To:

karl kauffman@fpl.com; 'kevin washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc:

Cascio, Tom

Subject:

PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company -

Fort Myers Plant

Attachments: 0710002016ProposedTable 2.pdf; 0710002016Proposed Statement of Basis.pdf;

0710002016ProposedCoverLetter&ProposedDetermination.pdf; 0710002016ProposedPermit.pdf; 0710002016ProposedTable 1.pdf

## Dear Sir/Madam:

A copy of the "PROPOSED PERMIT DETERMINATION" and the related permit documents for the above referenced facility are attached. This e-mail is being provided as a courtesy to inform you that the DRAFT permit has become a PROPOSED permit, and that the PROPOSED permit has been transmitted to the USEPA for their review.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

The attached document(s) is(are) in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

From:

Satyal, Ajaya

Sent:

Tuesday, October 16, 2007 2:42 PM

To:

Friday, Barbara

Subject:

Out of Office AutoReply: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida

Power & Light Company - Fort Myers Plant

I am out of the office on October 16, 2007. If you need immediate assistance, please call South District office at (239) 332-6975.

From:

System Administrator

To:

Satyal, Ajaya

Sent:

Tuesday, October 16, 2007 2:42 PM

Subject:

Delivered:PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light

Company - Fort Myers Plant

#### Your message

To:

'karl\_kauffman@fpl.com'; 'kevin\_washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc:

ascio, Tom

Subject:

PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort Myers Plant

Sent:

10/16/2007 2:42 PM

## was delivered to the following recipient(s):

Satyal, Ajaya on 10/16/2007 2:42 PM

From:

System Administrator

To:

Cascio, Tom

Sent:

Tuesday, October 16, 2007 2:42 PM

Subject:

Delivered:PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light

Company - Fort Myers Plant

## Your message

To:

'karl\_kauffman@fpl.com'; 'kevin\_washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc:

Cascio, Tom

Subject:

PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort Myers Plant

Sent:

10/16/2007 2:42 PM

## was delivered to the following recipient(s):

Cascio, Tom on 10/16/2007 2:42 PM

From:

**Exchange Administrator** 

Sent:

Tuesday, October 16, 2007 2:42 PM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT184544.txt; PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power &

Light Company - Fort Myers Plant





ATT184544.txt

PROPOSED Title V

(372 B) Permit Renewa...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

karl\_kauffman@fpl.com
kevin washington@fpl.com

From:

Mail Delivery System [MAILER-DAEMON@sophos.golder.com]

Sent:

Tuesday, October 16, 2007 2:42 PM

To:

Friday, Barbara

Subject:

Successful Mail Delivery Report

Attachments:

Delivery report; Message Headers





Delivery report.txt

Message

(455 B)

Headers.txt (2 KB)

This is the mail system at host sophos.golder.com.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<KKosky@Golder.com>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 47150611 17216 5 5

From: Karl\_Kauffman@fpl.com

Sent: Tuesday, October 16, 2007 2:44 PM

To: Friday, Barbara

Subject: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort

Myers Plant

Return Receipt

Your PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort

document: Myers Plant

was Karl Kauffman/PGBU/FPL

received by:

at: 10/16/2007 02:44:30 PM

From: Kevin\_Washington@fpl.com

Sent: Tuesday, October 16, 2007 2:46 PM

To: Friday, Barbara

Subject: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort

Myers Plant

Return Receipt

Your PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort

document: Myers Plant

was Kevin Washington/GC/FPL

received by:

at: 10/16/2007 02:46:09 PM

From:

Satyal, Ajaya

To:

Friday, Barbara

Sent:

Tuesday, October 16, 2007 3:13 PM

Subject:

Read: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light

Company - Fort Myers Plant

#### Your message

To:

'karl\_kauffman@fpl.com'; 'kevin\_washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc:

Cascio, Tom

Subject:

PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort Myers Plant

Sent:

10/16/2007 2:42 PM

was read on 10/16/2007 3:13 PM.

From: Satyal, Ajaya

Sent: Tuesday, October 16, 2007 3:15 PM

To: Friday, Barbara

Subject: RE: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort

Myers Plant

This is to confirm that TV Permit Renewal for FPL Ft. Myers is received.

Thank you.

Ajaya Satyal, District Air Program Administrator Florida Department of Environmental Protection, South District 2295 Victoria Ave, Ste. 364 Fort Myers, Florida 33902 Phone Number (239) 332-6975

From: Friday, Barbara

Sent: Tuesday, October 16, 2007 2:42 PM

To: 'karl\_kauffman@fpl.com'; 'kevin\_washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc: Cascio, Tom

Subject: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort Myers

Plant

## Dear Sir/Madam:

A copy of the "<u>PROPOSED PERMIT DETERMINATION</u>" and the related permit documents for the above referenced facility are attached. This e-mail is being provided as a courtesy to inform you that the DRAFT permit has become a PROPOSED permit, and that the PROPOSED permit has been transmitted to the USEPA for their review.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

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Thank you,

DEP, Bureau of Air Regulation

From:

Cascio, Tom

To:

Friday, Barbara

Sent:

Tuesday, October 16, 2007 3:26 PM Read: New Posting #0710002

Subject:

#### Your message

To:

Gracy Danois; Kathleen Forney; Walker, Elizabeth (AIR)

Cc:

Cascio, Tom

Subject: Sent:

New Posting #0710002 10/16/2007 2:40 PM

was read on 10/16/2007 3:26 PM.

From:

Cascio, Tom

To:

Friday, Barbara

Sent:

Tuesday, October 16, 2007 3:22 PM

Subject:

Read: PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light

Company - Fort Myers Plant

#### Your message

To:

'karl\_kauffman@fpl.com'; 'kevin\_washington@fpl.com'; 'KKosky@Golder.com'; Satyal, Ajaya

Cc:

Cascio, Tom

Subject:

PROPOSED Title V Permit Renewal No.: 0710002-016-AV - Florida Power & Light Company - Fort Myers Plant

Sent:

10/16/2007 2:42 PM

was read on 10/16/2007 3:22 PM.



# Florida Department of Environmental Protection

Bob Martinez Center

2600 Blair Stone Road
Tallahassee, Florida 32399-2400

October 15, 2007

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

Electronically Sent - Received Receipt Requested.

Mr. Karl Kauffman, Plant General Manager: Karl Kauffman@fpl.com Florida Power & Light Company Post Office Box 14000 Juno Beach, Florida 33408

Re: DEP File No. 0710002-016-AV

Fort Myers Plant

Facility ID: 0710002; ORIS Code: 0612

Dear Mr. Kauffman:

One copy of the "<u>PROPOSED PERMIT DETERMINATION</u>" for the Fort Myers Plant, located at 10650 State Road 80, Fort Myers, Lee County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

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

http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the U.S.EPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit 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

Trend Veelhaun

#### Enclosures

Karl Kauffman, FPL: <u>Karl Kauffman@fpl.com</u>
Kevin Washington, FPL: <u>Kevin Washington@fpl.com</u>
Ken Kosky, P.E., Golder Associates: <u>Ken Kosky@golder.com</u>
Ajaya Satyal, South District: <u>Ajaya.Satyal@dep.state.fl.us</u>
Gracy Danois, EPA Region 4: <u>danois.gracy@epa.gov</u>

## PROPOSED Permit Determination Florida Power & Light Company

## **Fort Myers Plant**

Title V Permit Renewal No. 0710002-016-AV

## I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" to the Florida Power & Light Company, for the Fort Myers Plant, located at 10650 State Road 80, Fort Myers, Lee County, was clerked on August 30, 2007. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was published in the Fort Myers News-Press on September 12, 2007.

The DRAFT Title V Air Operation Permit Renewal was available for public inspection at the Department of Environmental Protection's South District Office in Fort Myers and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was received on September 20, 2007.

## II. Public Comment(s).

The only comments received were from the applicant in a letter received on October 10, 2007. The comments were not considered significant enough to reissue the DRAFT Title V Permit Renewal and require another Public Notice. Listed below are responses to the significant comments in the letters. The comments are not restated.

No.	Permit Specific Condition Reference	Department Response
F 1 d		to the first term of the control of
1	Section I, Facility Description	The stack height dimensions for Units 3A and 3B
	and Section III, Subsection D,	were corrected in the PROPOSED permit.
	Emission Unit Description.	
2	Section III, Permitting Notes	The permitting notes included in the previous Title V
	following C.5. and D.10.	Air Operation Permit dealing with heat input limits
		for the combined cycle units and the large simple
		cycle units were not included in the present version
		because there are enforceable heat input limits from
		earlier construction permits that apply to these units.

#### III. Conclusion.

The permitting authority hereby issues the PROPOSED Title V Permit Renewal No. **0710002-016-AV**, with the one change correcting stack height dimensions reflected above.

## **STATEMENT OF BASIS**

Title V Air Operation Permit Renewal No. 0710002-016-AV
Florida Power & Light (FPL) Company
Fort Myers Plant
Lee 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.

Emission units (EU) 003 through 014 are fuel oil fired simple cycle combustion turbines manufactured by the General Electric Company. These are operated as peaking units. Each unit has a rated gross capacity of 63 megawatts (MW). These emission units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are *not subject* to 40 Code of Federal Regulations (CFR) 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines (Subpart GG). The combustion turbines commenced commercial operation in May 1974.

There are six natural gas-fired combined-cycle units (emission units 018 through 023) built with a nominal generating capacity of 1,600 MW. These are subject to Subpart GG and to emission limitations that insured their construction (coupled with shut down of conventional units) would not trigger the rules for the prevention of significant deterioration (PSD). They began operation in 2001. They are regulated under Phase II of the Federal Acid Rain Program (Title IV).

There are two large simple cycle units each with a nominal capacity of 170 MW that began operation in 2003. They are subject to Subpart GG and to best available control technology (BACT) limits for volatile organic compounds (VOC). They are also regulated under Title IV.

The older simple cycle peaking units, EU 003 through 014, have emission limits for nitrogen oxides ( $NO_X$ ) but have no add-on control equipment. The combined cycle units and the larger simple cycle units (EU 018 through 023, 027 and 028) incorporate Dry Low  $NO_X$  (DLN) technology and clean fuels. They do not have add-on pollution control devices but do have continuous emissions monitors (CEMS) for  $NO_X$ . Thus Compliance Assurance Monitoring (CAM) does <u>not</u> apply to emission units at this facility.

The facility holds ORIS code 0612 under the Program. Also included in this permit are miscellaneous unregulated emissions units and/or activities. Based on the Title V permit renewal application received on July 2, 2007, this facility is a major source of hazardous air pollutants (HAP). This facility reported no noncompliance items at the time of application. This was verified by the Department's South District compliance personnel. The permitting notes included in the previous Title V Operation Permit dealing with heat input limits for the combined cycle units and the large simple cycle units were not included in the present version because there are enforceable heat input limits from earlier construction permits that apply to these units.

