



REPORT

TV RENEWAL/REVISION AIR PERMIT APPLICATION

**Duke Energy Florida
Anclote Power Plant**

Submitted To: Florida Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Rd., MS No. 5505
Tallahassee, FL 32399-2400

Submitted By: Golder Associates Inc.
5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA

Distribution: Florida Department of Environmental Protection
Duke Energy Florida
Golder Associates Inc.

May 2014

Project No. 1303015

A world of
capabilities
delivered locally





Table of Contents

PART I—FDEP APPLICATION REPORT

1.0	APPLICATION BACKGROUND	2
2.0	REQUESTED TV REVISIONS	3
2.1	Gas Heaters	3
2.2	Major Source HAP Status	3
2.3	Requirement for COMS.....	4

Attachments

Attachment A – FDEP Form No. 62 210.900(1), Application for Air Permit — Long Form

Attachment B – Facility Emission Calculations

PART II—FDEP APPLICATION FOR AIR PERMIT



1.0 APPLICATION BACKGROUND

Duke Energy Florida (DEF) operates the Anclote Power Plant. This existing facility consists of two fossil fuel fired steam generators, designated as Unit Nos. 1 and 2. These two units share a common stack. The site also includes two, 12-cell mechanical draft helper cooling towers, an emergency diesel generator and two natural gas-fired process heaters. Also located at this site, and included in this permit, are miscellaneous unregulated/insignificant emissions units and activities. An emission unit designation, referred to as “relocatable diesel-fired engine driven generator(s) (EU008)” is requested to be removed from the permit.

Operation of the Anclote Power Plant is currently authorized by Title V (TV) Operation Permit No. 1010017-012-AV. This permit was issued with an effective date of January 1, 2010 and an expiration date of December 31, 2014. In accordance with Rule 62-213.420(1)(a)2., F.A.C., an application for a TV permit renewal must be submitted at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Anclote Power Plant, this regulatory deadline requires the submittal of a TV Permit renewal application no later than May 20, 2014. This application and supporting documents constitute Duke’s request for renewal of Anclote Power Plant Title V Operation Permit Number 1010017-012-AV.

In addition, this application is to revise and update the existing TV permit to reflect site conditions, as well as to incorporate certain applicable operating requirements from Permit No. 1010017-013-AC. This is an air construction permit, issued on September 14, 2012, for the conversion of Anclote’s existing Units 1 and 2 and associated equipment from the use of heavy fuel oil and natural gas to exclusive use of natural gas only. Unit Nos. 1 and 2 were previously authorized to fire fuel oil Nos. 1 through 6, and on-specification used oil, so any reference to these fuels in the TV renewal is requested to be deleted.

The facility is a major source of air pollution under the Title V program [Chapter 62-213, Florida Administrative Code (F.A.C.)] and the Prevention of Significant Deterioration (Rule 62-212.400, F.A.C.) program and is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C. However, upon conversion to exclusive use of natural gas, this facility will not be a major source of hazardous air pollutants (HAP), based on Air Project No. 1010017-013-AC. This facility does, however, operate a stationary reciprocating internal combustion engine, subject to regulation under 40 CFR 63, Subpart ZZZZ (National Emissions Standards For Stationary Reciprocating Internal Combustion Engines). However, since the engine being operated meets the Subpart ZZZZ definition of “existing unit,” there are no unit specific applicable requirements that must be met pursuant to this rule at this time.

This air permit application consists of the appropriate application form required by the Florida Department of Environmental Protection (FDEP) Form 62-210.900(1), effective 3/11/2010 (see Part II of this application package), as well as required supporting documentation and attachments.



2.0 REQUESTED TV REVISIONS

The application serves to request the renewal of the current TV operating permit, as well as several requested revisions. The items addressed include the following:

- The incorporation of requirements from Air Construction Permit No. 1010017-013-AC;
- The removal of all references to oil-firing capability for Unit 1 and 2 (EU001 and EU002);
- The removal of fuel storage tanks (EU004);
- The removal of the requirement to install and operate Continuous Opacity Monitoring Systems (COMS) from the Title V operating and air construction (AC) permits from Unit 1 and 2, as these units are now defined as “gas-fired” units;
- Title III applicability: upon conversion to exclusive use of natural gas, this facility will not be a major source of HAPs, based on Air Project No. 1010017-013-AC;
- The revised heat input rating of the two gas-fired process heaters to <10 MMBtu/hr exempts them from the 40 CFR Part 60, (NSPS) Subpart Dc requirements;
- The requested revision of EU003, Surface Coating Operations, from an unregulated emission unit to an insignificant emission unit;
- The removal of the Diesel-Fired Air Compressor (EU006) from the unregulated emission unit list, as it no longer exists onsite; and
- The removal of the Relocatable Diesel-Fired Engine Driven Generator(s) (EU008) from the permit and the regulated emission unit list, as it no longer exists onsite.

Of the requested revisions above, two of these (the removal of COMS and the gas heater NSPS applicability) will require concurrent processing of revisions to the underlying air construction permit conditions. A third issue, the major source HAP status, would also imply such a revision, however, the underlying air construction permit (1010017-013-AC) already indicates that the site will be considered a minor source of HAPs upon completion of the gas conversion project.

2.1 Gas Heaters

In the air construction permit application, the two gas-fired process heaters were estimated to have a heat input rating of 16.5 MMBtu/hr. During construction, the heater design was revised to a rating of 9.8 MMBtu/hr, with a steady state rating of 8.9 MMBtu/hr. The revised vendor specification is attached to the gas heater emission unit section (EU009). In spite of the exemption from the NSPS standard, these units are still subject to the PSD BACT limit for CO of 0.08 lb/MMBtu, so they will continue to be referred to as “regulated” emission units.

2.2 Major Source HAP Status

As stated in the Facility Regulatory Classification section of Air Permit No. 1010017-013-AC, upon conversion to exclusive use of natural gas, this facility will not be a major source of HAPs. These calculations were conducted to confirm the current area source status and are included in Attachment B to this application.



2.3 Requirement for COMS

The requirement for COMS on Units 1 and 2 at the site were initially driven by the Acid Rain program requirement for “oil-fired” units. Based on a discussion with Louis Nichols (Nichols.louis@epa.gov) of the Clean Air Market Division (CAMD), the site should be able to remove the COMS, provided that the definition of “gas-fired unit” under 40 CFR Part 72.2 is met.

Gas-fired means:

(ii) For a unit for which a monitoring plan has already been submitted under § 75.62, that has not qualified as gas-fired under paragraph (3)(i) of this definition, and whose fuel usage changes, the designated representative submits either:

(A) Three calendar years of data following the change in the unit’s fuel usage, showing that no less than 90.0 percent of the unit’s average annual heat input during the previous three calendar years, and no less than 85.0 percent of the unit’s annual heat input during any one of the previous three calendar years, is from the combustion of gaseous fuels and the remaining heat input is from the combustion of fuel oil; or

(B) A minimum of 720 hours of unit operating data following the change in the unit’s fuel usage, showing that no less than 90.0 percent of the unit’s heat input is from the combustion of gaseous fuels and the remaining heat input is from the combustion of fuel oil, and a statement that this changed pattern of fuel usage is considered permanent and is projected to continue for the foreseeable future.

The Anclote Power Plant meets the requirements of Paragraph (ii)(B) above. The gas conversions were completed on July 1, 2013 for Unit 1 and on December 1, 2013 for Unit 2. Units 1 and 2 have operated in excess of 3,700 hours and 2,300 hours, respectively, since the conversion to natural gas firing was completed. The units are no longer physically capable of firing fuel oil and this permit application requests that any reference to the authorization to fire fuel oil be deleted from the permit. It is on this basis that DEF requests the removal of the use of COMS from the revised/renewed TV permit.



May 2014

Project No.1303015

ATTACHMENT A
APPLICATION FOR AIR PERMIT - LONG FORM
DEP Form No. 62-210.900(1)



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Duke Energy Florida, Inc.	
2. Site Name: Anclote Power Plant	
3. Facility Identification Number: 1010017	
4. Facility Location... Street Address or Other Locator: 1729 Baillies Bluff Road City: Holiday County: Pasco Zip Code: 34691-9753	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Chris Bradley, Senior Environmental Specialist	
2. Application Contact Mailing Address... Organization/Firm: Duke Energy Florida, Inc. Street Address: 299 First Avenue North, FL-903 City: St. Petersburg State: Florida Zip Code: 33701-3308	
3. Application Contact Telephone Numbers... Telephone: (727) 820 - 5962 ext. Fax: (727) 820 - 5229	
4. Application Contact E-mail Address: Chris.Bradley@duke-energy.com	

Application Processing Information (DEP Use)

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

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Operation of the Duke Energy Florida, Inc. (Duke) Anclote Power Plant is currently authorized by Title V Operation Permit 1010017-012-AV. This permit was issued with an effective date of January 1, 2010 and an expiration date of December 31, 2014.

In accordance with Rule 62-213.420(1)(a)2., F.A.C., an application for a Title V permit renewal must be submitted at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Anclote Power Plant, this regulatory deadline requires the submittal of a Title V Permit renewal application no later than May 20, 2014. This application and supporting documents constitutes Duke's request for renewal of Anclote Power Plant Title V Operation Permit Number 1010017-012-AV.

This Title V air operation permit renewal incorporates certain applicable operating requirements from 1010017-013-AC, an air construction permit issued on September 14, 2012 for the conversion Anclote's existing Units 1 and 2 and associated equipment from use of heavy fuel oil and natural gas to exclusive use of natural gas only.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	Fossil Fuel Fired Steam Generator Unit No. 1	NA	NA
002	Fossil Fuel Fired Steam Generator Unit No. 2	NA	NA
007	Two (2), 12-cell Mechanical Draft Helper Cooling Towers	NA	NA
009	Two (2) Natural Gas Heaters	NA	NA
005	Emergency Diesel Generator (unregulated)	NA	NA

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

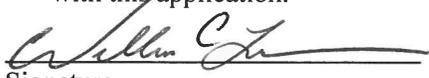
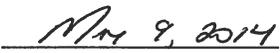
Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: Fax:
4. Owner/Authorized Representative E-mail Address:
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i> _____ Signature _____ Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

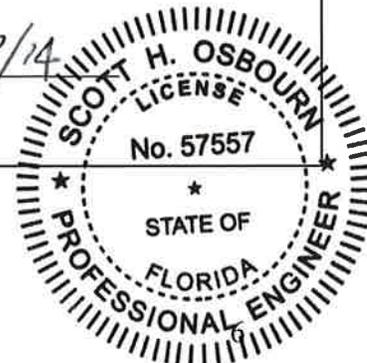
1. Application Responsible Official Name: William Luke, Plant Manager
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Duke Energy Florida, Inc. Street Address: 1729 Baillies Bluff Road City: Holiday State: Florida Zip Code: 34691-9753
4. Application Responsible Official Telephone Numbers... Telephone: (727) 943 - 3006 ext. Fax: (727) 943 - 3050
5. Application Responsible Official E-mail Address: William.Luke@duke-energy.com
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.  Signature  Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Scott Osbourn Registration Number: 57557
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates, Inc. Street Address: 5100 Lemon Street, Suite 208 City: Tampa State: FL Zip Code: 33609
3. Professional Engineer Telephone Numbers... Telephone: (813) 287 - 1717 ext. 53304 Fax: (813) 287 - 1716
4. Professional Engineer E-mail Address: sosbourn@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  _____ Signature (seal) Date <u>5/9/14</u>

* Attach any exception to certification statement.



FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
<p>As stated in the Facility Regulatory Classification section of Air Permit No. 1010017-013-AC, upon conversion to exclusive use of natural gas, this facility will not be a major source of HAPs.</p>	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
CO	A	N
NO _x	A	N
PM	A	N
PM ₁₀	A	N
SO ₂	A	N
VOC	A	N
HAPs (Total)	B	N

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C1 <input type="checkbox"/> Previously Submitted, Date:
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C2 <input type="checkbox"/> Previously Submitted, Date:
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C3 <input type="checkbox"/> Previously Submitted, Date:

Additional Requirements for Air Construction Permit Applications – N/A

1.	Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____
3.	Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4.	List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications – N/A

- | |
|--|
| 1. List of Exempt Emissions Units:
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility) |
|--|

Additional Requirements for Title V Air Operation Permit Applications

- | |
|--|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)
<input checked="" type="checkbox"/> Attached, Document ID: APP-FI-CV1 <input type="checkbox"/> Not Applicable (revision application) |
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
<input checked="" type="checkbox"/> Attached, Document ID: APP-FI-CV2
<input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements) |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
<input type="checkbox"/> Attached, Document ID: _____
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
<input type="checkbox"/> Attached, Document ID: _____
<input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed
<input checked="" type="checkbox"/> Not Applicable |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Requested Changes to Current Title V Air Operation Permit:
<input checked="" type="checkbox"/> Attached, Document ID: APP-FI-CV4 <input type="checkbox"/> Not Applicable |

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID: **APP-FI-CA1** Previously Submitted, Date: _____

Not Applicable (not an Acid Rain source)

Phase II NO_x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: **APP-FI-CA2** Previously Submitted, Date: _____

Not Applicable (not a CAIR source)

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

**Section [1] of [5]
Fossil Fuel Fired Steam Generator No. 1**

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Description of Emissions Unit Addressed in this Section: Fossil Fuel Fired Steam Generator No. 1			
3. Emissions Unit Identification Number: 001			
4. Emissions Unit Status Code: A	5. Commence Construction Date: N/A	6. Initial Startup Date: OCT 16, 1974	7. Emissions Unit Major Group SIC Code: 49
8. Federal Program Applicability: (Check all that apply)			
<input checked="" type="checkbox"/> Acid Rain Unit			
<input checked="" type="checkbox"/> CAIR Unit			
9. Package Unit: N/A		Model Number:	
10. Generator Nameplate Rating: 556.2 MW			
11. Emissions Unit Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Fossil Fuel Fired Steam Generator No. 1

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description:
Good combustion practices for CO and NO_x including, but not limited to, combustion by air staging achieved by close coupled overfire air (CCOFA).
[Rule 62-210.200(Definition BACT) and 62-212.400(PSD/BACT), F.A.C.]

2. Control Device or Method Code: **025**

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

EMISSIONS UNIT INFORMATION

Section [1] of [5]
Fossil Fuel Fired Steam Generator No. 1

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 5,500 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment: Unit 1 is not restricted in hours of operation and may operate 8,760 hours/year [Permit No. 1010017-013-AC; Rule 62-210.200 (Definition Potential to Emit), F.A.C.]

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

C. EMISSION POINT (STACK/VENT) INFORMATION**(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission units 001 and 002 exhaust from a common stack.			
5. Discharge Type Code: V	6. Stack Height: 499 feet	7. Exit Diameter: 24 feet	
8. Exit Temperature: 349 °F	9. Actual Volumetric Flow Rate: 3,440,279 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 324.43 North (km): 3,188.93		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

**Section [1] of [5]
Fossil Fuel Fired Steam Generator No. 1**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): External Combustion Boilers, Electric Generation, Natural Gas, Tangentially Fired Units		
2. Source Classification Code (SCC): 1-01-006-04		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 5.4	5. Maximum Annual Rate: 47,235	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,020
10. Segment Comment: Maximum hourly and annual rates are based on 5,500 MMBtu/hr, natural gas heat content of 1,020 Btu/ft³ (HHV), and 8,760 hours per year.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
NOx			EL
PM			NS
PM₁₀			NS
PM_{2.5}			NS
SO₂			NS
VOC			NS
HAPs			NS

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

POLLUTANT DETAIL INFORMATION

Page [1] of [16]

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 825 lb/hour 3,614 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.15 lb/MMBtu Reference: BACT; Permit No. 1010017-013-AC		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: CO = (0.15 lb/MMBtu) x (5,500 MMBtu/hr) = 825 lb/hr Annual Emissions: CO = (0.15 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 3,614 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: Emissions based on a 30-operating day rolling average excluding periods of startup, shutdown, and malfunction.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/MMBtu	4. Equivalent Allowable Emissions: 825 lb/hour 3,614 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1,650 lb/hour 7,227 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.30 lb/MMBtu Reference: Vendor Data		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: NOx = (0.3 lb/MMBtu) x (5,500 MMBtu/hr) = 1,650 lb/hr Annual Emissions: NOx = (0.3 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 7,227 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: Emissions based on 12-month rolling average for all periods of operation including startup, shutdown and malfunction.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.30 lb/MMBtu	4. Equivalent Allowable Emissions: 1,650 lb/hour 7,227 tons/year
5. Method of Compliance: NOx CEMS	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 138 lb/hour 602 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.025 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM = (0.025 lb/MMBtu) x (5,500 MMBtu/hr) = 138 lb/hr Annual Emissions: PM = (0.025 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 602 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 99 lb/hour 434 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.018 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM₁₀ = (0.018 lb/MMBtu) x (5,500 MMBtu/hr) = 99 lb/hr Annual Emissions: PM₁₀ = (0.018 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 434 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM_{2.5}		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 33 lb/hour 145 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.006 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM_{2.5} = (0.006 lb/MMBtu) x (5,500 MMBtu/hr) = 33 lb/hr Annual Emissions: PM_{2.5} = (0.006 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 145 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 31 lb/hour 135 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 2.0 gr/100 scf Reference: Estimated Maximum Fuel Sulfur		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: $SO_2 = [(2.0 \text{ gr}/100 \text{ scf}) / (7,000 \text{ gr}/\text{lb})] \times 10^6 \times [(2.0 \text{ lb } SO_2/\text{lb S}) / 1,020 \text{ MMBtu}/\text{MMscf}] \times 5,500 \text{ MMBtu}/\text{hr} = 31 \text{ lb}/\text{hr}$ Annual Emissions: $SO_2 = [(2.0 \text{ gr}/100 \text{ scf}) / (7,000 \text{ gr}/\text{lb})] \times 10^6 \times [(2.0 \text{ lb } SO_2/\text{lb S}) / 1,020 \text{ MMBtu}/\text{MMscf}] \times 5,500 \text{ MMBtu}/\text{hr} \times 8,760 \text{ hr}/\text{yr} \times (1 \text{ ton}/2,000 \text{ lb}) = 135 \text{ ton}/\text{year}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.0 gr/100 scf	4. Equivalent Allowable Emissions: 31 lb/hour 135 tons/year
5. Method of Compliance: Fuel Sampling and Analysis or Vendor Analysis	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 28 lb/hour 120 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.005 lb/MMBtu Reference: AP-42 Factor		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: VOC = (0.005 lb/MMBtu) x (5,500 MMBtu/hr) = 28 lb/hr Annual Emissions: VOC = (0.005 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 120 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: HAPS (total)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.21 lb/hour 0.93 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Various Reference: AP-42 Tables 1.4-3-1.4-4 and AB 2588		7. Emissions Method Code: 3 and 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: See Tables 1,2 & 3 in Attachment B - Facility Emission Calculations.			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ - **N/A**

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE15	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 15 % Exceptional Conditions: 20 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Reference Method 9 or COMS	
5. Visible Emissions Comment: Visible emissions shall not exceed 15 percent (%) opacity based on a 6-minute block average, except for one 6-minute period per hour of not more than 20%. [Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.) (Note: This application is requesting authorization for removal of COMS.)	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Reference Method 9 or COMS	
5. Visible Emissions Comment: After June 30, 2014 for periods of startup, shutdown and malfunction, visible emissions shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% as determined by EPA Method 9 or COMS. [Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.) (Note: This application is requesting authorization for removal of COMS.)	

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 42I Serial Number: 0607315739	
5. Installation Date: 04/10/2006	6. Performance Specification Test Date: 08/02/13
7. Continuous Monitor Comment: Required by CAIR Program and 40 CFR Part 75 (Acid Rain Program).	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 410I Serial Number: 0607315741	
5. Installation Date: 04/10/2006	6. Performance Specification Test Date: 08/02/2013
7. Continuous Monitor Comment: Required by 40 CFR Part 75 (Acid Rain Program).	

EMISSIONS UNIT INFORMATION

Section [1] of [5]

Fossil Fuel Fired Steam Generator No. 1

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor **3** of **4**

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: DURAG Model Number: D-R 290 Serial Number: 421291, 419304	
5. Installation Date: 02/01/2006	6. Performance Specification Test Date: 10/29/2013
7. Continuous Monitor Comment: This application is requesting authorization for removal of the COMS.	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Thermo Environmental Instruments Model Number: 48i CO Serial Number: CM13090062	
5. Installation Date: 04/03/2013	6. Performance Specification Test Date: 8/2/2013
7. Continuous Monitor Comment: Required by Air Construction Permit 1010017-013-AC.	

EMISSIONS UNIT INFORMATION

**Section [1] of [5]
Fossil Fuel Fired Steam Generator No. 1**

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C2 <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I2 <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: N/A <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I4 <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I6 Test Date(s)/Pollutant(s) Tested: 08/02/13 – NOx RATA; 08/02/2013 – CO RATA 10/29/2013 - Opacity <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

**Section [2] of [5]
Fossil Fuel Fired Steam Generator No. 2**

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Fossil Fuel Fired Steam Generator No. 2

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code:

A

5. Commence Construction Date:

N/A

6. Initial Startup Date:

OCT 31, 1978

7. Emissions Unit Major Group SIC Code:

49

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit: **N/A**

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **556.2 MW**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [2] of [5]
Fossil Fuel Fired Steam Generator No. 2

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description:
Good combustion practices for CO and NO_x including, but not limited to, combustion by air staging achieved by close coupled overfire air (CCOFA).
[Rule 62-210.200(Definition BACT) and 62-212.400(PSD/BACT), F.A.C.]

2. Control Device or Method Code: **025**

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

EMISSIONS UNIT INFORMATION

**Section [2] of [5]
Fossil Fuel Fired Steam Generator No. 2**

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 5,500 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day weeks/year days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: Unit 2 is not restricted in hours of operation and may operate 8,760 hours/year [Permit No. 1010017-013-AC; Rule 62-210.200 (Definition Potential to Emit), F.A.C.]

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

C. EMISSION POINT (STACK/VENT) INFORMATION**(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission units 001 and 002 exhaust from a common stack.			
5. Discharge Type Code: V	6. Stack Height: 499 feet	7. Exit Diameter: 24 feet	
8. Exit Temperature: 349 °F	9. Actual Volumetric Flow Rate: 3,440,279 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 324.43 North (km): 3,188.93		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type): External Combustion Boilers, Electric Generation, Natural Gas, Tangentially Fired Units		
2. Source Classification Code (SCC): 1-01-006-04		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 5.4	5. Maximum Annual Rate: 47,235	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,020
10. Segment Comment: Maximum hourly and annual rates are based on 5,500 MMBtu/hr (HHV), natural gas heat content of 1,020 Btu/ft³, and 8,760 hours per year.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
NOx			EL
PM			NS
PM10			NS
PM2.5			NS
SO2			NS
VOC			NS
HAPs			NS

EMISSIONS UNIT INFORMATION

Section [2] of [5]
 Fossil Fuel Fired Steam Generator No. 2

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
 (Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 825 lb/hour 3,614 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.15 lb/MMBtu Reference: BACT; Permit No. 1010017-013-AC		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: CO = (0.15 lb/MMBtu) x (5,500 MMBtu/hr) = 825 lb/hr Annual Emissions: CO = (0.15 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 3,614 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: Emissions based on a 30-operating day rolling average excluding periods of startup, shutdown, and malfunction.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/MMBtu	4. Equivalent Allowable Emissions: 825 lb/hour 3,614 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1,650 lb/hour 7,227 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.30 lb/MMBtu Reference: Vendor Data		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: NOx = (0.3 lb/MMBtu) x (5,500 MMBtu/hr) = 1,650 lb/hr Annual Emissions: NOx = (0.3 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 7,227 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: Emissions based on 12-month rolling average for all periods of operation including startup, shutdown and malfunction.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/MMBtu	4. Equivalent Allowable Emissions: 1,650 lb/hour 7,227 tons/year
5. Method of Compliance: NOx CEMS	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 138 lb/hour 602 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.025 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM = (0.025 lb/MMBtu) x (5,500 MMBtu/hr) = 138 lb/hr Annual Emissions: PM = (0.025 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 602 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 99 lb/hour 434 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.018 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM₁₀ = (0.018 lb/MMBtu) x (5,500 MMBtu/hr) = 99 lb/hr Annual Emissions: PM₁₀ = (0.018 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 434 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM_{2.5}		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 33 lb/hour 145 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.006 lb/MMBtu Reference: 2012 BART Analysis		7. Emissions Method Code: 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: PM_{2.5} = (0.006 lb/MMBtu) x (5,500 MMBtu/hr) = 33 lb/hr Annual Emissions: PM_{2.5} = (0.006 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 145 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

POLLUTANT DETAIL INFORMATION

Page [11] of [16]

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 31 lb/hour 135 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 2.0 gr/100 scf Reference: Estimated Maximum Fuel Sulfur		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: $SO_2 = [(2.0 \text{ gr}/100 \text{ scf}) / (7,000 \text{ gr}/\text{lb})] \times 10^6 \times [(2.0 \text{ lb } SO_2/\text{lb S}) / 1,020 \text{ MMBtu}/\text{MMscf}] \times 5,500 \text{ MMBtu}/\text{hr} = 31 \text{ lb}/\text{hr}$ Annual Emissions: $SO_2 = [(2.0 \text{ gr}/100 \text{ scf}) / (7,000 \text{ gr}/\text{lb})] \times 10^6 \times [(2.0 \text{ lb } SO_2/\text{lb S}) / 1,020 \text{ MMBtu}/\text{MMscf}] \times 5,500 \text{ MMBtu}/\text{hr} \times 8,760 \text{ hr}/\text{yr} \times (1 \text{ ton}/2,000 \text{ lb}) = 135 \text{ ton}/\text{year}$			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.0 gr/100 scf	4. Equivalent Allowable Emissions: 31 lb/hour 135 tons/year
5. Method of Compliance: Fuel Sampling and Analysis or Vendor Analysis	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 28 lb/hour 120 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.005 lb/MMBtu Reference: AP-42 Factor		7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: VOC = (0.005 lb/MMBtu) x (5,500 MMBtu/hr) = 28 lb/hr Annual Emissions: VOC = (0.005 lb/MMBtu) x (5,500 MMBtu/hr) x (8,760 hr/yr) x (1 ton/2,000 lb) = 120 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: HAPs (total)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.21 lb/hour 0.93 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Various Reference: AP-42 Tables 1.4-3-1.4-4 and AB 2588		7. Emissions Method Code: 3 and 5	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: See Tables 1, 2 & 3 in Attachment B - Facility Emission Calculations.			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE15	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 15 % Exceptional Conditions: 20 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Reference Method 9 or COMS	
5. Visible Emissions Comment: Visible emissions shall not exceed 15 percent (%) opacity based on a 6-minute block average, except for one 6-minute period per hour of not more than 20%. [Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.) (Note: This application is requesting authorization for removal of COMS.)	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Reference Method 9 or COMS	
5. Visible Emissions Comment: After June 30, 2014 for periods of startup, shutdown and malfunction, visible emissions shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% as determined by EPA Method 9 or COMS. [Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.) (Note: This application is requesting authorization for removal of COMS.)	

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

H. CONTINUOUS MONITOR INFORMATION**Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor **1** of **4**

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 42I Serial Number: 0607315740	
5. Installation Date: 05/11/2006	6. Performance Specification Test Date: 07/12/2013
7. Continuous Monitor Comment: Required by CAIR Program and 40 CFR Part 75 (Acid Rain Program).	

