MEMORANDUM

To:

Trina Vielhauer by bas

Al Linero automorphism Cassia

Through:

From:

Date:

October 15, 2004

Subject:

PROPOSED Title V Permit Renewal No. 0090006-003-AV

Cape Canaveral Plant

The Public Notice of Intent to Issue was published in the Florida Today Newspaper on September 10, 2004. The only comment received was from the applicant in an e-mail memorandum requesting the addition of the following permitting note (it was in the initial Title V permit but was removed in the DRAFT renewal because it was redundant). It was added back in the PROPOSED permit.

{Permitting note: The averaging times for all specified emissions standards are tied to or based on the run time of the test method(s) used for determining compliance; and, in the case of particulate matter, the appropriate averaging time is a "3-hour average".}

I recommend your approval and forwarding to Barbara for posting on the Internet for EPA's review.



Department of Environmental Protection

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

Colleen M. Castille Secretary

October 19, 2004

Mr. Lowell Trotter Plant General Manager Florida Power & Light Company Environmental Services Department P.O. Box 14000 Juno Beach, FL 33408

Re:

PROPOSED Title V Permit Renewal No. 0090006-003-AV

Cape Canaveral Plant

Dear Mr. Trotter:

One copy of the "PROPOSED PERMIT RENEWAL DETERMINATION" for the Cape Canaveral Plant located on the West side of the Indian River, approximately eight miles north of Cocoa, Florida on U.S. Highway No. 1, Brevard County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit renewal has become a PROPOSED permit renewal.

An electronic version of this document has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit renewal is made by the U.S.EPA within 45 days, the PROPOSED permit renewal will become a FINAL permit renewal no later than 55 days after the date on which the PROPOSED permit renewal was mailed (posted) to U.S.EPA. If U.S.EPA has an objection to the PROPOSED permit renewal, the FINAL permit renewal will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Tom Cascio at 850/921-9526.

Sincerely,

Trina L. Vielhauer, Chief Bureau of Air Regulation

TLV/tbc

Enclosures

Copy furnished to:

Mary Archer, Florida Power & Light Company Len Kozlov, P.E., Central District Office U.S.EPA, Region 4 (INTERNET E-mail Memorandum)

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PROPOSED PERMIT RENEWAL DETERMINATION

PROPOSED Permit No. 009006-003-AV Cape Canaveral Plant

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to the Florida Power and Light Company for the Cape Canaveral Plant, located on the West side of the Indian River, approximately eight miles north of Cocoa, Florida on U.S. Highway No. 1, Brevard County, was clerked on August 27, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Florida Today Newspaper on September 10, 2004. The DRAFT Title V Air Operation Permit was available for public inspection at the Department of Environmental Protection's Central District Office in Orlando, and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on October 4, 2004.

II. Public Comments.

One comment was submitted by the applicant in an e-mail memorandum received by the Department on September 17, 2004:

"Regarding the Draft Title V Permit referenced above, FPL has the following comments:

Page 8 of 24; Specific Condition No. A-7. Please add a permitting note for clarity in addressing the averaging time for the particulate matter testing such as the note in the current Title V permit.

{Permitting note: The averaging times for all specified emissions standards are tied to or based on the run time of the test method(s) used for determining compliance; and, in the case of particulate matter, the appropriate averaging time is a "3-hour average".}"

III. Response.

This specific permitting note was included in the previous Title V permit (0090006-001-AV). The addition of this note is acceptable to the Department, and the change was made in the PROPOSED Permit.

IV. Conclusion.

The permitting authority hereby issues PROPOSED Title V Permit No. 0090006-003-AV, with the one change noted above.

STATEMENT OF BASIS

Title V Permit Renewal No. 0090006-003-AV
Florida Power and Light Company
Cape Canaveral Plant
Brevard County

This Title V air operation permit renewal 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.

This facility consists of two oil and natural gas fired conventional steam electric generating stations, designated as Units #1 and #2. These emissions units are regulated under Acid Rain, Phase II, and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input.

Each emissions unit is a nominal 400 megawatt (MW) class (electric) steam generator which drives a single reheat turbine generator, and is equipped with a 397 foot exhaust stack. Each emissions unit is fired on No. 2, No. 6 residual, or used oil, with a maximum heat input of 4000 MMBtu per hour, or natural gas with a maximum heat input of 4180 MMBtu per hour. Fuel additives such as, but not limited to, magnesium hydroxide are used to enhance combustion and facilitate furnace cleaning, in a manner consistent with Best Operational Practices. The control device consists of multiple cyclones with fly ash reinjection to control particulate matter emissions. Unit #1 commenced commercial operation in April, 1965. Unit #2 commenced commercial operation in May, 1969.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. Based on the Title V permit renewal application received on July 1, 2004, this facility is a major source of hazardous air pollutants (HAPs).

