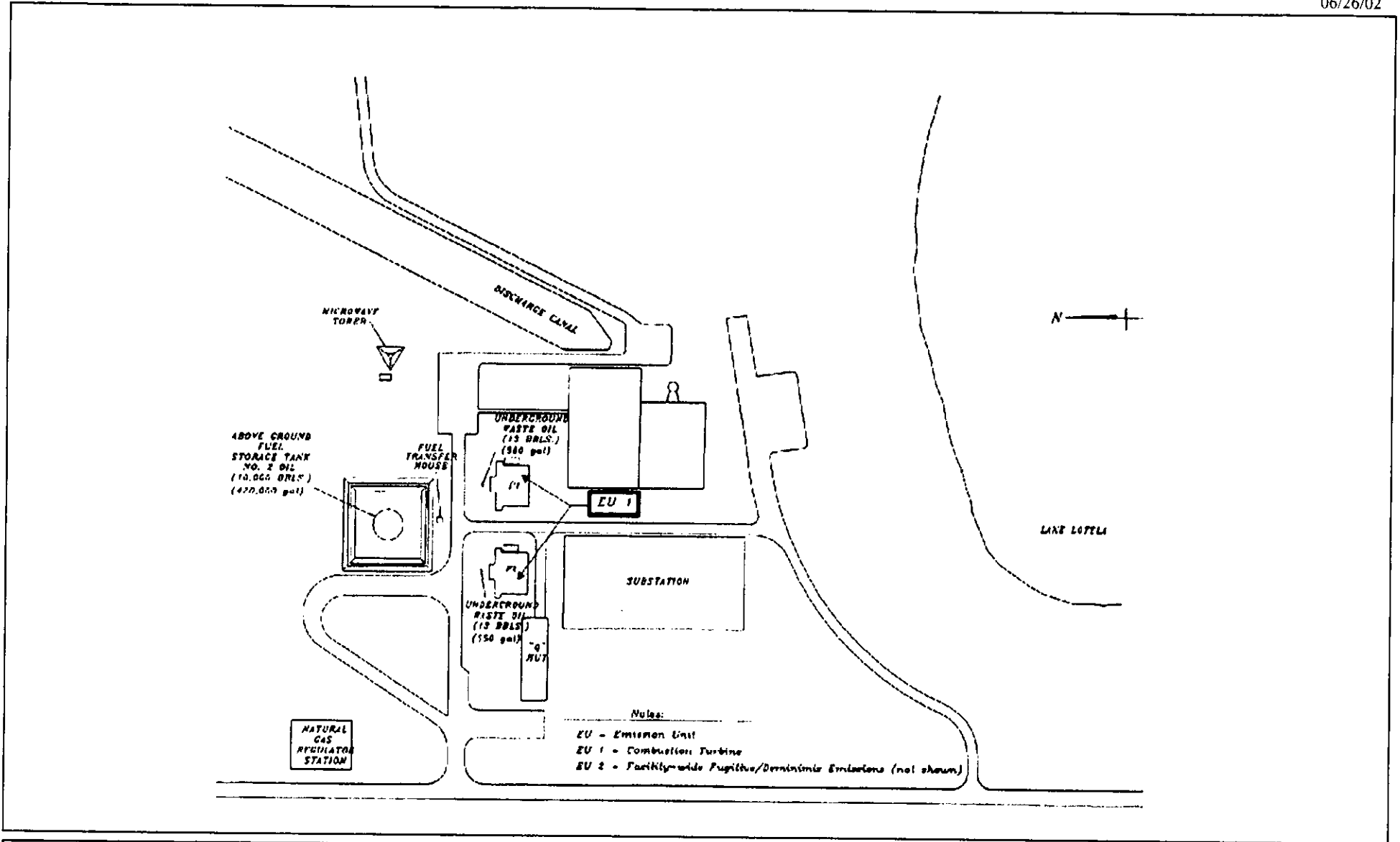
Attachment AP-FI-C1  
Area Map Showing Facility Location