Continuous Monitoring System: Continuous Monitor **2** of **4**

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 410I Serial Number: 0607315742	
5. Installation Date: 05/11/2006	6. Performance Specification Test Date: 07/12/2013
7. Continuous Monitor Comment: Required by 40 CFR Part 75 (Acid Rain Program).	

EMISSIONS UNIT INFORMATION

Section [2] of [5]

Fossil Fuel Fired Steam Generator No. 2

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**Continuous Monitoring System:** Continuous Monitor **3** of **4**

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: DURAG Model Number: D-R 290 Serial Number: 421292, 421652	
5. Installation Date: 02/01/2006	6. Performance Specification Test Date: 10/29/2013
7. Continuous Monitor Comment: This application is requesting authorization for removal of the COMS.	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Thermo Environmental Instruments Model Number: 48i CO Serial Number: CM13090063	
5. Installation Date: 04/04/2013	6. Performance Specification Test Date: 1/14/2014
7. Continuous Monitor Comment: Required by Air Construction Permit 1010017-013-AC.	

EMISSIONS UNIT INFORMATION

**Section [2] of [5]
Fossil Fuel Fired Steam Generator No. 2**

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C2 <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I2 <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: N/A <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I4 <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I6 (NOx RATA); APP-EU2-I6 (CO RATA, Opacity) Test Date(s)/Pollutant(s) Tested: 07/09/13 – NOx RATA ; 01/14/2014 – CO RATA 10/29/2013 - Opacity <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [3] of [5]
Cooling Towers

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [3] of [5]
Cooling Towers

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Two (2), 12-cell mechanical draft helper cooling towers

3. Emissions Unit Identification Number: **007**

4. Emissions Unit Status Code:

A

5. Commence Construction Date:

6. Initial Startup Date:

7. Emissions Unit Major Group SIC Code:

49

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating:

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [3] of [5]

Cooling Towers

Emissions Unit Control Equipment/Method: Control 1 of 1

- | |
|---|
| 1. Control Equipment/Method Description:
Towers Mist (Drift) Eliminators – Low velocity (V<250 ft/min) |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

- | |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

- | |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

- | |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

EMISSIONS UNIT INFORMATION

Section [3] of [5]
Cooling Towers

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 660,000 gal/min for both cooling towers combined
2. Maximum Production Rate:
3. Maximum Heat Input Rate: million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 4,500 hours/year
6. Operating Capacity/Schedule Comment: Each cooling tower consists of twelve (12) cells. Maximum operating schedule of 4,500 hr/yr applies to each 12-cell cooling tower.

EMISSIONS UNIT INFORMATION

Section [3] of [5]

Cooling Towers

C. EMISSION POINT (STACK/VENT) INFORMATION**(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 60 feet		7. Exit Diameter: 32 feet
8. Exit Temperature: varies °F	9. Actual Volumetric Flow Rate: 36,000,000 acfm		10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 324.43 North (km): 3,188.93		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Each cooling tower consists of twelve (12) cells. Stack height and exit diameter applies to each cooling tower cell. Actual volumetric flow rate data applies to both 12-cell cooling towers combined.			

EMISSIONS UNIT INFORMATION

Section [3] of [5]
Cooling Towers

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Cooling Tower, Process Cooling, Mechanical Draft. Cooling tower water recirculation rate		
2. Source Classification Code (SCC): 3-85-001-01		3. SCC Units: Million gallons
4. Maximum Hourly Rate: 39.6	5. Maximum Annual Rate: 178,200	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Each cooling tower consists of twelve (12) cells. Data applies to both 12-cell cooling towers combined. Hourly Rate: 660,000 gal/min x 60 min/hr / 10⁶ = 39.6 million gal Annual Rate: 660,000 gal/min x 60 min/hr x 4,500 hr/yr / 10⁶ = 178,200 million gal		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [3] of [5]
Cooling Towers

POLLUTANT DETAIL INFORMATION

Page [1] of [2]

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 47.9 lb/hour 107.8 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 1.21 lb/10⁶gal Reference: Vendor data		7. Emissions Method Code:	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <p>Each cooling tower consists of twelve (12) cells. Data provided above applies to both 12-cell cooling towers combined.</p> <p>Potential annual emission rate based on 4,500 hours per year operation per tower.</p> <p>Hourly: $PM = 1.21 \text{ lb}/10^6 \text{ gal} \times (39.6 \times 10^6 \text{ gallons/hr}) = 47.9 \text{ lb/hr}$</p> <p>Annual: $PM = 1.21 \text{ lb}/10^6 \text{ gal} \times (39.6 \times 10^6 \text{ gallons/hr}) \times 4,500 \text{ hr/yr} = 107.8 \text{ ton/yr}$</p>			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [3] of [5]

Cooling Towers

H. CONTINUOUS MONITOR INFORMATION – N/A

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [3] of [5]

Cooling Towers

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-FI-C2 <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: N/A <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: N/A <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Two Natural Gas Fuel Heaters

3. Emissions Unit Identification Number: **009**

4. Emissions Unit Status Code: C	5. Commence Construction Date: March 2013	6. Initial Startup Date: Unit 1 Heater - 09/2013 Unit 2 Heater - 12/2013	7. Emissions Unit Major Group SIC Code: 49
--	---	--	--

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:
Manufacturer: **Sigma Thermal** Model Number: **CM9B-G-30**

10. Generator Nameplate Rating:

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

Emissions Unit Control Equipment/Method: – N/A

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: :	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: 9.81 MMBtu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: The steady-state firing rate (HHV basis) for each natural gas heater is 8.92 MMBtu/hr. Total gas consumption at steady-state is 8,778 ft³/hr.	

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: feet		7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS): Longitude (DD/MM/SS):	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

D. SEGMENT (PROCESS/FUEL) INFORMATION

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

1. Segment Description (Process/Fuel Type): Natural Gas		
2. Source Classification Code (SCC): 1-01-006-04		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 0.00962	5. Maximum Annual Rate: 84.3	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,020
10. Segment Comment: Rates given are per natural gas heater: Hourly rate: (9.81 MMBtu/hr) / (1,020 MMBtu/MMSCF) = 9,618 ft³/hr Annual rate: 9,618 ft³/hr x 8,760 = 84.3 ft³/yr		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NOx			NS
PM/PM ₁₀			NS
SO ₂			NS
VOC			NS

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [4] of [5]

Two Natural Gas Heaters

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.78 lb/hour 3.44 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.08 lb/MMBtu Reference: BACT, Permit No. 1010017-013-AC		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly Emissions: CO = (0.08 lb/MMBtu) x (9,811,157 Btu/hr) / 10⁶ = 0.78 lb/hr Annual Emissions: CO = (0.08 lb/MMBtu) x (9,811,157 Btu/hr) / 10⁶ x (8,760 hr/yr) x (1 ton/2,000 lb) = 3.44 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATION**POLLUTANT DETAIL INFORMATION**

Section [4] of [5]

Two Natural Gas Heaters

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS****Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.08 lb/MMBtu	4. Equivalent Allowable Emissions: 0.78 lb/hour 3.44 tons/year
5. Method of Compliance: Vendor Certification	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

H. CONTINUOUS MONITOR INFORMATION – N/A

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [4] of [5]

Two (2) Natural Gas Heaters

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: APP-EU1-I2 <input type="checkbox"/> Previously Submitted, Date: _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: N/A _____ <input type="checkbox"/> Previously Submitted, Date: _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input checked="" type="checkbox"/> Attached, Document ID: APP-EU9-I6 Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

**Section [5] of [5]
Emergency Diesel Generator**

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION

Section [5] of [5]

Emergency Diesel Generator

A. GENERAL EMISSIONS UNIT INFORMATION**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Emergency Diesel Generator – 1500 HP

3. Emissions Unit Identification Number: **005**

4. Emissions Unit Status Code:

C

5. Commence Construction Date:

2003

6. Initial Startup Date:

2003

7. Emissions Unit Major Group SIC Code:

49

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:

Manufacturer: **Caterpillar**

Model Number: **3512**

10. Generator Nameplate Rating: **1119 kW**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [5] of [5]

Emergency Diesel Generator

Emissions Unit Control Equipment/Method: – N/A

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:

2. Control Device or Method Code:

EMISSIONS UNIT INFORMATION

Section [5] of [5]

Emergency Diesel Generator

C. EMISSION POINT (STACK/VENT) INFORMATION– N/A
(Optional for unregulated emissions units.)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code:			
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:					
5. Discharge Type Code:		6. Stack Height: feet		7. Exit Diameter: feet	
8. Exit Temperature: °F		9. Actual Volumetric Flow Rate: acfm		10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm			12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates... Zone: East (km): North (km):			14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS): Longitude (DD/MM/SS):		
15. Emission Point Comment:					

EMISSIONS UNIT INFORMATION

**Section [5] of [5]
Emergency Diesel Generator**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Diesel Fuel No. 2		
2. Source Classification Code (SCC): 1-01-006-04		3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 0.075	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Hourly Rate based on vendor specifications (74.9 gal/hr at 1500 hp)		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION**POLLUTANT DETAIL INFORMATION**

Section [5] of [5]
 Emergency Diesel Generator

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS- N/A**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ___ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [5] of [5]
Emergency Diesel Generator

H. CONTINUOUS MONITOR INFORMATION – N/A

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

EMISSIONS UNIT INFORMATION

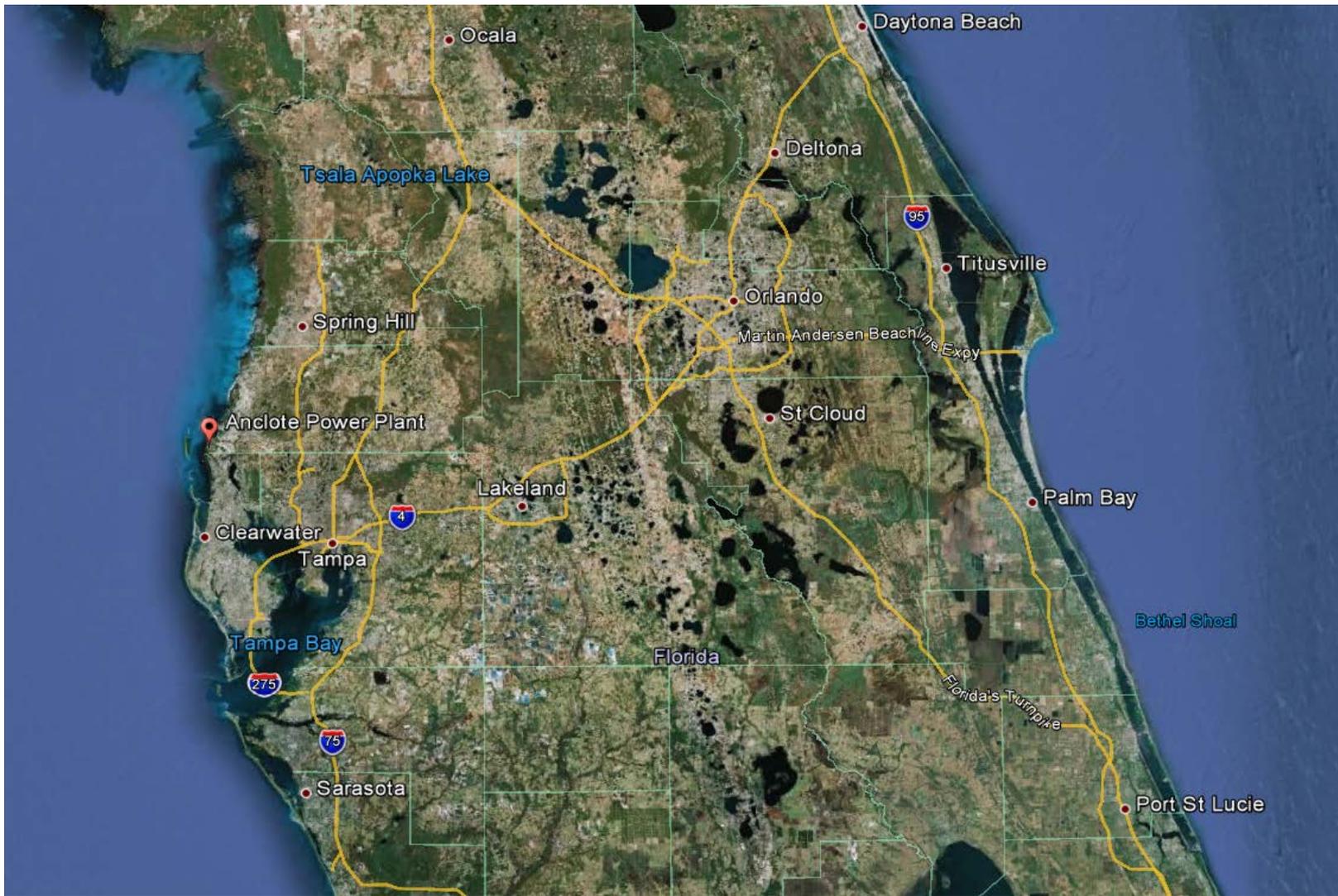
Section [5] of [5]
Emergency Diesel Generator

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>N/A</u> <input type="checkbox"/> Previously Submitted, Date: _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>N/A</u> <input type="checkbox"/> Previously Submitted, Date: _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>N/A</u> <input type="checkbox"/> Previously Submitted, Date: _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**ATTACHMENT
APP-FI-C1
FACILITY PLOT PLAN**



SOURCE: 2012 Google Earth Aerial

CLIENT/PROJECT

Duke Energy Florida, Inc.

TAMPA, FLORIDA



TITLE:

**Figure 1
Site Location**

DRAWN BY:
JS

REVIEWED BY:

DATE:
April 2014

NOT TO
SCALE

FILE NO.:

JOB NO.:
1303015

Anclote Power Plant



LEGEND

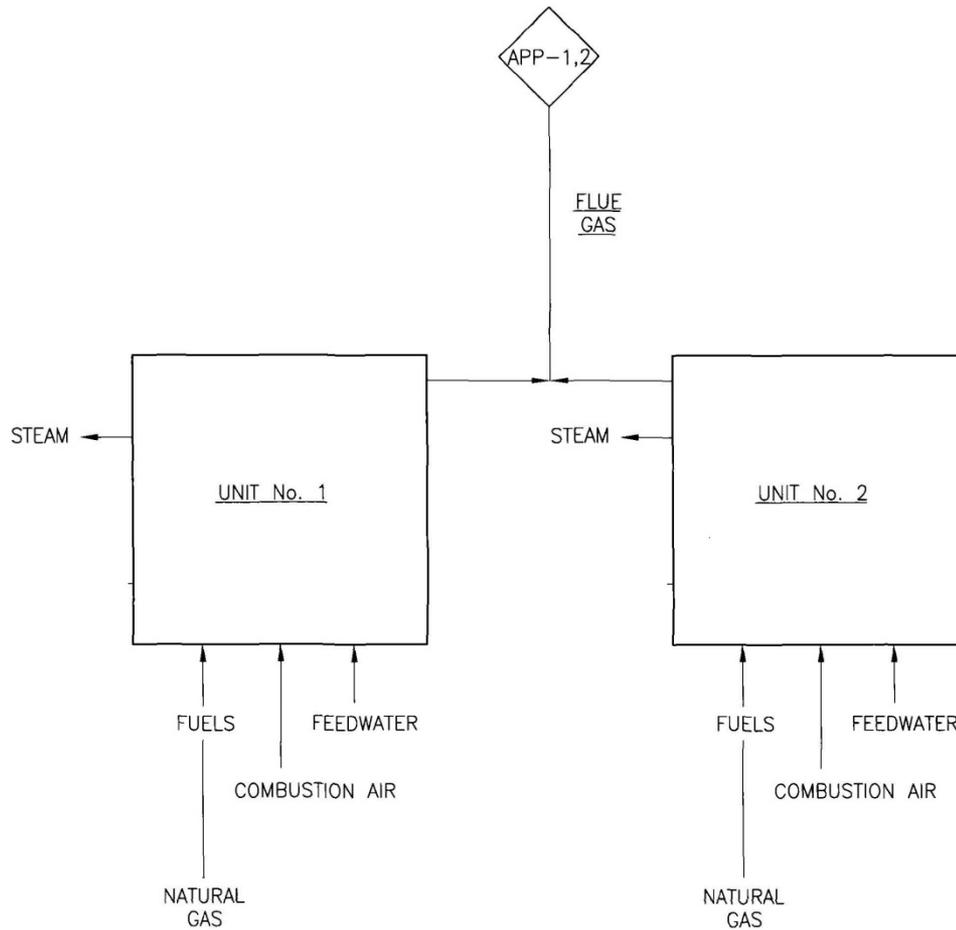
1 – Boilers Stack

SOURCE: 2014 Google Earth Aerial

CLIENT/PROJECT Duke Energy Florida, Inc.		TAMPA, FLORIDA		TITLE: Figure 2 Site Layout	
DRAWN BY: JS	REVIEWED BY:	DATE: April 2014	NOT TO SCALE	FILE NO.:	JOB NO.: 1303015
					Anclote Power Plant



**ATTACHMENT
APP-FI-C2
PROCESS FLOW DIAGRAM**



CLIENT/PROJECT

Duke Energy Florida, Inc.

TAMPA, FLORIDA



TITLE:

**Figure 3
Process Flow Diagram
Fossil Fuel Fired Steam Generators**

DRAWN BY:
JS

REVIEWED BY:
SO

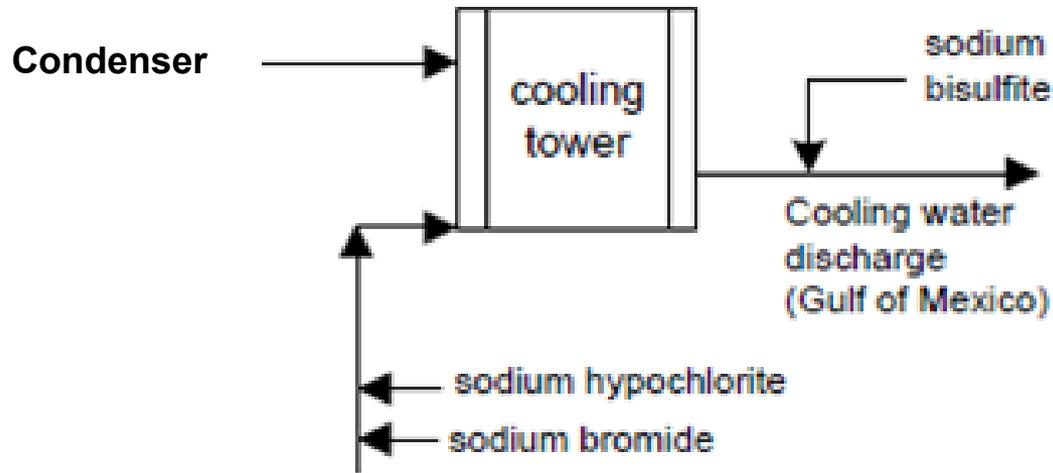
DATE:
May 2014

NOT TO
SCALE

FILE NO.:

JOB NO.:
1303015

Anclole Power Plant



CLIENT/PROJECT

Duke Energy Florida, Inc.

TAMPA, FLORIDA



TITLE:

**Figure 4
Process Flow Diagram
Cooling Towers**

DRAWN BY:
JS

REVIEWED BY:
SO

DATE:
May 2014

NOT TO
SCALE

FILE NO.:

JOB NO.:
1303015

Anclore Power Plant

**ATTACHMENT
APP-FI-C3
PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER**

Precautions to Prevent Emissions of Unconfined Particulate Matter

Unconfined particulate matter (PM) emissions that may result from operations at the Anclote Power Plant include:

1. Vehicular traffic on paved and unpaved roads.
2. Wind-blown dust from material storage and yard areas.
3. Periodic abrasive blasting.

The following techniques may be used to control unconfined PM emissions on an as-needed basis:

1. Paving and maintenance of roads, parking areas, and yards.
2. Chemical (dust suppressants) or water application to:
 - Unpaved roads.
 - Unpaved yard areas.
 - Open stock piles.
3. Removal of PM from roads and other paved area to prevent reentrainment.
4. Removal of PM from buildings or work areas to prevent airborne particulate.
5. Landscaping or planting of vegetation.
6. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent PM.
7. Confining abrasive blasting where possible.
8. Enclosure or covering of conveyor systems.
9. Other techniques, as necessary.

**ATTACHMENT
APP-FI-CV1
LIST OF INSIGNIFICANT ACTIVITIES**

List of Insignificant Emissions Units and/or Activities.

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

1. Internal combustion engines – mobile sources.
2. Vacuum pumps in laboratory operations.
3. Equipment used for steam cleaning.
4. Equipment used exclusively for space heating, other than boilers.
5. Laboratory Equipment used exclusively for chemical or physical analysis.
6. Brazing, soldering, or welding equipment.
7. Fire protection and safety equipment.
8. Petroleum lubrication systems.
9. Application of fungicide, herbicide, or pesticide.
10. Vehicle refueling operations and associated fuel storage.
11. Degreasing Units using heavier-than air vapors exclusively that do not use any substance containing a hazardous air pollutant.
12. Non-halogenated solvent storage and cleaning operations that do not use any substance containing a hazardous air pollutant.
13. Lube oil system vents.
14. Lube oil reservoir tank.
15. Parts washers/degreasers.
16. Used oil storage tanks.
17. Portable unleaded gasoline tank.
18. Evaporation of non-hazardous boiler cleaning chemicals.
19. No. 2 diesel fuel tanks.
20. Turbine vapor extractor.
21. Sand blasting and abrasive grit blasting.
22. Storage tanks less than 550 gallons.
23. Architectural (equipment) maintenance painting.
24. Solvent cleaning.
25. Surface coating operations.

**ATTACHMENT
APP-FI-CV2
IDENTIFICATION OF APPLICABLE REQUIREMENTS**

**IDENTIFICATION OF APPLICABLE REQUIREMENTS
TITLE V CORE LIST**

Effective: 06/15/12

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

Federal Rule: (description)

40 CFR 61, Subpart M: NESHAP for Asbestos.
40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.
40 CFR 98, Subpart A: Mandatory Reporting of Greenhouse Gases.
40 CFR 98, Subpart C: General Stationary Combustion Sources.
40 CFR 98, Subpart AA: Pulp and Paper Manufacturing

State Rule: (description)

CHAPTER 62-4, F.A.C.: PERMITS, effective 12-01-11

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application. 10-31-07
62-4.055, F.A.C.: Permit Processing. 8-16-98
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals. 3-16-08
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 6-29-11.

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions from Permitting.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.
62-210.350, F.A.C.: Public Notice and Comment. 10-12-08.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.

62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections and Amendments. 3-16-08

62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility. 7-3-08

62-210.650, F.A.C.: Circumvention.

62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.

62-210.900(1), F.A.C.: Application for Air Permit – Long Form, Form and Instructions. 3-11-10

62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions. 7-3-08

62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source. 7-3-08

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW,
effective 12-04-11

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective
6/29/11

62-213.205, F.A.C.: Annual Emissions Fee.

62-213.400, F.A.C.: Permits and Permit Revisions Required.

62-213.410, F.A.C.: Changes Without Permit Revision.

62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.

62-213.415, F.A.C.: Trading of Emissions Within a Source.

62-213.420, F.A.C.: Permit Applications.

62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.

62-213.440, F.A.C.: Permit Content.

62-213.450, F.A.C.: Permit Review by EPA and Affected States

62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.

62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.

62-213.900(2), F.A.C.: Statement of Compliance Form.

62-213.900(3), F.A.C.: Responsible Official Notification Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-11-10

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

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

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 02-12-04

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

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

Miscellaneous:

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

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

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 10-6-08

CHAPTER 62-257, F.A.C.: Asbestos Program, effective 10-12-08

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



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE

Florida Power Corporation d/b/a
Progress Energy Florida, Inc.
1729 Baillies Bluff Road
Holiday, Florida 34691-9753

Air Permit No. 1010017-013 -AC (PSD-FL-419)
Progress Energy Anclote Power Plant
SIC Code: 4911 - Electric Services

Authorized Representative:
William Luke, Plant Manager

Natural Gas Conversion Project
Expiration Date: December 31, 2014
Pasco County, Florida

PROJECT

This is the final air construction permit, which authorizes conversion of Units 1 and 2 and associated equipment from present use of heavy fuel oil and natural gas to exclusive use of natural gas and establishes permit limits for nitrogen oxides (NO_x) and carbon monoxide (CO) at the Progress Energy Anclote Power Plant, located in Pasco County at 1729 Baillies Bluff Road, Holiday, Florida. The UTM coordinates are Zone 17, 324.4 km East and 3118.7 km North.

This final permit is organized into the following sections: Section 1 (General Information), Section 2 (Administrative Requirements), Section 3 (Emissions Units Specific Conditions) and Section 4 (Appendices).

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

FINAL PERMIT

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

William Luke, Plant Manager, Anclote Power Plant: william.luke@pgnmail.com

Scott Osbourn, P.E., Golder Associates: sosbourn@golder.com

Robert Wong, Administrator, DEP SWD: robert.wong@dep.state.fl.us

Cindy Mulkey, DEP Siting Office: cindy.mulkey@dep.state.fl.us

Heather Ceron, EPA Region 4: ceron.heather@epa.gov

Lynn Scarce, DEP OPC: lynn.scarce@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The existing facility consists of the following emissions units (E.U.) and activities.

E.U. ID No.	Brief Description
Regulated Emissions Units	
001	Fossil Fuel Fired Steam Generator Unit No. 1
002	Fossil Fuel Fired Steam Generator Unit No. 2
007	Two, 12-cell Mechanical Draft Helper Cooling Towers
008	Relocatable Diesel Fired Engine Driven Generator(s)
Unregulated Emissions Units and/or Activities	
003	Surface Coating Operations
005	Emergency Diesel Generator
006	Diesel Air Compressor

Units 1 and 2 are residual fuel oil and natural gas-fired steam electric generating units. Each boiler provides steam to a steam turbine-electric generator with a gross nameplate rating of 556.2 megawatts (MW). Units 1 and 2 began commercial operation in 1974 and 1978, respectively as residual fuel oil units. An air construction permit for limited natural gas firing capability of 2,300 million Btu per hour (MMBtu/hour) was issued in October 1998.

The two units exhaust through a single stack that is 499 feet in height, 24 feet in diameter and at a temperature of approximately 349 degrees Fahrenheit (°F).

Units 1 and 2 are each equipped with continuous emissions monitoring systems (CEMS) to measure and record NO_x emissions and a continuous opacity monitoring system (COMS) to measure and record the opacity of the exhaust gas.

FACILITY REGULATORY CLASSIFICATION

- Upon conversion to exclusive use of natural gas, the facility will not be a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PROPOSED PROJECT

This project: authorizes construction to increase natural gas firing capability on Units 1 and 2; removes residual fuel oil and other liquid fuels as authorized fuels for Units 1 and 2; establishes a nitrogen oxides (NO_x) emission standard of 0.30 pounds per million Btu heat input (lb/MMBtu) on a 12-month rolling average; and establishes a Best Available Control Technology (BACT) carbon monoxide (CO) emission standard of 0.15 lb CO/MMBtu on a 30-day rolling average.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: Southwest District Office. The mailing address and phone number of the Southwest District Office is: 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926, 813/632-7600.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation:
 - a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

8. Application for Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority.
[Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fossil Fuel-Fired Steam Generators, Units 1 and 2

This section of the permit addresses the following emissions units.

E.U. ID No.	Brief Description
001	Fossil Fuel Fired Steam Generator Unit No. 1 – Gross Nameplate Rating of 556.2 MW
002	Fossil Fuel Fired Steam Generator Unit No. 2 – Gross Nameplate Rating of 556.2 MW
<u>Design Heat Input Rating of Units 1 and 2:</u> The design heat input rating of each unit after conversion to exclusive natural gas firing is 5,500 million Btu per hour (MMBtu/hour).	