The Department has determined that the appropriate particulate testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. These units are subject to a steady-state PM emission limit of 0.1 lb/mmBtu, and 0.3 lb/mmBtu for soot blowing and load change. The Department has determined that sources with particulate matter emissions less than half the effective standard shall test annually. A summary of results of particulate matter emission testing in lb/mmBtu in recent Annual Operating Reports for the units at Cape Canaveral are 0.045 (steady-state) and 0.045 (soot-blowing).

The Florida Power and Light Company may inject additives such as magnesium oxide, magnesium hydroxide and related compounds into each boiler for the purposes of reducing build-up of particulate matter on the interior boiler surfaces, to facilitate proper heat transfer and other boiler operation, and to reduce the particulate matter required to be removed from boiler surfaces during soot blowing and other boiler cleaning operations. The rate of additive injection is not large, generally on the order of 1 gallon of additive per approximately 2,500 (± 500) gallons of

fuel oil (this is approximately 0.04% by volume). The permit requires that emission tests be conducted while injecting additives consistent with normal operating practices.

This facility is allowed to co-fire natural gas with fuel oil in any ratio in order to avoid exceeding the sulfur dioxide limitation of this permit. The permit specifies that compliance with the sulfur dioxide standard shall be based on the total heat input from all liquid and gaseous fuels burned. The permit also requires that the sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change. However, excess emissions of sulfur dioxide are allowed during malfunctions in accordance with the excess emissions conditions of this permit, which are based on Rule 62-210.700, F.A.C. Malfunctions that could occur and affect sulfur dioxide emissions include unexpected loss of natural gas supply at the plant, failure of the fuel feed system or burner failure.

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. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5),F.A.C., included in the permit, requires measurement of process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.

This renewal permit includes the following change to the initial Title V permit:

• Appendix I-1. List of Insignificant Emissions Units and/or Activities, has been augmented as indicated below.

Emissions Unit	Description	
1	Natural Gas Metering Area Relief Valves	
2	Iydrazine Mixing Tank	
3	Fuel Oil Storage Tanks and Related Systems	
4	Lube Oil Tanks, Vents, and Related Systems	
5	Oil/Water Separation Basin and Related Equipment	
6	Hazardous Waste Building	
7	Paint/Lube Buildings	
8	Miscellaneous Mobile Vehicle Operation	
9	Evaporation of Boiler Chemical Cleaning Waste	
10	Steam & Air Evacuation Systems	
11	Feedwater, Condensate & Heater Drains	
12	Service & Cooling Water	
13	Fuels & Lube Oil System	
14	Caustic Wash, Station & Instrument Air	
15	Condensate System	
16	Feedwater System	

17	Chemical Feed System	
18	Instrument Air System	
19	Service Air System	
20	Closed Cooling Water System	
21	Service Water & Fire Protection Systems	
22	Fuel Oil System	
23	Nitrogen Purge System	
24	Caustic Wash System	
25	Fuel Management System	
26	Steam & Air Evacuation System	
27	Miscellaneous Mobile Equipment Operation	
28	Miscellaneous Building Venting	
29	Misc. Building Heating/Cooling	
30	Fuel Oil Barge Unloading Area	
31	Gas Metering Area (Units 1 & 2)	
32	Recreation Area Pavilion	
33	Motor Fuels Area	
34	C.E.M. Building	
35	Control, Auxiliary & Miscellaneous Buildings-Portable and	
33	Sanitary	
36	"Donkey Boiler" Mobile Auxiliary Steam Unit	
37	· · · · · · · · · · · · · · · · · · ·	
38	Bulk Gas Building	
39	Hydrogen Storage Building	
	Hydrogen Storage Tube Trailer	
40	Service Building	
41	Control Building	
42	Water Treatment	
43	Waste Water Treatment	
44	LAPIO – Low API Oil System	
45	Chlorination/Dechlorination	
46	Home heating and comfort with a gross maximum heat output of less than one million BTU/hr.	
47	Internal combustion engines in boats, aircraft and vehicles	
	used for transportation of passengers or freight.	
48	Vacuum pumps used in laboratory operations.	
49	Equipment used for steam cleaning.	
50	Belt or drum sanders having a total sanding surface of five	
	square feet or less and other equipment used exclusively on	
	wood or plastics or their products having a density of 20	
	pounds per cubic foot or more.	
51	Equipment used exclusively for space heating, other than	
	boilers.	
52	Laboratory Equipment used exclusively for chemical or	
-	physical analysis.	
53	Brazing, soldering or welding equipment	
54	Laundry dryers, extractors, or tumblers for fabrics cleaned	
	with only water solutions of bleach or detergents	