## Florida Power & Light Company

## Fort Myers Plant

Facility ID No. 0710002

Lee County

## PROPOSED Permit Renewal No. 0710002-016-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: 850/921-9533

Compliance Authority:
Department of Environmental Protection
South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Telephone: 239/332-6975
Fax: 239/332-6969

## **Table of Contents**

Section	Page Number
Placard Page	1
I. Facility Information. A. Facility Description.	
B. Summary of Emissions Unit ID Nos. and Brief Descriptions.  C. Relevant Documents.	
II. Facility-wide Conditions.	5
<ul> <li>III. Emissions Units and Conditions.</li> <li>A. Fossil Fuel Fired Steam Generators #1 &amp; #2 (E.U. ID Nos001 and -002)</li> <li>B. Simple-Cycle Combustion Turbines #1 - 12 (E.U. ID Nos003 to -014)</li> <li>C. Combined-Cycle Combustion Turbines 2A - 2F (E.U. ID Nos018 to -023) 6 Direct-Fired Natural Gas Heaters (E.U. ID No024)</li> <li>D. Combustion Turbines 3A and 3B, Simple-Cycle Peaking Units (E.U. ID No028)</li> </ul>	7 )13 os027 and
IV. Acid Rain Part, Phase II.	44
Appendix I-1: List of Insignificant Emissions Units and/or Activities	48
Appendix U-1: List of Unregulated Emissions Units and/or Activities	49
Appendix H-1: Permit History	50

## Permittee:

Florida Power & Light Company P.O. Box 14000 Juno Beach, Florida 33408 PROPOSED Permit Renewal No. 0710002-016-AV

Facility ID No. **0710002** SIC Nos.: 49, 4911

The purpose of this permit is to renew the Title V Air Operation Permit for the Fort Myers Plant. This facility is located at 10650 State Road 80, Fort Myers, Lee County; Universal Transverse Mercator (UTM) Coordinates: Zone 17, 422.3 km East and 2952.9 km North; Latitude: 26° 41' 49" North and Longitude: 81° 46' 55" West.

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 renewal. The facility holds ORIS code 0612 under Phase II of the Federal Acid Rain Program.

## Referenced attachments made a part of this permit renewal:

Appendix I-1, List of Insignificant Emissions Units and/or Activities Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix TV-6, Title V Conditions (Version Dated 6/23/06)
Appendix SS-1, Stack Sampling Facilities (Version Dated 10/07/96)
Figure 1, Summary Report-Gaseous and Opacity Excess Emission
And Monitoring System Performance Report (Version Dated 7/96)
Phase II Acid Rain Part Renewal Application received on July 2, 2007.

Effective Date: January 1, 2008

Renewal Application Due Date: July 5, 2012

Expiration Date: December 31, 2012

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/aal/tbc

## Section I. Facility Information

## Subsection A. Facility Description

This facility consists of two fuel oil fired conventional steam electric generating stations, designated as Units 1 and 2 (classified as *permanently retired* under Phase II of the Federal Acid Rain Program); 12 simple-cycle combustion turbines, designated as Units 3 through 14; 6 combined-cycle combustion turbines, designated as Units 2A through 2F; and two simple-cycle combustion turbine peaking units, designated as Units 3A and 3B, by the Florida Power and Light Company.

Unit 1 was comprised of a Babcock and Wilcox outdoor-type boiler/steam generator and a Westinghouse outdoor reheat condensing steam turbine that drove a hydrogen-cooled generator with a nameplate rating of 156.3 megawatts (MW). Unit 2 was comprised of a Foster-Wheeler outdoor-type boiler/steam generator and a General Electric outdoor reheat condensing steam turbine that drove a hydrogen-cooled generator with a generator nameplate rating of 402.1 MW. Although the boilers have been removed, their associated steam turbines have been retained and are driven by the steam generated in the non-fired heat recovery steam generators associated with the new combined-cycle combustion turbines 2A through 2F.

Units 3 through 14 are fuel oil fired combustion turbines manufactured by the General Electric Company, each with a rated gross capacity of 63 MW. Foggers were installed at the compressor inlet to each of the twelve combustion turbines during 1999, and initial compliance testing was completed on November 30, 1999.

Units 2A through 2F are combined-cycle units. Each unit is a 170 MW General Electric MS7241FA gas-fired combustion turbine-generator with an unfired heat recovery steam generator (HRSG) that will raise sufficient steam to produce another 80 MW via the existing steam-driven electrical generators. The tall stacks associated Units 1 and 2 were dismantled and replaced by two relatively short stacks per new unit for simple and combined-cycle operation. The facility includes a cooling tower for once-through brackish water and 6 direct-fired natural gas heaters with a 30-foot stack to heat the natural gas prior to use during simple cycle operation and cold start-ups.

Units 3A and 3B are simple-cycle combustion turbine peaking units. Each unit is a 170 MW General Electric MS7241FA gas-fired combustion turbine-generator with a 100.5-foot stack. Also included are two natural gas heaters with 30-foot stacks. Unit 3A started commercial operation on April 14, 2003, and Unit 3B started commercial operation on March 18, 2003.

Based on the Title V permit renewal application received on July 2, 2007, this facility is a major source of hazardous air pollutants (HAP).

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

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

E.U.	
ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator #1 (Permanently Retired)
-002	Fossil Fuel Fired Steam Generator #2 (Permanently Retired)
-003	Combustion Turbine #1
-004	Combustion Turbine #2
-005	Combustion Turbine #3
-006	Combustion Turbine #4
-007	Combustion Turbine #5
-008	Combustion Turbine #6
-009	Combustion Turbine #7
-010	Combustion Turbine #8
-011	Combustion Turbine #9
-012	Combustion Turbine #10
-013	Combustion Turbine #11
-014	Combustion Turbine #12
-018	Combustion Turbine 2A, Combined-Cycle Unit With Non-Fired HRSG
-019	Combustion Turbine 2B, Combined-Cycle Unit With Non-Fired HRSG
-020	Combustion Turbine 2C, Combined-Cycle Unit With Non-Fired HRSG
-021	Combustion Turbine 2D, Combined-Cycle Unit With Non-Fired HRSG
-022	Combustion Turbine 2E, Combined-Cycle Unit With Non-Fired HRSG
-023	Combustion Turbine 2F, Combined-Cycle Unit With Non-Fired HRSG
-024	6 Natural Gas Pre-Heaters
-027	Combustion Turbine 3A, Simple-Cycle Peaking Unit
-028	Combustion Turbine 3B, Simple-Cycle Peaking Unit
-029	Natural Gas Heater
-030	Natural Gas Heater

Unregulated Emissions Units and/or Activities

E.U.		The second secon		
ID No.	Brief Description			
-015	Painting of plant equipment and non-halogenated solvent cl	eaning operations		
-016	Miscellaneous mobile equipment and internal combustion engines			
-017	Emergency Diesel Generator			
-025	Cooling Tower			

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.

## Florida Power & Light Company Fort Myers Plant

## 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 Renewal Application received on July 2, 2007.

DRAFT Title V Air Operation Permit clerked on August 30, 2007.

## Section II. Facility-wide Conditions

## The following conditions apply facility-wide:

- 1. Appendix TV-6, Title V Conditions, is a part of this permit.

  {Permitting note: Appendix TV-6, 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. 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.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
  - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center Post Office Box 1515 Lanham-Seabrook, Maryland 20703-1515 Telephone: 301/429-5018

- **b.** The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.[40 CFR 68]
- 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. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

  [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
- 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1)(a), F.A.C.]
- 8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following:
  - **a.** In order to perform sandblasting on fixed plant equipment, sandblasting enclosures are constructed and operated as necessary. 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.
- **g.** During construction periods, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; proposed by applicant in the Title V permit renewal application received July 5, 2002; and 0710002-004-AC.]

- 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. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of Appendix TV-6, Title V Conditions).}

11. 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 2295 Victoria Avenue, Suite 364 Fort Myers, Florida 33901 Telephone: 239/332-6975 Fax: 239/332-6969

12. 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 Enforcement Section
61 Forsyth Street
Atlanta, GA 30303-8960
Phone: 404/562-9155

Fax: 404/562-9163 or 404/562-9164

13. 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 (Permanently Retired)					
-002	Fossil Fuel Fired Steam Generator #2 (Permanently Retired)					

Fossil Fuel Fired Steam Generator #1 was a nominal 156.3-megawatt (electric) steam generator designated as Fort Myers Unit #1. The emission unit was fired on No. 2 or No. 6 fuel oil with a maximum heat input of 1,690 mmBtu per hour. Emissions from Unit #1 were uncontrolled. It commenced commercial operation in November 1958, and was permanently retired on August 31, 2001.

Fossil Fuel Fired Steam Generator #2 was a nominal 402.1-megawatt (electric) steam generator designated as Fort Myers Unit #2. The emission unit was fired on No. 2 or No. 6 fuel oil with a maximum heat input of 4,000 mmBtu per hour. Particulate matter emissions were controlled by two UOP Aerotec mechanical dust collectors. It commenced commercial operation in July 1969, and was permanently retired on September 1, 2001.

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

## The following specific conditions apply:

A.1. Boiler 1 and boiler 2 were permanently removed from service on August 31 and September 1, 2001, respectively, in accordance with the conditions of repowering authorized by permit 0710002-004-AC. The boilers and the tall stacks associated with them were dismantled and replaced by two relatively short stacks for each of the new combined-cycle combustion turbines for simple and combined operation. The steam turbines that were associated with these boilers were retained and are driven by steam generated in the non-fired heat recovery steam generators associated with the new combined-cycle combustion turbines 2A through 2F.

All operational requirements and limitations associated with boilers 1 and 2 have been rescinded.

#### Section III. Emissions Units and Conditions

## Subsection B. This section addresses the following emissions unit(s):

E.U.		<u>्र</u> ्वस्तुः सम्			The second second
ID No.	Brief Description			- 1	
-003	Combustion Turbine #1				
-004	Combustion Turbine #2				
-005	Combustion Turbine #3				
-006	Combustion Turbine #4				
-007	Combustion Turbine #5				
-008	Combustion Turbine #6				
-009	Combustion Turbine #7				
-010	Combustion Turbine #8				
-011	Combustion Turbine #9	•			
-012	Combustion Turbine #10				
-013	Combustion Turbine #11				
-014	Combustion Turbine #12				

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are *not* subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

Each unit has a rated gross capacity of 63 MW. The combustion turbines commercial operation in May 1974. Foggers were installed at the compressor inlet to each of the twelve combustion turbines during 1999, and initial compliance testing was completed on November 30, 1999.