{Permitting Note: Existing Units 1 and 2 commenced construction prior to the applicable dates of federal or State requirements to obtain a permit for the Prevention of Significant Deterioration (PSD) and prior to the applicability dates of 40 Code of Federal Regulations (CFR), Part 60, Subparts D - Standards of Performance for Fossil Fuel Fired Steam generators and Da - Standards of Performance for Electric Utility Steam Generating Units. In accordance with Rule 62-212.400(PSD), F.A.C., this project subjects these units to a BACT determination for carbon monoxide (CO). Emissions standards specified in this permit allow these units to avoid PSD preconstruction review for nitrogen oxides (NO_x)}

AUTHORIZED CONSTRUCTION

1. Previous Permits: The conditions of this section supplement all previously issued air construction permits affecting Units 1 and 2. These include the original construction permit issued in 1971, a permit issued in 1998 to install partial natural gas capability and a permit issued in 2007 affecting sulfur dioxide (SO₂) monitoring. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions. However, this permit supersedes the approved fuels and authorized heat input authorizations and limitations contained in previous permits. Relevant provisions of these permits are incorporated in the Facility Title V Operation Permit. [Permits AC-367, 1010017-004-AC, 1010017-009-AC and 1010017-012-AV]
2. Natural Gas Conversion Project: For Units 1 and 2, the permittee is authorized to perform the following work to convert Units 1 and 2 and associated equipment from present use of heavy fuel oil and natural gas to exclusive use of natural gas.
 - a. Three additional levels of natural gas burners per furnace;
 - b. Superheater surface area reductions;
 - c. Disabling of residual fuel oil firing capability;
 - d. Upgrade of superheater metallurgy;
 - e. Upgrade of the burner control and management system;
 - f. Replacement/upgrade of the forced draft (FD) fan in each unit;
 - g. Addition of two (2) fuel gas heaters;
 - h. Modifications to the natural gas delivery systems;
 - i. Replacement of the existing natural gas metering and regulating (M&R) station;
 - j. Other modifications to maintain the gross generating capacity or improve the net generating capacity of the units.
3. BACT Controls for CO: For Units 1 and 2, the applicant shall incorporate combustion controls based on good combustion practices for CO and NO_x including, but not limited to, combustion by air staging achieved by close coupled overfire air (CCOFA).
[Rule 62-210.200(Definition BACT) and 62-212.400(PSD/BACT), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fossil Fuel-Fired Steam Generators, Units 1 and 2

PERFORMANCE REQUIREMENTS

4. Permitted Capacities: Maximum heat input rates are not established. The design heat input rating is increased by this project to 5,500 MMBtu/hour/unit to achieve the gross nameplate capacity of 556.2 MW per steam turbine-electrical generator. Greater or lower heat input may be required to achieve the gross capacity of each unit.
5. Authorized Fuels: After December 31, 2013 only natural gas may be fired in Unit 1. After June 30, 2014 only natural gas may be fired in Unit 2. [Application No. 1010017-013-AC; Rules 62-4.070 (Reasonable Assurance), 62-210.200(Definition BACT) and 62-212.400(PSD, BACT), F.A.C.]
6. Capacities and Restrictions: Units 1 and 2 are not restricted in hours of operation and may operate 8,760 hours per year. [Application No. 1010017-013-AC; Rule 62-210.200(Definition Potential to Emit), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

7. Emission Standards: Emissions from Units 1 and emissions from Unit 2 shall not exceed the following standards based on the data collected by the continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS).
 - a. *NO_x emissions*: As determined by CEMS data, after December 31, 2013 and after June 30, 2014 emissions of NO_x from Unit 1 and Unit 2, respectively, shall not exceed 0.30 lb/MMBtu heat input on a 12-month rolling average for all periods of operation including startup, shutdown and malfunction. [Rules 62-4.070, 62-210.200 (Definition-Potential to Emit), F.A.C. and avoidance of Rule 62-212.400(PSD/BACT), F.A.C.]
 - b. *CO emissions*: As determined by CEMS data, after December 31, 2013 and after June 30, 2014 emissions of CO from Unit 1 and Unit 2, respectively, shall not exceed 0.15 lb/MMBtu heat input on a 30-operating day rolling average excluding periods of startup, shutdown and malfunction. [Rules 62-4.070, 62-210.200 (Definition-BACT) and 62-212.400(PSD/BACT), F.A.C.]
 - c. *Visible Emissions*: As determined by COMS data or EPA Method 9, after December 31, 2013 and after June 30, 2014 visible emissions from Unit 1 and Unit 2, respectively, shall not exceed 15 percent (%) opacity based on a 6-minute block average, except for one 6-minute period per hour of not more than 20%. For periods of startup, shutdown and malfunction, visible emissions shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% as determined by COMS data or EPA Method 9. [Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.]

{Permitting Note: The permittee shall implement the calculation approach specified by this permit for each CEMS, as follows: 24-hour Block Average. Compliance shall be determined after each 24-hour block by calculating the arithmetic average of all valid hourly averages occurring within that block averaging period; 30-day Rolling Average. Compliance shall be determined after each operating day by calculating the arithmetic average of all valid hourly averages occurring within that day and the prior 29 operating days; 12-month Rolling Average. Compliance shall be determined after each operating month by calculating the arithmetic average of all valid hourly averages occurring within that month and the prior 11 operating months. [Rule 62-4.070(3), F.A.C.]}

8. Circumvention: No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. The natural gas burners, CCOFA systems and upgraded burner control and management system shall operate as necessary to comply with the emission standards of this permit. [Rule 62-210.650, F.A.C.]
9. Excess Emissions - Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fossil Fuel-Fired Steam Generators, Units 1 and 2

startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

10. Excess Emissions - Allowed: In accordance with Rule 62-210.700(6), F.A.C., excess emissions due to startup, shutdown or malfunction have been considered in establishing the sets of emissions standards of this permit. No other periods of excess emissions are authorized. [Rule 62-210.700(6), F.A.C.]

CONTINUOUS EMISSIONS MONITORING REQUIREMENTS

11. Existing CEMS/COMS: For Units 1 and 2, the permittee shall continue to calibrate, operate, and maintain continuous monitoring equipment to measure and record opacity and NO_x. The monitors shall be installed, operated and maintained in accordance with the existing requirements of 40 CFR 60.45, as well as the provisions of the federal acid rain program. [Rule 62-4.070(3), F.A.C.]
12. CO-CEMS Installation: The applicant shall install CO-CEMS and conduct the appropriate performance specification by December 31, 2013 for Unit 1, and June 30, 2014, for Unit 2, respectively. Thereafter, the permittee shall properly, calibrate, operate and maintain CEMS to measure and record CO emissions in the terms of the applicable standard. Each CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The permittee shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR Part 60, Appendix B. [Rules 62-4.070(3) and 62-212.400(Definition-BACT), F.A.C.]
13. Compliance by COMS and CEMS: Compliance with the standards for opacity and emissions of CO and NO_x shall be demonstrated with data collected from the required continuous monitoring systems. Within 90 days of achieving 4,950 MMBtu/hour/unit while firing the new gas burners in each unit, but not later than 180 days after firing the new gas burners, the permittee shall certify proper operation of each required monitor. [Rules 62-4.070(3) and 62-212.400(Definitions-BACT), F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

14. Common Testing Requirements: All required emissions tests shall be conducted in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]
15. Test Methods: Required tests shall be performed in accordance with the following reference methods.

EPA Methods	Description of Method and Comments
1-4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
3 or 3A	Any of these methods shall be used to determine O ₂ or carbon dioxide (CO ₂) diluent concentration when conducting relative accuracy test audits (RATA) in conjunction with diluent O ₂ or CO ₂ - CEMS installed, calibrated, maintained and operated in accordance with 40 CFR 60, Appendix B, Performance Specification 3 (PS-3) and Appendix F.
7E	This method shall be used to determine NO _x emissions when conducting RATA in conjunction with NO _x -CEMS installed, calibrated, maintained and operated in accordance with 40 CFR 60, Appendix B, PS-2 and Appendix F.
9	Visual Determination of the Opacity of Emissions.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fossil Fuel-Fired Steam Generators, Units 1 and 2

EPA Methods	Description of Method and Comments
10	This methods shall be used to determine CO emissions when conducting RATA in conjunction with CO-CEMS installed, calibrated, maintained and operated in accordance with 40 CFR 60, Appendix B, PS-4A and Appendix F.
The above methods are described in 40 CFR 60, Appendix A and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used without prior written approval from the Department.	

[Rules 62-4.070(3), 62-204.800(8) and 62-212.400(BACT), F.A.C.; 40 CFR 60, Appendix A]

RECORDS AND REPORTS

16. **Malfunction Notifications:** If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner’s intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction.
[Rules 62-210.700(6) and 62-4.130, F.A.C.]
17. **Fuel Monitoring – Units 1 and 2:** Using the existing operating data system, the permittee shall continuously monitor each fuel to determine the heat input rates to Units 1 and 2. The heat input rates shall be calculated from the amounts of fuel fired and the higher heating value (HHV) of each fuel as determined by vendor certifications or the regular sampling and analysis required by the current Title V permit. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
18. **Reporting Annual Emissions:** The permittee shall use data from each required CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rules 62-210.370(3) and 62-212.300(1)(e), F.A.C. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Mechanical Draft Helper Cooling Towers (EU 007)

EMISSIONS UNITS

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
007	Mechanical Draft Helper Cooling Towers with maximum circulation rate of 660,000 GPM.

PREVIOUS PERMITS

1. Previous Permits: The conditions of this section supplement the original air construction (PSD) permit issued in 2007 authorizing the replacement of previously installed cooling towers. However, this permit supersedes the performance restrictions in hours of operation. Relevant provisions of the PSD permit for the cooling towers are incorporated in the Facility Title V Operation Permit. [Permits 1010017-007-AC (PSD-FL-379), 1010017-008-AC and 1010017-012-AV]
2. Hours of Operation. Both cooling towers shall not operate more than 9,000 hours in total per calendar year. This equates to an average of 4,500 hours/year/cooling tower. [Rule 62-210.200 (Definitions – Potential to Emit (PTE), F.A.C.; and Permit No. 1010017-007-AC (PSD-FL-379)]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

C. Natural Gas Fuel Heaters (EU 009)

This section of the permit addresses the following emissions unit.

EU No.	Emissions Unit Description
009	Two nominal 16.5 MMBtu/hour (HHV) natural gas-fired process heaters

NSPS APPLICABILITY

1. NSPS Subpart Dc Applicability: Each 16.5 MMBtu/hr process heater is subject to all applicable requirements of 40 CFR 60, Subpart Dc which applies to Small Industrial, Commercial, or Institutional Boiler. Specifically, each emission unit shall comply with 40 CFR 60.48c Reporting and Recordkeeping Requirements.
[Rule 62-204.800(7)(b) and 40 CFR 60, NSPS-Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, attached as Appendix Dc].

EMISSIONS AND TESTING REQUIREMENTS

2. Natural Gas Fired Process Heaters BACT Emissions Limits: CO emissions from the two natural gas fired process heaters shall not exceed 0.08 lb/MMBtu. [Rule 62-212.400(PSD/BACT), F.A.C.]
3. Natural Gas Fired Process Heaters Testing Requirements: Each unit shall be stack tested to demonstrate initial compliance with the emission standards for CO. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each unit. As an alternative, a Manufacturer certification of emissions characteristics of the purchased model that are at least as stringent as the BACT values can be used to fulfill this requirement.
[Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]

EQUIPMENT SPECIFICATIONS

4. Equipment: The permittee is authorized to install, operate, and maintain two 16.5 MMBtu/hour (HHV) process heaters for the purpose of heating the natural gas supply to the boilers.
[Application No. 1010017-013-AC; Rule 62-210.200(PTE), F.A.C.]

PERFORMANCE REQUIREMENTS

5. Hours of Operation: The gas-fueled process heaters are allowed to operate continuously (8760 hours per year). [Applicant Request; Rule 62-210.200(PTE), F.A.C. and 40 CFR 63.7575]

NOTIFICATION, REPORTING AND RECORDS

6. Notification: Initial notification is not required for the two small gas-fueled 16.5 MMBtu/hr process heaters. [40 CFR 63.9, 40 CFR 63.7506(c) and Rule 62-204.800(11)(b) F.A.C.]

Florida Department of Environmental Protection

Memorandum

TO: Joseph Kahn, Division of Air Resource Management
THROUGH: Trina L. Vielhauer, Chief, Bureau of Air Regulation
Jon Holtom, P.E., Title V Section *JH*
FROM: Scott M. Sheplak, P.E., Title V Section *SMS*
DATE: November 20, 2009
SUBJECT: Final Permit No. 1010017-012-AV
Progress Energy Florida, Inc. (PEF), Anclote Power Plant
Title V Air Operation Permit Renewal

Permitting Clock: ARMS Day 30 was November 15, 2009

The final permit for this project is attached for your approval and signature. The permit renewal is for the operation of the Anclote Power Plant.

The attached final determination identifies issuance of the combined draft/proposed permit, summarizes the publication process, and provides the Department's response(s) to comment(s) (if any) on the draft permit. There are no pending petitions for administrative hearings or extensions of time to file a petition for an administrative hearing.

I recommend your approval of the attached final permit for this project.

TLV/jkh/sms

Attachments

NOTICE OF FINAL PERMIT

*In the Matter of an
Application for Permit by:*

Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
1729 Baillies Bluff Road
Holiday, Florida 34691-9753

Final Permit No. 1010017-012-AV
Anclote Power Plant

Responsible Official:
Mr. Reginald Anderson, Plant Manager

Title V Air Operation Permit Renewal
Pasco County

Enclosed is the final permit package to renew the Title V air operation permit for the Anclote Power Plant. This existing facility is located at 1729 Baillies Bluff Road, Holiday in Pasco County, Florida. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30-days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jkh/sms

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination, the Statement of Basis and the Final Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested to the persons listed below:

Mr. Reginald Anderson, Plant Manager, PEF: reginald.anderson@pgnmail.com
Ms. Brenda E. Brickhouse, Director-EH&S, PEF: brenda.brickhouse@pgnmail.com
Ms. Patricia Q. West, Manager-Environmental Services, PEF: patricia.west@pgnmail.com
Mr. Chris Bradley, PEF: chris.bradley@pgnmail.com
Mr. Thomas W. Davis, P.E., ECT: tdavis@ectinc.com
Ms. Cindy Zhang-Torres, P.E., DEP SWD: zhang-torres@dep.state.fl.us
Ms. Katy R. Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: oquendo.ana@epa.gov
Ms. Barbara Friday, DEP BAR: barbara.friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)
Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date,
pursuant to Section 120.52(7), Florida Statutes, with the
designated agency clerk, receipt of which is hereby
acknowledged.


(Clerk)


(Date)

FINAL DETERMINATION

PERMITTEE

Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
Anclote Power Plant
1729 Baillies Bluff Road
Holiday, Florida 34691-9753

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Bureau of Air Regulation, Title V Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Final Permit No. 1010017-012-AV
Anclote Power Plant

The purpose of this project is to renew the Title V air operation permit for the Anclote Power Plant.

This permit was processed using a parallel review.

PUBLIC NOTICE

A Written Notice of Intent to Issue a Title V Air Operation Permit to Progress Energy Florida, Inc. for the Anclote Power Plant located in Pasco County at 1729 Baillies Bluff Road, Holiday, Florida, was clerked on October 12, 2009. The Public Notice of Intent to Issue a Title V Air Operation Permit was published in the Pasco Times, an edition of the St. Petersburg Times on October 16, 2009. The draft/proposed Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue a Title V Air Operation Permit was received on October 20, 2009.

COMMENTS

On October 12, 2009, the Department informed US EPA Region 4 that this permit was being processed using a parallel review. US EPA Region 4 was notified of the publication date of the Public Notice on October 20, 2009. No comments on the draft/proposed permit were received from the US EPA Region 4 Office.

No comments were received from the public during the 30 day public comment period; however, comments were received from the Applicant. The comments were not considered significant enough to reissue the draft Title V air operation permit and require another Public Notice, therefore, the draft/proposed Title V air operation permit was changed. The comments are addressed below. Additions to the permit are indicated below by double underline. Deletions from the permit are indicated below by ~~strike through~~.

Letter from PEF dated November 6, 2009 and received on November 9, 2009

Applicant Comments

1. Facility Address Correction. The facility's address needs to be corrected from "1729 Baileys Bluff Road" to "1729 Baillies Bluff Road."

FINAL DETERMINATION

Response: The facility's address shown on the USGS map in Attachment A of the application shows the address as "Baileys Bluff Road." The Department has confirmed the address change. The address cited throughout the permit is changed to read as follows:

1729 ~~Baileys~~Baillies Bluff Road

2. Specific Conditions A.21. and A.33. The referenced title for Appendix D in these specific conditions should read "Optional," not "Optimal."

Response: The Department concurs. These specific conditions are corrected to read as follows:

A.21. Continuous Monitoring Systems. ... Appendix D in 40 CFR 75, "~~Optimal~~Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units" ...

A.33. SO₂ Emissions Data Protocol. ... Appendix D of 40 CFR 75, "~~Optimal~~Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units." ...

3. Specific Conditions A.38. The requested change is to include other Department approved analytical methods.

Response: The Department agrees with the requested change. Consistent with other permits, this specific condition is changed to read as follows:

A.38. Records. The owner or operator shall maintain records of the fuel oil heating value, density or specific gravity, and the percent sulfur content. Fuel sulfur content, percent by weight, for liquid fuels shall be determined by either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88, and ASTM D129-95 (or latest editions) to analyze a representative sample of the fuel oil. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Permit Nos. 1010017-004-AC & 1010017-009-AC, Specific Condition D.6.; and, Rules 62-213.440 and 62-297.440, F.A.C.]

4. Section III. Subsection B. Relocatable Diesel Fired Engine Driven Generator(s). If the reference to "virgin" No. 2 fuel oil is synonymous with "new" No. 2 fuel oil, please delete the redundant word "virgin."

Response: This was the description verbatim from the air construction (AC) permit, Permit No. AC09-202080. The Department agrees with you that these words appear to be synonymous. Also, for consistency with the other listed plants' Title V air operation permits to which these generators may locate, the referenced type of fuel is changed as requested. All references to "new/virgin No. 2 fuel oil" are changed to read as follows:

new/~~virgin~~ No. 2 fuel oil

5. Section III. Subsection B. Relocatable Diesel Fired Engine Driven Generator(s). Testing Requirements in Specific Condition B.15. - *Annual Compliance Test*, Specific Condition B.17. - *Compliance Test Prior To Renewal*, Specific Condition B.18. - *Common Testing Requirements* and Specific Condition B.19. - *Testing after Relocation*.

Responses: This subsection of the permit, Subsection B., is written similar to the AC permit allowing relocatable generators to be located at the Anclote Power Plant. This subsection only applies when the generators are located at the Anclote Power Plant. Each comment/concern is individually addressed below.

Specific condition B.16. in the permit already addresses the annual compliance test comment/concern. Specifically, when hours of operation of a generator are less than 400, no annual test is required.

FINAL DETERMINATION

Appendix TR, specific condition TR.7.a.(3)(a) (which is Rule 62-297.310(7)(a)3.a., F.A.C.) in the permit already addresses the renewal compliance test comment/concern. Specifically, when a generator has not operated prior to renewal, no renewal test is required.

Appendix TR is one of the new Title V permitting formats. This appendix contains requirements applicable to the generators. Like Subsection B. of the permit, requirements to test only apply when the generators are located at the Anclote Power Plant.

Specific condition B.19. requiring testing after relocation only applies when the generators are located at the Anclote Power Plant.

No changes to the permit are deemed necessary.

6. Appendix U, List of Unregulated Emissions Units and/or Activities and Appendix I, List of Insignificant Emissions Units and/or Activities. The applicant requests that the fuel storage tanks be reclassified as “unregulated” from Appendix U to “insignificant” in Appendix I. Supporting calculations showing that the emissions from the storage tanks are below the insignificant levels specified in Rule 62-213.430(6), F.A.C. from a Florida licensed professional engineer are provided. Also, the fuel storage tanks are not subject to any unit-specific requirements.

Response: The Department agrees with the requested change which is administrative in nature. Appendix U and Appendix I are each changed to read as follows:

Appendix U

...

<u>E.U. ID No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-006	Diesel Air Compressor. ...
-004	Fuel storage tanks
-005	Emergency Diesel Generator. ...

Appendix I

...

Brief Description of Emissions Units and/or Activities

1. Internal combustion engines - mobile sources.

...

26. The following engines ...

27. Fuel storage tanks.

DEPARTMENT INITIATED CHANGES

Changes initiated by the Department were made in this final permit.

Statewide Format Changes

1. Section II. of the Permit, Facility-wide Condition FW9. Based on a recent comment from U.S. EPA Region 4, the regulatory citation for facility-wide condition FW9 is updated. This specific condition is changed to read as follows:

FINAL DETERMINATION

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)~~1~~, F.A.C.]

CONCLUSION

The draft/proposed Title V air operation permit was changed. The final action of the Department is to issue the final permit.

STATEMENT OF BASIS

Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
Anclote Power Plant
Title V Operation Permit Renewal

APPLICANT

The applicant for this project is Florida Power Corporation dba Progress Energy Florida, Inc. The applicant's responsible official and mailing address are: Mr. Reginald Anderson, Plant Manager, Anclote Power Plant, Florida Power Corporation dba Progress Energy Florida, Inc., 1729 Baillies Bluff Road, Holiday, Florida 34691-9753.

FACILITY DESCRIPTION

The applicant operates the existing Anclote Power Plant, which is located at 1729 Baillies Bluff Road, Holiday in Pasco County, Florida.

This existing facility consists of two fossil fuel fired steam generators, Unit Nos. 1 and 2. Unit Nos. 1 and 2 share a common stack. Unit Nos. 1 and 2 are authorized to fire fuel oil Nos. 1 through 6, and on-specification used oil. Pipeline quality natural gas may be fired alone or co-fired with fuel oil. Unit Nos. 1 and 2 are authorized to co-fire natural gas with fuel oils No. 1 through 6, and on-specification used oil. Air pollutant emissions from Unit Nos. 1 and 2 are uncontrolled. Relocatable diesel fuel fired generator(s) are permitted to be located at this facility and may be relocated to other Progress Energy Florida, Inc. (PEF) facilities. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V air operation permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received on May 20, 2009.

Request for Additional Information dated and sent via e-mail on June 30, 2009.

Additional Information Response received via e-mail on August 25, 2009.

Additional Information received via e-mail on September 24, 2009.

Draft/Proposed Permit posted onto web site on October 12, 2009.

Public Notice published on October 16, 2009.

Notification to U.S. EPA Region 4 of Publication of Public Notice on October 20, 2009.

PRIMARY REGULATORY REQUIREMENTS

Title III: This facility is a major source of hazardous air pollutants (HAP), based on the Title V air operation permit renewal application received on May 20, 2009.

NESHAP: This facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 Code of Federal Regulations (CFR) 63.

Title IV: This facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: This facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

STATEMENT OF BASIS

PSD: This facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: This facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

This facility has engines which were potentially subject to the recently promulgated NSPS 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS "4-I's" or "CI-ICE" and 40 CFR 60 Subpart JJJJ a.k.a. NSPS "4-J's" or "SI-ICE." These federal regulations do not apply since these engines are 'existing' units under these subparts.

CAIR: This facility operates units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: This facility does not operate units subject to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Emissions units at this facility are not subject to Compliance Assurance Monitoring (CAM) for one or more of the following reasons: they do not trigger the pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); or, they are not equipped with air pollution control device(s).

PROJECT REVIEW

Changes were made in the format of this renewed Title V air operation permit.

Permit

- Conditions were removed from the previous permit and new conditions were added into this permit. For these reasons, the conditions in this new permit were renumbered.
- Removed all references to state air operation (AO) permits within the regulatory citations of permit specific conditions.
- Permit No. 1010017-004-AC for E.U. ID Nos. -001 and -002 (Fossil Fuel Fired Steam Generator Nos. 1 and 2) contained a permitting note on heat input, so it was kept verbatim from the AC permit.
- An air construction (AC) permit revision, Permit No. 1010017-009-AC which applies to E.U. ID Nos. -001 and -002 (Fossil Fuel Fired Steam Generator Nos. 1 and 2), is reflected in this renewal. The AC permit revision had made minor changes to the previously issued AC permit, Permit No. 1010017-004-AC.
- The emissions unit identification number (E.U. ID No.) previously assigned to the Relocatable Diesel Fired Engine Driven Generator(s) was changed from: 7775047-001 to: -008.

CONCLUSION

This project renews Title V air operation permit No. 1010017-006-AV, which was effective January 1, 2005.

Florida Power Corporation
dba Progress Energy Florida, Inc. (PEF)
Anclote Power Plant
Facility ID No. 1010017
Pasco County

Title V Air Operation Permit Renewal

Final Permit No. 1010017-012-AV
(2nd Renewal, Renewal of Title V Air Operation Permit No. 1010017-006-AV)

Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section

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

Telephone: 850/488-0114
Fax: 850/921-9533

Compliance Authority

State of Florida
Department of Environmental Protection
Southwest District Office

13051 Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: 813/632-7600
Fax: 813/744-6458

Title V Air Operation Permit Renewal
Final Permit No. 1010017-012-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
Placard Page.	1
I. Facility Information.	I.2
A. Facility Description.	
B. Summary of Emissions Units.	
C. Applicable Requirements.	
II. Facility-wide Conditions.	II.1
III. Emissions Units and Conditions.	
A. E.U. ID No(s). -001 & -002: Fossil Fuel Fired Steam Generator Nos. 1 & 2.	III.A.1
B. E.U. ID No(s). -008: Relocatable Diesel Fired Engine Driven Generator(s).	III.B.1
C. E.U. ID No(s). -007: Two, 12-cell Mechanical Draft Helper Cooling Towers.	III.C.1
IV. Acid Rain Part.	IV.1
A. E.U. ID No(s). -001 & -002: Fossil Fuel Fired Steam Generator Nos. 1 & 2.	A.1
V. Clean Air Interstate Rule (CAIR) Part.	V.1
A. E.U. ID No(s). -001 & -002: Fossil Fuel Fired Steam Generator Nos. 1 & 2.	A.1
VI. Appendices.	VI.1
Appendix A, Glossary.	
Appendix ASP, ASP Number 97-B-01 (With Scrivener’s Order Dated July 2, 1997).	
Appendix BOP, Best Operational Practices for Start up and Shutdown.	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix OGC, File Nos. 86-1574 and 86-1575.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Appendix U, List of Unregulated Emissions Units and/or Activities.	
Referenced Attachments.	At End
Table 1, Summary of Air Pollutant Standards and Terms.	
Table 2, Compliance Requirements.	
Table H, Permit History.	