55	Fire & Safety Equipment					
56	Surface coating facilities in ozone attainment areas (provided					
	that 6.0 gallons of coatings per day are applied)					
57	Degreasing units using heavier-than-air vapors exclusively,					
	except any such unit using or emitting any substance					
	classified as a hazardous air pollutant.					

• The following permitting note, originally included in the initial Title V Permit, was added at the applicant's request after Specific Condition A.7. in the PROPOSED permit:

{Permitting note: The averaging times for all specified emissions standards are tied to or based on the run time of the test method(s) used for determining compliance; and, in the case of particulate matter, the appropriate averaging time is a "3-hour average".}

Facility ID No. **0090006** Brevard County

Title V Air Operation Permit Renewal PROPOSED Permit No. 0090006-003-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

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

> Telephone: 850/488-0114 Fax: 850/922-6979

Compliance Authority:
State of Florida
Department of Environmental Protection
Central District Office

3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

> Telephone: 407/894-7555 Fax: 407/897-2966

Title V Air Operation Permit Renewal PROPOSED Permit No. 0090006-003-AV

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Permittee:

Florida Power and Light Company P.O. Box 14000 Juno Beach, Florida 33408 PROPOSED Permit No. 0090006-003-AV

Facility ID No. 0090006 SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Renewal

This permit is for the operation of the Cape Canaveral Plant. This facility is located on the West side of the Indian River, approximately eight miles north of Cocoa, Florida on U.S. Highway No. 1, Brevard County; UTM Coordinates: Zone 17, 523.1 km East and 3149.0 km North; Latitude: 28° 28' 10" North and Longitude: 80° 45' 51" West.

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 I-1, List of Insignificant Emissions Units and/or Activities Appendix U-1, List of Unregulated Emissions Units and/or Activities APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/12/02) APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) Acid Rain Phase II Part Application Renewal dated April 14, 2004 Alternate Sampling Procedure: ASP No. 97-B-01 Florida Department of Environmental Protection Order dated January 2, 1986

Effective Date: January 1, 2005

Renewal Application Due Date: July 5, 2009

Expiration Date: December 31, 2009

Michael G. Cooke, Director Division of Air Resource Management

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two oil and natural gas fired conventional steam electric generating stations, designated as Units #1 and #2. Each steam unit is a nominal 400 megawatt (MW) class (electric) steam generator which drives a single reheat turbine generator. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V permit renewal application received on July 1, 2004, this facility is a major source of hazardous air pollutants (HAPs).

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

E.U. ID	7	
No.	Brief Description	
-001	Fossil Fuel Fired Steam Generator #1	
-002	Fossil Fuel Fired Steam Generator #2	

Unregulated Emissions Units and/or Activities

-003	Painting and Solvent Cleaning	
-004	Internal Combustion Engines which drive Compressors and Water Pumps and Similar	
	Equipment	
-005	Emergency Diesel Generators	

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

Subsection C. Relevant Documents.

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

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History/ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Title V Air Operation Permit with effective date January 1, 2000.

Title V Permit Renewal Application received on July 1, 2004.

DRAFT Title V Permit Renewal clerked on August 27, 2004.

Documents on file with USEPA

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

{Permitting note: The permit shield becomes effective not upon issuance, but upon the Title V permit's effective date.}

- 1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards.

 Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

 [Rule 62-296.320(2), F.A.C.]
- 3. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
- **b.** As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
- c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs Division of Emergency Management 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100

Telephone: 850/413-9921; Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, Maryland 20703-1515

Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center EPA Office of Solid Waste and Emergency Response USEPA (5305 W)

401 M Street, SW Washington, D.C. 20460 Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier

Department of Community Affairs State Emergency Response Commission 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

4. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

- 5. <u>Unregulated Emissions Units and/or Activities.</u> 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 Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1. & 4., F.A.C.]
- 7. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following:
- a. In order to perform sandblasting on fixed plant equipment, sandblasting enclosures are constructed and operated as necessary. Thick polyurethane flaps are used over the doorways to prevent any sandblasting material from leaving the sandblast facility.
- b. Maintenance of paved areas is performed as needed.
- c. Mowing of grass and care of vegetation are done on a regular basis.
- d. Access to plant property by unnecessary vehicles is controlled and limited.
- e. Bagged chemical products are stored in weather tight buildings until they are used. Spills of powdered chemical products are cleaned up as soon as practical.

f. Vehicles are restricted to slow speeds on the plant site.