## The following specific conditions apply to the emissions unit(s) listed above:

## Essential Potential to Emit (PTE) Parameters

- B.1. Permitted Capacity. The maximum heat input rate to the combustion turbines shall not exceed 895 mmBtu/hr/unit, at 25 degrees F (or 760 mmBtu/hr/unit, at 59 degrees F). This maximum heat input rate will vary depending on the ambient conditions and the combustion turbine characteristics, as determined by manufacturer's curves corrected for site conditions. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 1; and 0710002-005-AC, Specific Condition No. 20.]
- B.2. Methods of Operation Fuels. The only fuels authorized to be burned in these emissions units are No. 2 distillate fuel oil or on-specification used oil from Florida Power and Light Company operations. See Specific Condition B.6. These fuels may be mixed or burned simultaneously. [Rule 62-213.410, F.A.C.; AO36-223496; and 0710002-003-AO]
- **B.3.1.** Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and AO36-223496, Specific Condition No. 8]
- **B.3.2.** The twelve foggers may operate up to 6000 hours per year (average 500 hours per unit per year). [0710002-005-AC, Specific Condition No. 20]
- **B.4.** Emissions Unit Operating Rate Limitation after Testing. See Specific Condition **B.11**. [Rule 62-297.310(2), 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.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **B.5.1.** and **B.5.2.** are based on the specified averaging time of the applicable test method.}

- **B.5.1.** <u>Visible Emissions</u>. 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 AO36-223496, Specific Condition No. 3.]
- **B.5.2.** Nitrogen Oxides. NO<sub>x</sub> emissions shall not exceed 530 lb/hr/unit at 59 degrees F. [0710002-005-AC, Specific Condition No. 20.]
- **B.6.** "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 this facility 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 B.15., B.18., and B.19.

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

<sup>\*</sup>As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

## **Excess Emissions**

- **B.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.]
- **B.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**

- **B.9.** 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.}

- **B.10.1.** Visible Emissions. The test method for visible emissions shall be EPA Method 9, adopted and incorporated 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. & 62-297.401, F.A.C.]
- **B.10.2.** Nitrogen Oxides. The test method for nitrogen oxides shall be EPA method 7 or 7E, adopted and incorporated 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.; and 0710002-006-AC, Specific Condition No. 10]

<sup>\*\*</sup>PCBs must be less than **2 ppm** for on-specification used oil to be fired in these emissions units. [40 CFR 279.11; AO36-22346; and, 0710002-003-AO]

- **B.11.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating 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 (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. [Rules 62-297.310(2), F.A.C.]
- **B.12.** Applicable Test Procedures.
  - (a) Required Sampling Time.
    - 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.

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

- **B.13.** 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;
      - b. The following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 100 tons per year or more of any regulated air pollutant, other than lead, lead compounds measured as elemental lead, and

- acrylonitrile. See permit limiting standards and applicable test methods as noted in Specific Conditions B.5., B.6., & B.10.
- 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. See Specific Conditions **B.13.(a).a. & b.**, and **B.14.1**
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

- **B.14.1.** Visible Emissions Testing Annual and Renewal. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning only liquid fuels for less than 400 hours per year. To meet **permit renewal** requirements, the permittee shall conduct visible emissions tests on 3 (three) of the CTs that did not operate more than 400 hours per year on liquid fuels during the previous five year period.

  [Rules 62-297.310(7)(a)4. & 8., F.A.C.]
- **B.14.2.** Nitrogen Oxides Testing. Nitrogen oxides emissions shall be determined by a stack test on one representative turbine. Testing shall be preformed each federal fiscal year, no later than September 30<sup>th</sup>, and on a different turbine not previously tested. [0710002-005-AC, Specific Condition No. 20.]
- **B.15.** Compliance with the "on-specification" used oil requirements, including an analysis for PCBs, will be determined from a sample collected from each batch delivered for firing. See Specific Conditions **B.6.**, **B.18.**, and **B.19.** [Rules 62-4.070 and 62-213.440; and 40 CFR 279.]

#### Recordkeeping and Reporting Requirements

- **B.16.** 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.]
- **B.17.** 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.]

**B.18.** 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. On a quarterly basis, for each quarter during which used oil is burned, a report shall be submitted to the Department's South District office concerning the quantity and analysis of the on-specification used oil burned. 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 B.6., B.15., and B.19.

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, AO36-223496]

**B.19.** 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 Combustion Turbines 1 to 12 during the calendar year. See Specific Conditions B.6., B.15., and B.18. [Rule 62-213.440(1)(b)2.b., F.A.C.]

## Section III. Emissions Units and Conditions.

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

E.U. ID No.	Brief Description
-018	Combustion Turbine 2A, Combined-Cycle Unit With Non-Fired HRSG
-019	Combustion Turbine 2B, Combined-Cycle Unit With Non-Fired HRSG
-020	Combustion Turbine 2C, Combined-Cycle Unit With Non-Fired HRSG
-021	Combustion Turbine 2D, Combined-Cycle Unit With Non-Fired HRSG
-022	Combustion Turbine 2E, Combined-Cycle Unit With Non-Fired HRSG
-023	Combustion Turbine 2F, Combined-Cycle Unit With Non-Fired HRSG
-024	6 Natural Gas Pre-Heaters

Emission Units -018 through -023 are each (nominal) 170 MW General Electric MS7241FA combustion turbines, each with an unfired heat recovery steam generator (HRSG). When operating in the combined-cycle mode, the HRSG produces enough steam to generate an additional 80 MW via the existing steam-driven electrical generators (250 MW total from each unit). Each of the combined cycle units have two relatively short stacks, one for simple cycle mode and one for combined-cycle mode. These units shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not required to demonstrate compliance with non-NSPS permit standard(s). These units also include six direct-fired heaters with 21-foot stacks to heat the natural gas prior to use during simple cycle operation and cold start-ups.

{Permitting notes: The units began commercial operation from September 2000 to March 2001. Stack height = 125 feet, exit diameter = 19.0 feet, exit temperature = 220 °F, actual volumetric flow rate = 1,196,162 acfm. Emissions from the CT are controlled by the use of dry low-NO<sub>X</sub> (DLN) burners when firing natural gas.}

#### General

- C.1. <u>Definitions</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60 shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

  [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]
- C.2. <u>Circumvention</u>. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]
- C.3. Modifications. Except as provided under 40 CFR 60.14(e) and (f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 11 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14(a)]

C.4. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment [Rule 62-4.070(3), F.A.C.; and 0710002-004-AC]

{Permitting Note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

## Essential Potential to Emit (PTE) Parameters

- C.5. Permitted Capacity.
  - a. CTs. The maximum heat input rates, based on the lower heating value (LHV) of the fuel to each combustion turbine at compressor inlet conditions of 59°F, 60% relative humidity, 100% load, and 14.7 psia shall not exceed 1,760 million Btu per hour (mmBtu/hr). This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other compressor inlet conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions Potential Emissions)]
  - **b.** <u>Direct Fired Heaters (DFHs)</u>. The maximum heat input rate, based on the lower heating value (LHV) of the fuel to the DFHs at ambient conditions of 59°F, 60% relative humidity, 100% load, and 14.7 psia shall not exceed 132 mmBtu per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.: 40 CFR 60.332(b); and 0710002-004-AC].

- C.6. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition C.40. [Rule 62-297.310(2), F.A.C.]
- **C.7.** Methods of Operation.
  - **a.** <u>Fuels</u>: Only natural gas shall be fired in these units. The burning of other fuels requires review, public notice, and approval through the pre-construction process.
  - **b.** Control Technology: Dry Low NO<sub>X</sub> (DLN) combustors shall be installed on each stationary combustion turbine to control nitrogen oxides (NO<sub>X</sub>) emissions.
  - c. Gas Heaters: Gas heaters (emissions unit -024) shall be used to preheat the gas fuel when the CTs are operated in the simple cycle mode and cold start-ups. The gas heaters are not required for combined cycle mode as the gas fuel will be preheated by means of a hot water heat exchanger.

[Rules 62-4.070, F.A.C., 62-210.200, F.A.C. (Definitions - Potential Emissions), & 62-213.410, F.A.C.; Chapters 62-210 & 62-212, F.A.C.; 0710002-004-AC; and Applicant Request]

- C.8. Maximum Annual Allowable Hours of operation for each of the six combustion turbines, and the gas heaters, are 8,760.
  [Rule 62-210.200, F.A.C. (Definitions Potential Emissions); and 0710002-004-AC]
- C.8.1. Each gas turbine may operate in a high-temperature peaking mode to generate additional direct, shaft-driven electrical power to respond to peak demands. During any consecutive 12 months, each combined cycle gas turbine shall operate in this peaking mode for no more than 400 hours of operation. The maximum heat input rate to each gas turbine is 1838 MMBtu per hour in peak mode operation (based on a compressor inlet air temperature of 59° F, the higher heating value (HHV). [0710002-014-AC, Specific Condition 3.]

## C.8.2. Peaking Mode Operation Limits.

The combined-cycle gas turbines are subject to the following emission limits during peaking mode operation. Emissions limits are corrected to 15% O<sub>2</sub> (lb/hr at ISO Conditions).

Emission Units 018-023	NO <sub>X</sub>	CO	VOC	PM/Visibility (% Opacity)	Technology and Comments
Combustion	15 ppmvd (24-hr block avg)	9 ppmvd	1.4 ppmvd	10	Dry Low NO <sub>X</sub> Combustors
Turbines (each)	102 lb/hr	29 lb/hr	3 lb/hr		Natural Gas, Good Combustion

<u>Averaging Time</u>: A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. Peaking mode of operation shall be excluded from compliance with the 30-day rolling average. [Rules 62-210.200 (Definitions-Potential Emissions), and 62-4.070(3), F.A.C.; and 0710002-014-AC, Specific Condition 4.]

## C.8.3. Peaking Mode Operation Compliance Procedures.

Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate at which each unit will be operated, but not later than 180 days following initial operation of the unit in the *peaking* mode, by using the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.

The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources".

EPA Reference Method 7, "Determination of Nitrogen Oxides Emissions from Stationary Sources.

Compliance for each pollutant after the initial tests shall be the same as outlined in the original permit 0710002-004-AC issued on 11/25/98.

Testing for peak operation may be carried out on two of the units. The Department will consider testing of two of the units to be representative of all six units.

[Rules 62-210.200 (PTE) and 62-4.070 (3), F.A.C.; and 0710002-014-AC, Specific Condition 5.]

## **Emission Limitations and Standards**

{Permitting Note: The attached 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 C.9. through C.16. are based on the specified averaging time of the applicable test method.}

{Permitting Note: The following emission limits, as established by 0710002-004-AC, are determined for this project assuming full load.}

C.9. Nitrogen Oxides - CTs. The concentration of NO<sub>X</sub> concentrations in the exhaust gas of each CT shall not exceed 9 ppmvd at 15% O2 on a 30-day rolling average basis as measured by the CEMS (maintained in accordance with 40 CFR 75). Based on CEMS data at the end of each operating day, a new 30-day average rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 9 ppm @15% O2 nor 65 lb/hr (initial compliance test only).

[0710002-004-AC; and Applicant Request in letter received on August 20, 2003.]

**C.10.** Nitrogen Oxides - Heaters. Nitrogen oxides emissions from the six gas heaters shall not exceed 0.10 lb/mmBtu (at ISO conditions).

[0710002-004-AC & 0710002-008-AC]

#### **C.11.** Sulfur Dioxide.

- **a.** No owner or operator subject to the provisions of 40 CFR 60.333 shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent.
- **b.** Sulfur dioxide emissions shall be controlled by the firing of natural gas, per Specific Condition C.7. Compliance with this condition assures compliance with the NSPS limit contained in Specific Condition C.11.a.