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:

Florida Power Corporation
dba Progress Energy Florida, Inc.
Anclote Power Plant

Final Permit No. 1010017-012-AV
Facility ID No. 1010017
SIC No. 4911
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the Anclote Power Plant. This existing facility is located at 1729 Baillies Bluff Road, Holiday, Pasco County; UTM Coordinates: Zone 17, 324.4 km East and 3118.7 km North; and, Latitude: 28° 48' 17" North and Longitude: 82° 47' 08" 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 in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2010
Renewal Application Due Date: May 20, 2014
Expiration Date: December 31, 2014

Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/jkh/sms

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This existing facility consists of two fossil fuel fired steam generators, Unit Nos. 1 and 2. Unit Nos. 1 and 2 share a common stack. Unit Nos. 1 and 2 are authorized to fire fuel oil Nos. 1 through 6, and on-specification used oil. Pipeline quality natural gas may be fired alone or co-fired with fuel oil. Unit Nos. 1 and 2 are authorized to co-fire natural gas with fuel oils No. 1 through 6, and on-specification used oil. Air pollutant emissions from Unit Nos. 1 and 2 are uncontrolled. Relocatable diesel fuel fired generator(s) are permitted to be located at this facility and may be relocated to other Progress Energy Florida, Inc. (PEF) facilities. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
<i>Regulated Emissions Units</i>	
	<i>Fossil Fuel Fired Steam Generator Units</i>
-001	Fossil Fuel Fired Steam Generator Unit No. 1
-002	Fossil Fuel Fired Steam Generator Unit No. 2
-007	Two, 12-cell Mechanical Draft Helper Cooling Towers
-008	Relocatable Diesel Fired Engine Driven Generator(s)
<i>Unregulated Emissions Units and/or Activities</i>	
-003	Surface Coating Operations
-005	Emergency Diesel Generator
-006	Diesel Air Compressor

Subsection C. Applicable Requirements.

Based on the Title V air operation permit renewal application received on May 20, 2009, this facility is a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. However, since the engines being operated meet the Subpart ZZZZ definition of "existing units," there are no unit specific applicable requirements that must be met pursuant to this rule at this time. This facility is classified as a Prevention of Significant Deterioration (PSD) major facility. A summary of important applicable requirements is shown in the following table.

Applicable Requirement	E.U. ID No(s).
Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input	-001 & -002
Acid Rain, Phase II SO ₂	-001 & -002
Rule 62-296.470, F.A.C., Clean Air Interstate Rule	-001 & -002
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration	-007
Rule 62-210.300, F.A.C., Permits Required	-008

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section VI., Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “objectionable odor” means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time. [Rule 62-296.320(1), F.A.C.]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: paving and maintenance of roads, parking areas and yards; chemical (dust suppressants) or water application to unpaved roads, unpaved yard areas and open stock piles; removal of particulate matter (PM) from roads and other unpaved areas to prevent reentrainment and from buildings or work areas to prevent airborne PM; landscaping or planting of vegetation; use of hoods, fans, filters and similar equipment to contain, capture and/or vent PM; confining abrasive blasting where possible; and, enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in Title V air operation permit renewal application received on May 20, 2009.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

SECTION II. FACILITY-WIDE CONDITIONS.

- FW9.** Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:
- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: 703/227-7650.
 - b. 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
	<i>Fossil Fuel Fired Steam Generator Units</i>
-001	Fossil Fuel Fired Steam Generator Unit No. 1
-002	Fossil Fuel Fired Steam Generator Unit No. 2

Unit No. 1, a fossil fuel fired steam generator, consists of a Combustion Engineering, Inc., Controlled Circulation, Radiant Reheat (CCRR) type boiler/steam generator and steam turbine which drives a generator with a nameplate rating of 535 (summer)/540 (winter) megawatts (MW) (electric). This unit is authorized to fire fuel oil Nos. 1 through 6, and on-specification used oil, with a nominal maximum heat input of 4964 MMBtu per hour. Pipeline quality natural gas may be fired alone or co-fired with fuel oil and shall be limited to a nominal maximum heat input of 2300 MMBtu per hour. Unit No. 1 is authorized to co-fire natural gas with fuel oil Nos. 1 through 6, and on-specification used oil, with a nominal maximum heat input of 5073 MMBtu per hour. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity. Fossil fuel fired steam generator Unit No. 1 began commercial operation on October 16, 1974.

Unit No. 2, a fossil fuel fired steam generator, consists of a Combustion Engineering, Inc., CCRR type boiler/steam generator and steam turbine which drives a generator with a nameplate rating of 525 (summer)/530 (winter) MW (electric). This unit is authorized to fire fuel oil Nos. 1 through 6, and on-specification used oil, with a nominal maximum heat input of 4850 MMBtu per hour. Pipeline quality natural gas may be fired alone or co-fired with fuel oil and shall be limited to a nominal maximum heat input rate of 2300 MMBtu per hour. Unit No. 2 is authorized to co-fire natural gas with fuel oil Nos. 1 through 6, and on-specification used oil, with a nominal maximum heat input of 4957 MMBtu per hour. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity. Fossil fuel fired steam generator Unit No. 2 began commercial operation on October 31, 1978.

These emissions units may burn on-specification used oil generated on or off-site. Each boiler/steam generator for Unit Nos. 1 and 2 drives a turbine generator and both units share a common stack. The stack parameters are: height, 499 feet; diameter, 24.0 feet; exit temperature, 320 degrees F; and, actual stack gas flow rate, 1,700,000 acfm. Air pollutant emissions from these units are uncontrolled.

{Permitting note(s): These emissions units are regulated under Acid Rain, Phase II; Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

Essential Potential to Emit (PTE) Parameters

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Types</u>
1	4964	No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On-Specification Used Oil*
1	2300	Natural Gas
1	5073	Natural Gas co-fired with No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On-Specification Used Oil*
2	4850	No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On-specification Used Oil*
2	2300	Natural Gas
2	4957	Natural Gas co-fired with No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On-Specification Used Oil*

* The on-specification used oil burned at this facility may be generated on or off-site.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

[Rules 62-4.160(2), 62-210.200 (Definitions - Potential to Emit (PTE)); and, 62-296.405(1), F.A.C.; and, Permit No. 1010017-004-AC, Specific Condition A.2.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input.}

- A.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- A.3. Methods of Operation - Fuels.**
- a. **Startup.** The only fuels allowed to be burned are pipeline quality natural gas and No. 6 or lighter grades of fuel oils. On-specification used oil shall only be burned if the Polychlorinated Biphenyls (PCB) are less than 2 parts per million (ppm) and may be blended with No. 6 or lighter grades of fuel oil. Blending as means of achieving the 2 ppm level shall not be allowed. The maximum sulfur content of fuel oils fired is 1.8%, by weight.
- b. **Normal.** The only fuels allowed to be burned are pipeline quality natural gas, No. 6 or lighter grades of fuel oils, and on-specification used oil. The maximum sulfur content of fuel oils fired is 1.8%, by weight.
- c. **On-specification used oil.** The maximum amount of on-specification used oil, whether generated on or off-site, that can be burned facility-wide shall not exceed 10% of the heat input (monthly) or 30 million gallons per year cumulatively. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown. [Rules 62-4.160(2), 62-210.200, 62-213.410, 62-213.440(1) and 62-4.070(1)&(3), F.A.C.; Permit No. 1010017-004-AC, Specific Conditions A.4. and B.4.; and, 40 CFR 271.20(e)(3).]
- A.4. Hours of Operation.** These emissions units may operate continuously (8760 hours/year). [Rule 62-210.200 (Definitions - (PTE), F.A.C.)]

Operations

- A.5. Operations.** This installation shall be operated by a competent and qualified person. Operations shall be conducted according to the best accepted practices and recommendations of the Department. [Permit No. AC-367, Specific Condition 2.]
- A.6. Operating Procedures.** Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. [Permit No. 1010017-004-AC, Specific Condition A.6.]
- A.7. Co-firing with Natural Gas.** Co-firing natural gas with fuel oil having more than 1.8% sulfur content, by weight, as-fired, is prohibited. [Permit No. 1010017-004-AC, Specific Condition D.3.]
- A.8. Low Load Operation.** To minimize acid smut, at low load operation (less than 80 MW per unit), the use of natural gas shall be at least 40% of the heat input to each unit or 7,000 MMBtu/day, whichever is less. [Permit No. 1010017-004-AC, Specific Condition B.6.]
- {Permitting note: The above condition does not apply during unit startups, shutdowns, malfunctions and load changes. Once stable unit operation is achieved following such events, natural gas shall be fired during low load operations in accordance with this condition.}*

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **A.9. - A.13.** are based on the specified averaging time of the applicable test method.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

- A.9. Visible Emissions (VE).** As authorized by OGC File Nos. 86-1574 and 86-1575 (included in the attached Appendix), visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C. [Rule 62-296.405(1)(a), F.A.C.; and, OGC File Nos. 86-1574 and 86-1575 dated December 11, 1986.]
- A.10. Visible Emissions - Soot Blowing and Load Change.** Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. Visible emissions above 60 percent opacity shall be allowed for not more than 4, six-minute averages during this 3-hour period. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]
- A.11. Particulate Matter (PM) Emissions.** Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(b), F.A.C.]
- A.12. Particulate Matter - Soot Blowing and Load Change.** Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.13. Sulfur Dioxide (SO₂) Emissions.** When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(c)1.j., F.A.C.]
- A.14. Sulfur Dioxide - Sulfur Content.** The sulfur content of fuel oils, on-specification used oil, or any combination of the two burned in these units, shall not exceed 1.8%, by weight, as-fired at the plant. The 12 month rolling average shall not exceed 1.5%, by weight. Co-firing natural gas with fuel oil having more than 1.8% sulfur content, by weight, as-fired, is prohibited. [Rule 62-296.405(1)(e)3., F.A.C.; Permit No. 1010017-004-AC, Specific Conditions B.4. and D.3.; and, Applicant Request.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- A.15. Excess Emissions Allowed - Malfunctions.** Excess emissions resulting from malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- A.16. Excess Emissions Allowed - Startup And Shutdown.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- A.17. Best Operational Practices to Minimize Excess Emissions.** The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in **Appendix BOP, Best Operational Practices for Start up and Shutdown.** [Rules 62-210.700(2) and 62-213.440(1) (Operational Requirements that Assure Compliance), F.A.C.; and, Proposed by the Applicant in the Renewal Application.]
- A.18. Excess Emissions Prohibited.** 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.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

Monitoring of Operations

- A.19. Sulfur Dioxide.** The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor. This protocol is allowed because the emissions units do not have an operating flue gas desulfurization device. [Rule 62-296.405(1)(f)1.b., F.A.C.; Appendix D of 40 CFR 75; and, Applicant Request.]
- A.20. SO₂ Emissions Data Protocol.** Units 1 and 2 shall comply with the acid rain monitoring procedures in Appendix D of 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units". For shipments of fuel oil received at the Anclote Power Plant, the permittee shall retain an analysis which reports the sulfur and ash content and heat content (HHV) of the fuel shipment. The analysis shall be provided by the fuel vendor, permittee, or other sources which follow the appropriate fuel test methods. The analysis record shall specify the origin of the fuel sample, the methods by which the analyses were conducted, the person conducting the sampling, and analysis, and date of sampling and analysis. [Permit No. 1010017-004-AC, Specific Condition F.2.; and, Appendix D of 40 CFR 75.]

Continuous Monitoring Requirements

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on these units: opacity, NO_x and carbon dioxide (CO₂).}

- A.21. Continuous Monitoring Systems.** The permittee shall install, calibrate, maintain, and operate continuous monitoring systems to measure and record the nitrogen oxides (NO_x) emissions, sulfur dioxide (SO₂) emissions, and opacity from Unit Nos. 1 and 2. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. For SO₂ emissions monitoring, the permittee elected to demonstrate compliance by using the procedures of Appendix D in 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units", which are based on fuel monitoring, sampling, and analyses. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards following the format of 40 CFR 60.7 (1998 version). [Permit Nos. 1010017-004-AC & 1010017-009-AC, Specific Condition F.1.; and, Appendix D of 40 CFR 75.]
- A.22. COMS for Periodic Monitoring.** The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62-213.440(1)(b)1.b. (Periodic Monitoring), F.A.C.]

Test Methods and Procedures

- A.23. Test Methods.** Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 5, 5B, 5F or 17	Methods for Determining Particulate Matter Emissions
EPA Methods 6, 6A, 6B or 6C	Methods for Determining Sulfur Dioxide Emissions
Appendix D, 40 CFR 75	Optional SO ₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units
DEP Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

- A.24. Annual Compliance Test.** Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. -001 and -002 shall be tested to demonstrate compliance with the emission limitations and standards for VE, VE-SB (VE while soot blowing), PM and particulate matter while soot blowing (PM-SB). [Rule 62-297.310(7), F.A.C.]
- A.25. Compliance Test Prior To Renewal.** Prior to permit renewal, Emissions Unit ID Nos. -001 and -002 shall be tested to demonstrate compliance with the emission limitations and standards for VE, VE-SB (VE while soot blowing), PM and PM-SB. [Rule 62-297.310(7)(a)3., F.A.C.]
- A.26. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.27. Visible Emissions.** The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. [Rule 62-296.405(1)(e)1., F.A.C.]
- A.28. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- a. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
 - b. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - (1) For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - (2) For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.
- In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rule 62-297.401, F.A.C.]
- A.29. Particulate Matter.** The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]
- A.30. Sulfur Dioxide.** The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

EPA Method 6 or 6C if it has reason to believe that exceedances of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. Data substitution techniques shall not be used to determine compliance with the fuel oil sulfur limits of this section.** [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.]

- A.31. Sulfur Content of Liquid Fuel.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95, or later editions. Alternatively, fuel oil sulfur content may be evaluated using the methods specified in Section 2.2.5 of Appendix D to 40 CFR 75, as amended. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rules 62-213.440, 62-296.405(1)(e)3, 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; and, Permit No. 1010017-004-AC, Specific Conditions D.3. & D.6.]
- A.32. Gross Heating Value of Fuel Oil.** All fuel oil delivered to the facility shall be analyzed using ASTM D240-76 (or equivalent) to record the gross heating value (HHV). Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rule 62-297.440, F.A.C.; and, Permit No. 1010017-004-AC, Specific Condition D.5.]
- A.33. SO₂ Emissions Data Protocol.** Compliance with the liquid fuel sulfur limit shall be verified by fuel analysis and the monitoring provisions of Appendix D of 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units." In cases where No. 6 fuel oil is received with a sulfur content exceeding 1.5% by weight, and blending is required to obtain a fuel mix equal to the applicable percent sulfur limit, an analysis of a fuel sample representative of fuel from the fuel storage tanks shall be performed prior to firing oil at the plant. Reports of percent sulfur content of these analyses shall be maintained at the power plant facility. [Permit Nos. 1010017-004-AC & 1010017-009-AC, Specific Condition D.6.; and Appendix D of 40 CFR 75.]
- A.34. PM Testing Not Required.** Annual and permit renewal compliance testing for particulate matter emissions is not required for this emissions unit while burning:
- only gaseous fuel(s); or
 - gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
 - only liquid fuel(s) for less than 400 hours per year.
- See Specific Condition **TR7**. [Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]
- A.35. VE Testing Not Required.** By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit while burning:
- only gaseous fuel(s); or
 - gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
 - only liquid fuel(s) for less than 400 hours per year.
- See Specific Condition **TR7**. [Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

A.36. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions {Rule 62-296.405(1)(g), F.A.C.}	Every 3 months (quarterly)	A.37.

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

A.37. Quarterly Excess Emissions Report. Submit to the Department’s Southwest District Office a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.38. Records. The owner or operator shall maintain records of the fuel oil heating value, density or specific gravity, and the percent sulfur content. Fuel sulfur content, percent by weight, for liquid fuels shall be determined by either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88, and ASTM D129-95 (or latest editions) to analyze a representative sample of the fuel oil. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Permit Nos. 1010017-004-AC & 1010017-009-AC, Specific Condition D.6.; and, Rules 62-213.440 and 62-297.440, F.A.C.]

Other Requirements

A.39. On-Specification Used Oil. Burning of on-specification used oil is allowed in these emissions units in accordance with all other conditions of this permit and the following conditions:

- a. *On-Specification Used Oil Emissions Limitations.* These emissions units are permitted to burn on-specification used oil, which contains a Polychlorinated Biphenyl (PCB) concentration of less than 50 parts per million (ppm). On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. “Off-specification” used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered “off-specification” used oil.

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
Flash point	100 degrees F minimum

- b. *Quantity Limitation.* By this permit, these emissions units are permitted to burn on-specification used oil that is generated on or off-site, not to exceed 10 percent of the heat input (monthly) or 30 million gallons per year (714,286 barrels) during any calendar year.
- c. *PCB Limitation.* Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. *Operational Requirements.* On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.
- e. *Testing Requirements.* For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

- (1) Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications. [40 CFR 279.72(a)]
- (2) Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.
 - (a) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.
 - (b) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.
 - (c) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.
[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

- f. *Recordkeeping Requirements*. The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:
 - (1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.
 - (2) Results of the analyses of each deposit of used oil, as required by the above conditions.
 - (3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.
 - (4) The source and quantity of each batch of used oil received each month, including the name, address and EPA identification number (if applicable) of all marketers that delivered used oil to the facility, and the quantity delivered.
 - (5) Records of the operating rate of each emissions unit while burning used oil and the dates and time periods each emissions unit burns used oil.
[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]
- g. *Reporting Requirements*. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year. The quantity of used oil burned by each emissions unit shall be individually reported and shall not be combined with other fuels.
[Rules 62-4.070(1)&(3) and 62-213.440(1), F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) -008

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
-008	Relocatable Diesel Fired Engine Driven Generator(s)

This emissions unit consists of three relocatable Caterpillar Model 3508-DITA 820 kilowatt (kW) diesel generators. These relocatable diesel fired engine driven generator(s) shall have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons per hour (62.1 gph per generator) of new No. 2 fuel oil with a maximum (combined) rating of 2.460 megawatt (MW) (820 kilowatt (kW) per generator). Each engine's maximum heat input is 8.58 MMBtu/hour. Air pollutant emissions from the generator(s) are uncontrolled. Each engine generator has its own stack. The individual stack parameters are identical: height, 15 feet; diameter, 1 foot; exit temperature, 1,004 degrees F; and, actual stack gas flow rate, 7,283 acfm.

These diesel fired engine driven generator(s) may be located at this facility and may be relocated to any of the following facilities:

1. Crystal River Power Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Power Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Anclote Power Plant, 1729 Baillies Bluff Road, Holliday, Pasco County.
4. Bayboro Power Plant, 13th Avenue & 2nd Street South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mile east of U.S. 301, Wildwood, Sumter County.
6. Hines Energy Complex, County Road 555, 1 mile southwest of Homeland, Polk County.

{Permitting note(s): These relocatable diesel generators were permitted in 1991 under Permit No. AC09-202080. These relocatable diesel generators are regulated under Rule 62-210.300, F.A.C., Permits Required. These engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT "4-Z's" or "RICE MACT," however, since the engines meet the Subpart ZZZZ definition of "existing units," there are no unit specific applicable requirements that must be met pursuant to this rule at this time.}

Notification

- B.1. Notification.** These conditions become active and enforceable once the permittee has given notification to the SWD Office of the Department, if appropriate, that these units will be relocated to this facility. [Rule 62-4.070(1)&(3) and 62-213.440(1), F.A.C.]
- B.2. Relocation Notification.** The permittee shall notify the compliance authority, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following;
- a. which generator, by serial number, is being relocated;
 - b. which location the generator is being relocated from;
 - c. which location the generator is being relocated to; and,
 - d. the approximate startup date at the new location.
- [Rules 62-4.070(1)&(3) and 62-213.440(1), F.A.C.; and, Permit No. AC09-202080.]

Essential Potential to Emit (PTE) Parameters

- B.3. Hours of Operation.** In order to escape Prevention of Significant Deterioration (PSD) review, the hours of operation expressed as "engine-hours" shall not exceed 2,970 hours in any consecutive 12 month period. The total hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each diesel generator. [Rules 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; 62-212.400(12) (Source Obligation), F.A.C.; and, Permit No. AC09-202080.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) -008

B.4. Permitted Capacity. Each engine’s maximum allowable heat input rate and fuel firing rate is as follows:

MMBtu/hr Heat Input	Gallons/hour	Fuel Type
8.58 (each generator)	62.1 (each generator)	New No. 2 fuel oil

[Rules 62-4.160(2) and 62-210.200 (Definitions - PTE), F.A.C.; and, Permit No. AC09-202080.]

B.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.6. Methods of Operation - Fuels. Only new No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight, shall be burned in these units. [Rules 62-4.160(2), 62-210.200 (Definitions - PTE), 62-213.410, and 62-213.440(1), F.A.C.; and, Permit No. AC09-202080.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) B.7. is based on the specified averaging time of the applicable test method.

B.7. Visible Emissions. Visible emissions (VE) from each engine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C. and Permit No. AC09-202080.]

B.8. Sulfur Dioxide - Sulfur Content. The sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent, by weight. [Rule 62-213.440, F.A.C. and Permit No. AC09-202080.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

B.9. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.10. Excess Emissions Prohibited. 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.11. Fuel Analysis. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. [Rule 62-213.440, F.A.C. and Applicant’s Request.]

Test Methods and Procedures

B.12. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

B.13. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rule 62-297.310(4), F.A.C. and Permit No. AC09-202080.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) -008

- B.14. Sulfur Dioxide (SO₂) - Sulfur Content Testing.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or later editions. Alternatively, fuel oil sulfur content may be evaluated using the methods specified in Section 2.2.5 of Appendix D to 40 CFR 75, as amended. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rules 62-213.440 and 62-297.440, F.A.C.; and, Applicant's Request.]
- B.15. Annual Compliance Test.** Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), each diesel generator shall be tested to demonstrate compliance with the emission limitations and standards for VE. [Rule 62-297.310(7), F.A.C.]
- B.16. VE Testing - Annual.** By this permit, annual emissions compliance testing for VE is not required for each diesel generator when operated for less than 400 hours per year. [Rules 62-297.310(7)(a)4., F.A.C.]
- B.17. Compliance Test Prior To Renewal.** Prior to permit renewal, each diesel generator shall be tested to demonstrate compliance with the emission limitations and standards for VE. [Rule 62-297.310(7)(a)3., F.A.C.]
- B.18. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.19. Testing after Relocation.** After each relocation, each diesel generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content to demonstrate compliance with the permit limits in this section. [Rules 62-4.070(1)&(3) and 62-297.310(7)(b), F.A.C.; and, Permit No. AC09-202080.]
- B.20. Testing Operating Rate.** Testing of each diesel generator emissions must be accomplished while operating the diesel generator within $\pm 10\%$ of the maximum fuel firing rate of 62.1 gallons per hour. Failure to submit the actual operating rate may invalidate the test. [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. AC09-202080.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

- B.21. Recordkeeping.** To demonstrate compliance with the hours operation limit, records shall indicate the daily hours of operation for each diesel generator, the daily hours of operation expressed as "engine- hours", and a cumulative total hours of operation expressed as "engine hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Department upon request. [Rules 62-213.440 and 62-297.310(8), F.A.C. and, Permit No. AC09-202080.]
- B.22. Recordkeeping.** To demonstrate compliance with the sulfur content limit, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Department upon request. [Rule 62-297.310(8), F.A.C.; and, Permit No. AC09-202080.]
- B.23. Recordkeeping.** The owner or operator shall maintain the following records:
- the daily hours of operation for each of the generators,
 - the daily hours of operation expressed as "engine- hours",
 - the cumulative total hours of operation expressed as "engine-hours" for each month, and
 - the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis.
- [Rules 62-4.070(1)&(3) and 62-213.440, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) -008

B.24. Recordkeeping. Although these diesel generators are relocatable, each facility is required to maintain all appropriate records at each site. [Rules 62-4.070(3) and 62-213.440, F.A.C.]

Other Requirements

B.25. PSD Avoidance. The specific conditions in Permit No. AC09-202080, limiting the “engine hours,” were accepted by the applicant to escape PSD review. If PEF requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(4) - (12), F.A.C., as though construction had not yet begun. [Rule 62-212.400(12) (Source Obligation), F.A.C.; and, Permit No. AC09-202080.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit(s) -007

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
-007	Two, 12-cell Mechanical Draft Helper Cooling Towers

This emissions unit is comprised of two fiberglass circular helper cooling towers.

Each tower consists of 12 cooling tower cells for a total of 24 cells total. Each cooling tower cell is approximately 50 to 59 feet tall with a stack height of approximately 10 to 14 feet on top of the cooling towers. Each stack diameter is approximately 32 feet. Both towers were designed from salt water corrosion resistant materials. Brackish water used for cooling has an estimated total dissolved solids (TDS) of approximately 29,000 parts per million (ppm). The existing circulating water pumps were reused with no increase in throughput. These towers are used to reduce the discharge water temperature primarily during the summer months (April - September) to meet the facility's current water permit requirements, and each cooling tower shall operate no more than 4500 hours per calendar year. The cooling towers provide direct contact between the cooling water and air passing through the tower. Drift is created when small amounts of cooling water become entrained in the air stream and carried out of the tower. No chromium-based water treatment chemicals shall be used in the cooling towers.

The two mechanical draft helper cooling towers have a combined maximum water circulation rate of 660,000 gallons per minute (gpm) (330,000 gpm per tower). The design air flow is 36,000,000 acfm for both towers (18,000,000 acfm per tower and 1,500,000 acfm per cell). The drift eliminators are designed for a drift rate of no more than 0.0005% of the circulating water flow for each tower. Drift eliminators are the air pollution control technology used to control PM/PM₁₀ emissions caused by the cooling tower drift.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-379].}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. Each cooling tower shall not operate more than 4500 hours per calendar year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, PSD-FL-379/Air Construction Permit No. 1010017-007-AC.]

Air Pollution Control Technologies and Measures

C.2. Cooling Tower Design, Operation and Maintenance. The cooling tower shall be designed, operated and maintained to achieve a drift rate of no more than 0.0005% of the circulating water flow. [PSD-FL-379/Air Construction Permit No. 1010017-007-AC.]

C.3. Circulating Water Flow Rate. Upon request, the permittee shall provide a means for determining the circulating water flow rate through the new cooling towers. [PSD-FL-379/Air Construction Permit No. 1010017-007-AC; and, Rules 62-213.440(1) and 62-4.070(1)&(3), F.A.C.]

Test Methods and Procedures

C.4. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. *{Permitting note: No mass testing is required, however, special compliance testing could be required.}* [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit(s) -007

C.5. Reporting. PM and PM₁₀ emissions from the new cooling towers shall be reported in the AOR. [Rules 62-213.440(1) and 62-4.070(1)&(3), F.A.C.]

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Operated by: Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)

ORIS Code: 8048

Subsection A. This Subsection addresses Acid Rain, Phase II SO₂.

The emissions units listed below are regulated under Phase II SO₂ of the federal Acid Rain Program.

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

A.1. The Phase II SO₂ Acid Rain 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(s) listed below:

a. DEP Form No. 62-210.900(1)(a) - Form, Effective: 3/16/08, received on August 25, 2009, and signed by the Designated Representative on August 21, 2009, which is included at the end of this subsection. [Chapter 62-213, F.A.C.; and, Rule 62-214.320, F.A.C.]

A.2. Sulfur Dioxide (SO₂) Emission Allowances. SO₂ 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)1., 2. & 3., F.A.C.]

A.3. Comments, notes, and justifications: None.

SECTION IV. ACID RAIN PART.
Federal Acid Rain Provisions

Anclote Power Plant

Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part Issued by the DEP; and
 - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- (4) For applications including a SO₂ Opt-In unit, a monitoring plan for each SO₂ Opt-In unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-In units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

<p align="center">Anclote Power Plant</p> <p align="center"><small>Plant Name (from STEP 1)</small></p>
--

**STEP 3,
Continued.**

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
- (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO₂ Opt-in units only.

In column "f" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Anclole Power Plant
Plant Name (from STEP 1)

STEP 5

For SO₂ Opt-in units only. (Not required for SO₂ Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" (and in column "F").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO ₂ Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO ₂ Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO ₂ Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

For SO₂ Opt-in units only.

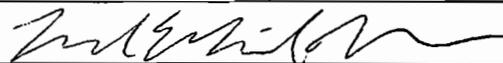
Attach additional requirements, certify and sign.