Source: Golder Associates Inc., 2002



**ATTACHMENT AP-FI-C2**

**FACILITY PLOT PLAN**

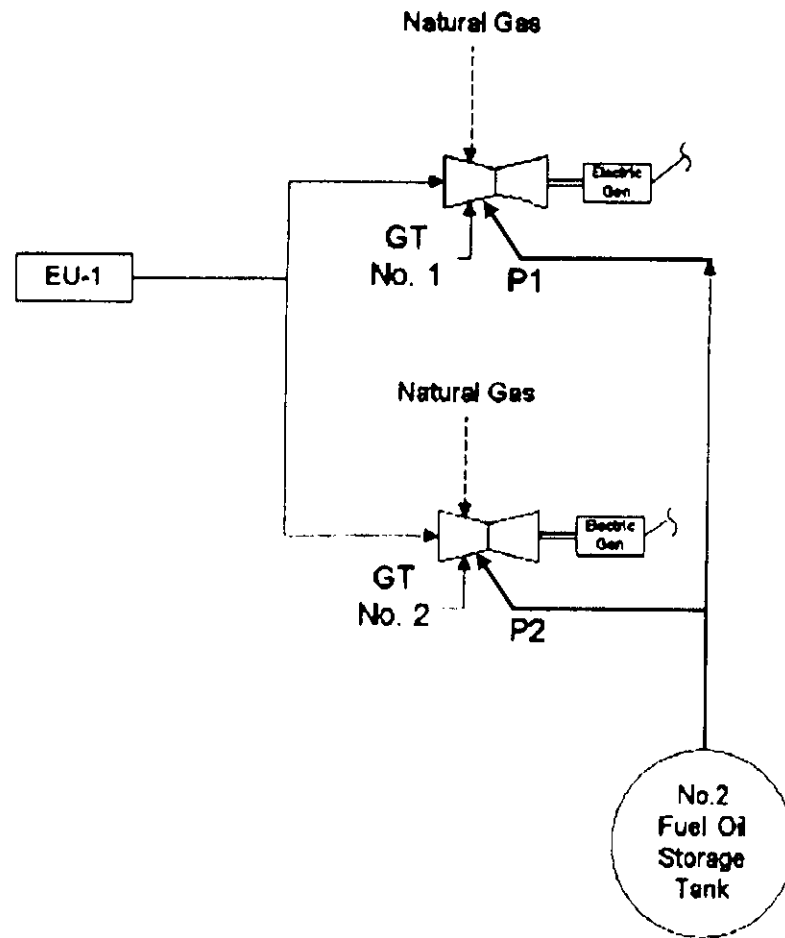


**Attachment AP-FI-C2**  
**Facility Plot Plan**

Source: Golder Associates Inc., 2002



**ATTACHMENT AP-FI-C3**  
**PROCESS FLOW DIAGRAM**



**Note:**  
 GT = Gas Turbine  
 EU = Emission Unit Number  
 See segment section for the operating rate of each emission unit.

Process Flow Legend	
	Steam Flow
	Gas Flow
	Solid / Liquid Flow

Attachment AP-FI-C3  
 Florida Power, Avon Park Plant  
 Process Flow Diagram

Source: Golder Associates Inc., 2002



**ATTACHMENT AP-FI-C4**

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



---

**ATTACHMENT AP-FI-C4**  
**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 **Rule 62-296.320(4)(c)2, 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 AP-FI-C5**  
**FUGITIVE EMISSIONS IDENTIFICATION**

**ATTACHMENT AP-FI-C5**  
**FUGITIVE EMISSIONS IDENTIFICATION**

Many fugitive emissions at the plant site have been classified as "trivial activities". 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 the electricity generation 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 2. This emission unit section 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**

Florida Power 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
- methyl ethyl ketone (MEK)
- 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 expected for the facility.

**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 described above.

**Regulated Toxic or Flammable Substances**

The following regulated toxic or flammable substance is or may be present at the Florida Power facility:

**Acetylene** – Present on the facility property in 100-lb cylinders which are used for plant maintenance (welding and cutting).

**ATTACHMENT AP-FI-C12**

**IDENTIFICATION OF ADDITIONAL  
APPLICABLE REQUIREMENTS**

Florida Power Corporation  
Avon Park Plant  
**Facility ID No.:** 0550003  
Highlands County

Final Title V Air Operation Permit  
**FINAL Permit No.:** 0550003-001-AV

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

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

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

Final Title V Air Operation Permit  
**FINAL Permit No.: 0550003-001-AV**

**Table of Contents**

<b>Section</b>	<b>Page Number (s)</b>
<b><u>Placard Page</u></b> .....	1
<b><u>I. Facility Information</u></b> .....	2
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents	
<b><u>II. Facility-wide Conditions</u></b> .....	3, 5
<b><u>III. Emissions Units and Conditions</u></b>	
Gas Turbine Peaking Unit No.1 & No.2 .....	6 - 10
<b><u>IV. Acid Rain Part</u></b>	
Acid Rain, Phase II .....	11, 12
<b>Appendix U-1, List of Unregulated Emissions Units and/or Activities</b>	
<b>Appendix I-1, List of Insignificant Emissions Units and/or Activities</b>	
<b>Appendix TV-1, TITLE V CONDITIONS (12/02/97)</b>	
<b>Appendix H-1, Permit History/ID Number Changes</b>	

**Permittee:**  
Florida Power Corporation

**FINAL Permit No.:** 0550003-001-AV  
**Facility ID No.:** 0550003  
**SIC No.:** 4911  
**Project:** Initial Title V Air Operation Permit

This permit is for the operation of the Avon Park Plant. This facility is located at 1415 South Highlands Avenue, Avon Park, Highlands County; UTM Coordinates: Zone 17, 451.4 km East and 3050.5 km North; Latitude: 27° 34' 45" North and Longitude: 81° 29' 33" West.

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

**Referenced attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

APPENDIX TV-1, TITLE V CONDITIONS (12/02/97)

Phase II Acid Rain Application/Compliance Plan received December 22, 1995.

ORDER EXTENDING PERMIT EXPIRATION DATE (dated 06/30/97)

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

---

Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sms/cl

Florida Power Corporation

**FINAL Permit No.:** 0550003-001-AV



Avon Park Plant  
Page 2 of 12

## **Section I. Facility Information.**

### **Subsection A. - Facility Description.**

This facility consists of two gas turbine peaking units No.1 and No.2. Both units have separate exhaust stacks and are permitted to fire No.2 fuel oil or natural gas. Each turbine is rated at 33.8 MW at a maximum heat input of 562.6 MMBtu/hr. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

### **Subsection B. - Summary of Emissions Unit ID No(s). and Brief Description(s).**

<b>E.U. ID No.</b>	<b>Brief Description</b>
-003	Gas Turbine Peaking Unit No. 1
-004	Gas Turbine Peaking Unit No. 2
-002	Fossil Fuel Fired Steam Generator [Retired Acid Rain Unit, see Acid Raid Part IV]