[Rule 62-296.320(4)(c)2., F.A.C.; and proposed by applicant in the Title V permit renewal application received on July 1, 2004.]

- 8. 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.]
- 9. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District office:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555

Fax: 407/897-2966

10. 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 Air & EPCRA Enforcement Branch, Air Compliance Section

61 Forsyth Street Atlanta, Georgia 30303 Telephone: 404/562-9155 Fax: 404/562-9163 or 404/562-9164

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 52., Appendix TV-4, Title V Conditions.} [Rule 62-214.420(11), F.A.C.]

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U.		
ID No.	Brief Description	
-001	Fossil Fuel Fired Steam Generator #1	
-002	Fossil Fuel Fired Steam Generator #2	

Fossil Fuel Fired Steam Generators #1 and #2 are nominal 400 megawatt class (electric) steam generators designated as Cape Canaveral Units #1 and #2, respectively. Each emissions unit is fired on No. 2, No. 6 residual, or used oil, with a maximum heat input of 4000 MMBtu per hour, or natural gas with a maximum heat input of 4180 MMBtu per hour. Unit #1 commenced commercial operation in April, 1965. Unit #2 commenced commercial operation in May, 1969.

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

Both emissions units consist of boiler/steam generators which drive a single reheat turbine generator, and are equipped with 397 foot exhaust stacks. The control devices consist of multiple cyclones with fly ash reinjection to control particulate matter emissions.

The mechanical dust collectors are excluded from compliance assurance monitoring (CAM), because they are (a) inherent process equipment contained entirely within the flue ductwork, (b) use a passive method of particulate matter separation from the flue gas stream, (c) recover unburned carbon and ash from the flue gas system, and (d) have no moving parts, no control inputs, nor any controllable parameters.

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

The following conditions apply:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type	
1	4180	Natural Gas	
	4000 No. 2 Fuel Oil, No. 0		
		Fuel Oil or Used Oil	
2	4180	Natural Gas	
	4000	No. 2 Fuel Oil, No. 6 Residual	
		Fuel Oil or Used Oil	

Methods of heat input calculation are as determined by hourly fuel usage, and the higher heat value of the oil as determined by as-fired fuel analysis. When a blend of fuel oil and natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. [Rules 62-4.160(2), 62-210.200 (PTE), and 62-296.405, F.A.C.; AO05-217321; AO05-252219]

{Permitting note: 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.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.23**. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation - Fuels.

- a. Startup: The only fuels allowed to be burned are natural gas, propane gas, No. 2 fuel oil, No. 6 residual fuel oil, or on-specification used oil from Florida Power and Light Company operations.
- b. Normal: The only fuels allowed to be burned are natural gas, No. 2 fuel oil, No. 6 residual fuel oil, or on-specification used oil from Florida Power and Light Company operations. [Rule 62-213.410, F.A.C.; AO05-217321, Specific Condition No. 2; AO05-252219, Specific Condition No. 2]
- **A.4.** Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (PTE), F.A.C.; AO05-217321, Specific Condition No. 3; AO05-252219, Specific Condition No. 3]

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.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **A.5.** through **A.10.** are based on the specified averaging time of the applicable test method.}

A.5. <u>Visible Emissions.</u> Visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions standard shall compliance test for particulate matter emissions annually.

[Rule 62-296.405(1)(a), F.A.C.; and Order dated January 2, 1986.]

A.6. <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. 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.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]

A.7. <u>Particulate Matter.</u> Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1) (b), F.A.C.]

{Permitting note: The averaging times for all specified emissions standards are tied to or based on the run time of the test method(s) used for determining compliance; and, in the case of particulate matter, the appropriate averaging time is a "3-hour average".}

- **A.8.** Particulate Matter Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.9. <u>Sulfur Dioxide</u>. Sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. Compliance shall be based on the total heat input from all liquid and gaseous fuels burned. The sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change. [Rules 62-213.440 and 62-296.405(1)(c)1.j., F.A.C.]
- A.10. "On-Specification" Used Oil. Only "on-specification" used oil generated by the Florida Power and Light Company in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired at these emissions units shall not exceed 1,500,000 gallons per calendar year. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" used oil and shall not be fired. See Specific Conditions A.16., A.34., and A.35.