[0710002-004-AC; 40 CFR 60.333; and Applicant Request.]

- C.12. Carbon Monoxide CTs. The concentration of carbon monoxide emissions (@15% O<sub>2</sub> in the exhaust gas) shall not exceed 12 ppmvd as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 43 lb/hr (per CT) to be demonstrated by stack test.[0710002-004-AC]
- C.13. <u>Carbon Monoxide Heaters</u>. Carbon monoxide emissions from the gas heaters shall not exceed 0.15 lb/mmBtu (at ISO conditions). [0710002-004-AC & 0710002-008-AC]
- C.14. Volatile Organic Compounds (VOCs). The concentration of VOC in the exhaust gas shall not exceed 1.4 ppmvd. VOC emissions (at ISO conditions) shall not exceed 2.9 lb/hr per CT. [0710002-004-AC]
- **C.15.** Visible Emissions CTs. Visible emissions from the CTs shall not exceed 10 percent opacity. [0710002-004-AC]
- **C.16.** Visible Emissions Heaters. Visible emissions from the gas heaters shall not exceed 10 percent opacity. [0710002-004-AC]

#### **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

C.17. Excess emissions resulting from startup, shutdown, or malfunction of the combustion turbines and heat recovery steam generators shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except during "cold start-up" to or shutdowns from combined cycle operation. During cold start-up to combined cycle operation, up to four hours of excess emissions are allowed. During shutdowns from combined cycle operation, up to three hours of excess emissions are allowed. Cold start-up is defined as a startup to combined cycle operation when the heat recovery steam generator high-pressure drum is below 450 psig for at least one hour.

Excess emissions from the combustion turbines resulting from startup of the *steam turbines* system shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed 12 hours per cold startup of the steam turbine system.

The following NO<sub>X</sub> excess emissions periods are applicable only at the end of construction and shall not exceed a total of 90 days per combustion turbine:

Emissions of  $NO_X$  from the combustion turbines (CTs), in excess of the BACT limit established in Specific Condition C.9., resulting from steam blow activities associated with bringing the heat recovery steam generators into operation shall be permitted provided that best operational practices are adhered to and that the Subpart GG NSPS limit of 75/110 ppmvd @15%  $O_2$  is not exceeded. The period during which such excess emissions are authorized shall not exceed a total of 90 days per combustion turbine. The applicant shall record for each CT unit the periods of startup for each operating mode. Excess emissions during the periods of startup shall be reported to the FDEP South District office within 30 days.

[Applicant Request (FPL estimates that CT emissions will comply with the NSPS NO<sub>X</sub> limit following initial compliance testing, but that low load operation necessary for steam blow activities prior to initial combined cycle operation will result in NO<sub>X</sub> emissions above the BACT limit of 9 ppmvd @15 percent O<sub>2</sub>. Excess emissions of NO<sub>X</sub> resulting from steam blows may occur intermittently over a period of up to 30 days per CT initially, followed by a period of up to 60 days of intermittent steam blows for the piping systems serving the six interconnected combined cycle units)].

[Applicant Request (FPL estimates that, on the average, there will be approximately 12 startups to combined-cycle operation per year), G.E. Combined Cycle Startup Curves Data; Rules 62-210.700(1), F.A.C. & 62-4.130, F.A.C.; and 0710002-004-AC]

**C.18.** 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**

- C.19. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- **C.20.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
  - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
  - (2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334.

## Florida Power & Light Company Fort Myers Plant

[40 CFR 60.334]

- **C.21**. Natural Gas Monitoring Schedule. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334:
  - **a.** The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
  - **b.** The permittee shall submit a monitoring plan, certified by signature of the Designated Representative (DR), that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
  - c. Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

[0710002-004-AC]

- C.22. 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.]

#### **Continuous Monitoring Requirements**

- C.23. Continuous Monitoring System.
  - a. The permittee shall have installed and shall calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the emissions of nitrogen oxides from each CT. Thirty-day rolling average periods when NO<sub>X</sub> emissions (ppmvd @ 15% oxygen) are above the standards, listed in Specific Conditions C.9. and C.10., shall be provided to the DEP South District Office within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternately by facsimile within one working day).
  - When NO<sub>X</sub> monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the thirty-day rolling average emission rate.
     [Rules 62-210.700 & 62-4.130, F.A.C.; and 071002-004-AC]
- C.24. Continuous compliance with the NO<sub>X</sub> emission limits. Continuous compliance with the NO<sub>X</sub> emission limits shall be demonstrated with the CEM system based on a 30-day rolling average. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new 30 day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction. A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>X</sub> concentrations are obtained at least 15 minutes apart. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C.; 40 CFR 75; and, 0710002-004-AC]
- C.25. CEMS for reporting excess emissions. The NO<sub>X</sub> CEMS may be used in lieu of the requirement for reporting excess emissions in 40 CFR 60.334, Subpart GG. Upon request from DEP, the

CEMS emission rates for NO<sub>X</sub> on each CT shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332. [0710002-004-AC]

- **C.26.** For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]
  - {Permitting Note: The requirements for the NO<sub>X</sub> CEMS which are installed and maintained in accordance with 40 CFR 75 are at least as stringent as the requirements of 40 CFR 60, and are an acceptable alternative to this condition.}
- C.27. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]

#### Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.}

- C.28. Annual Tests Required. For the combustion turbines (emissions units 018 023), annual testing must be performed during every federal fiscal year (October 1 September 30) for NO<sub>X</sub>, CO, and VE, in accordance with the requirements listed below. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. PM testing is only required if the VE test indicates an exceedance of the standards. VOC testing is only required if the annual CO test indicates an exceedance of the CO standard. Annual compliance testing is not required for the six Direct-Fired Natural Gas Heaters (emissions unit 024).

  [0710002-004-AC; and Rule 62-297.310(7), F.A.C.]
- C.29. Compliance with the NO<sub>X</sub> emission limit. If requested, the test method for emissions of nitrogen oxides shall be EPA Reference Method 20. During performance tests, to determine compliance with the NSPS NO<sub>X</sub> standard, measured NO<sub>X</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

 $NO_X = (NO_{XO}) (Pr/Po)^{0.5} e^{19(Ho-0.00633)} (288^{\circ}K/Ta)^{1.53}$ where:

 $NO_x$  = emission rate of  $NO_x$  at 15 percent  $O_2$  and ISO standard ambient conditions, volume percent.

 $NO_{XO}$  = observed  $NO_X$  concentration, ppm by volume.

 $P_r$  = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

P<sub>0</sub> = observed combustor inlet absolute pressure at test, mm Hg.

 $H_0 =$  observed humidity of ambient air, g  $H_2O/g$  air.

e = transcendental constant, 2.718.

 $T_a =$  ambient temperature, °K.

[40 CFR 60.335; Rule 62-297.401, F.A.C.; and 0710002-004-AC]

{Permitting Note: If testing is performed at 95% - 100% of rated capacity then the requirements of this specific condition to correct to ISO conditions are not applicable. The annual calibration

- RATA associated with the  $NO_X$  CEMS in use on these units may be used in lieu of the required annual EPA Reference Method 20, as long as all of the requirements of Rule 62-297.310, F.A.C., are met (i.e., prior test notification, proper test result submittal, etc.).}
- C.30. Compliance with the CO emission limit. Annual compliance testing for CO, using EPA Reference Method 10, may be conducted at less than capacity when compliance testing is conducted concurrent with the annual NO<sub>X</sub> RATA testing which is performed pursuant to 40 CFR 75. [0710002-004-AC.]
- **C.30.1.** Compliance with the CO emission limit high temperature peaking mode. No initial performance test for CO is required. [0710002-014-AC.]
  - {Permitting Note: Testing under normal conditions for VOC and CO provides reasonable assurance of compliance under high-temperature peaking mode operation.}
- C.31. Compliance with the VOC emission limit. The CO emission limit will be employed as a surrogate and no annual testing is required. If the results of the CO test do not demonstrate compliance with the CO limit, compliance with the VOC limit shall be demonstrated by conducting a stack test using EPA Method 18 or 25A. [0710002-004-AC]
- **C.31.1.**Compliance with the VOC emission limit high temperature peaking mode. No initial performance test for VOC is required. [0710002-014-AC.]
  - {Permitting Note: Testing under normal conditions for VOC and CO provides reasonable assurance of compliance under high-temperature peaking mode operation.}
- C.32. Compliance with the Visible Emissions limits. EPA Reference Method 9 shall be used to demonstrate compliance with the visible emissions standard in Specific Conditions C.15. and C.16. [Rule 62-297.401, F.A.C.; 40 CFR 60, Appendix A; and 0710002-004-AC]
- C.33. <u>Nitrogen Oxides</u>. To compute the emissions of nitrogen oxides, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. [40 CFR 60.335]
- C.34. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- C.35. Compliance with the SO<sub>2</sub> and PM/PM<sub>10</sub> emission limits. Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas is the method for determining compliance for SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with the 40 CFR 60.333, natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. Gas analysis, if conducted, may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used for determination of fuel sulfur content if gas analysis is done. [0710002-004-AC]
- C.36. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

- **C.37.** The owner or operator shall provide, or cause to be provided, stack sampling and performance testing facilities as follows:
  - (1) Sampling ports adequate for test methods applicable to such facilities.
  - (2) Safe sampling platform(s).
  - (3) Safe access to sampling platform(s).
  - (4) Utilities for sampling and testing equipment.
  - [40 CFR 60.8(e)(1), (2), (3) & (4); and, PSD-FL-190]
- C.38. 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.]
- C.39. 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.]
- C.40. Operating Rate During Testing/Testing procedures. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average compressor inlet temperature during the test (with 100 percent represented by a curve depicting heat input vs. compressor inlet temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. compressor inlet temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for compressor inlet temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapter 62-204 and 62-297, F.A.C. [Rules 62-297.310(2) & (2)(a), F.A.C.; 0710002-004-AC.]
- C.41. 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.]

#### C.42. 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 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.
- **(b)** Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (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.

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

#### TABLE 297.310-1 CALIBRATION SCHEDULE

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<u>ITEM</u>	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass	+/-2% ref. thermometer or equivalent, or thermometric points
Bimetallic thermometer	Quarterly	Calib. liq. in	5 degrees F glass thermometer
Thermocouple	Annually	ASTM Hg in glass	5 degrees F ref. thermometer, NBS calibrated reference and potentiometer
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

## Florida Power & Light Company Fort Myers Plant

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 each test series	Comparison check	5%

- **C.43.** 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;
      - 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.
    - 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.

- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

#### Recordkeeping and Reporting Requirements

- **C.44.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
  - (4) A notification of any <u>physical or operational change</u> to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

- C.45. Quarterly Reports. Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1997 version), shall be submitted to the DEP's South District office.

  [40 CFR 60.7(a)(7); and 0710002-004-AC]
- C.46. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.[40 CFR 60.7(b)]
- C.47. Excess Emissions Report. In case of excess emissions resulting from malfunctions, the owner or operator shall notify DEP's South District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions C.9. through C.16.