- A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
- B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
- D. Attach a complete compliance plan for SO₂ under 40 CFR 72.40.
- E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
- F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature	Date
-----------	------

STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)	
I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.	
Name Brenda E. Brickhouse	Title Director, Environmental, Health & Safety Section, Progress Energy Inc.
Owner Company Name Florida Power Corporation dba Progress Energy Florida, Inc.	
Phone (727) 820-5153	E-mail address Brenda.Brickhouse@pgnmail.com
Signature 	Date 8/21/09

SECTION V. CAIR PART.
CLEAN AIR INTERSTATE RULE PROVISIONS

Clean Air Interstate Rule (CAIR).

Operated by: Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
Plant Name: Anclote Power Plant
ORIS Code: 8048

Subsection A. This Subsection addresses CAIR.

The emissions units below are regulated under the Clean Air Interstate Rule.

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

1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b) - Form, Effective: 3/16/08), which is attached at the end of this subsection. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]
2. Comments, notes, and justifications: None.

SECTION V. CAIR PART.
CLEAN AIR INTERSTATE RULE PROVISIONS

ANCLOTE POWER PLANT
Plant Name (from STEP 1)

STEP 3

**Read the
standard
requirements.**

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 - (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

SECTION V. CAIR PART.
CLEAN AIR INTERSTATE RULE PROVISIONS

ANCLOTE POWER PLANT
Plant Name (from STEP 1)

**STEP 3,
Continued**

Liability.

- (1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.
- (2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.
- (3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO₂ unit.

Excess Emissions Requirements.

- If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:
- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
 - (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

SECTION V. CAIR PART.
CLEAN AIR INTERSTATE RULE PROVISIONS

ANCLOTE POWER PLANT
Plant Name (from STEP 1)

**STEP 3,
Continued**

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.

(2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.

(2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.

(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:

(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and

(ii) [Reserved].

(2) The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

SECTION V. CAIR PART.
CLEAN AIR INTERSTATE RULE PROVISIONS

ANCLOTE POWER PLANT
Plant Name (from STEP 1)

**STEP 3,
Continued**

Excess Emissions Requirements.

If a CAIR NO_x Ozone Season source emits NO_x during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 - (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

- (1) Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.
- (2) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.
- (3) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Certification (for designated representative or alternate designated representative only)

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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

Name: Patricia Q. West	Title: Manager, Environmental Services, Energy Supply Florida
Company Owner Name FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC.	
Phone: 727.820.5739	E-mail Address: Patricia.West@pgnmail.com
Signature <i>Patricia Q. West</i>	Date 5/1/09

SECTION VI. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 2, 1997).

Appendix BOP, Best Operational Practices for Start up and Shutdown.

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

Appendix OGC, File Nos. 86-1574 and 86-1575.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

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

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Abbreviations and Acronyms:

° F: degrees Fahrenheit	ISO: International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)
acfm: actual cubic feet per minute	kPa: kilopascals
AOR: Annual Operating Report	LAT: Latitude
ARMS: Air Resource Management System (Department's database)	lb: pound
BACT: best available control technology	lbs/hr: pounds per hour
Btu: British thermal units	LONG: Longitude
CAM: compliance assurance monitoring	MACT: maximum achievable technology
CEMS: continuous emissions monitoring system	mm: millimeter
cfm: cubic feet per minute	MMBtu: million British thermal units
CFR: Code of Federal Regulations	MSDS: material safety data sheets
CO: carbon monoxide	MW: megawatt
COMS: continuous opacity monitoring system	NESHAP: National Emissions Standards for Hazardous Air Pollutants
DARM: Division of Air Resources Management	NO_x: nitrogen oxides
DCA: Department of Community Affairs	NSPS: New Source Performance Standards
DEP: Department of Environmental Protection	O&M: operation and maintenance
Department: Department of Environmental Protection	O₂: oxygen
dscfm: dry standard cubic feet per minute	ORIS: Office of Regulatory Information Systems
EPA: Environmental Protection Agency	OS: Organic Solvent
ESP: electrostatic precipitator (control system for reducing particulate matter)	Pb: lead
EU: emissions unit	PM: particulate matter
F.A.C.: Florida Administrative Code	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
F.D.: forced draft	PSD: prevention of significant deterioration
F.S.: Florida Statutes	psi: pounds per square inch
FGR: flue gas recirculation	PTE: potential to emit
Fl: fluoride	RACT: reasonably available control technology
ft²: square feet	RATA: relative accuracy test audit
ft³: cubic feet	RMP: Risk Management Plan
gpm: gallons per minute	RO: Responsible Official
gr: grains	SAM: sulfuric acid mist
HAP: hazardous air pollutant	scf: standard cubic feet
Hg: mercury	scfm: standard cubic feet per minute
I.D.: induced draft	SIC: standard industrial classification code
ID: identification	

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SOA: Specific Operating Agreement

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

x: By or times

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers and ID numbers.

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where:	40	refers to	Title 40
	CFR	refers to	Code of Federal Regulations
	60	refers to	Part 60
	60.334	refers to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213.205, F.A.C.]

Where:	62	refers to	Title 62
	62-213	refers to	Chapter 62-213
	62-213.205	refers to	Rule 62-213.205, F.A.C.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105	=	3-digit number code identifying the facility is located in Polk County
0221	=	4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Where:

AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221= 4-digit number assigned by permit tracking database
001 or 002= 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01

AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC53 = old Air Construction Permit numbering identifying the facility is located in Polk County

APPENDIX ASP
ASP NUMBER 97-B-01

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)
Florida Electric Power Coordinating Group, Inc.,) ASP No. 97-B-01
Petitioner.)

ORDER ON REQUEST
FOR
ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]
2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.
3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

APPENDIX ASP
ASP NUMBER 97-B-01

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.

5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."

6. Rule 297.310(7)(a)3., F.A.C., states, "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.

7. Rule 297.310(7)(a)3., F.A.C., further states, "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 and/or solid fuel for a total of no more than 400 hours."

8. Rule 297.310(7)(a)4., F.A.C., states, "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..."

9. Rule 297.310(7)(a)5., F.A.C., states, "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."

10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

APPENDIX ASP
ASP NUMBER 97-B-01

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.”

11. Rule 297.310(7)(a)7., F.A.C., states, “For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.” [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]

12. The fifth edition of the U. S. Environmental Protection Agency’s Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]

13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

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

—Page 3 of 8—

2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;

3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;

4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of

APPENDIX ASP
ASP NUMBER 97-B-01

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

APPENDIX ASP
ASP NUMBER 97-B-01

(a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(b) A statement of the preliminary agency action;

(c) A statement of the relief sought; and

(d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

APPENDIX ASP
ASP NUMBER 97-B-01

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully

—Page 7 of 8—

APPENDIX ASP
ASP NUMBER 97-B-01

each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

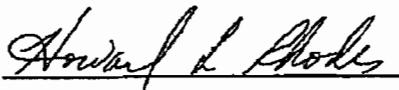
This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

—Page 8 of 8—

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 18th day of March 1997.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Maria H. Olden 3-18-97
Clerk Date

APPENDIX ASP
ASP NUMBER 97-B-01

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)
Florida Electric Power Coordinating Group, Inc.,) ASP No. 97-B-01
Petitioner.)

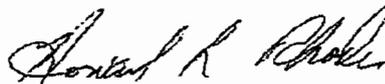
ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

APPENDIX ASP
ASP NUMBER 97-B-01

The above two documents comprise Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 2, 1997).

**ANCLOTE POWER PLANT
PROCEDURES FOR STARTUP AND SHUTDOWN**

FOSSIL FUEL STEAM GENERATORS (EU ID 001 AND 002)

GENERATING UNIT STARTUP

- Ensure all fluid levels are in limits.
- Insure fuel inventory is adequate.
- Ensure all fuel safety systems are in service.
- Ensure all valves/switches/breakers are set for startup.
- Establish fire in steam generator.
- Regulate firing rate to raise pressure and temperatures within established limits.
- At acceptable temperature and pressure, begin steam admission to turbine.
- Increase turbine speed and firing rate in accordance with established operating limits until turbine speed reaches approximately 3,600 rpm.
- Synchronize generator to power grid and increase generator load to 5 percent.
- Ensure all required systems are in service and operable.
- Increase generator load to desired operating level.

GENERATING UNIT SHUTDOWN

- Reduce generator load and reduce pressure and temperature to established levels.
- Remove generator from service.
- Reduce fuel flow to minimum and trip fuel.
- Secure all operating and safety systems in accordance with established operating procedures.

APPENDIX I

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.

Brief Description of Emissions Units and/or Activities

1. Internal combustion engines - mobile sources.
2. Vacuum pumps in laboratory operations.
3. Equipment used for steam cleaning.
4. Equipment used exclusively for space heating, other than boilers.
5. Laboratory equipment used exclusively for chemical or physical analyses.
6. Brazing, soldering or welding equipment.
7. Fire protection and safety equipment.
8. Petroleum lubrication systems.
9. Application of fungicide, herbicide, or pesticide.
10. Vehicle refueling operations and associated fuel storage.
11. Degreasing units using heavier-than air vapors exclusively that do not use any substance containing a hazardous air pollutant.
12. Non-halogenated solvent storage and cleaning operations that do not use any substance containing a hazardous air pollutant.
13. Lube oil system vents.
14. Lube oil reservoir tank.
15. Parts washers/degreasers.
16. Used oil storage tanks.
17. Portable unleaded gasoline tank.
18. Evaporation of non-hazardous boiler cleaning chemicals.
19. No. 2 diesel fuel tanks.
20. Turbine vapor extractor.
21. Sand blasting and abrasive grit blasting.
22. Storage tanks less than 550 gallons.
23. Architectural (equipment) maintenance painting.
24. No. 2 fuel oil, residual fuel oil, and used oil truck unloading.
25. Solvent Cleaning.

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

26. The following engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT “4-Z’s” or “RICE MACT,” however, since the engines meet the Subpart ZZZZ definition of “existing units,” there are no unit specific applicable requirements that must be met pursuant to this rule at this time. These engines are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS}:

Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)
Diesel Fire Pump	1972	Compression Ignition (CI)	525
Cherry Picker	2005	Compression Ignition (CI)	215
Diesel Backhoe	Pre-1999	Compression Ignition (CI)	31
Diesel Welder	1994	Compression Ignition (CI)	16

There is no air pollution control equipment associated with this/ese unit(s).

27. Fuel storage tanks.

APPENDIX OGC FILE NOS. 86-1574 AND 86-1575.

12/11/86

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:)	
)	
Petition for Reduction in)	
Semiannual Particulate)	
Emissions Compliance Testing,)	OGC File No. 86-1574
Anclote Unit No. 1;)	
Florida Power Corporation)	
)	
Petitioner.)	
_____)	

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Anclote Unit No.1

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since February 19, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing in GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from the first annual test. Failure of Anclote Unit No.1 to meet

either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a

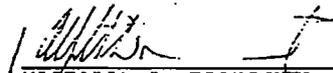
waiver of any right such person has to an administrative determination (hearing) under Section 120.57, Florida Statutes.

DONE AND ORDERED this 11th day of Dec, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED AND ACKNOWLEDGEMENT
PAID, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

C. Hutchins 12-12-86
Clerk Date

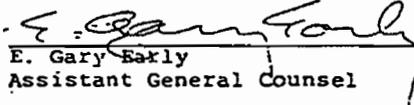


VICTORIA J. TSCHINKEL
Secretary

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida
32399-2400
Telephone (904)488-9730

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ORDER has been furnished by United States Mail to J.A. Hancock, Vice President, Fossil Operations, Florida Power Corporation, Post Office Box 14042, St. Petersburg, Florida 33733; on this 12 day of December, 1986, in Tallahassee, Florida.


E. Gary Early
Assistant General Counsel

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida
32399-2400
Telephone (904)488-9730

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:)	
)	
Petition for Reduction in)	
Semiannual Particulate)	
Emissions Compliance Testing,)	OGC File No. 86-1575
Anclote Unit No. 2;)	
Florida Power Corporation)	
)	
Petitioner.)	

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Anclote Unit No.2

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since March 2, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing is GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from

either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a

waiver of any right such person has to an administrative determination (hearing) under Section 120.57, Florida Statutes.

DONE AND ORDERED this 11th day of Dec, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

C. Hutchings 12-12-86
Clerk Date


VICTORIA J. TSCHINKEL
Secretary

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida
32399-2400
Telephone (904)488-9730

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ORDER has been furnished by United States Mail to J.A. Hancock, Vice President, Fossil Operations, Florida Power Corporation, Post Office Box 14042, St. Petersburg, Florida 33733; on this 12 day of December, 1986, in Tallahassee, Florida.


E. Gary Early
Assistant General Counsel

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida
32399-2400
Telephone (904)488-9730

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(version dated 09/17/2009)

RR1. Reporting Schedule. This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2., RR3.
Malfunction Excess Emissions Report	Every 3 months (quarterly), if requested	RR3.
Semi-Annual Monitoring Report	Every 6 months	RR4.
Annual Operating Report	April 1 st of each year	RR5.
Annual Emissions Fee Form and Fee	March 1 st of each year	RR6.
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7.
Notification of Administrative Permit Corrections	As needed	RR8.
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9.
Permit Renewal Application	225 days prior to the expiration date of permit	TV17.

{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}

RR2. Reports of Problems.

- a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
- b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (1) A description of and cause of noncompliance; and
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
- d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately".

[Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(version dated 09/17/2009)

- RR3.** Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
Rule 62-210.700(6): In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rules 62-213.440(1)(b)3.b., and 62-210.700(6), F.A.C.]
- RR4.** Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]
- RR5.** Annual Operating Report.
a. The permittee shall submit to the Compliance Authority, each calendar year, on or before April 1, a completed DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year.
b. Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C.
[Rules 62-210.370(2) & (3), and 62-213.440(3)(a)2., F.A.C.]
- RR6.** Annual Emissions Fee Form and Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.
a. If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
c. A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.
[Rules 62-213.205(1), (1)(g), (1)(i) & (1)(j), F.A.C.]
- RR7.** Annual Statement of Compliance.
a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(version dated 09/17/2009)

- (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
 - (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
- c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

- a. A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
- (1) Typographical errors noted in the permit;
 - (2) Name, address or phone number change from that in the permit;
 - (3) A change requiring more frequent monitoring or reporting by the permittee;
 - (4) A change in ownership or operational control of a facility, subject to the following provisions:
 - (a) The Department determines that no other change in the permit is necessary;
 - (b) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
 - (c) The new permittee has notified the Department of the effective date of sale or legal transfer.
 - (5) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;
 - (6) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
 - (7) Any other similar minor administrative change at the source.
- b. Upon receipt of any such notification, the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- c. After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- d. For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

[Rule 62-210.360, F.A.C.]

RR9. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(version dated 09/17/2009)

the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

- a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
- b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

- RR10. Report Submission.** The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}
- RR11. EPA Report Submission.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.
- RR12. Acid Rain Report Submission.** Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.
- RR13. Report Certification.** All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- RR14. Certification by Responsible Official (R.O.).** 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.]
- RR15. Confidential Information.** Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]
- RR16. Forms and Instructions.** The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at:
<http://www.dep.state.fl.us/air/rules/forms.htm>.
- a. Major Air Pollution Source Annual Emissions Fee Form (Effective 10/12/2008).
 - b. Statement of Compliance Form (Effective 06/02/2002).
 - c. Responsible Official Notification Form (Effective 06/02/2002).
- [Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit for which testing is required. The terms “stack” and “duct” are used interchangeably in this appendix.

- TR1.** 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- TR2.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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 purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- TR3.** 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.]
- TR4.** Applicable Test Procedures.
- a. Required Sampling Time.
- (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
- (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

- (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 or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Required Flow Rate Range.* For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- d. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

- e. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

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

TR5. 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.]

TR6. Sampling Facilities. Permittees that are required to sample mass emissions from point sources shall install stack sampling ports and provide sampling facilities that meet the requirements of this condition. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- d. *Work Platforms.*
 - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
 - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

- stack.
- (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
 - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. *Access to Work Platform.*
- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
 - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. *Electrical Power.*
- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. *Sampling Equipment Support.*
- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 - (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
 - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

TR7. 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.*

- (1) The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
- (2) For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

- (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 sub-subparagraph 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 and/or solid fuel for a total of no more than 400 hours.
 - (4) During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) Each NESHAP pollutant, if there is an applicable emission standard.
 - (5) An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
 - (6) For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
 - (7) For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
 - (8) Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 - (9) The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (10) An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- 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 Department rule or in a permit issued pursuant to those rules is being violated, it shall 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

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

Rule 62-297.620, F.A.C., that the compliance 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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

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

TR8. Test Reports.

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 - (1) The type, location, and designation of the emissions unit tested.
 - (2) The facility at which the emissions unit is located.
 - (3) The owner or operator of the emissions unit.
 - (4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - (5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - (6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - (7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - (8) The date, starting time and duration of each sampling run.
 - (9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - (10) The number of points sampled and configuration and location of the sampling plane.
 - (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - (12) The type, manufacturer and configuration of the sampling equipment used.
 - (13) Data related to the required calibration of the test equipment.
 - (14) Data on the identification, processing and weights of all filters used.
 - (15) Data on the types and amounts of any chemical solutions used.
 - (16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - (17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - (18) All measured and calculated data required to be determined by each applicable test procedure for each run.
 - (19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
 - (20) The applicable emission standard and the resulting maximum allowable emission rate for the

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(version dated 9/12/2008)

emissions unit plus the test result in the same form and unit of measure.

- (21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

APPENDIX TV
TITLE V GENERAL CONDITIONS
(version dated 09/17/2009)

Operation

- TV1. General Prohibition.** A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]
- TV2. Validity.** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
- TV3. Proper Operation and Maintenance.** The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
- TV4. Not federally enforceable. Health, Safety and Welfare.** To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]
- TV5. Continued Operation.** An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, applicable requirements of the CAIR Program, and applicable requirements of the Hg Budget Trading Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rule 62-213.420(1)(b)2., F.A.C.]
- TV6. Changes Without Permit Revision.** Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- a. Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
 - b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
 - c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
- [Rule 62-213.410, F.A.C.]
- TV7. Circumvention.** No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

Compliance

- TV8. Compliance with Chapter 403, F.S., and Department Rules.** Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

APPENDIX TV

TITLE V GENERAL CONDITIONS

(version dated 09/17/2009)

- TV9.** Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
- TV10.** Binding and enforceable. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
- TV11.** Timely information. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]
- TV12.** Halting or reduction of source activity. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]
- TV13.** Final permit action. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- TV14.** Sudden and unforeseeable events beyond the control of the source. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- TV15.** Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program, the CAIR Program. [Rule 62-213.460, F.A.C.]
- TV16.** Compliance With Federal Rules. A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

Permit Procedures

- TV17.** Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV18.** Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit

APPENDIX TV
TITLE V GENERAL CONDITIONS
(version dated 09/17/2009)

issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]

TV19. Insignificant Emissions Units or Pollutant-Emitting Activities. The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.

TV20. Savings Clause. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

TV21. Suspension and Revocation.

- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (1) Submitted false or inaccurate information in his application or operational reports.
 - (2) Has violated law, Department orders, rules or permit conditions.
 - (3) Has failed to submit operational reports or other information required by Department rules.
 - (4) Has refused lawful inspection under Section 403.091, F.S.
- d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

TV22. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

TV23. Emissions Unit Reclassification.

- a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

TV24. Transfer of Permits. Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee

APPENDIX TV
TITLE V GENERAL CONDITIONS
(version dated 09/17/2009)

transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

Rights, Title, Liability, and Agreements

TV25. Rights. As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

TV26. Title. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.)]

TV27. Liability. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

TV28. Agreements.

- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (1) Have access to and copy any records that must be kept under conditions of the permit;
 - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

TV29. Permit. The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

TV30. Recordkeeping.

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These

APPENDIX TV
TITLE V GENERAL CONDITIONS
(version dated 09/17/2009)

materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
- (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
 - (2) The person responsible for performing the sampling or measurements;
 - (3) The dates analyses were performed;
 - (4) The person and company that performed the analyses;
 - (5) The analytical techniques or methods used;
 - (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

TV31. Emissions Computation. Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

- a. Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
- (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. Continuous Emissions Monitoring System (CEMS).
- (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
 - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

APPENDIX TV
TITLE V GENERAL CONDITIONS
(version dated 09/17/2009)

- (a) A calibrated flowmeter that records data on a continuous basis, if available; or
 - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- c. Mass Balance Calculations.
- (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
 - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- d. Emission Factors.
- (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

APPENDIX TV

TITLE V GENERAL CONDITIONS

(version dated 09/17/2009)

- e. Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- g. Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- h. Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

Responsible Official

TV32. Designation and Update. The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

Prohibitions and Restrictions

TV33. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

TV34. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

TV35. Open Burning Prohibited. Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

APPENDIX U

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES

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

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

<u>E.U. ID</u>	<u>Brief Description of Emissions Units and/or Activity</u>			
No.				
-006	Diesel Air Compressor. The following engine(s) is/are considered to be ‘existing’ units for purposes of <i>40 CFR 60 Subpart III also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE”</i> {CI engines pre-May 2006 are exempt from the NSPS}:			
	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)
	Diesel Air Compressor	Pre-1999	Compression Ignition (CI)	1200
	There is no air pollution control equipment associated with this/ese unit(s).			
-005	Emergency Diesel Generator. The following engine(s) is/are considered to be ‘existing’ units for purposes of <i>40 CFR 60 Subpart III also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE”</i> {CI engines pre-May 2006 are exempt from the NSPS}:			
	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)
	Emergency Diesel Generator	2003	Compression Ignition (CI)	1500
	There is no air pollution control equipment associated with this/ese unit(s).			
-003	Surface coating operations.			

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Table 1, Summary of Air Pollutant Standards and Terms.

Table 2, Compliance Requirements.

Table H, Permit History.

Table 1, Summary of Air Pollutant Standards and Terms									
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)						Final Permit No. 1010017-012-AV			
Anclote Power Plant						Facility ID No. 1010017			
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.	Brief Description								
-001 & -002	Fossil Fuel Fired Steam Generator Unit Nos. 1 & 2								
Unless otherwise indicated, the following apply to each individual emissions unit listed.									
Pollutant Name or Parameter	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
VE	Gas/Oil	8,760	40%					Rule 62-296.405(1)(a), F.A.C.	III.A.9.
VE-SB	Gas/Oil		60% 3 hrs/24 hrs					Rule 62-210.700(3), F.A.C.	III.A.10.
-001 PM	Gas/Oil	8,760	0.1 lb/MMBtu			507.3	2,777.5	Rule 62-296.405(1)(b), F.A.C.	III.A.11.
-001 PM-SB	Gas/Oil	1,095	0.3 lb/MMBtu			1,521.9		Rule 62-210.700(3), F.A.C.	III.A.12.
-002 PM	Gas/Oil	8,760	0.1 lb/MMBtu			495.7	2,714.0	Rule 62-296.405(1)(b), F.A.C.	III.A.11.
-002 PM-SB	Gas/Oil	1,095	0.3 lb/MMBtu			1,487.1		Rule 62-210.700(3), F.A.C.	III.A.12.
-001 SO ₂	Oil	8,760	2.75 lb/MMBtu					Rule 62-296.405(1)(c)1.j., F.A.C.	III.A.13.
-001 SO ₂	Oil		max. 1.8% S by weight max. 1.5% S by weight 12- mos. rolling avg.			9,352.2		Permit No. 1010017-004-AC	III.A.14.
-001 SO ₂	Oil	8,760					35,135.4	Permit No. 1010017-004-AC	III.A.14.
-002 SO ₂	Oil	8,760	2.75 lb/MMBtu					Rule 62-296.405(1)(c)1.j., F.A.C.	III.A.13.
-002 SO ₂	Oil		max. 1.8% S by weight max. 1.5% S by weight 12- mos. rolling avg.			9,137.4		Permit No. 1010017-004-AC	III.A.14.
-002 SO ₂	Oil	8,760					33,351.5	Permit No. 1010017-004-AC	III.A.14.
Arsenic	Used Oil		5 ppm (30,000,000 gal/yr)			0.14	0.62	40 CFR 279	III.A.39.
Cadmium	Used Oil		2 ppm (30,000,000 gal/yr)			0.06	0.25	40 CFR 279	III.A.39.
Chromium	Used Oil		10 ppm (30,000,000 gal/yr)			0.29	1.25	40 CFR 279	III.A.39.
Lead	Used Oil		100 ppm (30,000,000 gal/yr)			2.85	12.5	40 CFR 279	III.A.39.
Total Halogens	Used Oil		1,000 ppm (30,000,000 gal/yr)			28.53	124.95	40 CFR 279	III.A.39.
PCBs	Used Oil		<50 ppm (30,000,000 gal/yr)			1.43	6.25	40 CFR 279	III.A.39.
Notes:									
* The "Equivalent Emissions" listed are for informational purposes only.									

Table 1, Summary of Air Pollutant Standards and Terms										
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)						Final Permit No. 1010017-012-AV				
Anclote Power Plant						Facility ID No. 1010017				
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.		Brief Description								
-007		Two, 12-cell Mechanical Draft Helper Cooling Towers								
Pollutant Name or Parameter		Fuel(s)		Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
		Hours/Year		Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
PM		4,500 each tower		NA	NA	NA	47.9	107.8	PSD-FL-379	NA
water flow rate		4,500 each tower		NA	NA	NA			PSD-FL-379	III.C.3.
Notes:										
* The "Equivalent Emissions" listed are for informational purposes only.										

Table 1, Summary of Air Pollutant Standards and Terms									
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)						Final Permit No. 1010017-012-AV			
Anclote Power Plant						Facility ID No. 1010017			
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.	Brief Description								
-008	Relocatable Diesel Fired Engine Driven Generator(s)								
Pollutant Name or Parameter	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
VE	Oil	(aggregate hours from all 3 generators)	<20%					Rule 62-296.320(4)(b)1., F.A.C.	III.B.7.
SO ₂	Oil	"	max. 0.5% S by weight			13.0	19.3	AC09-202080	III.B.8.
NO _x	Oil	"	NA	NA	NA		122.3	NA	NA
CO	Oil	"	NA	NA	NA		32.5	NA	NA
Notes:									
* The "Equivalent Emissions" listed are for informational purposes only.									