CONSTITUENT/PROPERTY*	ALLOWABLE LEVEL		
Arsenic	5 ppm maximum		
Cadmium	2 ppm maximum		
Chromium ⁵	10 ppm maximum		
Lead	100 ppm maximum		
Total Halogens	1000 ppm maximum		
Flashpoint	100 degrees F minimum		
PCBs	less than 50 ppm		

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods). [40 CFR 279.11; and AO05-217321, AO05-252219]

Excess Emissions

- **A.11.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **A.12.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

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

A.13. 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.14.** Sulfur Dioxide. The permittee shall demonstrate compliance with the sulfur dioxide limit of Specific Condition **A.9.** of this permit by the following:
- a. Through the use of CEMS installed, operated and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in rule 62-204.800, F.A.C. A relative accuracy test audit of the SO₂ CEMS shall be conducted at least annually. Compliance shall be demonstrated based on a 3-hour rolling average.
- b. In the event the CEMS becomes temporarily inoperable or interrupted, the fuel oil sulfur content and the maximum fuel oil to natural gas firing ratio is limited to that which was last used to demonstrate compliance prior to the loss of the CEMS. Alternatively, the boilers may fire 100 percent fuel oil with a maximum sulfur content of 2.5 percent, by weight, or less, or 100 percent natural gas.

[Rules 62-213.440, 62-204.800 and 62-296.405(1)(c)3., F.A.C.]

A.15. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

A.16. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch delivered for firing. See Specific Conditions **A.10.**, **A.34.**, and **A.35.**

[Rules 62-4.070 and 62-213.440; and, 40 CFR 279]

Continuous Monitoring Requirements

A.17. The Florida Power and Light Company shall operate, calibrate, and maintain a continuous opacity monitoring system. The continuous opacity monitoring system shall be calibrated, operated, span checked, and maintained according to the manufacturer's recommendation. Calibrations shall consist of electronic zero and span checks and include an optical lens check to ensure the monitoring system functions properly.

[Rule 62-210.700, F.A.C.; AO05-217321, Specific Condition No. 9; and AQ05-252219, Specific Condition No. 9]

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.18.** <u>Visible Emissions.</u> The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See Specific Conditions **A.19.** and **A.40.** [Rule 62-296.405(1)(e)1., F.A.C.]
- **A.19.** DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
 - 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
 - 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each

of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

A.20. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 (Orsat analysis) or 3A shall be used when the oxygen based F-factor is computed according to EPA Method 19 is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.

[Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

A.21. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance using CEMS for sulfur dioxide. See Specific Condition A.14. of this permit.

[Rules 62-213.440 and 62-296.405(1)(c)3. and (1)(e)3., F.A.C.; Proposed by applicant 09/18/97]

A:22. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

- **A.23.** Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited; operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- **A.24.** Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.25. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1 CALIBRATION SCHEDULE

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

each test series

- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **A.26.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- **A.27.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. (a) General Compliance Testing.
 - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard (see Specific Condition A.29.);
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours. See Specific Conditions A.28 and A.30.

- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. 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) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]
- A.28. Florida Department of Environmental Protection Order dated January 2, 1986, granted annual particulate matter testing with a 40% opacity limit. Compliance testing shall be conducted on an annual basis during every federal fiscal year. If the emissions unit(s) fails to comply with the Order conditions, then the emissions unit(s) will resume particulate matter (steady-state) testing either annually with a 20% opacity limit or quarterly with a 40% opacity limit. Visible emissions testing will be conducted annually regardless of the option selected. If a quarterly schedule is selected, the permittee shall advise the Department's Central District Office in writing of the quarterly test date schedule. See Specific Conditions A.27.(a)4. & 5., A.29., and A.30.

[AO05-217321, Specific Condition No. 4; AO05-252219, Specific Condition No. 4; Order dated 01/02/1986]

- **A.29.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
 - a. only gaseous fuel(s); or
 - b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
 - c. only liquid fuel(s) for less than 400 hours per year. See Specific Conditions A.27.(a)4.a. and A.28.

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

- **A.30.** Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:
 - a. only gaseous fuel(s); or
 - b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
 - c. only liquid fuel(s) for less than 400 hours per year. See Specific Conditions A.27.(a)4.b. & 5. and A.28.

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

A.31. Compliance Testing Related Requirements. Should the Florida Power and Light Company (FPL) decide to pursue routine use of a fuel additive, then all future compliance testing for particulate matter and visible emissions shall include use of the additive at an injection rate consistent with normal operation.