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

### **Subsection C. - Relevant Documents.**

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

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

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History / ID Number Changes

These documents are on file with permitting authority:

Initial Title V Permit Application received June 14, 1996

Florida Power Corporation  
Avon Park Plant  
Page 3 of 12

**FINAL Permit No.:** 0550003-001-AV

## Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97), is a part of this permit. {Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided with only one copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.]
3. Prevention of Accidental Releases (Section 112(r) of the CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and;
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
4. Insignificant Emissions units and/or Activities. Appendix I-1, List of Insignificant Emissions units and/or Activities, is a part of this permit.  
[Rules 62-213.430(6), F.A.C.]
5. Unregulated Emissions units and/or Activities. Appendix U-1, List of Unregulated Emissions units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, VOCs or OSs without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.  
[Rule 62-296.320(1)(a), F.A.C.]
7. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or

greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

**8. Not federally enforceable.** Reasonable precautions should be taken to prevent emissions of unconfined particulate matter at this facility. Steps presently taken at the facility to minimize particulate emissions are as follows:

- Maintenance of paved areas as needed,
- Regular mowing of grass and care of vegetation, and
- Limiting access to plant property by unnecessary vehicles.
- Additional or alternative activities may be utilized to minimize unconfined particulate emissions.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the initial Title V permit application received June 14, 1996.]

**9.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

**10.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District office:

Department of Environmental Protection  
South District Office  
2295 Victoria Avenue, Suite 364  
Fort Myers, Florida 33901  
Telephone: 941/332-6975  
Fax: 941/332-6969

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

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

Florida Power Corporation  
Avon Park Plant

**FINAL Permit No.: 0550003-001-AV**

Page 5 of 12

12. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within sixty (60) days after the end of the calendar year.  
{See condition No. 52., Appendix TV-1, Title V Conditions}  
[Rule 62-214.420(11), F.A.C.]

### **Section III. Emissions Unit(s) & Conditions.**

#### **Subsection A. This section addresses the following emissions unit(s).**

<b>E. U. ID No.</b>	<b>Brief Description</b>
-003	Gas Peaking Turbine No.1
-004	Gas Peaking Turbine No.2

The above referenced turbines may fire natural gas or No. 2 fuel oil having a maximum sulfur content of 1.0 percent by weight. Each turbine is rated for and has a maximum heat input of 33.8 MW (megawatts of electricity) and 562.6 MMBtu/hr, respectively. Emissions are not controlled and each turbine exhausts through a separate stack. These units are not subject to any federal requirements, NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines or Acid Rain. The above units began commercial service in 1968.

Permitting Note: The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required.

#### **The following specific conditions apply to both of the above referenced emissions units:**

##### **Essential Potential to Emit (PTE) Parameters**

**A.1. Permitted Capacity.** The maximum heat input rate to each turbine shall not exceed 562.6 MMBtu/hour while firing No. 2 fuel oil or natural gas.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition A.13.

**A.3. Methods of Operation - Fuels.** Only natural gas or No. 2 fuel oil having a maximum sulfur content of 1.0 percent, by weight, shall be fired in the turbines.

[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

**A.4. Hours of Operation.** These emissions units may operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

### Emission Limitations and Standards

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

**A.5. Visible Emissions.** Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 28-202500.]

**A.6. Not federally enforceable. Sulfur Content.** The sulfur content of the No. 2 fuel oil shall not exceed 1.0 percent, by weight.

[Requested in initial Title V permit application dated June 12, 1996; and, AO 28-202500.]

### Excess Emissions

**A.7.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

**A.8.** 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.]

### Monitoring of Operations

**A.9.** The permittee shall demonstrate compliance with the sulfur content limit with a fuel analysis provided by the vendor upon each fuel delivery. See specific condition A.12.

[Rule 62-213.440, F.A.C.; and, AO 28-202500.]

**A.10. Determination of Process Variables.**

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

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

### Test Methods and Procedures

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

**A.11.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

**A.12.** The fuel sulfur content, percent by weight, provided by the vendor for each delivery of liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition(s). [Rules 62-213.440 and 62-297.440, F.A.C.]

**A.13.** Operating Rate During Testing.

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

**A.14.** Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less

than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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

[Rule 62-297.310(4)(a)2.c., F.A.C.]

**A.15. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

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

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

- a. Visible emissions, if there is an applicable standard;

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

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

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct



compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

**A.16. Visible Emissions Testing - Annual**. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

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

[Rules 62-297.310(7)(a)4. and 8., F.A.C.]

### **Record keeping and Reporting Requirements**

**A.17. Malfunction Reporting**. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

**A.18. Test Reports**.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

[Rule 62-297.310(8), F.A.C.]

Page 11 of 12

**Section IV. Acid Rain Part.**

**Operated by: Florida Power Corporation**  
**ORIS code: 0624**

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

The emissions unit listed below is regulated under Acid Rain Part, Phase II.