Table 2, Summary of Compliance Requirements							
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)				Final Permit No. 1010017-012-AV			
Anclote Power Plant				Facility ID No. 1010017			
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.	Brief Description						
-001 & -002	Fossil Fuel Fired Steam Generator Unit Nos. 1 & 2						
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing	Frequency	Min. Compliance		See permit condition(s)
			Time Frequency	Base Date *	Test Duration	CMS**	
VE	Gas/Oil	DEP Method 9	annual & renewal		60 minutes	Yes	III.A.23., 24, 25., 27. & 28.
VE-SB	Gas/Oil	DEP Method 9	annual & renewal		60 minutes	Yes	III.A.23., 24, 25., 27. & 28.
PM	Gas/Oil	EPA Method 17, 5, 5B, or 5F	annual & renewal		1 hour		III.A.23., 24, 25. & 29.
PM-SB	Gas/Oil	EPA Method 17, 5, 5B, or 5F	annual & renewal		1 hour		III.A.23., 24, 25. & 29.
SO2	Oil	EPA Method 6, 6A, 6B, or 6C			1 hour		III.A.23., 24, 25., 30., 31. & 33.
SO2	Gas/Oil	Appendix D, 40 CFR 75					III.A.23., 24, 25., 30., 31. & 33.
SO2	Oil	Fuel sampling & analysis for 1.8% S by weight	Each Delivery			Yes	III.A.23., 24, 25., 30., 31. & 33.
SO2	Oil	Fuel sampling & analysis for 1.5% S by weight 12-mos. rolling avg.	12-mos. rolling avg.			Yes	III.A.23., 24, 25., 30., 31. & 33.
Arsenic	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Cadmium	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Chromium	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Lead	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Total Halogens	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Flash Point	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
PCBs	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.39.
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							

Table 2, Summary of Compliance Requirements							
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)					Final Permit No. 1010017-012-AV		
Anclote Power Plant					Facility ID No. 1010017		
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.	Brief Description						
-007	Two, 12-cell Mechanical Draft Helper Cooling Towers						
			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
PM		NA	NA	NA	NA	NA	NA
water flow rate			Upon request				III.C.3.
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							

Table 2, Summary of Compliance Requirements							
Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)					Final Permit No. 1010017-012-AV		
Anclote Power Plant					Facility ID No. 1010017		
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.	Brief Description						
-008	Relocatable Diesel Fired Engine Driven Generator(s)						
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing	Frequency	Min. Compliance		
			Time Frequency	Base Date *	Test Duration	CMS**	See permit condition(s)
VE	Oil	EPA Method 9	Renewal		30 minutes		
VE	Oil	EPA Method 9	Annual		30 minutes		
SO ₂	Oil	0.5% S by weight	Each Delivery		III.B.11.		
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							

TABLE H
PERMIT HISTORY/ID NUMBER CHANGES

This permit history summarizes primarily projects issued after project number -006-AV. For previously issued projects, also refer to the Appendix H-1's referenced in Permit Nos. 1010017-003-AV and 1010017-006-AV posted on the web site.

Relevant Permits Issued & Projects:

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
All	Facility	1010017-003-AV	01/01/2000	12/31/2004	Initial
All	Facility	1010017-006-AV	01/01/2005	12/31/2009	Renewal (1 st)
All	Facility	1010017-012-AV	01/01/2010	12/31/2014	Renewal (2 nd)
-001 & -002	CAIR	1010017-011-AV	03/17/2009	NA	Revision (CAIR)
-001 & -002	Incorporation of 1010017-009-AC	1010017-010-AV ¹	10/29/2007	NA	Revision
-001 & -002	SO ₂ Monitoring Revision	1010017-009-AC	08/16/2007	NA	Construction (mod.)
-007	Helper Cooling Towers	PSD-FL-379/ 1010017-007-AC	10/17/2006	11/01/2009	Construction
-001 & -002	Natural gas burners & equipment	1010017-004-AC	10/13/1998	12/01/1999	Construction (mod.)
-008	Relocatable Diesel Fired Generator(s)	AC09-202080	10/07/1991	06/30/1992	Construction
-001 & -002	Oil-fired Unit Nos. 1 & 2 (515 MW capacity each)	AC-367	06/04/1971	06/30/1975	Construction

¹ the most recent Title V air operation permit posted on the web site.

"NA" represents not applicable.

Friday, Barbara

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; 'Tom Davis'; Zhang-Torres; 'Forney.Kathleen@epamail.epa.gov'; 'Oquendo.Ana@epamail.epa.gov'; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Attachments: 1010017-012-AV SignedNoticeofFinalPermit.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Scott Sheplak

Owner/Company Name: FLORIDA POWER CORP DBA PROGRESS ENERGY FL
Facility Name: ANCLOTE POWER PLANT
Project Number: 1010017-012-AV
Permit Status: FINAL
Permit Activity: PERMIT RENEWAL
Facility County: PASCO

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1010017.012.AV.F_pdf.zip

“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. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> . “

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9524

Friday, Barbara

From: Exchange Administrator
Sent: Tuesday, December 01, 2009 9:32 AM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)
Attachments: ATT229547.txt; FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

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.

Reginald.Anderson@pgnmail.com

Brenda.Brickhouse@pgnmail.com

patricia.west@pgnmail.com

chris.bradley@pgnmail.com

Friday, Barbara

From: Anderson, Reginald D. [Reginald.Anderson@pgnmail.com]
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 10:51 AM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Reginald.Anderson@pgnmail.com
Subject:

was read on 12/1/2009 10:51 AM.

Friday, Barbara

From: Anderson, Reginald D. [Reginald.Anderson@pgnmail.com]
Sent: Tuesday, December 01, 2009 10:54 AM
To: Friday, Barbara
Subject: RE: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Barbara,

I am able to access the document.

Reggie

Reginald Anderson
Progress Energy
reginald.anderson@pgnmail.com

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Tuesday, December 01, 2009 9:32 AM
To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; West, Patricia Q.; Bradley, Chris; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Scott Sheplak

Owner/Company Name: FLORIDA POWER CORPDBAPROGRESS ENERGY FL
Facility Name: ANCLOTE POWER PLANT
Project Number: 1010017-012-AV
Permit Status: FINAL
Permit Activity: PERMIT RENEWAL
Facility County: PASCO

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1010017.012.AV.F.pdf.zip

“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. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> . “

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Friday, Barbara

From: Brickhouse, Brenda [Brenda.Brickhouse@pgnmail.com]
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 2:08 PM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Brenda.Brickhouse@pgnmail.com
Subject:

was read on 12/1/2009 2:08 PM.

Friday, Barbara

From: West, Patricia Q. [Patricia.West@pgnmail.com]
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 10:21 AM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Patricia.West@pgnmail.com
Subject:

was read on 12/1/2009 10:21 AM.

Friday, Barbara

From: Exchange Administrator
Sent: Tuesday, December 01, 2009 9:32 AM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)
Attachments: ATT229538.txt; FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

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.

tdavis@ectinc.com

Friday, Barbara

From: Tom Davis [tdavis@ectinc.com]
Sent: Tuesday, December 01, 2009 10:02 AM
To: Friday, Barbara
Subject: RE: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Barbara,

I have received and can access the documents referenced in your email below.

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Tuesday, December 01, 2009 9:32 AM
To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Scott Sheplak

Owner/Company Name: FLORIDA POWER CORPDBAPROGRESS ENERGY FL
Facility Name: ANCLOTE POWER PLANT
Project Number: 1010017-012-AV
Permit Status: FINAL
Permit Activity: PERMIT RENEWAL
Facility County: PASCO

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1010017.012.AV.F_pdf.zip

“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. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> . “

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any

problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Friday, Barbara

From: System Administrator
To: Zhang-Torres; Gibson, Victoria
Sent: Tuesday, December 01, 2009 9:32 AM
Subject: Delivered:FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was delivered to the following recipient(s):

Zhang-Torres on 12/1/2009 9:32 AM
Gibson, Victoria on 12/1/2009 9:32 AM

Friday, Barbara

From: Zhang-Torres
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 10:19 AM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was read on 12/1/2009 10:19 AM.

Friday, Barbara

From: Gibson, Victoria
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 10:01 AM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was read on 12/1/2009 10:01 AM.

Friday, Barbara

From: Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]
Sent: Tuesday, December 01, 2009 9:32 AM
To: Friday, Barbara
Subject: Successful Mail Delivery Report
Attachments: Delivery report; Message Headers

This is the mail system at host mseive01.rtp.epa.gov.

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

<Forney.Kathleen@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 4B1528ED_11490_9734_21 744F54430B

<Oquendo.Ana@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 4B1528ED_11490_9734_21 744F54430B

Friday, Barbara

From: System Administrator
To: Sheplak, Scott
Sent: Tuesday, December 01, 2009 9:32 AM
Subject: Delivered:FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was delivered to the following recipient(s):

Sheplak, Scott on 12/1/2009 9:32 AM

Friday, Barbara

From: Sheplak, Scott
To: Friday, Barbara
Sent: Tuesday, December 01, 2009 10:50 AM
Subject: Read: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was read on 12/1/2009 10:50 AM.

Friday, Barbara

From: Sheplak, Scott
Sent: Tuesday, December 01, 2009 10:52 AM
To: Friday, Barbara
Subject: RE: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Thank you Barbara!

From: Friday, Barbara
Sent: Tuesday, December 01, 2009 9:32 AM
To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Scott Sheplak

Owner/Company Name: FLORIDA POWER CORPDBAPROGRESS ENERGY FL
Facility Name: ANCLOTE POWER PLANT
Project Number: 1010017-012-AV
Permit Status: FINAL
Permit Activity: PERMIT RENEWAL
Facility County: PASCO

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1010017.012.AV.F_pdf.zip

“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. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> .”

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday
Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)921-9524

Friday, Barbara

From: System Administrator
To: Holtom, Jonathan
Sent: Tuesday, December 01, 2009 9:32 AM
Subject: Delivered:FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV

Your message

To: Anderson, Reginald D.
Cc: Brickhouse, Brenda; patricia.west@pgnmail.com; chris.bradley@pgnmail.com; Tom Davis; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC. - ANCLOTE POWER PLANT; 1010017-012-AV
Sent: 12/1/2009 9:32 AM

was delivered to the following recipient(s):

Holtom, Jonathan on 12/1/2009 9:32 AM

**ATTACHMENT
APP-FI-CV4
REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT**

STATEMENT OF BASIS

Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
Anclote Power Plant
Title V Operation Permit Renewal

APPLICANT

The applicant for this project is Florida Power Corporation dba Progress Energy Florida, Inc. The applicant's responsible official and mailing address are: Mr. Reginald Anderson, Plant Manager, Anclote Power Plant, Florida Power Corporation dba Progress Energy Florida, Inc., 1729 Baillies Bluff Road, Holiday, Florida 34691-9753.

FACILITY DESCRIPTION

The applicant operates the existing Anclote Power Plant, which is located at 1729 Baillies Bluff Road, Holiday in Pasco County, Florida.

This existing facility consists of two fossil fuel fired steam generators, Unit Nos. 1 and 2. Unit Nos. 1 and 2 share a common stack. Unit Nos. 1 and 2 are authorized to fire ~~fuel oil Nos. 1 through 6, and on specification used oil.~~ Pipeline quality natural gas ~~only, may be fired alone or co-fired with fuel oil.~~ Unit Nos. 1 and 2 are authorized to ~~co-fire natural gas with fuel oils No. 1 through 6, and on specification used oil.~~ Air pollutant emissions from Unit Nos. 1 and 2 are uncontrolled. ~~Relocatable diesel fuel fired generator(s) are permitted to be located at this facility and may be relocated to other Progress Energy Florida, Inc. (PEF) facilities.~~ Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew and revise the existing Title V air operation permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received on May 20, 2009.
Request for Additional Information dated and sent via e-mail on June 30, 2009.
Additional Information Response received via e-mail on August 25, 2009.
Additional Information received via e-mail on September 24, 2009.

Draft/Proposed Permit posted onto web site on October 12, 2009.
Public Notice published on October 16, 2009.
Notification to U.S. EPA Region 4 of Publication of Public Notice on October 20, 2009.

PRIMARY REGULATORY REQUIREMENTS

Title III: ~~Upon completion of the natural gas conversion project, this facility will not be~~ a major source of hazardous air pollutants (HAP), ~~based on the Title V air operation permit renewal application received on May 20, 2009.~~

NESHAP: This facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 Code of Federal Regulations (CFR) 63.

Title IV: This facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: This facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

STATEMENT OF BASIS

PSD: This facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: This facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

This facility has engines which were potentially subject to the recently promulgated NSPS 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” and 40 CFR 60 Subpart JJJJ a.k.a. NSPS “4-J’s” or “SI-ICE.” These federal regulations do not apply since these engines are ‘existing’ units under these subparts.

CAIR: This facility operates units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: This facility does not operate units subject to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Emissions units at this facility are not subject to Compliance Assurance Monitoring (CAM) for one or more of the following reasons: they do not trigger the pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); or, they are not equipped with air pollution control device(s).

PROJECT REVIEW

Changes were made in the format of this renewed Title V air operation permit.

Permit

- Conditions were removed from the previous permit and new conditions were added into this permit. For these reasons, the conditions in this new permit were renumbered.
- Removed all references to state air operation (AO) permits within the regulatory citations of permit specific conditions.
- Permit No. 1010017-004-AC for E.U. ID Nos. -001 and -002 (Fossil Fuel Fired Steam Generator Nos. 1 and 2) contained a permitting note on heat input, so it was kept verbatim from the AC permit.
- An air construction (AC) permit revision, Permit No. 1010017-009-AC which applies to E.U. ID Nos. -001 and -002 (Fossil Fuel Fired Steam Generator Nos. 1 and 2), is reflected in this renewal. The AC permit revision had made minor changes to the previously issued AC permit, Permit No. 1010017-004-AC.
- The emissions unit identification number (E.U. ID No.) previously assigned to the Relocatable Diesel Fired Engine Driven Generator(s) was changed from: 7775047-001 to: -008.

CONCLUSION

This project renews Title V air operation permit No. 1010017-006-AV, which was effective January 1, 2005.

Title V Air Operation Permit Renewal
Final Permit No. 1010017-012-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
Placard Page.	1
I. Facility Information.	I.2
A. Facility Description.	
B. Summary of Emissions Units.	
C. Applicable Requirements.	
II. Facility-wide Conditions.	II.1
III. Emissions Units and Conditions.	
A. E.U. ID No(s). -001 & -002:	
Fossil Fuel Fired Steam Generator Nos. 1 & 2.	III.A.1
B. E.U. ID No(s). -008:	
Relocatable Diesel Fired Engine Driven Generator(s).	III.B.1
C.B. E.U. ID No(s). -007:	
Two, 12-cell Mechanical Draft Helper Cooling Towers.	III.C.1
C. E.U. ID No. -009	
Two nominal 9.8 MMBtu/hr natural gas-fired process heaters	
IV. Acid Rain Part.	IV.1
A. E.U. ID No(s). -001 & -002:	
Fossil Fuel Fired Steam Generator Nos. 1 & 2.	A.1
V. Clean Air Interstate Rule (CAIR) Part.	V.1
A. E.U. ID No(s). -001 & -002:	
Fossil Fuel Fired Steam Generator Nos. 1 & 2.	A.1
VI. Appendices.	VI.1
Appendix A, Glossary.	
Appendix ASP, ASP Number 97-B-01 (With Scrivener’s Order Dated July 2, 1997).	
Appendix BOP, Best Operational Practices for Start up and Shutdown.	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix OGC, File Nos. 86-1574 and 86-1575.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Appendix U, List of Unregulated Emissions Units and/or Activities.	
Referenced Attachments.	At End
Table 1, Summary of Air Pollutant Standards and Terms.	
Table 2, Compliance Requirements.	
Table H, Permit History.	

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This existing facility consists of two fossil fuel fired steam generators, Unit Nos. 1 and 2. Unit Nos. 1 and 2 share a common stack. Unit Nos. 1 and 2 are authorized to fire ~~fuel oil Nos. 1 through 6, and on specification used oil.~~ Pipeline quality natural gas ~~only, may be fired alone or co-fired with fuel oil.~~ Unit Nos. 1 and 2 are authorized to ~~co-fire natural gas with fuel oils No. 1 through 6, and on specification used oil.~~ Air pollutant emissions from Unit Nos. 1 and 2 are uncontrolled. ~~Relocatable diesel fuel fired generator(s) are permitted to be located at this facility and may be relocated to other Progress Energy Florida, Inc. (PEF) facilities.~~ Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
<i>Regulated Emissions Units</i>	
<i>Fossil Fuel Fired Steam Generator Units</i>	
-001	Fossil Fuel Fired Steam Generator Unit No. 1
-002	Fossil Fuel Fired Steam Generator Unit No. 2
-007	Two, 12-cell Mechanical Draft Helper Cooling Towers
-008	Relocatable Diesel Fired Engine Driven Generator(s)
-009	Two nominal 9.8 MMBtu/hr natural gas-fired process heaters
<i>Unregulated Emissions Units and/or Activities</i>	
-003	Surface Coating Operations
-005	Emergency Diesel Generator
-006	Diesel Air Compressor

Subsection C. Applicable Requirements.

Based on the ~~Air Construction Permit issued on September 14, 2012, Title V air operation permit renewal application received on May 20, 2009,~~ this facility is not a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. However, since the engines being operated meet the Subpart ZZZZ definition of "existing units," there are no unit specific applicable requirements that must be met pursuant to this rule at this time. This facility is classified as a Prevention of Significant Deterioration (PSD) major facility. A summary of important applicable requirements is shown in the following table.

Applicable Requirement	E.U. ID No(s).
Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input	-001 & -002
Acid Rain, Phase II SO ₂	-001 & -002
Rule 62-296.470, F.A.C., Clean Air Interstate Rule	-001 & -002
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration	-007
Rule 62-210.300, F.A.C., Permits Required	-008

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section VI, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time. [Rule 62-296.320(1), F.A.C.]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: paving and maintenance of roads, parking areas and yards; chemical (dust suppressants) or water application to unpaved roads, unpaved yard areas and open stock piles; removal of particulate matter (PM) from roads and other unpaved areas to prevent reentrainment and from buildings or work areas to prevent airborne PM; landscaping or planting of vegetation; use of hoods, fans, filters and similar equipment to contain, capture and/or vent PM; confining abrasive blasting where possible; and, enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in Title V air operation permit renewal application received on May 20, 2009.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by ~~March~~April

1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

SECTION II. FACILITY-WIDE CONDITIONS.

- FW9.** Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:
- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: 703/227-7650.
 - b. 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
	<i>Fossil Fuel Fired Steam Generator Units</i>
-001	Natural Gas-Fired Fossil Fuel-Fired Steam Generator Unit No. 1
-002	Natural Gas-Fired Fossil Fuel-Fired Steam Generator Unit No. 2

Unit No. 1, a ~~natural gas-fired~~ ~~fossil fuel-fired~~ steam generator, consists of a Combustion Engineering, Inc., Controlled Circulation, Radiant Reheat (CCRR) type boiler/steam generator and steam turbine which drives a generator with a gross nameplate capacity of 556.2 rating of 535 (summer)/540 (winter) megawatts (MW) (electric). This unit is authorized to fire ~~natural gas only, fuel oil Nos. 1 through 6, and on specification used oil,~~ with a nominal maximum heat input of 5,500/4964 MMBtu per hour. ~~Pipeline quality natural gas may be fired alone or co-fired with fuel oil and shall be limited to a nominal maximum heat input of 2300 MMBtu per hour. Unit No. 1 is authorized to co-fire natural gas with fuel oil Nos. 1 through 6, and on specification used oil, with a nominal maximum heat input of 5073 MMBtu per hour. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity.~~ Fossil fuel fired steam generator Unit No. 1 began commercial operation on October 16, 1974.

Unit No. 2, a ~~natural gas-fired~~ ~~fossil fuel-fired~~ steam generator, consists of a Combustion Engineering, Inc., CCRR type boiler/steam generator and steam turbine which drives a generator with a nameplate rating of 525 (summer)/530 (winter) MW (electric). This unit is authorized to fire ~~natural gas only, fuel oil Nos. 1 through 6, and on specification used oil,~~ with a nominal maximum heat input of 5,500/4850 MMBtu per hour. ~~Pipeline quality natural gas may be fired alone or co-fired with fuel oil and shall be limited to a nominal maximum heat input rate of 2300 MMBtu per hour. Unit No. 2 is authorized to co-fire natural gas with fuel oil Nos. 1 through 6, and on specification used oil, with a nominal maximum heat input of 4957 MMBtu per hour. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity.~~ Fossil fuel fired steam generator Unit No. 2 began commercial operation on October 31, 1978.

~~These emissions units may burn on specification used oil generated on or off site.~~ Each boiler/steam generator for Unit Nos. 1 and 2 drives a turbine generator and both units share a common stack. The stack parameters are: height, 499 feet; diameter, 24.0 feet; exit temperature, 320 degrees F; and, actual stack gas flow rate, 1,700,000 acfm. Air pollutant emissions from these units are uncontrolled.

{Permitting note(s): These emissions units are regulated under Acid Rain, Phase II; Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Types
1	4964	No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On Specification Used Oil*
1	5,500	Natural Gas <u>Only</u>
1	5073	Natural Gas co-fired with No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On Specification Used Oil*
2	4850	No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On specification Used Oil*
2	5,500	Natural Gas <u>Only</u>
2	4957	Natural Gas co-fired with No. 1, 2, 3, 4, 5, or 6 Fuel Oil, and On Specification Used Oil*

* The on-specification used oil burned at this facility may be generated on or off site.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

[Rules 62-4.160(2), 62-210.200 (Definitions - Potential to Emit (PTE)); and, 62-296.405(1), F.A.C.; and, Permit No. 1010017-004-AC, Specific Condition A.2.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation - Fuels.

a. **Startup.** The only fuels allowed to be burned ~~is are~~ pipeline quality natural gas, ~~and No. 6 or lighter grades of fuel oils. On specification used oil shall only be burned if the Polychlorinated Biphenyls (PCB) are less than~~ 2 parts per million (ppm) and may be blended with No. 6 or lighter grades of fuel oil. ~~Blending as means of achieving the 2 ppm level shall not be allowed. The maximum sulfur content of fuel oils fired is 1.8%, by weight.~~

b. **Normal.** The only fuels allowed to be burned ~~is are~~ pipeline quality natural gas, ~~No. 6 or lighter grades of fuel oils, and on specification used oil. The maximum sulfur content of fuel oils fired is 1.8%, by weight. e. On specification used oil. The maximum amount of on specification used oil, whether generated on or off site, that can be burned facility wide shall not exceed 10% of the heat input (monthly) or 30 million gallons per year cumulatively. On specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.~~

[Rules 62-4.160(2), 62-210.200, 62-213.410, 62-213.440(1) and 62-4.070(1)&(3), F.A.C.; Permit No. 1010017-004-AC, Specific Conditions A.4. and B.4.; and, 40 CFR 271.20(e)(3).]

A.4. Hours of Operation. These emissions units may operate continuously (8760 hours/year). [Rule 62-210.200 (Definitions - (PTE), F.A.C.)]

Operations

A.5. Operations. This installation shall be operated by a competent and qualified person. Operations shall be conducted according to the best accepted practices and recommendations of the Department. [Permit No. AC-367, Specific Condition 2.]

A.6. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. [Permit No. 1010017-004-AC, Specific Condition A.6.]

~~**A.7. Co firing with Natural Gas.** Co firing natural gas with fuel oil having more than 1.8% sulfur content, by weight, as fired, is prohibited. [Permit No. 1010017-004 AC, Specific Condition D.3.]~~

~~**A.8. Low Load Operation.** To minimize acid smut, at low load operation (less than 80 MW per unit), the use of natural gas shall be at least 40% of the heat input to each unit or 7,000 MMBtu/day, whichever is less. [Permit No. 1010017-004 AC, Specific Condition B.6.]~~

~~*{Permitting note: The above condition does not apply during unit startups, shutdowns, malfunctions and load changes. Once stable unit operation is achieved following such events, natural gas shall be fired during low load operations in accordance with this condition.}*~~

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **A.9. - A.13.** are based on the specified averaging time of the applicable test method.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

~~A.9. Visible Emissions (VE). As authorized by OGC File Nos. 86-1574 and 86-1575 (included in the attached Appendix), visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C. [Rule 62-296.405(1)(a), F.A.C.; and, OGC File Nos. 86-1574 and 86-1575 dated December 11, 1986.]~~

~~A.9 Visible Emissions: As determined by EPA Method 9, visible emissions from Unit 1 and Unit 2, respectively, shall not exceed 15 percent (%) opacity based on a 6-minute block average, except for one 6-minute period per hour of not more than 20%. For periods of startup, shutdown and malfunction, visible emissions shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% as determined by COMS data or EPA Method 9.~~

~~[Rules 62-4.070, 62-210.200 (Definition-BACT and 62-212.400(PSD/BACT), F.A.C.)]~~

~~A.10. Visible Emissions—Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3 hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. Visible emissions above 60 percent opacity shall be allowed for not more than 4, six minute averages during this 3 hour period. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]~~

~~A.10 Emission Standards: Emissions from Units 1 and emissions from Unit 2 shall not exceed the following standards based on the data collected by the continuous emission monitoring systems (CEMS).~~

~~a. NO_x emissions: As determined by CEMS data, emissions of NO_x from Unit 1 and Unit 2, respectively, shall not exceed 0.30 lb/MMBtu heat input on a 12-month rolling average for all periods of operation including startup, shutdown and malfunction. [Rules 62-4.070, 62-210.200 (Definition-Potential to Emit), F.A.C. and avoidance of Rule 62-212.400(PSD/BACT), F.A.C.]~~

~~b. CO emissions: As determined by CEMS data, emissions of CO from Unit 1 and Unit 2, respectively, shall not exceed 0.15 lb/MMBtu heat input on a 30-operating day rolling average excluding periods of startup, shutdown and malfunction.~~

~~[Rules 62-4.070, 62-210.200 (Definition-BACT) and 62-212.400(PSD/BACT), F.A.C.]~~

~~A.11. Particulate Matter (PM) Emissions. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(b), F.A.C.]~~

~~A.12. Particulate Matter—Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3 hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]~~

~~A.13. Sulfur Dioxide (SO₂) Emissions. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(e)1.j., F.A.C.]~~

~~A.14. Sulfur Dioxide—Sulfur Content. The sulfur content of fuel oils, on specification used oil, or any combination of the two burned in these units, shall not exceed 1.8%, by weight, as fired at the plant. The 12-month rolling average shall not exceed 1.5%, by weight. Co-firing natural gas with fuel oil having more than 1.8% sulfur content, by weight, as fired, is prohibited. [Rule 62-296.405(1)(e)3., F.A.C.; Permit No. 1010017-004 AC, Specific Conditions B.4. and D.3.; and, Applicant Request.]~~

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.15. Excess Emissions Allowed - Malfunctions. Excess emissions resulting from malfunction shall be

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

- A.16. Excess Emissions Allowed - Startup And Shutdown.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- A.17. Best Operational Practices to Minimize Excess Emissions.** The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in **Appendix BOP, Best Operational Practices for Start up and Shutdown.** [Rules 62-210.700(2) and 62-213.440(1) (Operational Requirements that Assure Compliance), F.A.C.; and, Proposed by the Applicant in the Renewal Application.]
- A.18. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
-

Monitoring of Operations

- A.19. Sulfur Dioxide.** The permittee elected to demonstrate compliance by accepting a **natural gas liquid** fuel sulfur limit that will be verified with a fuel analysis provided by the vendor. This protocol is allowed because the emissions units do not have an operating flue gas desulfurization device. [Rule 62-296.405(1)(f)1.b., F.A.C.; Appendix D of 40 CFR 75; and, Applicant Request.]
- A.20. SO₂ Emissions Data Protocol.** Units 1 and 2 shall comply with the acid rain monitoring procedures in Appendix D of 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units". ~~For shipments of fuel oil received at the Anclote Power Plant, the permittee shall retain an analysis which reports the sulfur and ash content and heat content (HHV) of the fuel shipment. The analysis shall be provided by the fuel vendor, permittee, or other sources which follow the appropriate fuel test methods. The analysis record shall specify the origin of the fuel sample, the methods by which the analyses were conducted, the person conducting the sampling, and analysis, and date of sampling and analysis.~~ [Permit No. 1010017-004-AC, Specific Condition F.2.; and, Appendix D of 40 CFR 75.]