[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1997 version)].

- C.48. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
  - (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
  - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
  - (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.[40 CFR 60.7(c)(1), (2), (3), and (4)]
- **C.49.** The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
  - (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
  - (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2)]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

- **C.50.** (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
  - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and,
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2). The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) & (e)(2).

[40 CFR 60.7(e)(1)]

C.51. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records. These records shall be made available to DEP representatives upon request.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.; and 0710002-004-AC]

#### C.52. 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 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

#### Section III. Emissions Units and Conditions.

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

E.U. ID No.	<b>Brief Description</b>
-027	Combustion Turbine 3A, Simple-Cycle Peaking Unit
-028	Combustion Turbine 3B, Simple-Cycle Peaking Unit
-029	Natural Gas Heater
-030	Natural Gas Heater

Units 3A and 3B are simple-cycle combustion turbine (CT) peaking units. Each unit is a 170-megawatt (MW) General Electric MS7241FA gas-fired combustion turbine-generator. Each CT exhausts through a single 100.5-foot stack. Also included are two natural gas heaters with 30-foot stacks. Inherently clean fuels and good combustion practices are employed to control all pollutants. Unit 3A started commercial operation on April 14, 2003, and Unit 3B started commercial operation on March 18, 2003.

Emission Units 027 and 028 (340 MW in simple-cycle operation), shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C.

#### General

- **D.1.1.** NSPS Requirement Subpart A. These emission units shall comply with all applicable provisions of 40 CFR 60, Subpart A, General Provisions, including:
  - 40 CFR 60.7, Notification and Recordkeeping
  - 40 CFR 60.8, Performance Tests
  - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
  - 40 CFR 60.12, Circumvention
  - 40 CFR 60.13, Monitoring Requirements
  - 40 CFR 60.19, General Notification and Reporting Requirements

[0710002-009-AC, Specific Condition 3.]

- **D.1.2.** The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not required to demonstrate compliance with non-NSPS permit standard(s). [0710002-009-AC, Specific Condition 4.]
- Definitions. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR 60 shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
   [40 CFR 60.2; and Rule 62-204.800(7)(a), F.A.C.]
- **D.3.** BACT Determination. In accordance with Rule 62-212.400, F.A.C. (and 40 CFR 51.166(j)(4)), the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source." This reassessment will also be conducted for this project if there are any increases in heat input limits,

hours of operation, oil firing, low or baseload operation (e.g., conversion to combined-cycle operation) short-term or annual emission limits, annual fuel heat input limits or similar changes. [40 CFR 51.166(j)(4); Rule 62-212.400, F.A.C.; and 0710002-009-AC, Specific Condition 10., Section II.]

- D.4. <u>Circumvention</u>. The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
   [Rule 62-210.650, F.A.C.; and 0710002-009-AC, Specific Condition 14., Section II.]
- **D.5.** Concealment. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12.]
- **D.6.** Modifications. Except as provided under 40 CFR 60.14(e) and (f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 11 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14(a)]
- D.7. Operating Procedures. All operators and supervisors shall be properly trained to operate and maintain the combustion turbine and pollution control system in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as method of minimizing excess emissions.

  [Rule 62-4.070(3) F.A.C.; and 0710002-009-AC, Specific Condition 17., Section II.]

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

- D.8. Fuels. Only pipeline natural gas (sulfur content of 2 grains per 100 standard cubic foot) and No. 2 fuel oil (0.05% sulfur content, by weight) or superior grade fuel oil shall be fired in these units. [Rule 62-210.200, F.A.C. (Definitions Potential Emissions); and 0710002-009-AC, Specific Condition 6.]
- **D.9.** <u>Turbine Capacity</u>. The maximum heat input rates, based on the lower heating value (LHV) of the fuel to each combustion turbine at compressor inlet conditions of 59°F, 60% relative humidity and 14.7 psia shall not exceed: 1,600 (gas-baseload), 1,680 [(gas-high power mode (HPM)], 1,811 (oil-baseload) million Btu per hour (mmBtu/hr).
  - This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other compressor inlet conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Rule 62-210.200, F.A.C. (Definitions Potential Emissions); and 0710002-009-AC, Specific Condition 7.]
- **D.10.** Gas-Fired Heaters. The maximum heat input rate, based on the lower heating value (LHV) of the fuel to the gas-fired heaters at ambient conditions of 59°F, 60% relative humidity, 100% load, and 14.7 psia shall not exceed 100 mmBtu per hour. [0710002-009-AC, Specific Condition 8.]
- **D.11.** Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **D.47**. [Rule 62-297.310(2), F.A.C.]
- **D.12.** Simple-Cycle Mode Operation Only. Each combustion turbine shall operate only in simple-cycle mode. Any request to convert these units to combined-cycle operation or increase the allowable

hours of operation in any other mode of operation shall be approved by the Department through a permit modification in accordance with Chapters 62-210 and 62-212, F.A.C. [Rules 62-210.300 and 62-212.400, F.A.C.; and 0710002-009-AC, Specific Condition 9.]

- **D.13.** Alternate Gas Firing Methods of Operation: High Power Mode (HPM).
  - a. Power Augmentation Mode: In accordance with the manufacturer's recommendations, steam may be injected into each combustion turbine when firing natural gas to provide additional peaking power during periods of high electrical power demand. Each unit shall not exceed 440 hours of power augmentation during any consecutive 12 months. To qualify as "power augmentation mode", the combustion turbine must operate at a load of 95% or greater than that of the manufacturer's maximum base load rate adjusted for the compressor inlet air conditions. Prior to activating and after deactivating the power augmentation mode, the operator shall log the date, time, and new mode of operation. Power augmentation when firing distillate oil is prohibited.
  - b. High Temperature Peaking Mode: In accordance with the manufacturer's recommendations, each combustion turbine may be operated in a high temperature peaking mode when firing natural gas to provide additional power during periods of peak electrical power demands. Peaking is achieved through the automated gas turbine control system by allowing slightly higher exhaust temperatures, calculating a new combustion reference temperature for the peak load, and adjusting the fuel distribution between the fuel nozzles to maintain lean pre-mix firing. During the transfer from base load to peak load and during peak load operation, each unit will remain in the per-mix steady state mode. Each unit shall not exceed 60 hours of peaking during any consecutive 12 months. To qualify as "peaking mode", the combustion turbine must operate at a load of 95% or greater than that of the manufacturer's maximum base load rate adjusted for the compressor inlet air conditions. Prior to activating and after deactivating the peaking mode, the operator shall log the date, time, and new mode of operation. Peaking when firing distillate oil is prohibited.

[0710002-009-AC, Specific Condition 10.]

- Hours of Operation. Each unit is allowed to operate continuously (or 8760 hours per year). However each unit is limited to 500 hours per year operation on 0.05 % sulfur (by weight) fuel oil or superior grade oil and 500 hours on high power mode (HPM).
  [Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions Potential Emissions); and 0710002-009-AC, Specific Condition 11.]
- **D.15.** Control Technology Dry Low NO<sub>X</sub>. Dry Low NO<sub>X</sub> (DLN) combustors are installed on each stationary combustion turbine to control nitrogen oxides (NO<sub>X</sub>) emissions. [0710002-009-AC, Specific Condition 12.]
- D.16. Emissions Performance Diagrams. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO<sub>X</sub> and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion–firing mode shall be minimized when firing natural gas.
  [Rules 62-4.070, and 62-210.650 F.A.C.; and 0710002-009-AC, Specific Condition 13.]
- D.17. Control Technology Wet Injection. A wet injection system is installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO<sub>X</sub> emissions.
  [Rule 62-4.070, F.A.C.; and 0710002-009-AC, Specific Condition 14.]

#### **Emission Limitations and Standards**

{Permitting Note: The attached 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 **D.18.** through **D.23.** are based on the specified averaging time of the applicable test method.}

**D.18.** Following are the emission limits determined for this project assuming full load. Values for NO<sub>X</sub> are corrected to 15% O<sub>2</sub> on a dry basis. These limits or their equivalents in terms of pounds per hour, as well as the applicable averaging times, are followed by the applicable specific conditions. [Rules 62-204.800(8)(b) (Subpart GG) and 62-210.200 (Definitions-Potential Emissions), F.A.C.; and 0710002-009-AC, Specific Condition 15.].

Pollutant	Control Technology	Emissions Limits
NO <sub>X</sub>	Dry Low NO <sub>X</sub> for Natural Gas Wet Injection and limited Fuel Oil usage.	10.5 ppmvd (Gas, Base) 15 ppmvd (Gas, HPM) 42 ppmvd (Fuel Oil)
PM/PM <sub>10</sub> , VE	Pipeline Natural Gas, Low Sulfur Fuel Oil.	10/17 lb/hr (Gas/Fuel Oil) 10 percent Opacity (Gas/Fuel Oil)
VOC (BACT)	As Noted Above.	1.5 ppmvd (Gas) 3.5 ppmvw (Fuel Oil)
СО	As Noted Above.	9 ppmvd (Gas, Base) 15 ppmvd (Gas, HPM) 20 ppmvd (Fuel Oil)
SO <sub>2</sub> and Acid Mist	As Noted Above.	2 grains sulfur/100 ft <sup>3</sup> (in Gas) 0.05% sulfur, by weight (in Fuel Oil)

HPM: High Power Modes – (High Temperature Peaking or Steam Power Augmentation)

#### **D.19.** Nitrogen Oxides (NOX) Emissions.

- a. Gas Firing Base Case: The concentration of NO<sub>X</sub> concentrations in the exhaust gas of each combustion turbine (CT) shall not exceed 10.5 ppmvd at 15%O<sub>2</sub> on a 30-day rolling average basis as measured by the CEMS (maintained in accordance with 40 CFR 75). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 10.5 ppmvd @15% O<sub>2</sub> nor 69 lb/hr, to be demonstrated by stack test (see Specific Condition **D.46.**).
- b. Gas Firing High Power Modes (HPM): The concentration of NO<sub>X</sub> concentrations in the exhaust gas of each CT shall not exceed 15 ppmvd at 15%O<sub>2</sub> on a 24-hour rolling average basis as measured by the CEMS (maintained in accordance with 40 CFR 75). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 15 ppmvd @15% O<sub>2</sub> nor 102 lb/hr, to be demonstrated by stack test (see Specific Condition D.46.).
- c. Fuel Oil Firing Operation: The concentration of NO<sub>X</sub> concentrations in the exhaust gas of each CT shall not exceed 42 ppmvd at 15%O<sub>2</sub> on a 24-hour rolling average basis as measured by the CEMS (maintained in accordance with 40 CFR 75). In addition, NO<sub>X</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 42 ppmvd @15% O<sub>2</sub> nor 320 lb/hr, to be demonstrated by stack test (see Specific Condition **D.46.**).
- **d.** Gas Fired Heaters: NO<sub>X</sub> emission limit from each gas heater shall not exceed 0.10 lb/mmBtu to be demonstrated by stack test (see Specific Condition **D.46.**). Compliance shall be demonstrated by a representative stack test on one unit.