<b>E.U. ID No.</b>	<b>Description</b>
-002	Fossil Fuel Fired Steam Generator (boiler) - PERMANENTLY RETIRED

1. The "Retired Unit Exemption" form submitted for this facility constitutes the Acid Rain Part application pursuant to 40 CFR 72.8 and is a part of this permit. The owners and operators of this acid rain unit shall comply with the standard requirements and special provisions set forth in DEP Form No. 62-210.900(1)(a)3., dated July 1, 1995, and signed by the designated representative on December 14, 1995. This unit is subject to the following: 40 CFR 72.1 which requires the unit to have an Acid Rain Part as part of its Title V permit; 40 CFR 72.2 which provides associated definitions; 40 CFR 72.3 which provides measurements, abbreviations, and acronyms; 40 CFR 72.4 which provides the federal authority of the Administrator; 40 CFR 72.5 which provides the authority of the states; 40 CFR 72.6 which makes the boiler a Phase II unit; 40 CFR 72.10 which gives the public access to information about this unit; and, 40 CFR 72.13 which incorporates certain ASTM methods into 40 CFR Part 72. [Chapter 62-213, F.A.C. and Rule 62-214.340, F.A.C.]

2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are as follows:

<b>E.U. ID No.</b>	<b>EPA ID</b>	<b>Year</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
-002	P1	SO <sub>2</sub> allowances, under Table 2 of CFR 73	487*	487*	487*

\*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the U. S. EPA under Table 2 of 40 CFR 73.

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program.

Florida Power Corporation  
 Avon Park Plant

**FINAL Permit No.: 0550003-001-AV**

Page 12 of 12

Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.440(3), F.A.C.

b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain program.

c. Allowances shall be accounted for under the Federal Acid Rain Program.

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

4. The designated representative of this acid rain unit applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed "Retired Unit Exemption" form (DEP Form No. 62-210.900(1)(a)3., F.A.C., attached) to the Department. The date of permanent retirement is January 1, 1995. The unit has been completely dismantled and removed from the facility. Permit AO 28-211596 for this unit has been formally surrendered by letter on November 21, 1996. The final "Retired Unit Exemption" was issued by the U.S. EPA Region 4 on January 31, 1997. [Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

5. Comments, notes, and justifications: None.

**Appendix U-1, List of Unregulated Emission Units and/or Activities**

Florida Power Corporation  
 Avon Park Plant  
 Page 1 of 1

**FINAL Permit No.:** 0550003-001-AV

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

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

E.U. ID No.	Brief Description of Emission Unit(s) and/or Activity
-002	Fossil Fuel Fired Steam Generator [Retired Acid Rain Unit, see Acid Rain Part IV]

### **Appendix I-1, List of Insignificant Emissions Units and/or Activities**

Florida Power Corporation

**FINAL Permit No.:** 0550003-001-AV

Avon Park Plant

Page 1 of 1

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities
1. Lube Oil Vent with demister
2. Fuel Oil Storage Tanks (underground) - 2600 gal.
3. Two Waste Oil Storage Tanks - 550 gal.
4. Tank No. CT5 - No. 2 Fuel Oil (10,000 bbls)
5. Turbine Lube Oil Tank - 800 gal.

**Appendix H-1, Permit History/ID Number Changes**

Florida Power Corporation  
Avon Park

**DRAFT Permit No.:** 0550003-001-AV  
**Facility ID No.:** 0550003

---

**Permit History (for tracking purposes):**

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> <sup>1,2</sup>	<u>Revised Date(s)</u>
-002	Unit #2 46 MW Capacity	AO28-211596	05/12/92	05/12/97 <sup>3</sup>		
-003	Peaking Unit #1	AO28-202500	10/10/91	10/10/96	08/16/96	
-004	Peaking Unit #2	AO28-202500	10/10/91	10/10/96	08/16/96	

---

**ID Number Changes (for tracking purposes):**

From: **Facility ID No.:** 52FTM280003

To: **Facility ID No.:** 0550003

---

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

3 - Permit AO 28-211596 for this unit has been formally surrendered by letter on November 21, 1996. Retired Acid Rain Unit; Permanent Shutdown January 21, 1984; Dismantled and removed from site.

**ATTACHMENT AP-FI-C14**  
**COMPLIANCE REPORT AND PLAN**

**ATTACHMENT AP-FI-C14**  
**COMPLIANCE REPORT AND PLAN**

Compliance with the conditions set forth in this operation permit will be certified on an annual basis by the submittal of the Statement of Compliance – Title V Source DEP Form No. 62-213.900(7). This report will be submitted by March 1 of each year for the prior calendar year.



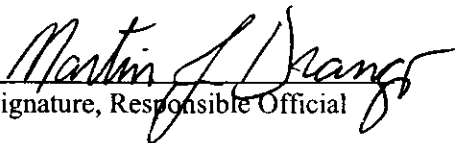
**ATTACHMENT AP-FI-C15**  
**COMPLIANCE CERTIFICATION**

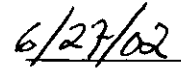
**ATTACHMENT AP-FI-C15**

**COMPLIANCE CERTIFICATION**

The facility and emission units identified in this application are in compliance with the Applicable Regulations identified in the application form and attachments referenced in the section. The compliance report for this facility will be submitted by March 1 of each year for the prior calendar year. The compliance statement is as follows:

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

  
\_\_\_\_\_  
Signature, Responsible Official

  
\_\_\_\_\_  
Date

Martin J. Drango, Plant Manager Avon Park

**III. EMISSIONS UNIT INFORMATION**

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

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

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):			
<b>Gas Turbine Peaking Units No. 1 and No. 2</b>			
4. Emissions Unit Identification Number: <input type="checkbox"/> No ID			
ID: <b>003 and 004</b> <input type="checkbox"/> ID Unknown			
5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
<b>A</b>	<b>DECEMBER 1968</b>	<b>49</b>	<input type="checkbox"/>
9. Emissions Unit Comment: (Limit to 500 Characters)			