Continuous Monitoring Requirements

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on these units: ~~opacity~~; NOx and carbon dioxide (CO₂). In addition, continuous monitors for emissions of CO are installed in accordance with Rule 62-212.400(PSD/BACT), F.A.C.}}

- A.21. Continuous Monitoring Systems.** The permittee shall install, calibrate, maintain, and operate continuous monitoring systems to measure and record the nitrogen oxides (NOx) emissions and carbon monoxide (CO) emissions, sulfur dioxide (SO₂) emissions, and opacity from Unit Nos. 1 and 2. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75 and 40 CFR Part 60. For SO₂ emissions monitoring, the permittee elected to demonstrate compliance by using the procedures of Appendix D in 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units", which are based on fuel monitoring, sampling, and analyses. Periods of startup, shutdown and; ~~malfunction, and fuel switching~~ shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards following the format of 40 CFR 60.7 (1998 version). [Permit Nos. 1010017-004-AC & 1010017-009-AC, Specific Condition F.1.; and, Appendix D of 40 CFR 75.]
- ~~**A.22. COMS for Periodic Monitoring.** The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62-213.440(1)(b)1.b. (Periodic Monitoring), F.A.C.]~~

Test Methods and Procedures

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

A.23. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 5, 5B, 5F or 17	Methods for Determining Particulate Matter Emissions
EPA Methods 6, 6A, 6B or 6C	Methods for Determining Sulfur Dioxide Emissions
Appendix D, 40 CFR 75	Optional SO ₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units
DEP Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

- A.24. Annual Compliance Test.** Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. -001 and -002 shall be tested to demonstrate compliance with the emission limitations and standards for ~~VE, VE-SB (VE while soot blowing), PM and particulate matter while soot blowing (PM-SB).~~ [Rule 62-297.310(7), F.A.C.]
- A.25. Compliance Test Prior To Renewal.** Prior to permit renewal, Emissions Unit ID Nos. -001 and -002 shall be tested to demonstrate compliance with the emission limitations and standards for ~~VE, VE-SB (VE while soot blowing), PM and PM-SB.~~ [Rule 62-297.310(7)(a)3., F.A.C.]
- A.26. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.27. Visible Emissions.** The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. [Rule 62-296.405(1)(e)1., F.A.C.]

- A.28. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
 - EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

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

[Rule 62-297.401, F.A.C.]

~~**A.29. Particulate Matter.** The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]~~

A.30. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

EPA Method 6 or 6C if it has reason to believe that exceedances of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a natural gas/liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. *Data substitution techniques shall not be used to determine compliance with the fuel oil sulfur limits of this section.*** [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.]

A.31. Sulfur Content of Liquid Fuel. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95, or later editions. Alternatively, fuel oil sulfur content may be evaluated using the methods specified in Section 2.2.5 of Appendix D to 40 CFR 75, as amended. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rules 62-213.440, 62-296.405(1)(e)3, 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; and, Permit No. 1010017-004 AC, Specific Conditions D.3. & D.6.]

A.32. Gross Heating Value of Fuel Oil. All fuel oil delivered to the facility shall be analyzed using ASTM D240-76 (or equivalent) to record the gross heating value (HHV). Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rule 62-297.440, F.A.C.; and, Permit No. 1010017-004 AC, Specific Condition D.5.]

A.33. SO₂ Emissions Data Protocol. Compliance with the liquid fuel sulfur limit shall be verified by fuel analysis and the monitoring provisions of Appendix D of 40 CFR 75, "Optional SO₂ Emissions Data Protocol for Gas Fired and Oil Fired Units." In cases where No. 6 fuel oil is received with a sulfur content exceeding 1.5% by weight, and blending is required to obtain a fuel mix equal to the applicable percent sulfur limit, an analysis of a fuel sample representative of fuel from the fuel storage tanks shall be performed prior to firing oil at the plant. Reports of percent sulfur content of these analyses shall be maintained at the power plant facility. [Permit Nos. 1010017-004 AC & 1010017-009 AC, Specific Condition D.6.; and Appendix D of 40 CFR 75.]

A.34. PM Testing Not Required. Annual and permit renewal compliance testing for particulate matter emissions is not required for this emissions unit while burning:

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

See Specific Condition **TR7**. [Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

A.35. VE Testing Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit while burning:

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

See Specific Condition **TR7**. [Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) -001 & -002

A.36. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions { Rule 62-296.405(1)(g), F.A.C. }	Every 3 months (quarterly)	A.37.

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

A.37. Quarterly Excess Emissions Report. Submit to the Department’s Southwest District Office a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.38. Records. The owner or operator shall maintain records of the fuel oil heating value, density or specific gravity, and the percent sulfur content. Fuel sulfur content, percent by weight, for liquid fuels shall be determined by either ASTM D2622 94, ASTM D4294 90 (95), ASTM D1552 95, ASTM D1266 91, or both ASTM D4057 88, and ASTM D129 95 (or latest editions) to analyze a representative sample of the fuel oil. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Permit Nos. 1010017-004 AC & 1010017-009 AC, Specific Condition D.6.; and, Rules 62-213.440 and 62-297.440, F.A.C.]

Other Requirements

A.39. On Specification Used Oil. Burning of on-specification used oil is allowed in these emissions units in accordance with all other conditions of this permit and the following conditions:

a. **On Specification Used Oil Emissions Limitations.** These emissions units are permitted to burn on-specification used oil, which contains a Polychlorinated Biphenyl (PCB) concentration of less than 50 parts per million (ppm). On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279—Standards for the Management of Used Oil, listed below. “Off-specification” used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered “off-specification” used oil.

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
Flash point	100 degrees F minimum

b. **Quantity Limitation.** By this permit, these emissions units are permitted to burn on-specification used oil that is generated on or off site, not to exceed 10 percent of the heat input (monthly) or 30 million gallons per year (714,286 barrels) during any calendar year.

c. **PCB Limitation.** Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. **Operational Requirements.** On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. **Testing Requirements.** For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit(s) 001 & 002

(1) Analysis of used oil fuel. A generator, transporter, processor/re refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications. [40 CFR 279.72(a)]

(2) Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(a) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(b) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(c) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW 846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

f. Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:

(1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.

(2) Results of the analyses of each deposit of used oil, as required by the above conditions.

(3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.

(4) The source and quantity of each batch of used oil received each month, including the name, address and EPA identification number (if applicable) of all marketers that delivered used oil to the facility, and the quantity delivered.

(5) Records of the operating rate of each emissions unit while burning used oil and the dates and time periods each emissions unit burns used oil.

[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. Reporting Requirements. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year. The quantity of used oil burned by each emissions unit shall be individually reported and shall not be combined with other fuels.

[Rules 62-4.070(1)&(3) and 62-213.440(1), F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) 008

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
008	Relocatable Diesel Fired Engine Driven Generator(s)

This emissions unit consists of three relocatable Caterpillar Model 3508 DITA 820 kilowatt (kW) diesel generators. These relocatable diesel fired engine driven generator(s) shall have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons per hour (62.1 gph per generator) of new No. 2 fuel oil with a maximum (combined) rating of 2.460 megawatt (MW) (820 kilowatt (kW) per generator). Each engine's maximum heat input is 8.58 MMBtu/hour. Air pollutant emissions from the generator(s) are uncontrolled. Each engine generator has its own stack. The individual stack parameters are identical: height, 15 feet; diameter, 1 foot; exit temperature, 1,004 degrees F; and, actual stack gas flow rate, 7,283 acfm.

These diesel fired engine driven generator(s) may be located at this facility and may be relocated to any of the following facilities:

1. Crystal River Power Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Power Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Anclote Power Plant, 1729 Baillies Bluff Road, Holliday, Pasco County.
4. Bayboro Power Plant, 13th Avenue & 2nd Street South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mile east of U.S. 301, Wildwood, Sumter County.
6. Hines Energy Complex, County Road 555, 1 mile southwest of Homeland, Polk County.

(Permitting note(s): These relocatable diesel generators were permitted in 1991 under Permit No. AC09-202080. These relocatable diesel generators are regulated under Rule 62-210.300, F.A.C., Permits Required. These engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT "4 Z's" or "RICE MACT," however, since the engines meet the Subpart ZZZZ definition of "existing units," there are no unit specific applicable requirements that must be met pursuant to this rule at this time.)

Notification

B.1. Notification. These conditions become active and enforceable once the permittee has given notification to the SWD Office of the Department, if appropriate, that these units will be relocated to this facility. [Rule 62-4.070(1)&(3) and 62-213.440(1), F.A.C.]

B.2. Relocation Notification. The permittee shall notify the compliance authority, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following:

- a. which generator, by serial number, is being relocated;
- b. which location the generator is being relocated from;
- c. which location the generator is being relocated to; and,
- d. the approximate startup date at the new location.

[Rules 62-4.070(1)&(3) and 62-213.440(1), F.A.C.; and, Permit No. AC09-202080.]

Essential Potential to Emit (PTE) Parameters

B.3. Hours of Operation. In order to escape Prevention of Significant Deterioration (PSD) review, the hours of operation expressed as "engine hours" shall not exceed 2,970 hours in any consecutive 12-month period. The total hours of operation expressed as "engine hours" shall be the summation of the individual hours of operation of each diesel generator. [Rules 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; 62-212.400(12) (Source Obligation), F.A.C.; and, Permit No. AC09-202080.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) 008

B.4. Permitted Capacity. Each engine's maximum allowable heat input rate and fuel firing rate is as follows:

MMBtu/hr Heat Input	Gallons/hour	Fuel Type
8.58 (each generator)	62.1 (each generator)	New No. 2 fuel oil

[Rules 62-4.160(2) and 62-210.200 (Definitions-PTE), F.A.C.; and, Permit No. AC09-202080.]

B.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.6. Methods of Operation—Fuels. Only new No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight, shall be burned in these units. [Rules 62-4.160(2), 62-210.200 (Definitions-PTE), 62-213.410, and 62-213.440(1), F.A.C.; and, Permit No. AC09-202080.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **B.7.** is based on the specified averaging time of the applicable test method.

B.7. Visible Emissions. Visible emissions (VE) from each engine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C. and Permit No. AC09-202080.]

B.8. Sulfur Dioxide—Sulfur Content. The sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent, by weight. [Rule 62-213.440, F.A.C. and Permit No. AC09-202080.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

B.9. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.10. Excess Emissions Prohibited. 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.11. Fuel Analysis. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. [Rule 62-213.440, F.A.C. and Applicant's Request.]

Test Methods and Procedures

B.12. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

B.13. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rule 62-297.310(4), F.A.C. and Permit No. AC09-202080.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit(s) 008

- B.14. Sulfur Dioxide (SO₂) Sulfur Content Testing.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or later editions. Alternatively, fuel oil sulfur content may be evaluated using the methods specified in Section 2.2.5 of Appendix D to 40 CFR 75, as amended. In addition, any ASTM method (or later editions) referenced in Rule 62-297.440(1) F.A.C. is acceptable. [Rules 62-213.440 and 62-297.440, F.A.C.; and, Applicant's Request.]
- B.15. Annual Compliance Test.** Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), each diesel generator shall be tested to demonstrate compliance with the emission limitations and standards for VE. [Rule 62-297.310(7), F.A.C.]
- B.16. VE Testing Annual.** By this permit, annual emissions compliance testing for VE is not required for each diesel generator when operated for less than 400 hours per year. [Rules 62-297.310(7)(a)4., F.A.C.]
- B.17. Compliance Test Prior To Renewal.** Prior to permit renewal, each diesel generator shall be tested to demonstrate compliance with the emission limitations and standards for VE. [Rule 62-297.310(7)(a)3., F.A.C.]
- B.18. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.19. Testing after Relocation.** After each relocation, each diesel generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content to demonstrate compliance with the permit limits in this section. [Rules 62-4.070(1)&(3) and 62-297.310(7)(b), F.A.C.; and, Permit No. AC09-202080.]
- B.20. Testing Operating Rate.** Testing of each diesel generator emissions must be accomplished while operating the diesel generator within ± 10% of the maximum fuel firing rate of 62.1 gallons per hour. Failure to submit the actual operating rate may invalidate the test. [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. AC09-202080.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

- B.21. Recordkeeping.** To demonstrate compliance with the hours operation limit, records shall indicate the daily hours of operation for each diesel generator, the daily hours of operation expressed as "engine hours", and a cumulative total hours of operation expressed as "engine hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Department upon request. [Rules 62-213.440 and 62-297.310(8), F.A.C. and, Permit No. AC09-202080.]
- B.22. Recordkeeping.** To demonstrate compliance with the sulfur content limit, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Department upon request. [Rule 62-297.310(8), F.A.C.; and, Permit No. AC09-202080.]
- B.23. Recordkeeping.** The owner or operator shall maintain the following records:
- the daily hours of operation for each of the generators;
 - the daily hours of operation expressed as "engine hours";
 - the cumulative total hours of operation expressed as "engine hours" for each month, and
 - the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis.
- [Rules 62-4.070(1)&(3) and 62-213.440, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

~~Subsection B. Emissions Unit(s) 008~~

~~**B.24. Recordkeeping.** Although these diesel generators are relocatable, each facility is required to maintain all appropriate records at each site. [Rules 62-4.070(3) and 62-213.440, F.A.C.]~~

~~Other Requirements~~

~~**B.25. PSD Avoidance.** The specific conditions in Permit No. AC09-202080, limiting the “engine hours,” were accepted by the applicant to escape PSD review. If PEF requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(4)–(12), F.A.C., as though construction had not yet begun. [Rule 62-212.400(12) (Source Obligation), F.A.C.; and, Permit No. AC09-202080.]~~

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit(s) -007

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
-007	Two, 12-cell Mechanical Draft Helper Cooling Towers

This emissions unit is comprised of two fiberglass circular helper cooling towers.

Each tower consists of 12 cooling tower cells for a total of 24 cells total. Each cooling tower cell is approximately 50 to 59 feet tall with a stack height of approximately 10 to 14 feet on top of the cooling towers. Each stack diameter is approximately 32 feet. Both towers were designed from salt water corrosion resistant materials. Brackish water used for cooling has an estimated total dissolved solids (TDS) of approximately 29,000 parts per million (ppm). The existing circulating water pumps were reused with no increase in throughput. These towers are used to reduce the discharge water temperature primarily during the summer months (April - September) to meet the facility's current water permit requirements, and each cooling tower shall operate no more than 4500 hours per calendar year. The cooling towers provide direct contact between the cooling water and air passing through the tower. Drift is created when small amounts of cooling water become entrained in the air stream and carried out of the tower. No chromium-based water treatment chemicals shall be used in the cooling towers.

The two mechanical draft helper cooling towers have a combined maximum water circulation rate of 660,000 gallons per minute (gpm) (330,000 gpm per tower). The design air flow is 36,000,000 acfm for both towers (18,000,000 acfm per tower and 1,500,000 acfm per cell). The drift eliminators are designed for a drift rate of no more than 0.0005% of the circulating water flow for each tower. Drift eliminators are the air pollution control technology used to control PM/PM₁₀ emissions caused by the cooling tower drift.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-379].}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. Each cooling tower shall not operate more than 4500 hours per calendar year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, PSD-FL-379/Air Construction Permit No. 1010017-007-AC.]

Air Pollution Control Technologies and Measures

C.2. Cooling Tower Design, Operation and Maintenance. The cooling tower shall be designed, operated and maintained to achieve a drift rate of no more than 0.0005% of the circulating water flow. [PSD-FL-379/Air Construction Permit No. 1010017-007-AC.]

C.3. Circulating Water Flow Rate. Upon request, the permittee shall provide a means for determining the circulating water flow rate through the new cooling towers. [PSD-FL-379/Air Construction Permit No. 1010017-007-AC; and, Rules 62-213.440(1) and 62-4.070(1)&(3), F.A.C.]

Test Methods and Procedures

C.4. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. *{Permitting note: No mass testing is required, however, special compliance testing could be required.}* [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit(s) -007

C.5. Reporting. PM and PM₁₀ emissions from the new cooling towers shall be reported in the AOR. [Rules 62-213.440(1) and 62-4.070(1)&(3), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit(s) -007

This section of the permit addresses the following emissions unit.

EU No. Emissions Unit Description

009 Two nominal 9.8 MMBtu/hour (HHV) natural gas-fired process heaters

EMISSIONS AND TESTING REQUIREMENTS

1. Natural Gas Fired Process Heaters BACT Emissions Limits: CO emissions from the two natural gas fired process heaters shall not exceed 0.08 lb/MMBtu. [Rule 62-212.400(PSD/BACT), F.A.C.]

2. Natural Gas Fired Process Heaters Testing Requirements: Each unit shall be stack tested to demonstrate initial compliance with the emission standards for CO. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each unit. As an alternative, a Manufacturer certification of emissions characteristics of the purchased model that are at least as stringent as the BACT values can be used to fulfill this requirement. [Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]

EQUIPMENT SPECIFICATIONS

3. Equipment: The permittee is authorized to install, operate, and maintain two 9.8 MMBtu/hour (HHV) process heaters for the purpose of heating the natural gas supply to the boilers. [Application No. 1010017-013-AC; Rule 62-210.200(PTE), F.A.C.]

PERFORMANCE REQUIREMENTS

4. Hours of Operation: The gas-fueled process heaters are allowed to operate continuously (8760 hours per year). [Applicant Request; Rule 62-210.200(PTE), F.A.C. and 40 CFR 63.7575]

NOTIFICATION, REPORTING AND RECORDS

5. Notification: Initial notification is not required for the two small gas-fueled 16.5 MMBtu/hr process heaters. [40 CFR 63.9, 40 CFR 63.7506(c) and Rule 62-204.800(11)(b) F.A.C.]

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Operated by: Florida Power Corporation dba Progress Energy Florida, Inc. (PEF)
ORIS Code: 8048

Subsection A. This Subsection addresses Acid Rain, Phase II SO₂.

The emissions units listed below are regulated under Phase II SO₂ of the federal Acid Rain Program.

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

- A.1.** The Phase II SO₂ Acid Rain 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(s) listed below:
- a. DEP Form No. 62-210.900(1)(a) - Form, Effective: 3/16/08, received on August 25, 2009, and signed by the Designated Representative on August 21, 2009, which is included at the end of this subsection. [Chapter 62-213, F.A.C.; and, Rule 62-214.320, F.A.C.]
- A.2.** Sulfur Dioxide (SO₂) Emission Allowances. SO₂ 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)1., 2. & 3., F.A.C.]
- A.3.** Comments, notes, and justifications: None.

ANCLOTEPOWERPLANT
PROCEDURESFORSTARTUPANDSHUTDOWN

FOSSIL FUEL STEAM GENERATORS (EU ID 001 AND 002)

GENERATING UNIT STARTUP

- Ensure all fluid levels are in limits.
- Insure fuel inventory is adequate.
- Ensure all fuel safety systems are in service.
- Ensure all valves/switches/breakers are set for startup.
- Establish fire in steam generator.
- Regulate firing rate to raise pressure and temperatures within established limits.
- At acceptable temperature and pressure, begin steam admission to turbine.
- Increase turbine speed and firing rate in accordance with established operating limits until turbine speed reaches approximately 3,600 rpm.
- Synchronize generator to power grid and increase generator load to 5 percent.
- Ensure all required systems are in service and operable.
- Increase generator load to desired operating level.

GENERATING UNIT SHUTDOWN

- Reduce generator load and reduce pressure and temperature to established levels.
- Remove generator from service.
- Reduce fuel flow to minimum and trip fuel.
- Secure all operating and safety systems in accordance with established operating procedures.

APPENDIX I

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.

Brief Description of Emissions Units and/or Activities

1. Internal combustion engines - mobile sources.
2. Vacuum pumps in laboratory operations.
3. Equipment used for steam cleaning.
4. Equipment used exclusively for space heating, other than boilers.
5. Laboratory equipment used exclusively for chemical or physical analyses.
6. Brazing, soldering or welding equipment.
7. Fire protection and safety equipment.
8. Petroleum lubrication systems.
9. Application of fungicide, herbicide, or pesticide.
10. Vehicle refueling operations and associated fuel storage.
11. Degreasing units using heavier-than air vapors exclusively that do not use any substance containing a hazardous air pollutant.
12. Non-halogenated solvent storage and cleaning operations that do not use any substance containing a hazardous air pollutant.
13. Lube oil system vents.
14. Lube oil reservoir tank.
15. Parts washers/degreasers.
16. Used oil storage tanks.
17. Portable unleaded gasoline tank.
18. Evaporation of non-hazardous boiler cleaning chemicals.
19. ~~No. 2 diesel fuel tanks.~~
20. Turbine vapor extractor.
21. Sand blasting and abrasive grit blasting.
22. ~~Diesel fuel s~~Storage tanks less than 550 gallons.
23. Architectural (equipment) maintenance painting.
24. ~~No. 2 fuel oil, residual fuel oil, and used oil truck unloading.~~
25. Solvent Cleaning.
26. Surface Coating

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

26. The following engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT “4-Z’s” or “RICE MACT,” however, since the engines meet the Subpart ZZZZ definition of “existing units,” there are no unit specific applicable requirements that must be met pursuant to this rule at this time. These engines are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS }:

Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)
Diesel Fire Pump	1972	Compression Ignition (CI)	525
Cherry Picker	2005	Compression Ignition (CI)	215
Diesel Backhoe	Pre-1999	Compression Ignition (CI)	31
Diesel Welder	1994	Compression Ignition (CI)	16

There is no air pollution control equipment associated with this/these unit(s).

27. Fuel storage tanks.

APPENDIX U

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES

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

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

E.U. ID No.	Brief Description of Emissions Units and/or Activity							
-006	<p>Diesel Air Compressor. The following engine(s) is/are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart III also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS}:</p>							
	<table border="1"> <thead> <tr> <th data-bbox="321 667 649 785">Identification</th> <th data-bbox="656 667 980 785">Model year/construction (manufacturer) date</th> <th data-bbox="987 667 1214 785">Type</th> <th data-bbox="1221 667 1471 785">Horsepower (HP)</th> </tr> </thead> </table>	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)			
	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)				
Diesel Air Compressor	Pre-1999	Compression Ignition (CI)	1200					
<p>There is no air pollution control equipment associated with this/ese unit(s).</p>								
-005	<p>Emergency Diesel Generator. The following engine(s) is/are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart III also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS}:</p>							
	<table border="1"> <thead> <tr> <th data-bbox="321 1037 649 1155">Identification</th> <th data-bbox="656 1037 980 1155">Model year/construction (manufacturer) date</th> <th data-bbox="987 1037 1214 1155">Type</th> <th data-bbox="1221 1037 1471 1155">Horsepower (HP)</th> </tr> </thead> </table>	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)			
	Identification	Model year/construction (manufacturer) date	Type	Horsepower (HP)				
Emergency Diesel Generator	2003	Compression Ignition (CI)	1500					
<p>There is no air pollution control equipment associated with this/ese unit(s).</p>								
-003	<p>Surface coating operations.</p>							

**ATTACHMENT
APP-FI-CA1
ACID RAIN PROGRAM FORMS**

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: New Revised Renewal

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Plant name Anclote	State FL	ORIS/Plant Code 8048
------------------------------	--------------------	--------------------------------

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO ₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
1		Yes		
2		Yes		

Plant Name (from STEP 1) **Anclote**

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
 - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- (4) For applications including a SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and

Plant Name (from STEP 1) **Anclote**

**STEP 3,
Continued.**

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

**STEP 4
For SO₂ Opt-in
units only.**

**In column "f" enter
the unit ID# for
every SO₂ Opt-in
unit identified in
column "a" of
STEP 2.**

**For column "g"
describe the
combustion unit
and attach
information and
diagrams on the
combustion unit's
configuration.**

**In column "h"
enter the hours.**

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

**ATTACHMENT
APP-FI-CA2
CAIR PART**

Plant Name (from STEP 1) **Anclote**

STEP 3

Read the
standard
requirements.

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 - (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Plant Name (from STEP 1) **Anclore**

**STEP 3,
Continued**

Liability.

- (1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.
- (2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.
- (3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO₂ unit.

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Plant Name (from STEP 1) **Anclote**

**STEP 3,
Continued**

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.

(2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.

(2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.

(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:

(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and

(ii) [Reserved];

(2) The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

Plant Name (from STEP 1) **Anclote**

Excess Emissions Requirements.

**STEP 3,
Continued**

If a CAIR NO_x Ozone Season source emits NO_x during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:
 (1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
 (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
 (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
 (2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.
 (2) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.
 (3) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

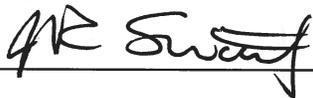
No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Certification (for designated representative or alternate designated representative only)

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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

Name Jeffrey R. Swartz	Title Vice President, Florida – Power Generation Operations
Owner Company Name Duke Energy Florida, Inc.	
Phone (727) 820-5188	E-mail address Jeffrey.Swartz@duke-energy.com
Signature 	Date 5/1/2014

**ATTACHMENT
APP-EU1-I4
PROCEDURES FOR STARTUP AND SHUTDOWN**

ANCLOTE POWER PLANT
EU01 – EU02
PROCEDURES FOR STARTUP AND SHUTDOWN

GENERATING UNIT STARTUP

- Ensure equipment is ready for operation.
- Ensure natural gas available.
- Ensure boiler ready for startup.
- Establish natural gas fire in boiler and verify proper combustion.
- Regulate firing rate to increase steam pressure and temperatures within established limits.
- At acceptable steam temperature and pressure, begin steam admission to turbine.
- Increase boiler firing rate and turbine speed in accordance with established operating limits.
- Synchronize generator to power grid and increase generator load within established operating limits.
- Ensure all required systems are in service and operable.
- Ensure CEMS is in service and calibrated in accordance with the air permit and applicable requirements.
- Increase generator load to desired operating level.

GENERATING UNIT SHUTDOWN

- Reduce generator load, steam pressure and temperature to established levels.
- Reduce natural gas flow to minimum and remove natural gas from service.
- Remove generator from service.

**ATTACHMENT
APP-EU1-I2
FUEL ANALYSIS AND SPECIFICATION**

Fuel Analysis and Specification

Pipeline Natural Gas	Density	0.4 – 0.6 rel.
	Heat Value	1,016 – 1,023 Btu/scf
	Fuel Sulfur	0.073 Avg Grains/hcf
	% N	< 0.5%
	% Ash	< 1%

**ATTACHMENT
APP-EU1-I6
COMPLIANCE DEMONSTRATION REPORTS**



**RECERTIFICATION APPLICATION
40 CFR Part 75 – Appendix D NO_x CEMS**

for

**Duke Energy Florida
Anclote Power Plant
Units 1 and 2
Holiday, Pasco County, Florida**

August 2013
Revision 0

Prepared By:

RMB Consulting and Research, Inc.
5104 Bur Oak Circle
Raleigh, North Carolina 27612
(919) 510-5102

CONTENTS

SECTION 1.0 – INTRODUCTION	1
SECTION 2.0 – RECERTIFICATION TESTS	3
2.1 Linearity Test	4
2.2 7-Day Calibration Error Test	6
2.3 Cycle Time Test	7
2.4 Relative Accuracy Test Audit	8
2.5 Miscellaneous Tests	11

List of Appendices

APPENDIX 1 – EPA MONITORING PLAN

- ECMPS Monitoring Plan Records

APPENDIX 2 – FIGURES AND DIAGRAMS

- Stack Diagram
- Traverse Point Diagram
- CEMS Flow Diagrams

APPENDIX 3 – LINEARITY TEST DATA

- ECMPS Printouts of Applicable Records
- DAHS Printouts

APPENDIX 4 – 7-DAY CALIBRATION ERROR TEST DATA

- ECMPS Printouts of Applicable Records
- DAHS Printouts

APPENDIX 5 – CYCLE TIME TEST DATA

- ECMPS Printouts of Applicable Records
- DAHS Printouts

APPENDIX 6 – STACK TEST FIRM RATA TEST REPORT

- ECMPS Printouts of Applicable Records
- Narrative Discussion
- Test Firm Discussion
- Calibration Gas Certificates of Analysis
- DAHS Printouts
- RM Raw Test Data, Calibrations, and Bias Corrected Values
- RM NO_x Converter Efficiency Results
- Response Time Checks

APPENDIX 7 – TEST PROGRAM CONTACT INFORMATION

- Contact Information
- QSTI/AETB Documentation

List of Tables

TABLE 2-1. Summary of CEMS Recertification Completion Dates and Deadlines	3
TABLE 2-2. Summary of Monitoring Plan and Recertification Report Submittal Deadlines.....	4
TABLE 2-3. Summary of Linearity Test Results	5
TABLE 2-4. Summary of 7-Day Calibration Error Test Results.....	7
TABLE 2-5. Summary of Cycle Time Test Results	8
TABLE 2-6. Summary of RATA and Bias Test Results	9
TABLE A6-1. 40 CFR Part 75, Appendices A and B RATA Requirements	APPENDIX 6-3
TABLE A6-2. 40 CFR Part 75 RATA Test Run Calculation and Reporting Requirements	APPENDIX 6-3
TABLE A6-3. RM Analyzer Spans and Calibration Gas Values	APPENDIX 6-6

1.0 INTRODUCTION

Duke Energy Florida's Anclote Power Plant has recently completed a fuel conversion from the use of heavy fuel oil and natural gas to the exclusive use of natural gas that will be combusted by Units 1 and 2 at the facility. Units 1 and 2 are subject to the federal emissions monitoring and reporting requirements for oxides of nitrogen (NO_x) as set forth by the U.S. Environmental Protection Agency (US EPA) in Title 40 of the Code of Federal Regulations (CFR) Part 75.