[0710002-009-AC, Specific Condition 16., as modified by 0710002-013-AC.]

- D.20. <u>Visible Emissions (VE)</u>. VE emissions from each turbine shall not exceed 10 percent opacity while operating in gas or fuel oil. Visible emissions from the gas heaters shall not exceed 10 percent opacity. Stack tests shall be conducted (see Specific Condition D.46.). [0710002-009-AC, Specific Condition 17.]
- D.21. Particulate Matter (PM/PM10). PM/PM<sub>10</sub> emissions shall not exceed 10 lb/hr when operating on natural gas, and shall not exceed 17 lb/hr when operating on fuel oil. Stack test shall be conducted (see Specific Condition D.46.) Compliance shall be demonstrated by a representative stack test on one unit.
  [Rule 62-4.070 (3) F.A.C.; and 0710002-009-AC, Specific Condition 18., as modified by
- **D.22.** Carbon Monoxide (CO) Emissions.

0710002-013-AC.1

- a. Gas Firing Base Case: The concentration of CO concentrations in the exhaust gas of each CT shall not exceed 9 ppmvd. In addition, CO emissions (at ISO conditions) shall neither exceed 9 ppmvd, nor exceed 29 lb/hr, to be demonstrated by stack test.
- **b.** Gas Firing High Power Mode (HPM) Operation: The concentration of CO concentrations in the exhaust gas of each CT shall not exceed 15 ppmvd. In addition, CO emissions (at ISO conditions) shall neither exceed 15 ppmvd, nor exceed 48 lb/hr, to be demonstrated by stack test
- c. Fuel Oil Firing: The concentration of CO concentrations in the exhaust gas of each CT shall not exceed 20 ppmvd. In addition, CO emissions (at ISO conditions) shall exceed neither exceed 20 ppmvd, nor exceed 65 lb/hr, to be demonstrated by stack test.
- **d.** Gas Fired Heaters: CO emission limit from each gas heater shall not exceed 0.075 lb/mmBtu to be demonstrated by stack test. Compliance shall be demonstrated by a representative stack test on one unit.

[0710002-009-AC, Specific Condition 19., as modified by 0710002-013-AC.]

- D.23. Volatile Organic Compounds (VOC) Emissions. The concentration of VOC in the exhaust gas shall not exceed 1.5 ppmvd (gas) and 3.5 ppmvw (oil) as determined by EPA Methods 18, 25, or 25 A. VOC emissions (at ISO conditions) shall not exceed 2.8 lb/hr (gas) and 7.3 lb/hr (oil) per CT to be demonstrated by stack test. [0710002-009-AC, Specific Condition 20.]
- **D.24.** Sulfur Dioxide (SO<sub>2</sub>) and Sulfuric Acid Mist (SAM) Emissions. SO<sub>2</sub> and SAM emissions shall be limited by firing pipeline natural gas (sulfur content less than 2 grains per 100 standard cubic foot), or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur, by weight.
  - [40 CFR 60 Subpart GG; Rules 62-4.070, and 62-204.800(7), F.A.C.; and 0710002-009-AC, Specific Condition 21.]

#### **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

**D.25.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output shall be limited to two hours in any 24-hour period, regardless of unit cycles (breaker closed to breaker open).

[Rules 62-210.700 and 62-4.130, F.A.C.; and 0710002-009-AC, Specific Condition 22.]

- D.26. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation, power augmentation, high temperature peaking or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C. All such emissions shall be included in the 30-day rolling average (gas-base case) or the 24-hr average (oil or HPM) to demonstrate compliance with the continuous NO<sub>X</sub> standard. [Rule 62-210.700(4), F.A.C.; and 0710002-009-AC, Specific Condition 23.]
- D.27. Excess Emissions Report. If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's South District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions D.18. and D.19.
  [Rules 62-4.130, 62-204.800, and 62-210.700(6), F.A.C.; 40 CFR 60.7; and 0710002-009-AC, Specific Condition 24.]

#### **Monitoring of Operations**

- **D.28.** 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.

[Rules 62-297.310(5)(a) & (b), F.A.C.; and 0710002-009-AC, Specific Condition 21., Section II.]

#### **Continuous Monitoring Requirements**

- **D.29.** Continuous Monitoring System Procedures. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the NO<sub>X</sub> emissions from each CT. Each device shall properly function prior to the initial performance tests and comply with the applicable monitoring system requirements of 40 CFR 75.62. Upon request from DEP, the CEMS emission rates for NO<sub>X</sub> on each CT shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332. [Rules 62-4.070, 62-210.700, & 62-4.130, F.A.C.; 40 CFR 75; and 0710002-009-AC, Specific Condition 41.]
- **D.30.** Continuous Monitoring Certification and Quality Assurance Requirements. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location

- shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62 [0710002-009-AC, Specific Condition 42.]
- D.31. Continuous Monitoring System Operation. The continuous monitoring systems (CEMS) for NO<sub>X</sub> shall be in continuous operation except for breakdowns, repairs, calibration checks, and zero and span adjustments. Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data average. These CEMS shall meet minimum frequency of operation requirements: one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction unless prohibited by 62-210.700 F.A.C. These excess emissions periods shall be reported as required in Specific Conditions D.66. and D.34.
  [Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, 62-4.070 (3), and 62-297.520, F.A.C.; 40 CFR 60.7; 40 CFR 60.13; 40 CFR 75; and 0710002-009-AC, Specific Condition 43.]
- D.32. Continuous Compliance with the NO<sub>X</sub> Emission Limits Base Case Operation. Continuous compliance with the NO<sub>X</sub> emission limits shall be demonstrated with the CEM system based on a 30-day rolling average. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new 30 day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>X</sub> concentrations are obtained at least 15 minutes apart.
  [Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, 62-4.070 (3), and 62-297.520, F.A.C.; 40 CFR 60.7; 40 CFR 75; and 0710002-009-AC, Specific Condition 44.]
- D.33. Continuous Compliance with the NO<sub>X</sub> Emission Limits Alternate Methods of Operation. Each 1-hour monitoring average consisting of any data collected during an alternate method of operation (oil firing, power augmentation, or peaking) shall be attributed entirely to the alternate method of operation. For each 24-hour average consisting of more than one method of operation, compliance shall be determined by prorating each emission standard based on the number of 1-hour averages represented. In event of a CEMS malfunction or occurrence of excess emissions while operating in the power augmentation or peaking modes, the permittee shall immediately cease power augmentation or peaking and revert to normal gas firing or shut down the combustion turbine. A valid hourly emission rate shall be calculated for each hour in which at least two NOX concentrations are obtained at least 15 minutes apart.

  [Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, 62-4.070 (3), and 62-297.520, F.A.C.; 40 CFR 60.7; 40 CFR 75; and 0710002-009-AC, Specific Condition 45.]
- D.34. CEMS for Reporting Excess Emissions. The NO<sub>X</sub> CEMS may be used in lieu of the requirement for reporting excess emissions in 40 CFR 60.334, Subpart GG. Excess Emissions and Monitoring System Performance Reports shall be submitted as specified in 40 CFR 60.7(c). CEM monitor downtime shall be calculated and reported according to the requirements of 40 CFR 60.7(c)(3) and 40 CFR 60.7(d)(2). Periods when NO<sub>X</sub> emissions (ppmvd @ 15 % oxygen) are above the permit limits listed in Specific Conditions D.18. and D.19., shall be reported to the DEP South District office as required in Specific Condition D.27. [0710002-009-AC, Specific Condition 46.]
- D.35. CEMS in lieu of Water to Fuel Ratio. The NO<sub>X</sub> CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334, Subpart GG. The calibration of the water/fuel monitoring device required in 40 CFR 60.335 will be replaced by the 40 CFR 75 certification tests of the NO<sub>X</sub> CEMS. [0710002-009-AC, Specific Condition 47.]

- **D.36.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
  - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
  - (2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334.

[40 CFR 60.334.]

- **D.37.** For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a).]
- D.38. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f).]
- **D.39.** Natural Gas Monitoring Schedule. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334:
  - The permittee shall submit a monitoring plan, certified by signature of the Designated Representative (DR), that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 2 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
  - Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

[0710002-009-AC, Specific Condition 48.]

- **D.40.** Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335.

  [0710002-009-AC, Specific Condition 49.]
- **D.41.** At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

#### Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.}

- D.42. Test Compliance Schedule. Compliance tests with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate at which each unit will be operated, but not later than 180 days following initial operation of the unit, and annually thereafter as indicated in this permit, or as required by the Compliance Authority.
  [40 CFR 60.8; Rule 62-4.070(3), F.A.C.; and 0710002-009-AC, Specific Condition 25.]
- D.43. <u>Initial Performance and Annual Compliance Tests</u>. Initial (I) performance tests (for both fuels) for each unit shall be conducted as indicated in Specific Conditions D.46. and D.47. Annual (A) compliance tests for each unit shall be conducted during every federal fiscal year (October 1 September 30) pursuant to Rule 62-297.310(7), F.A.C., on each CT as indicated in Specific Conditions D.46. and D.47. Where initial test only are indicated, these tests shall be repeated prior to renewal of each operation permit. [0710002-009-AC, Specific Condition 26.]
- D.44. <u>Test After Substantial Modifications</u>. Initial tests for each unit shall also be conducted after any substantial modifications and appropriate shake down period of air pollution control equipment such as change or tuning of combustors. Shakedown periods shall not to exceed 100 days after restarting the combustion turbine. This does not apply to routine maintenance.
  [Rules 62-297.310(7)(a)4 and 62-4.070(3), F.A.C.; and 0710002-009-AC, Specific Condition 27.]
- D.45. Tests Prior to Permit Renewal. Prior to renewing air operation permits, performance tests shall be conducted for each combustion turbine to demonstrate compliance with the CO, NO<sub>X</sub>, PM, VOC and visible emissions standards for normal gas firing, gas firing with power augmentation, gas firing with high temperature peaking, and backup oil firing. Tests for CO, NO<sub>X</sub>, and VOC emissions shall be conducted concurrently. Tests for PM and visible emissions shall be conducted concurrently. All tests shall be conducted within the 12 months prior to renewing the air operation permit.
  [Rule 62-297.310(7)(a)3., F.A.C.; and 0710002-009-AC, Specific Condition 28.]
- **D.46.** Test Methods. The following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C., shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing pursuant to Rule 62-297.310 (6), F.A.C.
  - EPA Reference Method 5 or 17. "Determination of Particulate Emissions from Stationary Sources" (I)
  - Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual (A) test requirements.
  - EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
  - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
  - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40 CFR 60 Subpart GG.
  - EPA Reference Method 18, 25 or 25A, "Determination of Volatile Organic Concentrations."
     Initial test only.

• EPA Reference Method 19. "Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates". Method 19 shall be used only for the calculation of lb/mmBtu and 40 CFR 75 shall be used to calculate mmBtu/hr and lb/hr emissions rates from stack tests. Initial test only.

[0710002-009-AC, Specific Condition 29.]