**Emissions Unit Control Equipment**

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

2. Control Device or Method Code(s):

**Emissions Unit Details**

1. Package Unit:

Manufacturer:

Model Number:

2. Generator Nameplate Rating:

34 MW

3. Incinerator Information:

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

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

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:	<b>563</b>	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	24 hours/day	7 days/week
	52 weeks/year	<b>8,760</b> hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p><b>Maximum Heat Input Rate = 562.6 (rounded to 563).</b></p> <p><b>Maximum heat input based on permit limit firing No. 2 fuel oil.</b></p> <p><b>Maximum heat input rate is a function of ambient temperature.</b></p>		



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

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? <b>EU1</b>		2. Emission Point Type Code: <b>1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  <b>Gas turbine gases exhaust through a single stack per turbine unit.</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>55</b> feet	7. Exit Diameter: <b>10</b> feet	
8. Exit Temperature: <b>850</b> °F	9. Actual Volumetric Flow Rate: <b>2,000,000</b> acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: <b>Zone: 17                      East (km): 451.4                      North (km): 3050.5</b>			
14. Emission Point Comment (limit to 200 characters):  <b>Stack parameters for each combustion turbine.</b>			

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

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  Internal Combustion Engines – Electric Generation - Distillate Oil (Diesel) - Turbine		
2. Source Classification Code (SCC): <b>2-01-001-01</b>		3. SCC Units: <b>1,000 Gallons Burned</b>
4. Maximum Hourly Rate: <b>4.077</b>	5. Maximum Annual Rate: <b>35,713</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>1.0</b>	8. Maximum % Ash: <b>0.1</b>	9. Million Btu per SCC Unit: <b>138</b>
10. Segment Comment (limit to 200 characters):  Maximum Annual Rate based on 8,760 hr/yr.  Heat Content – HHV.		

**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type ) (limit to 500 characters):  Internal Combustion Engines – Electric Generation – Natural Gas – Turbine		
2. Source Classification Code (SCC): <b>2-01-002-01</b>		3. SCC Units: <b>Million Cubic Feet Burned</b>
4. Maximum Hourly Rate: <b>0.56</b>	5. Maximum Annual Rate: <b>4,906</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>1,000</b>
10. Segment Comment (limit to 200 characters):  Maximum Annual Rate based on 8,760 hr/yr.  Maximum sulfur content of natural gas is 1.0 grain per 100 cf.  Heat Content – HHV.		



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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO <sub>2</sub>			EL
PM			NS
PM <sub>10</sub>			NS
NO <sub>x</sub>			NS
CO			NS
SAM			NS

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

**Potential/Fugitive Emissions**

1. Pollutant Emitted: <b>SO<sub>2</sub></b>	2. Total Percent Efficiency of Control: <b>0 %</b>
3. Potential Emissions: <b>577 lb/hour      2,527 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [ ] 1      [ ] 2      [ ] 3      _____ to _____ tons/year	
6. Emission Factor: <b>1% Sulfur</b> Reference: <b>Permit No. 0550003-001-AV Condition III.A.3</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions (limit to 600 characters):  <b>See Attachment AP-EU1-G8</b>	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: <b>1% Sulfur Oil</b>	4. Equivalent Allowable Emissions: <b>577 lb/hour      2,527 tons/year</b>
5. Method of Compliance (limit to 60 characters):  <b>Fuel oil analysis during compliance test</b>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):  <b>Florida Power performs a monthly fuel analysis for compliance with sulfur limit.</b>  <b>Permit Limit (BACT and Rules 62-4.160(2) and 62-213.440(1), F.A.C.)</b>	

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

**Visible Emissions Limitation:** Visible Emissions Limitation  1  of  2

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance: <b>Annual VE Test EPA Method 9</b>	
5. Visible Emissions Comment (limit to 200 characters):  <b>Rules 62-210.300(2)(a)3.b., c., or d. And 62-297.310(7)(a)4., 8., F.A.C.          No VE test &lt; 400 hr/yr oil operation except for period of one year          preceding permit renewal date.</b>	

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

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

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

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

**Visible Emissions Limitation:** Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: <b>VE99</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions:                      %                      Exceptional Conditions: <b>100 %</b> Maximum Period of Excess Opacity Allowed: <b>60</b> min/hour	
4. Method of Compliance: <b>Best Operational Practice</b>	
5. Visible Emissions Comment (limit to 200 characters):  <b>FDEP Rule 62-210.700(1); Allowed for 2 hours (120 minutes) per 24 hours for start up, shutdown and malfunction.</b>	

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

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

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

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

1. Process Flow Diagram [ <input checked="" type="checkbox"/> ] Attached, Document ID: <u>AP-EU1-J1</u> [ <input type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
2. Fuel Analysis or Specification [ <input checked="" type="checkbox"/> ] Attached, Document ID: <u>AP-EU1-J2</u> [ <input type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
3. Detailed Description of Control Equipment [ <input type="checkbox"/> ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
4. Description of Stack Sampling Facilities [ <input type="checkbox"/> ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
5. Compliance Test Report [ <input checked="" type="checkbox"/> ] Attached, Document ID: <u>AP-EU1-J5</u> [ <input type="checkbox"/> ] Previously submitted, Date: _____ [ <input type="checkbox"/> ] Not Applicable
6. Procedures for Startup and Shutdown [ <input checked="" type="checkbox"/> ] Attached, Document ID: <u>AP-EU1-J6</u> [ <input type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
7. Operation and Maintenance Plan [ <input type="checkbox"/> ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable [ <input type="checkbox"/> ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ <input type="checkbox"/> ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable
9. Other Information Required by Rule or Statute [ <input type="checkbox"/> ] Attached, Document ID: _____ [ <input checked="" type="checkbox"/> ] Not Applicable
10. Supplemental Requirements Comment:          