In the event FPL exceeds the tested additive injection rate by 10 percent or more, FPL shall notify the Department's Central District Office in writing within 14 days of the date that the higher rate was initiated. The notification shall include the date the higher injection rate began, the magnitude of the higher rate, and the approximate date by which the higher rate would cease.

{Permitting note: If additives were used in the prior year's operations, testing with the additives is required.}

[AO05-217321, Specific Condition No. 5; AO05-252219, Specific Condition No. 5]

- **A.32.** Operating Conditions During Testing Particulate Matter and Visible Emissions. Compliance testing during soot blowing and steady-state operation for particulate matter and visible emissions shall be conducted at least once annually, if liquid fuel is fired for more than 400 hours. A visible emissions test shall be conducted during one run of each particulate matter test. Testing shall be conducted as follows:
 - a. When Burning Fuel Oil Up To 2.5% Sulfur. When only fuel oil containing less than or equal to 2.5% sulfur, by weight, is fired (or co-fired with natural gas) in an emissions unit, particulate matter and visible emissions tests during soot blowing and steady-state operation shall be performed on such emissions unit while firing solely fuel oil containing at least 90% of the average sulfur content of the fuel oils fired in the previous 12 month period, except that such test shall not be required to be performed during any year that testing is performed in accordance with Specific Condition A.32.b.

b. When Burning Fuel Oil Greater Than 2.5% Sulfur. If fuel oil containing greater than 2.5% sulfur, by weight, is co-fired with natural gas in an emissions unit, particulate matter and visible emissions tests during soot blowing and steady-state operation shall be performed as soon as practicable, but in no event more than 60 days after firing such fuel oil, while co-firing such oil with the appropriate proportion of natural gas required to maintain SO, emissions between 90 to 100% of the SO, emission limit (corresponding to 2.475 and 2.75 lb/mmBtu, respectively). Following successful completion of such particulate matter and visible emissions testing, further particulate matter and visible emissions testing shall not be required during the remaining federal fiscal year unless fuel oil is fired that contains greater than 0.20% sulfur above the percentage sulfur concentration fired during the most recent co-firing test. If fuel oil is co-fired containing greater than 0.20% sulfur above the percentage sulfur concentration fired during the most recent co-firing test, additional particulate matter and visible emissions tests shall be performed as described above as soon as practicable, but in no event more than 60 days after firing such higher sulfur fuel oil. If any additional particulate matter and visible emissions tests are imposed after completion of any required annual compliance tests, then the frequency testing base date shall be reset to 12-months after the date of completion of the last tests.

[Rules 62-4.070(3), 62-213.440, 62-296.405(1)(c)3. and 62-297.310(7)(a)9., F.A.C.]

A.33. Testing While Injecting Additives. The owner or operator shall conduct emission tests while injecting additives consistent with normal operating practices. [Rule 62-213.440, F.A.C., and applicant agreement with DEP on August 25, 1998.]

Recordkeeping and Reporting Requirements

A.34. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See Specific Conditions **A.10.**, **A.16.**, and **A.35.**

[Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 279.61 and 761.20(e)]

A.35. The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Fossil Fuel Fired Steam Generators Nos. 1 and 2 during the calendar year. See Specific Conditions **A.10.**, **A.16.**, and **A.34.**

[Rule 62-213.440(1)(b)2.b., F.A.C.]

A.36. Quarterly reports containing monthly summaries of the quantities of used oil burned and the sampling and analysis results shall be submitted to the Department's Central District office. Used oil burned in one month within a calendar quarter triggers the quarterly reporting requirement.

[AO05-217321, Specific Condition No. 8; AO05-252219, Specific Condition No. 8]

- **A.37.** 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.38.** Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.39. 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.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.

- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

A.40. COMS for Periodic Monitoring. The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. See Specific Condition **A.18**. [Rule 62-213.440, F.A.C.; and applicant agreement with DEP on August 25, 1998.]

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power and Light Company

ORIS code: 0609

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

The emissions units listed below are regulated under Phase II of the federal Acid Rain Program.

E.U. ID	EPA ID	
No.		Brief Description
-001	PCC1	Fossil Fuel Fired Steam Generator #1
-002	PCC2	Fossil Fuel Fired Steam Generator #2

- 1. The Phase II permit application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
- a. DEP Form No. 62-210.900(1)(a), dated 04/14/04. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- 2. Sulfur dioxide (SO2) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2005	2006	2007	2008	2009
-001	PCC1	SO2 allowances, under Table 2 of 40 CFR Part 73	4224*	4224*	4224*	4224*	4224*
-002	PCC2	SO2 allowances, under Table 2 of 40 CFR Part 73	4961*	4961*	4961*	4961*	4961*

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

- 3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - 1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- 4. <u>Fast-Track Revisions of Acid Rain Parts</u>. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rule 62-213.413, F.A.C.]
- 5. Comments, notes, and justifications: None.