- **D.47.** Combustion Turbine Testing Capacity Procedures.
  - **a.** Initial performance tests shall be conducted in accordance with 40 CFR 60.8 and 40 CFR 60.335 for pollutants subject to New Source Performance Standards (NSPS) in Subpart GG for gas turbines.
  - b. Other required performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average compressor inlet temperature during the test (with 100 percent represented by a curve depicting heat input vs. compressor inlet temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. compressor inlet temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for compressor inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapter 62-204 and 62-297 F.A.C.
  - c. For higher operating mode performance tests conducted when gas firing under the power augmentation mode and under the high temperature peaking mode, the permittee shall document that the combustion turbine was operating under "peak load" for the given ambient conditions. For power augmentation, the steam injection rate shall be no less than 100,000 pounds of steam per hour.

[Rule 62-297.310(2), F.A.C.; 40 CFR 60.335; and 0710002-009-AC, Specific Condition 30.]

- D.48. Compliance with the SO<sub>2</sub> and PM/PM<sub>10</sub> emission limits. The use of pipeline natural gas as the primary fuel, and restricted use of No. 2 distillate oil (or superior grade) are the methods for determining continuous compliance for SO<sub>2</sub> and PM/PM<sub>10</sub>. Initial PM and upon permit renewal tests are required. VE shall serve as a surrogate for PM/PM<sub>10</sub> annual compliance test. Tests for PM and visible emissions shall be conducted concurrently. [0710002-009-AC, Specific Condition 31.]
- D.49. Test Methods for Natural Gas and Fuel Oil Sulfur Content. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO<sub>2</sub> standard, ASTM D 2880-71(or equivalent) for sulfur content of liquid fuel and ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel and shall be utilized in accordance with the EPA-approved custom fuel monitoring schedules. Natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be submitted when demonstrating compliance for this fuel. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335. [0710002-009-AC, Specific Condition 32.]
- **D.50.** Compliance with Visible Emissions (VE) limits. Initial and annual tests are required for visible emissions. Tests for PM and visible emissions shall be conducted concurrently. [0710002-009-AC, Specific Condition 33.]

- **D.51.** Compliance with CO emission limits. An initial test for CO shall be conducted concurrently with the initial VOC and NO<sub>X</sub> tests while operating at permitted capacity. These initial VOC, NO<sub>X</sub> and CO test results shall be the average of three runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual NO<sub>X</sub> RATA testing which is performed pursuant to 40 CFR 75. [0710002-009-AC, Specific Condition 34.]
- **D.52.** Compliance with the VOC emission limits. Initial and permit renewal compliance stack tests are required to demonstrate compliance with the VOC emission limits. CO emission limits and periodic tuning data will be employed as a surrogate and no annual testing is required. [0710002-009-AC, Specific Condition 35.]
- **D.53.** Compliance with the NO<sub>X</sub> limits. Compliance with the NO<sub>X</sub> emissions limits shall be determined by stack tests and a CEMS, as specified in Specific Conditions **D.46.**, **D.32.**, and **D.33.** [0710002-009-AC, Specific Condition 36.]
- **D.54.** Calculation of Emission Rate. For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.; and 0710002-009-AC, Specific Condition 19., Section II.]
- **D.55.** Applicable Test Procedures.
  - (a) Required Sampling Time. 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. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
  - (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
  - (c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rules 62-297.310(4)(a)1. & 2., (b), and (d), F.A.C.; and 0710002-009-AC, Specific Condition 20., Section II.]
- **D.56.** Stack Testing Facilities. Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [0710002-009-AC, Specific Condition 23., Section II.]
- **D.57.** 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;
  - 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.
- 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.
- (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; and 0710002-009-AC, Specific Condition 22., Section II.]

#### **Recordkeeping and Reporting Requirements**

- **D.58.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
  - (4) A notification of any <u>physical or operational change</u> to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

- **D.59.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
- **D.60.** The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
  - (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
  - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
  - (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4)]

- **D.61.** The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
  - (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
  - (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2)]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

**D.62.** (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and,
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2). The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) & (e)(2).

[40 CFR 60.7(e)(1)]

**D.63.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records. These records shall be made available to DEP representatives upon request.

[40 CFR 60.7(f); and Rule 62-213.440(1)(b)2.b., F.A.C.]

#### **D.64.** 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 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**D.65.** <u>Test Notification</u>. The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests.

- [Rule 62-297.310(7)(a)9., F.A.C.; 40 CFR 60.7 and 60.8; and 0710002-009-AC, Specific Condition 18., Section II.]
- D.66. Records Retention. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request.
  [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.; and 0710002-009-AC, Specific Condition 24., Section II.]
- D.67. Emissions Performance Test Results Reports. A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.; and 0710002-009-AC, Specific Condition 25., Section II.]
- **D.68.** Annual Reports. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the Compliance Authority: DEP's South District office by March 1st of each year.

  [Rule 62-210.370(2), F.A.C.; and 0710002-009-AC, Specific Condition 26., Section II.]
- **D.69.** Quarterly Reports. Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7)(c) and 60.334 (2000 version), shall be submitted to the Compliance Authority: DEP's South District office. [0710002-009-AC, Specific Condition 27., Section II.]
- **D.70.** Notifications. All notifications and reports required by any applicable requirements of 40 CFR Subpart A and GG shall be submitted to the DEP's South District office. [0710002-009-AC, Specific Condition 37.]
- **D.71.** Monthly Operations Record Summary. By the fifth calendar day of each month, the permittee shall record the hours of each mode of operation and the fuel consumption for each combustion turbine. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request from the DEP South District Office.

  [Rule 62-4.160(15), F.A.C.; and 0710002-009-AC, Specific Condition 39.]
- **D.72.** Fuel Records. The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
  - a The permittee shall obtain data sheets from the vendor indicating the average sulfur content of the natural gas being supplied by the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods as specified in Specific Condition **D.49**.
  - b The permittee shall obtain data sheets from the vendor indicating the quantity and sulfur content of the distillate oil for each shipment delivered. Methods for determining the sulfur content of distillate oil shall be ASTM D 2880-71 or equivalent methods as specified in Specific Condition **D.49**.

[0710002-009-AC, Specific Condition 40.]

Florida Power & Light Company Fort Myers Plant

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power and Light Company

ORIS code: 0612

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

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

E.U.	EPA	
ID No.	<b>ID</b>	Description
-001	PFM1	Fossil Fuel Fired Steam Generator #1 (Permanently Retired)
-002	PFM2	Fossil Fuel Fired Steam Generator #2 (Permanently Retired)
-018	FMCT2A	Combustion Turbine 2A, Combined-Cycle Unit With Non-Fired HRSG
-019	FMCT2B	Combustion Turbine 2B, Combined-Cycle Unit With Non-Fired HRSG
-020	FMCT2C	Combustion Turbine 2C, Combined-Cycle Unit With Non-Fired HRSG
-021	FMCT2D	Combustion Turbine 2D, Combined-Cycle Unit With Non-Fired HRSG
-022	FMCT2E	Combustion Turbine 2E, Combined-Cycle Unit With Non-Fired HRSG
-023	FMCT2F	Combustion Turbine 2F, Combined-Cycle Unit With Non-Fired HRSG
-027	PFM3A	Combustion Turbine 3A, Simple-Cycle Peaking Unit
-028	PFM3B	Combustion Turbine 3B, Simple-Cycle Peaking Unit

- 1. The Phase II part 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), effective June 16, 2003, signed by the Designated Representative on June 25, 2007, and received by the Department on July 2, 2007.

[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	2008	2009	2010	2011	2012
-001	PFM1	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	3188*	3188*	3194*	3194*	3194*
		SO <sub>2</sub> allowances,					
-002	PFM2	under Table 2 of 40	9457*	9457*	9475*	9475*	9475*

# Florida Power & Light Company Fort Myers Plant

		CFR 73					
-018	FMCT2A	Allowances to be determined by USEPA	0	0	0	0	0
-019	FMCT2B	Allowances to be determined by USEPA	0	0	0	0	0
-020	FMCT2C	Allowances to be determined by USEPA	0	0	0 .	0	0
-021	FMCT2D	Allowances to be determined by USEPA	0	.0	0	0	0
-022	FMCT2E	Allowances to be determined by USEPA	0	0	0	0	0
-023	FMCT2F	Allowances to be determined by USEPA	0	0	0	0	0
-027	PFM3A	Allowances to be determined by USEPA	0	0	0	0	0
-028	PFM3B	Allowances to be determined by USEPA	0	0	0	0	0

<sup>\*</sup>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.
  - 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 62-213.400(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. Fast-Track Revisions of Acid Rain Parts. 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. [Rules 62-213.413 & 62-214.370(4), F.A.C.]

- Where an applicable requirement of the Act is more stringent than an applicable requirement of the regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
   [40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions Applicable Requirements, F.A.C.]
- 6. Comments, notes, and justifications: The addition of units PFM2CTA through PFM2CTF replace the old units PFM1 and PFM2, which have been permanently retired as part of a repowering project. See Subsection B., below.

#### Subsection B. This subsection addresses the Retired Unit Exemptions under Acid Rain, Phase II.

The emissions units listed below are regulated as *permanently retired units* under Phase II of the Federal Acid Rain Program.

E.U. ID No.	Description
-001	Fossil Fuel Fired Steam Generator #1 (Permanently Retired)
-002	Fossil Fuel Fired Steam Generator #2 (Permanently Retired)

- 1. The "Retired Unit Exemption" form submitted for this facility constitutes a supplement to the Acid Rain Part application pursuant to 40 CFR 72.8 and is a part of this permit. The owners and operators of these acid rain units shall comply with the standard requirements and special provisions set forth in DEP Form No. 62-210.900(1)(a)3., dated April 16, 2001, and signed by the designated representative on July 20, 2007. This units are 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 (SO2) allowance allocations for the permanently retired Acid Rain units are as follows:

E.U. ID	EPA	Year	2008	2009	2010	2011	2012
No.	ID .						
-001	PFM1	SO <sub>2</sub> allowances, under	3188*	3188*	3194*	3194*	3194*
		Table 2 of 40 CFR 73					
-002	PFM2	SO <sub>2</sub> allowances, under	9457*	9457*	9475*	9475*	9475*
		Table 2 of 40 CFR 73					

<sup>\*</sup>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. 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.

# Florida Power & Light Company Fort Myers Plant

- 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 these acid rain units 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 was January 1, 2002.

  [Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]
- 5. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

  [40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions Applicable Requirements.]

#### 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., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, 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.