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

11. Alternative Methods of Operation [ ] Attached, Document ID: _____ [ X ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [ X ] Not Applicable
13. Identification of Additional Applicable Requirements [ ] Attached, Document ID: _____ [ X ] Not Applicable
14. Compliance Assurance Monitoring Plan [ ] Attached, Document ID: _____ [ X ] Not Applicable <b>See Attachment AP-EU1-J14</b>
15. Acid Rain Part Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ [ X ] Not Applicable

**ATTACHMENT AP-EU1-D**  
**APPLICABLE REQUIREMENTS**

**ATTACHMENT AP-EU1-D****Applicable Requirements Listing**

EMISSION UNIT ID: EU1

**FDEP Rules:****Stationary Sources-General:**

62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification

**Stationary Sources-Emission Standards:**

62-296.320(4)(b)(State Only)	CTs/Diesel Units
------------------------------	------------------

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

62-297.310(2)	All Units (Operating Rate)
62-297.310(4)	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports



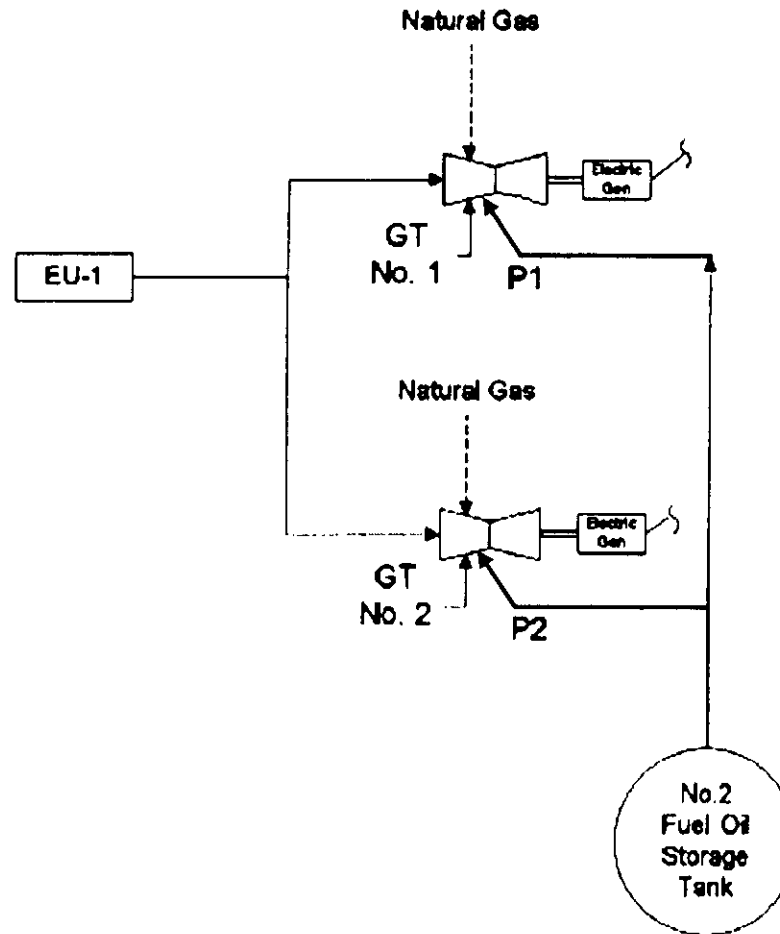
**ATTACHMENT AP-EU1-G8**  
**CALCULATION OF EMISSIONS**

**Attachment AP-EU1-G8. Maximum Estimated Emissions for Emissions Limited Pollutants  
Avon Park Plant, Gas Turbine Peaking Units**

Pollutant/Units	Gas Turbine	
	No. 1	No. 2
Hours of Operation	8,760	8,760
Annual Capacity Factor (%)	100	100
Sulfur Dioxide (lb/hr) = Fuel oil (lb/hr) x sulfur content (%) x (lb SO <sub>2</sub> /lb S)		
Basis	AV Permit	AV Permit
Fuel Usage (lb/hr)	28,851	28,851
Sulfur Content (%)	1.0	1.0
lb SO <sub>2</sub> /lb S (64/32)	2.0	2.0
Emission Rate (lb/hr)	577	577
(TPY)	2,527	2,527
Heat Input Rate (MMBtu/hr)	562.6	562.6
Btu/lb	19,500	

Source: Permit No. 0550003-001-AV

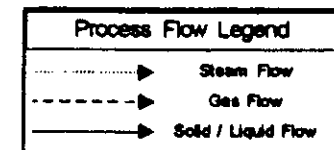
**ATTACHMENT AP-EU1-J1**  
**PROCESS FLOW DIAGRAM**

**Note:**

GT = Gas Turbine

EU = Emission Unit Number

See segment section for the operating rate of each emission unit.