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

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., <u>Categorical Exemptions</u>, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., <u>Generic Emissions Unit Exemption</u>, are exempt from the permitting requirements of Chapters 62-210, 62-212 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 Rules 62-210.300(3)(a) and (b)1., 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 Rules 62-210.300(3)(a) and (b)1., 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.

Emissions Unit	Description						
1	Natural Gas Metering Area Relief Valves						
2	Hydrazine Mixing Tank						
3	Fuel Oil Storage Tanks and Related Systems						
4	Lube Oil Tanks, Vents, and Related Systems						
5	Oil/Water Separation Basin and Related Equipment						
6	Hazardous Waste Building						
7	Paint/Lube Buildings						
8	Miscellaneous Mobile Vehicle Operation						
9	Evaporation of Boiler Chemical Cleaning Waste						
10	Steam & Air Evacuation Systems						
11	Feedwater, Condensate & Heater Drains						
12	Service & Cooling Water						
13	Fuels & Lube Oil System						
14	Caustic Wash, Station & Instrument Air						
15	Condensate System						
16	Feedwater System						
17	Chemical Feed System						
18	Instrument Air System						
19	Service Air System						
20	Closed Cooling Water System						
21	Service Water & Fire Protection Systems						
22	Fuel Oil System						
23	Nitrogen Purge System						
24	Caustic Wash System						
25	Fuel Management System						

Emissions Unit	Description						
26	Steam & Air Evacuation System						
27	Miscellaneous Mobile Equipment Operation						
28	Miscellaneous Building Venting						
29	Misc. Building Heating/Cooling						
30	Fuel Oil Barge Unloading Area						
31	Gas Metering Area (Units 1 & 2)						
32	Recreation Area Pavilion						
33	Motor Fuels Area						
34	C.E.M. Building						
35	Control, Auxiliary & Miscellaneous Buildings-Portable and						
33	Sanitary						
36	"Donkey Boiler" Mobile Auxiliary Steam Unit						
37	Bulk Gas Building						
38	Hydrogen Storage Building						
39	Hydrogen Storage Tube Trailer						
40	Service Building						
41	Control Building						
42	Water Treatment						
43	Waste Water Treatment						
44	LAPIO – Low API Oil System						
45	Chlorination/Dechlorination						
46	Home heating and comfort with a gross maximum heat output						
40	of less than one million BTU/hr.						
47	Internal combustion engines in boats, aircraft and vehicles						
1,	used for transportation of passengers or freight.						
48	Vacuum pumps used in laboratory operations.						
49	Equipment used for steam cleaning						
50	Belt or drum sanders having a total sanding surface of five						
	square feet or less and other equipment used exclusively on						
	wood or plastics or their products having a density of 20						
	pounds per cubic foot or more.						
51	Equipment used exclusively for space heating, other than						
	boilers.						
52	Laboratory Equipment used exclusively for chemical or						
	physical analysis.						
- 53	Brazing, soldering or welding equipment						
54	Laundry dryers, extractors, or tumblers for fabrics cleaned						
	with only water solutions of bleach or detergents						
55	Fire & Safety Equipment						
56 Surface coating facilities in ozone attainment areas (prov							
	that 6.0 gallons of coatings per day are applied)						
57,	Degreasing units using heavier-than-air vapors exclusively,						
	except any such unit using or emitting any substance						
	classified as a hazardous air pollutant.						

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

<u>Unregulated Emissions Units and/or Activities</u>. 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'.

Emissions Unit	Description					
-003	Painting and Solvent Cleaning .					
-004	Internal Combustion Engines which drive Compressors and					
	Water Pumps and Similar Equipment					
-005	Emergency Diesel Generators					

Appendix H-1. Permit History/ID Number Changes

Permit History (for tracking purposes):

E.U.		NT.			
ID No.	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
-001	Fossil Fuel Steam Generator #1	AO05-132054	12/16/87		08/23/90
		AO05-217321	03/10/93	02/25/98	02/12/97
					0090006-002-AO
-002	Fossil Fuel Steam Generator #2	AO05-163421	07/07/89		
		AO05-252219	07/24/94	07/19/99	02/12/97 0090006-002-AO
	Both of the above.	0090006-001-AV (Initial Title V Permit)	1/01/00	12/31/04	