<b>Emission Unit</b>	Brief Description of Emissions Units and/or Activities
1	Gas metering area relief valves
2	Hydrazine mixing tank and relief valves
3	Fuel oil storage tanks and related equipment
4	Lube oil tank vents and extraction vents
5	Oil/water separators and related equipment
6	Evaporation of boiler chemical cleaning waste
7	Black start diesel engines (3), control building, and diesel enclosures

#### 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'.

E.U. ID No.	Brief Description of Emissions Units and/or Activities
-015	Painting of plant equipment and non-halogenated solvent cleaning operations
-016	Miscellaneous mobile equipment and internal combustion engines
-017	Emergency diesel generator
-025	Cooling tower

### Appendix H-1: Permit History

E.U. ID			Effective	Expiration	Project
No.	Description	Permit No.	Date	Date	Type
001 - 014	2 fuel oil-fired boilers, 12 simple cycle combustion turbines	0710002-001-AV	1/1/98	12/31/02	Initial Title V Permit
001 & 002 018 - 023 024 025	Repowering of Units 1 & 2, replaced by 6 CTs with HRSGs, 6 direct-fired natural gas heaters, and 1 Mechanical draft cooling tower	0710002-004-AC	11/25/98	12/31/02	Construction Modification
003 - 014	Installation of direct water spray inlet fogging systems on 12 existing simple cycle combustion turbines	0710002-005-AC	7/20/99	7/20/04	Construction Modification
003 - 014	Modification to allow the use of EPA Method 7E	0710002-006-AC	10/15/99	10/15/04	Construction Modification
003 - 014	Title V revision to incorporate conditions of 005-AC & 006-AC	0710002-007-AV	1/1/98	12/31/02	Title V Revision
018 - 023	Modification to 6 new combined cycle units (authorized by 004-AC) to allow excess NO <sub>X</sub> emissions due to steam blows necessary during plant conversion.	0710002-008-AC	6/14/00	12/31/02	Construction Modification
027 - 030	2 GE 7FA natural gas combustion turbine peaking units & 2 gas heaters	0710002-009-AC	12/22/00	4/30/03	New Construction
001 – 014 018 - 025	Title V revision to incorporate conditions of 004-AC & 008-AC	0710002-010-AV	6/10/02	12/31/02	Title V Revision
001 & 002 018 - 023 024 025	Title V Permit Renewal.	0710002-012-AV	1/1/03	12/31/07	Title V Renewal.
027 - 030	•	0710002-013-AC	4/22/03		Permit Modification
018 - 023		0710002-014-AC		7/1/04	Permit Modification
027 & 028		0710002-015-AV		12/31/07	Title V Revision

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

#### Florida Power and Light Company Fort Myers Plant

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 Des	cription		•			
-003 to -014		Combustion	Turbines	7				
		•	Allowab	le Emissions		Equivalent Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour/unit	TPY	lbs/hour TPY	Regulatory Citation(s)	See permit condition(s)
Visible Emissions	oil	8760	< 20% Opacity				Rule 62-296.320(4)(b)1., F.A.C	B.5.
Nitrogen Oxides	oil	8760***	<u> </u>	530			0710002-005-AC	B.5.2.
Arsenic	used oil		5.0 ppm				40 CFR 279.11	B.6.
Cadmium	used oil		2.0 ppm				40 CFR 279.11	B.6.
Chromium	used oil		10.0 ppm				40 CFR 279.11	B.6.
Lead	used oil		100.0 ppm				40 CFR 279.11	B.6.
Total Halogens	used oil		1,000.0 ppm				40 CFR 279.11	B.6.
PCB	used oil		2.0 ppm				40 CFR 279.11	B.6.

Permit No. 0710002-016-AV

Facility ID No.: 0710002

E.U. ID Nos.		Brief Des	cription					
-018 to -023	-018 to -023 Combined Cycle Combustion Turbines							
			Allowat	le Emissions		Equivalent Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	bs./hour/unit	TPY	lbs/hour TPY	Regulatory Citation(s)	See permit condition(s)
Visible Emissions	Gas	8760	< 10% Opacity				0710002-004-AC	C.15.
Nitrogen Oxides	Gas	8760	9 ppmvd ·	65*		1,708.20	0710002-004-AC	C.9.
Carbon Monoxide	Gas	8760	12.0 ppmvd	43.0		1,130.04	0710002-004-AC	C.12.
VOC	Gas	8760	1.4 ppmvd	2.9		76.21	0710002-004-AC	C.14.
Sulfur Dioxide	Gas	8760	natural gas				0710002-004-AC	C.11.b.

	*Initial	compl	liance	test	on	y.
31						

E.U. ID No.		Brief Des	cription	<u>'</u>				•	
-024		6 gas fuel p	re-heaters						
			Allowat	le Emissions		Equivaler	nt Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	bs./hour/unif	TPY	lbs/hour	TPY	Regulatory Citation(s)	See permit condition(s)
Visible Emissions	Gas	8760	< 10% Opacity					0710002-004-AC	C.16.
Nitrogen Oxides	Gas	8760	0.10 lb/MMBtu	1		13.2 (each)	346.9 (all 6)	0710002-004-AC	C.10.
Carbon Monoxide	Gas	8760	0.15 ppmvd	43			) 524.34 (all 6)	0710002-004-AC	C.13.
E.U. ID Nos.		Brief Des	cription						
-027 to -028	Simp	le-Cycle Con	nbustion Turbines	7					
			Allowat	le Emissions		Equivaler	nt Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	bs./hour/unit	TPY	lbs/hour	TPY	Regulatory Citation(s)	See permit condition(s)
Visible Emissions	Gas	8760	< 10% Opacity	T -				0710002-009-AC	D.20.
	Fuel Oil	500	< 10% Opacity						
Nitrogen Oxides	Gas	8760	10.5 ppmvd	69				0710002-009-AC	D.19.
	Gas, HPM	1 500	15 ppmvd	102.0					
	Fuel Oil	500	42 ppmvd	320.0					
PM/PM10	Gas			10.0				0710002-009-AC	D.18.

Carbon Monoxide	Gas	8760	.075 lb/mmBtu					0710002-009-AC	D.22.
Nitrogen Oxides	Gas	8760	0.10 lb/mmBtu					0710002-009-AC	D.19.
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	bs./hour/unit	TPY	lbs/hour	TPY	Regulatory Citation(s)	See permit condition(s
			Allowabl	e Emissions		Equivalen	t Emissions*	<del>-</del>	
-029 to -030		2 natural g	as heaters						
E.U. ID No.		Brief Des	scription						
	Fuel Oil	500	:05 % sulfur by weigh	ık					
Sulfur Dioxide	Gas	8760	2 grains per 100 scf		•			0710002-009-AC	D.24.
	Fuel Oil	500	3.5 ppmvw	7.3					
voc	Gas	8760	1.5 ppmvd	2.8				0710002-009-AC	D.23.
	Fuel Oil	500	20 ppmvd	65.0					
	Gas, HPM	500	15 ppmvd	48.0					
Carbon Monoxide	Gas	8760	9 ppmvd	29.0				0710002-009-AC	D.22.
	Fuel Oil	500		17.0				0710002-009-AC	

Notes: \*\*\*The 12 inlet foggers may operate up to 6000 hours per year in aggregate.

\* 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 Fort Myers Plant

Permit No. 0710002-016-AV Facility ID No. 0710002

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.		Irief Description					
-003 to -014	Combustion Turbin						
			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	` Time	Base	Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Opacity	Oil	EPA Method 9	Annual	1-Oct	1 Hour		B.10.1
Nitrogen Oxides	Oil	EPA Method 7 or 7E	Annual	1-Oct			B.10.2, B.14.2
Arsenic	Used Oil	Fuel Analysis	Batch				B.15
Cadmium	Used Oil	Fuel Analysis	Batch				B.15
Chromium	Used Oil	Fuel Analysis	Batch				B.15
Lead	Used Oil	Fuel Analysis	Batch				B.15
РСВ	Used Oil	Fuel Analysis	Batch				B.15
Total Halogens	Used Oil	Fuel Analysis	Batch				B.15
Flash Point	Used Oil	Fuel Analysis	Batch				B.15

E.U. ID No.		Brief Description	8				
-018 to -023	Combined Cycle (	Combustion Turbines	j .				
			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Visible Emissions	Gas	EPA Method 9	Annual	1-Oct	1 Hour		C.32.
Nitrogen Oxides	Gas	EPA Method 20 or RATA	Annual	1-Oct		Yes	C.29.
Carbon Monoxide	Gas	EPA Method 10	Annual	1-Oct			C.30.
VOC	Gas	EPA Method 18 or 25	Only if CO test in	ndicates CO e	xceedence		C.31
Sulfur Dioxide	Gas	Fuel Analysis	Continuous				C.35.

	Brief Description 6 gas fuel pre-heaters						
-024	- 6 9	gas ruer pre-neaters	Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Visible Emissions	Gas	EPA Method 9	Renewal - if		30-minutes		C.32.
Nitrogen Oxides	Gas	EPA Method 20	operated in				C.29.
Carbon Monoxide	Gas	EPA Method 10	prior year.				C.30.

E.U. ID No. -027 to -028		Brief Description Simple-Cycle Combustion Turbines					
Pollutant Name		Compliance	Testing Time	Frequency Base	Min. Compliance Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Visible Emissions	Gas and Fuel Oil	EPA Method 9	Annual	1-Oct	1 Hour		D.46.
Nitrogen Oxides	Gas and Fuel Oil	EPA Method 20 or RATA	Annual	1-Oct		Yes	D.46.
PM/PM10	Gas and Fuel Oil	EPA Method 5 or 17	Renewal				D.46.
Carbon Monoxide	Gas and Fuel Oil	EPA Method 10	Annual	1-Oct			D.46.
VOC	Gas and Fuel Oil	EPA Method 18, 25, or 25A	Renewal		-		D.46.
Sulfur Dioxide	Gas and Fuel Oil	Fuel Analysis	Continuous				D.46.

E.U. ID No.		Brief Description					
-029 to -030	2						
			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuels	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
Nitrogen Oxides	Gas -	EPA Method 20	Annual	1-Oct			D.46.
Carbon Monoxide	Gas	EPA Method 10	Annual	1-Oct			D.46.

Notes:
\*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.
\*\*CMS [=] Continuous Monitoring System

#### **MEMORANDUM**

To:

Trina Vielhauer

Through: Al Linero

From:

Tom Cascio

Date:

October 15, 2007

Re:

PROPOSED Permit Renewal No. 0710002-016-AV

Florida Power & Light Company

Fort Myers Plant

The only comments received on the DRAFT permit package were from the applicant in a letter received on October 10, 2007, as noted below.

No.	Permit Specific Condition Reference	Department Response
469 (C.)		We cause The steels height disconsions for Units 2 A
1	Section I, Facility Description	We agree. The stack height dimensions for Units 3A
	and Section III, Subsection D,	and 3B were corrected in the PROPOSED permit.
	Emission Unit Description.	_
	Request: That the stack height	·
	dimensions be corrected (from	
	80 feet to 100.5 feet).	·
2	Section III, Permitting Notes	We disagree. The permitting notes dealing with heat
	following C.5. and D.10.	input limits for the combined cycle units and the
	Request: That the permitting	large simple cycle units were not included in the
	notes dealing with heat input	DRAFT permit because there are enforceable limits
	limits be retained.	from earlier construction permits. Therefore, the
		permitting notes remain removed in the PROPOSED
		permit.

Therefore, the only change reflected in the PROPOSED permit is the corrected stack height dimensions. We recommend that this PROPOSED Title V permit be forwarded to Patty for posting to the Internet for EPA review.