Attachment AP-EU1-J1  
 Florida Power, Avon Park Plant  
 Process Flow Diagram

Source: Golder Associates Inc., 2002



**ATTACHMENT AP-EU1-J2**

**FUEL ANALYSIS  
NO. 2 FUEL OIL**

FLORIDA POWER CORPORATION  
 CENTRAL CHEMICAL LABORATORY  
 15760 WEST POWERLINE STREET  
 CRYSTAL RIVER, FL 34428  
 TEL: 352-563-4463; EXT: 5239  
 MICROWAVE: 240-5239 MAC CN77

Avon Park Unit (s): 1

Sample Date: 05/01/2002 Sample Number: FO-8686

Type of Fuel: No. 2 oil

Enter the type of Sample: Gas Turbine

**RESULTS\***

API Gravity @ 33  
 %S: 0.50  
 Density (@ 60° F): 0.8597  
 Density (lb/gal): 7.1622

HHV, BTU/lb:	19,318	% ASH:	
HHV, BTU/gal:	138,356	% Carbon:	88.1
HHV, BTU/bbl:	5,810,952	% Hydrogen:	12.2
LHV, BTU/lb:	18,205	% Nitrogen:	0.1
LHV, BTU/gal:	130,384	% Water:	
LHV, BTU/bbl:	5,476,128		

Sample

\* Analysis performed by: TECO Labs

Jeff Smith  
 Chemist, Central Chem Lab

Tuesday, May 28, 2002

**ATTACHMENT AP-EU1-J5**  
**COMPLIANCE TEST REPORT**

**Source Test Report  
for  
Visible Emissions Evaluation**

**Avon Park  
Combustion Turbine  
Units P1 & P2**

**FDEP Permit Number:  
0550003-001-AV**

**Facility ID Number:  
0550003**

**Emissions Unit ID Number:  
-003 & -004**

**May 22, 2002**

**Prepared by:**

Environmental Services Section  
Florida Power  
263 13th Avenue, South  
MAC BB1A  
St. Petersburg, FL 33701  
(727) 826-4136



## TABLE OF CONTENTS

### Section

#### REPORT CERTIFICATION

1.0 INTRODUCTION

2.0 SUMMARY AND DISCUSSION OF RESULTS

3.0 FIELD AND ANALYTICAL PROCEDURES

#### APPENDICES

APPENDIX A -	VISIBLE EMISSION TEST DATA
APPENDIX B -	FUEL ANALYSIS
APPENDIX C -	PROJECT PARTICIPANTS

To the best of my knowledge, all applicable field procedures and calculations comply with Florida Department of Environmental Protection requirements, and all test data and plant operating data are true and correct.

\_\_\_\_\_  
Martin J. Drango  
Plant Manager

\_\_\_\_\_  
Date

## 1.0 INTRODUCTION

## 1.0 INTRODUCTION

The Environmental Services Section, Florida Power has performed visible emissions (VE) compliance testing on its Avon Park, Combustion Turbine Units P1 and P2 in Highlands County, Florida. The testing occurred on May 21, 2002. Both turbines were tested while combusting #2 fuel oil.

EPA Method 9 testing was performed by Ms. Debbie Telemeco-Anders, VE Certification No. 292625 (certification expiration date: August 22, 2002) to satisfy conditions of the Florida Department of Environmental Protection (FDEP) permit indicated below.

FDEP Permit No.	Source Name	Source Number
0550003-001-AV	Avon Park Combustion Turbine	P1 – E.U. 003 P2 – E.U. 004

## 2.0 SUMMARY AND DISCUSSION OF RESULTS

## 2.0 SUMMARY AND DISCUSSION OF RESULTS

For the Avon Park Combustion Turbine Units P1 & P2, the highest six-minute average opacity is summarized below. The VE data sheet and the observer's certification are located in Appendix A.

Source	Highest Average 6-minute Opacity	Unit Load (MW)	Average Ambient Temperature (F)	Unit Heat Input (MMBTU/Hr)
P1	9	23	85.0	409.62
P2	18	24	85.0	391.77

The source was found to be in compliance.

### **3.0 FIELD AND ANALYTICAL PROCEDURES**

### 3.0 FIELD AND ANALYTICAL PROCEDURES

The observer, qualified in accordance with EPA Method 9, used the following procedures for visually determining the opacity of emissions.

1. The qualified observer stood at a distance sufficient to provide a clear view of the emissions, with the sun oriented in the 140-degree (°) sector to his back. Consistent with maintaining the above requirement, the observer made his observations from a position such that his line of vision was approximately perpendicular to the plume direction. The observer's line of sight did not include more than one plume at a time when multiple stacks were involved.
2. The observer recorded the name of the plant, emission location, type of facility, observer's name and affiliation, and the date on the field data sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background were recorded on a field data sheet at the time opacity readings were initiated and completed.
3. Opacity observations were made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer did not look continuously at the plume, but instead observed the plume momentarily at 15-second intervals.
4. Opacity observations were recorded to the nearest 5 percent at 15-second intervals on the Visible Emission Observation Form. Each momentary observation recorded was deemed to represent the average opacity of emissions for a 15-second period.
5. Opacity is determined as an average of 24 consecutive observations recorded at 15-second intervals (i.e., highest 6-minute average). To find the average, the observations recorded on the field data sheet are divided into sets of 24 consecutive observations. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time, and in no case shall two sets overlap. For each set of 24 observations, the average is calculated by summing the opacity of the 24 observations and dividing this sum by 24. If an applicable standard specifies an averaging time requiring more than 24 observations, the average is calculated for all observations made during the specified time period. The average opacity is recorded on a field data sheet.