ID Number Changes (for tracking purposes):

From: Facility ID No. 30ORL050006

To: Facility ID No. 0090006

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

Permit No. **0090006-003-AV** Facility ID No. **0090006**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID Nos.		Brief Desc	ription]					
-001	Fossil Fu	el Fired Stea	m Generator	1					
-002	Fossil Fu	el Fired Stea	m Generator	.*					
			Allowable E	missions		Equivalent I	Emissions**		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	ГРҮ	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
Particulate Matter									
Steady State	gas/oil	8760	0.1 lb/MMBtu			400	1,533	Rule 62-296.405(1)(b), F.A.C.	A.7
Soot Blowing or	gas/oil		0.3 lb/MMBtu			1,200	657	Rule 62-210.700(3), F.A.C.	A.8
Load Changing									
						500***	2190***		
Sulfur Dioxide	oil	8760	2.75 lb/MMBtu			11,000	48,180	Rule 62-296.405(1)(c)1.j., F.A.C.	A.9
Visible Emissions			_						
Steady State	gas/oil	8760	40% Opacity					Rule 62-296.405(1)(b), F.A.C.	A.5
Soot Blowing or	gas/oil		60% Opacity					Rule 62-210.700(3), F.A.C.	A.6
Load Changing									
Arsenic	used oil*		5.0 ppm					40 CFR 279.11	A.10
Cadmium	used oil*		2.0 ppm					40 CFR 279.11	A.10
Chromium	used oil*		10.0 ppm					40 CFR 279.11	A.10
Lead	used oil*		100.0 ppm					40 CFR 279.11	A.10
Total Halogens	used oil*		1,000.0 ppm					40 CFR 279.11	A.10
PCB	used oil*		50.0 ppm					40 CFR 279.11	A.10

Notes:

^{*}The total quantity of on-specification used oil to be fired at this facility shall not exceed 1,500,000 gallons per year.

^{**} The "Equivalent Emissions" listed are for informational purposes only.

^{***} Values computed using the ratio of 3/21 for soot blowing/steady state per 24 hour day.

Table 2-1, Summary of Compliance Requirements

Florida Power and Light Company Cape Canaveral Plant

Permit No. **0090006-003-AV** Facility ID No. **0090006**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brie	ef Description					
-001	Fossil F	uel Fired Steam Ge	enerator	1			
-002	Fossil F	uel Fired Steam Ge	enerätor				
			Testing	Frequency	Min. Compliance		.5
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Particulate Matter							
Steady State	Gas/Oil	EPA Method 5 or 17	Annual	1-Oct	3 Hour		A.20
Soot blowing or	Gas/Oil	EPA Method 5 or 17	Annual	1-Oct			A.20
Load Changing		***					
Sulfur Dioxide	Gas/Oil	CMS	Continuous			Yes	A.14
Nitrogen Oxides	Gas/Oil		Continuous			Yes	
Carbon Dioxide	Gas/Oil		Continuous	,		Yes	
Volumetric Flow Rate	Gas/Oil		Continuous			Yes	
Opacity	Gas/Oil		Continuous			Yes	A.17
Steady State	Gas/Oil	DEP Method 9	Annual	1-Oct	. 1 Hour		A.18
Soot blowing or	Gas/Oil	DEP Method 9	Annual	1-Oct	1 Hour		A.18
Load Changing							
Arsenic	Used Oil	Fuel Analysis	Batch				A.10, A.34
Cadmium	Used Oil	Fuel Analysis	Batch]			A.10, A.34
Chromium	Used Oil	Fuel Analysis	Batch				A.10, A.34
Lead	Used Oil	Fuel Analysis	Batch				A.10, A.34
РСВ	Used Oil	Fuel Analysis	Batch				A.10, A.34
Total Halogens	Used Oil	Fuel Analysis	Batch				A.10, A.34
Flash Point	Used Oil	Fuel Analysis	Batch				A.10, A.34

Notes:

^{*}Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] Continuous Monitoring System

^{***}EPA Method 17 may be used only if the stack gas exit temperature is less than 375 degrees F.

Friday, Barbara

To:

Mary.Archer@fpl.com; Kozlov, Leonard

Cc:

Cascio, Tom

Subject: PROPOSED Title V Permit Renewal #0090006-003-AV - FP&L-Cape Canaveral Plant

Find attached the zip file for subject PROPOSED Title V Permit Renewal for your information and files.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday Planner II Bureau of Air Regulation (850)921-9524 Barbara.Friday@dep.state.fl.us