**ATTACHMENT AP-EU1-J6**  
**PROCEDURES FOR STARTUP/SHUTDOWN**

---

**ATTACHMENT AP-EU1-J6**  
**PROCEDURES FOR STARTUP/SHUTDOWN**

Startup for the gas turbine begins with an electric control system using a switch to initiate the unit startup cycle. The unit generator is synchronized with the grid and can be "on line" (electrical power production) within 5 minutes from startup.

The gas turbine has no emission controls. If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective action taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit generator from the system electrical grid), shutting off the fuel, and coasting to a stop.

**ATTACHMENT AP-EU1-J14**  
**COMPLIANCE ASSURANCE MONITORING PLAN**

**ATTACHMENT AP-EU1-J14**

**COMPLIANCE ASSURANCE MONITORING PLAN**

There are no emission control devices for the CTs, therefore no compliance assurance monitoring plan is required.

**III. EMISSIONS UNIT INFORMATION**

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

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

**Emissions Unit Description and Status**

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p><b>Facility-Wide Fugitive/De Minimis Emissions</b></p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID ID: <input checked="" type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: <b>A</b></p>	<p>6. Initial Startup Date:</p>	<p>7. Emissions Unit Major Group SIC Code: <b>49</b></p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p><b>See Attachment AP-EU2-A9.</b></p>			

**Emissions Unit Control Equipment**

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

2. Control Device or Method Code(s):

**Emissions Unit Details**

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

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

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p><b>This emission unit consists of numerous fugitive sources.</b></p>		





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

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram?		2. Emission Point Type Code: <b>4</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  <b>This EU consists of various activities generating fugitive emissions.</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>F</b>	6. Stack Height:  feet	7. Exit Diameter:  feet	
8. Exit Temperature:  °F	9. Actual Volumetric Flow Rate:  acfm	10. Water Vapor:  %	
11. Maximum Dry Standard Flow Rate:  dscfm		12. Nonstack Emission Point Height:  feet	
13. Emission Point UTM Coordinates: Zone:                      East (km):                      North (km):			
14. Emission Point Comment (limit to 200 characters):			

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

**Segment Description and Rate:** Segment  1  of  2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  <b>Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Distillate Fuel Oil #2 (Storage)</b>		
2. Source Classification Code (SCC): <b>4-03-888-01</b>		3. SCC Units: <b>Thousand Gallons Stored</b>
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: <b>420</b>
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  <b>Segment refers to combined storage capacity of various petroleum product storage tanks contained in the emission unit at the time of this permit application submittal. See Attachment AP-EU2-A9 for list.</b>		

**Segment Description and Rate:** Segment  2  of  2

1. Segment Description (Process/Fuel Type ) (limit to 500 characters):  <b>Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Distillate Fuel Oil #2 (Throughput)</b>		
2. Source Classification Code (SCC): <b>4-03-999-99</b>		3. SCC Units: <b>Thousand Gallons Throughput</b>
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: <b>35</b>
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  <b>Estimated Annual Activity Factor = 35.2 (rounded to 35). Segment refers to combined throughput of various petroleum product storage tanks contained in the emission unit. See Attachment AP-EU2-A9 for list.</b>		



**ATTACHMENT AP-EU2-A9**  
**EMISSIONS UNIT COMMENT**

---

**ATTACHMENT AP-EU2-A9**  
**EMISSIONS UNIT COMMENT – TRIVIAL ACTIVITIES**

The trivial activities identified in this application are provided for information only and are identified as examples of, but not limited to, the trivial activities identified by the Division of Air Resources Management's (DARM's) guidance document DARM-PER-12: Trivial List of Activities at a Title V Source (3/1/2000). It is understood that such activities do not have to be included in with the Title V Application. The trivial activities identified herein are consistent, in terms of amounts of emissions and types, with those listed in DARM's guidance.

**EMISSIONS UNIT COMMENT – NOTIFICATION OF TEMPORARY EXEMPTIONS**

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provided that the emission units listed in Tables 1 and 2 of this attachment are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800, F.A.C.

Attachment AP-EU2-A9  
General Emissions Unit Information

Table 1. Florida Power, Avon Park Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Maintenance Shop	Sand blaster, drill press, welding, lathes	ER/TR
	Cabinets with solvents, oils, flammables, etc.	TR
	Parts washer - light oil	TR
	Cylinders (acetylene, etc.)	TR
Gas Turbine 1	Lube oil vent with demister	UR
	Lube oil storage tank (underground) - 2,600 gal	UR
	Waste oil storage tank - 550 gal.	UR
	Turbine cooling - 175 gal. 50% glycol / 50% water mix.	TR
Fuel Storage and Associated Areas	Tank No. CT5 - No. 2 Fuel Oil (10,000 bbls)	UR
	Turbine lube oil tank (800 gal.)	UR
General Site	Oil water separators	TR
Substation	Transformers and Associated Equipment	TR

Note: ER = Exempt by Rule 62-210.300(3)(a); TR = Trivial; UR = Unregulated

Attachment AP-EU2-A9  
General Emissions Unit Information

Table 2. Florida Power, Avon Park Plant, Petroleum Product Storage and Throughput Operations

FP Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)
C.T. 6	Waste oil (below ground)	550	100
C.T. 7	Waste oil (below ground)	550	100
C.T. #05	Fuel oil (No. 2)	420,000	35,200
	TOTAL	421,100	35,400