Previously, the Anclote Power Plant had installed and certified a dedicated NO_x continuous emissions monitoring system (CEMS) in the ductwork for both units, which share a common stack, to comply with the monitoring, recordkeeping and reporting requirements of the 40 CFR Part 75 rule. As part of the fuel conversion project, the critical sample orifices in the dilution system and measurement spans were changed in the pre-existing NO_x monitors for both units, triggering a recertification event. For this project, a "full" recertification was completed on the NO_x and carbon dioxide (CO₂) monitor installed on each unit.

The updated NO_x CEMS for each unit consists of one (1) dual-range (0-70 and 0-300 ppm) Thermo Environmental Instruments Model 42i NO_x analyzer and one (1) Thermo Environmental Instruments Model 410i CO₂ (0-20%) analyzer. Each CEMS utilizes a dilution-extractive sampling and conditioning system.

This recertification application and associated appendices includes the recertification tests results for both Units 1 and 2. A copy of the EPA Monitoring Plan (which includes a summary of the Anclote Power Plant CEM systems) is provided in Appendix 1 of this recertification application. Unit, stack, and other associated diagrams are provided in Appendix 2.

In accordance with §75.20 of 40 CFR Part 75 and Question 13.21 of the Part 75 Emissions Monitoring Policy Manual, the Anclote Power Plant was required to perform the following quality assurance checks in order to certify each CEMS –

- Linearity test
- Seven (7) day calibration error test
- Cycle time test
- A minimum nine (9) run relative accuracy test audit (RATA)

2.0 RECERTIFICATION TESTS

The Unit 1 and Unit 2 recertification tests are subject to the following deadlines established in 40 CFR Part 75, §75.20(b)(3)(iv):

- Linearity test (≤ 168 unit operating hours after sample orifice replacement)
- 7-day calibration error test (≤ 21 unit operating days after sample orifice replacement)
- Cycle time test (≤ 168 unit operating hours after sample orifice replacement)
- RATA (≤ 720 unit operating hours after sample orifice replacement)

For this particular project, all CEMS recertification deadlines were met. The Anclote Power Plant successfully completed each of the required recertification tests for the Unit 1 and Unit 2 CEMS as summarized in Table 2-1.

Table 2-1. Summary of CEMS Recertification Completion Dates and Deadlines

Unit	Recertification Test	Sample Orifice Replacement (Hour 1)	Recertification Requirement Window	Recertification Completion Date	Recertification Deadline Date
1	Linearity	07/05/13 – Hour 10	≤ 168 op. hours	07/10/13 – Hour 16	07/12/13 – Hour 10
	7-Day CE	07/05/13 – Hour 10	≤ 21 op. days	07/17/13 – Hour 07	07/26/13 – Hour 10
	Cycle Time	07/05/13 – Hour 10	≤ 168 op. hours	07/10/13 – Hour 12	07/12/13 – Hour 10
	RATA	07/05/13 – Hour 10	≤ 720 op. hours	08/02/13 – Hour 15	08/04/13 – Hour 10
2	Linearity	07/05/13 – Hour 15	≤ 168 op. hours	07/08/13 – Hour 12	07/12/13 – Hour 15
	7-Day CE	07/05/13 – Hour 15	≤ 21 op. days	07/12/13 – Hour 07	07/26/13 – Hour 15
	Cycle Time	07/05/13 – Hour 15	≤ 168 op. hours	07/08/13 – Hour 14	07/12/13 – Hour 15
	RATA	07/05/13 – Hour 15	≤ 720 op. hours	07/09/13 – Hour 13	08/04/13 – Hour 15

Note

1. The “recertification deadline date” provides the earliest, “worst-case” deadline, which is based on continuous unit operation from the first operating hour after the sample orifice was replaced in each unit.

The 7-day calibration error test was completed by the Anclote Power Plant. The RATA, linearity, and cycle time tests were conducted by C.E.M. Solutions. Contact information for this recertification program can be found in Appendix 7 of this recertification application.

Note that all recertification test results discussed herein have been entered into, calculated by, and presented in this recertification application (where applicable) via US EPA's new Emissions Collection and Monitoring Plan System (ECMPS) XML reporting format, which was made effective January 1, 2009.

The updated monitoring plan for Unit 1 and Unit 2 must be submitted within 90 days after the end of the quarter in which the monitoring span is changed (and if different calibration gases are going to be used, which is the case for the Anclote Power Plant), as required by 40 CFR Part 75, §75.20(b)(3). Moreover, this recertification application report must be submitted within 45 days after the completion of all recertification tests, as required by 40 CFR Part 75, §75.63(a)(2).

For this particular project, all CEMS reporting deadlines were met. Note that the updated Monitoring Plan for this recertification is included within this recertification application report. The Anclote Power Plant successfully completed each of the required reporting deadlines for the Unit 1 and Unit 2 CEMS as summarized in Table 2-2.

Table 2-2. Summary of Monitoring Plan and Recertification Report Submittal Deadlines

Unit	Span Change Quarter	Recertification Completion Date	Monitoring Plan Submittal Date	Monitoring Plan Submittal Deadline	Recertification Report Submittal Date	Recertification Report Submittal Deadline
1	2013 – Quarter 3	08/02/13	08/23/13	12/29/13	08/23/13	09/16/13
2	2013 – Quarter 3	07/12/13	08/23/13	12/29/13	08/23/13	08/26/13

2.1 Linearity Test

For each of the two (2) CEMS, a linearity test was performed on the high and low range of the dual range NO_x analyzer and on the single range of the CO₂ analyzer in accordance with the procedures in 40 CFR Part 75, Appendix A, §6.2. Linearity tests were performed using EPA Protocol calibration gases corresponding to 20.0-30.0%, 50.0-60.0% and 80.0-100.0% of each analyzer span, while the unit(s) were operating. The analyzers were challenged three times with each of the three calibration gases, without using the same calibration gas twice in succession. Analyzer linearity error is determined using the following equations:

$$LE = \frac{|R - A|}{R} \times 100 \quad \text{or} \quad LE = |R - A|$$

Where: LE = Linearity error
R = Calibration gas tag value
A = Average CEMS response

Results of the linearity tests are acceptable if the linearity error is $\leq 5.0\%$ of the audit gas concentration, or if the absolute value of the difference between the average of the monitor responses and the average of the audit gas concentrations is ≤ 5.0 ppm NO_x, whichever is least restrictive. For CO₂, the linearity tests are acceptable if the linearity error is $\leq 5.0\%$ of the audit gas concentration, or if the absolute value of the difference between the average of the monitor response and the average of the audit gas concentrations is $\leq 0.5\%$ CO₂, whichever is least restrictive. Table 2-3 provides a summary of the linearity test results, and Appendix 3 of this recertification application contains the ECMPS results for each CEMS.

Table 2-3. Summary of Linearity Test Results

Unit	Date	Monitor	Level	Tag Value	Average Response	% of Tag Value	Performance Specification
1	07/10/13	NO _x (High Range)	Low	64.6 ppm	64.2 ppm	0.6 %	$\leq 5\%$ of tag value or $\leq \pm 5.0$ ppm
			Mid	166.5 ppm	164.7 ppm	1.1 %	
			High	270.0 ppm	267.4 ppm	1.0 %	
	07/10/13	NO _x (Low Range)	Low	17.6 ppm	19.0 ppm	(1.4 ppm)	$\leq 5\%$ of tag value or $\leq \pm 5.0$ ppm
			Mid	38.6 ppm	40.4 ppm	4.5 %	
			High	64.6 ppm	65.5 ppm	1.5 %	
	07/10/13	CO ₂	Low	5.0 %	4.9 %	2.1 %	$\leq 5\%$ of tag value or $\leq \pm 0.5\%$
			Mid	11.1 %	10.9 %	1.9 %	
			High	18.0 %	17.9 %	0.6 %	
2	07/08/13	NO _x (High Range)	Low	64.6 ppm	65.6 ppm	1.5 %	$\leq 5\%$ of tag value or $\leq \pm 5.0$ ppm
			Mid	166.5 ppm	164.0 ppm	1.5 %	
			High	270.0 ppm	271.2 ppm	0.4 %	
	07/08/13	NO _x (Low Range)	Low	17.6 ppm	21.1 ppm	(3.5 ppm)	$\leq 5\%$ of tag value or $\leq \pm 5.0$ ppm
			Mid	38.6 ppm	41.8 ppm	(3.2 ppm)	
			High	64.6 ppm	67.2 ppm	4.0 %	
	07/08/13	CO ₂	Low	5.0 %	5.2 %	3.3 %	$\leq 5\%$ of tag value or $\leq \pm 0.5\%$
			Mid	11.1 %	11.2 %	0.9 %	
			High	18.0 %	18.0 %	0.2 %	

2.2 Seven (7) Day Calibration Error Test

For each of the two (2) CEMS, calibration error tests were performed on the high range and low range of the dual-range NO_x analyzer and on the CO₂ analyzer once per day for seven (7) consecutive unit operating days, at approximate twenty-four (24) hour intervals, as prescribed by 40 CFR Part 75, Appendix A, §6.3.1. Each analyzer was challenged with two EPA Protocol gas concentrations corresponding to 0.0-20.0% and 80.0-90.0% of each instrument's span. Calibration error is determined by one of the following equations:

$$CE = \left(\frac{|R - A|}{S} \right) \times 100 \quad \text{or} \quad CE = |R - A|$$

Where:

- CE = Calibration error
- R = Reference value of calibration gas
- A = Actual CEMS response to calibration gas
- S = Span of instrument

Table 2-4 provides a summary of the 7-day calibration error test results for the NO_x and CO₂ analyzers, respectively. The 7-day ECMPS results for each CEMS are presented in Appendix 4 of this recertification application. The maximum drift specification for the NO_x analyzer is 2.5 % of the instrument's span (or ± 5 ppm absolute difference from the reference value) and 0.5 % absolute difference for the CO₂ analyzer during the 7-day calibration error test.

Table 2-4. Summary of 7-Day Calibration Error Test Results

Unit	Test Period		Test Parameter	Zero-Level ¹ Response	Span-Level ² Response	Performance Specification
	Start	End				
1	07/11/13	07/17/13	NO _x – High	0.4 ppm	2.6 ppm	≤ ± 5 ppm
	07/11/13	07/17/13	NO _x – Low	0.1 ppm	0.6 ppm	≤ ± 5 ppm
	07/11/13	07/17/13	CO ₂	0.0 %	0.2 %	≤ ± 0.5 %
2	07/06/13	07/12/13	NO _x – High	2.0 ppm	2.3 ppm	≤ ± 5 ppm
	07/06/13	07/12/13	NO _x – Low	1.7 ppm	1.2 ppm	≤ ± 5 ppm
	07/06/13	07/12/13	O ₂	0.0 %	0.1 %	≤ ± 0.5 %

¹Highest zero-level absolute difference shown during 7-day calibration error test period.

²Highest span-level absolute difference shown during 7-day calibration error test period.

2.3 Cycle Time Test

For each of the two (2) CEMS, a cycle time test was performed on both ranges of the dual-range NO_x analyzer and on the CO₂ analyzer using zero and high-level span calibration gases. **Note that the January 2008 rule revisions to 40 CFR Part 75 have included changes to the cycle time test procedures.**

In accordance with 40 CFR Part 75, Appendix A, §6.4, to determine the downscale cycle time, the current stable stack emissions value and clock (start) time was recorded. A zero-level concentration gas was then injected and conveyed throughout the entire CEMS until a stable monitor response (reading zero-level calibration gas) was obtained. At this point, the stable monitor response (still reading zero-level calibration gas) was recorded, the calibration gas flow was stopped, and the stop time was recorded. The downscale cycle time is defined as the time it takes for 95.0 percent of the step change to be achieved between the stable, starting stack emissions value (where the reference start time is when the zero-level calibration gas flow is started) and the stable, ending zero-level calibration gas emissions value. This procedure was then repeated for the high-level calibration gas concentration (i.e., the upscale cycle time).

The cycle time for each NO_x CEMS is the longest upscale or downscale interval measured for either the NO_x or CO₂ analyzer. The maximum cycle time allowed is 15 minutes. Table 2-5 provides a summary of the cycle time results for Units 1 and 2. The ECMPS results for each CEMS are presented in Appendix 5 of this recertification application.

Table 2-5. Summary of Cycle Time Test Results

Unit	Date	Analyzer	Cycle Time (Minutes)		Performance Specification
			Upscale	Downscale	
1	07/10/13	NO _x – High	2	2	≤ 15 minutes
		NO _x – Low	2	2	
		O ₂	2	2	
2	07/08/13	NO _x – High	3	2	≤ 15 minutes
		NO _x – Low	2	2	
		O ₂	2	2	

2.4 Relative Accuracy Test Audit

For each of the two (2) CEMS, a RATA was performed by C.E.M. Solutions in accordance with 40 CFR Part 75, Appendix A, §6.5. Each RATA consisted of a minimum of nine (9) 21-minute comparative test runs. The reference method test team used EPA Reference Methods 3A and 7E to make measurements of CO₂ and NO_x, respectively. In addition to determining relative accuracy, the data from each RATA was used to conduct the bias test in accordance with 40 CFR Part 75. Table 2-6 provides a summary of the RATA and bias test results. **The complete RATA discussion of results is included in Appendix 6 of this recertification application, along with the applicable ECMPS results for each CEMS.**

Table 2-6. Summary of RATA and Bias Test Results

Unit	Test Date	Load (MW)	RATA Result ¹	Performance Specification	Bias Test Result
				Annual	
1	08/02/13	479	0.009	± 0.015 lb/mmBtu	1.000
2	07/09/13	200	0.002	± 0.015 lb/mmBtu	1.000

¹RATA results indicate difference in lb NO_x/mmBtu between the RM and CEMS.

2.5 Miscellaneous Tests

Since the Anclote Unit 1 and Unit 2 CEMS were pre-existing CEMS, fuel flowmeter and data acquisition and handling system (DAHS) testing was not required for this re-recertification. Moreover, the fuel gas combusted by the facility is identical to the fuel gas previously combusted by the units. Hence, no additional fuel analyses or demonstrations are required to be submitted.

CO CEMS Certification and RATA Report

Completed for:

***Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1 (EU-001)***

Test Report Number: 20-6392-01-001

Test Completed: July 10 – August 2, 2013



**CO CEMS Certification
and RATA Report**

**Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1 (EU-001)
Holiday, Florida**

C.E.M. Solutions Project No.: 6392

Testing Completed: July 10 – August 2, 2013

C.E.M. Solutions, Inc. Report Number: 20-6392-01-001

C.E.M. Solutions, Inc.
1183 E. Overdrive Circle.
Hernando, Florida 34442
Phone: 352-4898-4337

**Declaration of Conformance to ASTM D 7036-04:
Standard Practice for Competence of Air Emission
Testing Bodies**

C.E.M. Solutions operates in conformance with the requirements of ASTM D 7036-04: Standard Practice for Competence of Air Emission Testing Bodies through the use of a quality system which incorporates a quality manual, internal audit system, systematic training of personnel and rigorous review of test methods and operating procedures.



Joe Conti
Quality Assurance Manager,
C.E.M. Solutions, Inc.

Statement of Validity

I hereby certify the information and data provided in this emissions test report for tests performed at the Duke Energy Florida, Inc. Anclote Power Plant on July 10 through August 2, 2013 are complete and accurate to the best of my knowledge.



Joe Conti
Quality Assurance Manager,
C.E.M. Solutions, Inc.

Project Background

Name of Source Owner: Duke Energy Florida, Inc.

Address of Owner: 299 First Avenue North
St. Petersburg, FL 33701

Source Identification: Facility: 1010017
Emissions Unit: EU -001

Location of Source: Pasco County, Florida

Type of Operation: SIC Code 4911

Tests Performed: Method 1 – Traverse Points
Method 3A – Determination of CO₂ and O₂
Method 10 – Determination of Carbon Monoxide
Method 19 – Determination of Emissions Rates
Relative Accuracy Test Audit
7-Day Calibration Error Check
Cycle Time Test
Cylinder Gas Audit

Test Supervisor (QI): Mr. Alex Houseal

Test Technicians: Mr. Josh Cooper
Mr. Ben Carrico
Mr. Brian Kimball

Date(s) Tests Conducted: Cylinder Gas Audit: July 10, 2013
7-Day Cal Error: July 11 – 17, 2013
Cycle Time Tests: July 10, 2013
Relative Accuracy Test Audit: August 2, 2013

Site Test Coordinator: Ms. Suzanne Hamilton
Mr. Charles Dufeny

State Regulatory Observers: No Observers Present

Table of Contents

1.0	Introduction	1
2.0	Facility Description	2
2.1	Process Equipment	2
2.2	Regulatory Applicability/Performance Standards	2
2.3	Applicable Regulatory Requirements	2
2.4	Recertification Tests Performance Standards	2
3.0	Test Program/Operating Conditions.....	4
3.1	Cylinder Gas Audit Operating Conditions	4
3.2	Cycle Response Time Test Operating Conditions	4
3.3	7-Day Calibration Error Test.....	4
3.4	Relative Accuracy Test Audits (RATAs)	4
4.0	Test Methods	5
4.1	CO Relative Accuracy Test Audit (RATA).....	5
4.1.1	Sampling Location/Traverse Points/Test Run Duration	6
4.1.2	Quality Assurance/Quality Control Procedures	7
4.2	Cylinder Gas Audit.....	7
4.3	Cycle Response Time Test.....	8
4.4	7-Day Calibration Error Test.....	8
5.0	Test Results	10
5.1	CO	10
5.1.1	CO RATA	10
5.1.2	CO Cylinder Gas Audit	10
5.1.3	CO Response Time Tests	10
5.1.4	CO 7-Day Drift Tests	10

List of Tables

Table 1:	Summary of Test Results.....	1
Table 2:	CEMS Analyzer Serial Numbers	3
Table 3:	Summary of EPA Reference Methods	5
Table 4:	Summary of EPA Reference Method Instrumentation	5
Table 5:	Reference Method Calibration Span and Calibration Gases.....	6
Table 6:	Unit 1 (EU-001) CO RATA Summary	11

Appendices

Appendix A: Facility Operating Data

Appendix B: Mathematical Equations

Appendix C: Sample Location Diagram/Traverse Points

Appendix D: Reference Method Calibration Gas Certificates of Analysis

Appendix E: Reference Method QA/QC

Appendix F: Reference Method Data

Appendix F-1: RATA

Appendix F-2: Linearity Test Data

Appendix F-3: Cycle Time Test Data

Appendix F-4: 7-Day Calibration Error Test Data

Appendix G: Accreditations and Certifications

1.0 Introduction

Duke Energy Florida, Inc. retained C.E.M. Solutions, Inc. to perform certification testing of the Unit 1 (EU-001) Continuous Emissions Monitoring Systems (CEMS), at its Anclote Power Plant facility located in Holiday, Florida. Tests were conducted in accordance with the United States Environmental Protection Agency's (USEPA) requirements in the Code of Federal Regulations, Title 40, Part 60. The CEMS certification test program was conducted from July 10, 2013 through August 2, 2013.

Suzanne Hamilton of the Duke Energy Anclote Power Plant coordinated plant operations throughout the test program. All testing was conducted in accordance with test methods promulgated by the Florida Department of Environmental Protection (FDEP).

The test program and results are presented and discussed in this report.

**Table 1: Summary of Test Results
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1**

Parameter	Test	Test Result	Performance Criteria
CO High Range	Cylinder Gas Audit	Low level: 1.40 % Mid level: 0.61 %	≤15.0%
CO Low Range	Cylinder Gas Audit	Low level: 10.08 % Mid level: 1.50 %	≤15.0%
CO High Range	Cycle Response Time	59 seconds	≤ 90 seconds
CO Low Range	Cycle Response Time	47 seconds	≤ 90 seconds
CO High Range	7-Day Drift	Zero level: 0.44 % Upscale level: 1.02%	≤5.0%
CO Low Range	7-Day Drift	Zero level: 4.55 % Upscale level: 3.35 %	≤5.0%
CO	RATA	1.4%	5.0% RA

2.0 Facility Description

Unit 1 (EU-001) is a fossil fuel fired steam generator capable of firing natural gas exclusively with a designed heat input rating of 5500 mmbtu/hr to achieve the gross nameplate capacity rating of 556.2 MW.

2.1 Process Equipment

Unit 1 and 2 share a common 499 foot exhaust stack. Emissions from both units are uncontrolled.

2.2 Regulatory Applicability/Performance Standards

The applicable regulatory requirements and test performance standards are discussed herein.

2.3 Applicable Regulatory Requirements

In accordance with 40CFR60, Appendix B and Appendix F, the Anclote Plant was required to complete the following certification tests:

- a) Cylinder Gas Audit
- b) Cycle Time Test
- c) 7-Day Calibration Error Test
- d) Relative Accuracy Test Audit

2.4 Certification Tests Performance Standards

The Anclote CEMS are subject to the following performance standards required by 40CFR60, Appendix B and Appendix F:

- a) Cylinder Gas Audit: The calibration error shall not exceed or deviate from the reference values of the low and mid level gases by more than 15.0%.
- b) Cycle Response Time Test: The cycle response time shall not exceed 90 seconds
- c) 7-Day Calibration Error Test: For CO, the monitors shall not deviate from the reference values of either the zero or upscale calibration gas by more than 2.5% of the instrument span. For CO₂, the monitor shall not deviate from the reference value of either the zero or upscale calibration gas by more than 0.5%, as calculated using the term |R-A| in equation A-5 of Appendix A.
- d) Relative Accuracy Test Audit: The relative accuracy of the CO-Diluent, and CO₂ CEMS shall not exceed 10.0%.

**Table 2: CEMS Analyzer Serial Numbers
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1**

Location/Description	Serial Number
Thermo Environmental Instruments, Model 48i CO	CM13090062

3.0 Test Program/Operating Conditions

The test program was conducted to determine the accuracy of the Unit 1 CEMS in regards to Title V Operating Permit number 1010017-013-AC from July 10, 2013 through August 2, 2013. During the CO lb/mmbtu RATA, Unit 1 operated at 479 MW.

3.1 Cylinder Gas Audit Operating Conditions

Unit 1 Stack CO Cylinder Gas Audits were conducted July 10, 2013, while there was a fire in the boiler.

3.2 Cycle Response Time Test Operating Conditions

The Unit 1 CO Cycle Response Time Test was completed on July 10, 2013, while the boiler was operating.

3.3 7-Day Calibration Error Test

The Unit 1 CO 7- Day Calibration Error Test was completed on July 11 through July 17, 2013. Each day's calibration error check was completed while the boiler was operating.

3.4 Relative Accuracy Test Audits (RATAs)

Unit 1 CEMS RATA was conducted on August 2, 2013 at the designated High operating level, also designated as the normal operating level. Unit 1 operated at an average of 479 gross megawatts.

Operating data during the RATAs are located in the Emissions Test reports located in Appendix D.

4.0 Test Methods

All testing was performed in accordance with methods approved by the United States Environmental Protection Agency (EPA) and FDEP. The following discusses the methods, as well as quality assurance and sample handling procedures.

Table 3 summarizes the EPA test methods utilized to complete the test program.

**Table 3: Summary of EPA Reference Methods
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1**

EPA Method	Description
1	Sample and Velocity Traverses for Stationary Sources
2	Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot)
3A	Determination of Carbon Dioxide and Oxygen
10	Determination of Carbon Monoxide
19	Determination of Emissions Rates

4.1 CO Relative Accuracy Test Audit (RATA)

CO reference method (RM) data was determined using instrument analyzer procedures. In addition, diluent gas concentrations of carbon dioxide (CO₂) were also measured via instrumental methods. CO₂ data was used to calculate CO pollutant emissions in pounds per million. Data collected by the reference method is compared to the CEMS data. Mathematical equations used to determine calculated emissions standards and RATA accuracy are located in Appendix B. Table 4 summarizes the EPA methods and instrumentation:

**Table 4: Summary of EPA Reference Method Instrumentation
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1**

Pollutant	EPA Method	Instrument	Serial Number
CO	USEPA 10	TEI Model 48c	48C-68846-361
CO ₂	USEPA 3A	CAI ZRH	N3G2200T

All reference method analyzers used meet or exceed applicable performance specifications detailed in the appropriate method.

Emissions were tested using an in-stack dilution extraction probe. Gas samples were continuously extracted from the stack by a gas sample probe and diluted at a ratio of approximately 100:1 with clean, dry instrument air (dilution air). Samples were then transported to gas analyzers, located in the environmentally controlled test trailer for analysis by the reference method analyzers.

Instrument outputs were recorded continuously with a Windows compatible personal computer, compiled into 15 second averages, and stored in a database for future reference.

Instrument ranges and calibration gases were chosen in accordance with each pollutant's applicable EPA method. Instrument ranges and calibration gases used are shown in Table 5:

**Table 5: Reference Method Calibration Span and Calibration Gases
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1**

Pollutant	Test Location	Calibration Span	Calibration Gases^a
CO	Unit 1	20.09 ppm	0.0 ppm CO 10.05 ppm CO 20.09 ppm CO
CO ₂	Unit 1	19.05 %	0.0 % CO ₂ 9.62 % CO ₂ 19.05% CO ₂

^a Concentrations of CO and CO₂ are in a balance of purified nitrogen (N₂). All analyzers were zeroed with ultra high purity N₂. All calibration gases have been certified to NIST traceable standards.

Calibration gas Certificates of Analysis can be found in Appendix D.

4.1.1 Sampling Location/Traverse Points/Test Run Duration

The 14 feet by 27.6 feet rectangular ducts on Units 1 and 2 have an inner diameter, at the sample location, of 27.6 feet (331.0"). The emissions sampling location is 90 feet downstream from the nearest flow disturbance, and 75 feet upstream from the nearest duct bend.

Gas sample traverse points were located in accordance with 40CFR, Part 60, Appendix A, Performance Specification 2, Section 8.1.3.2 at 0.4 meters, 1.2 meters and 2.0 meters from the inner wall of the stack. Each point was sampled for seven minutes, equaling a total of 21 minutes per test run. A minimum of nine

test runs were completed. A diagram of the sample location can be viewed in Appendix C.

4.1.2 Quality Assurance/Quality Control Procedures

All sampling, analytical, and Quality Assurance/Quality Control (QA/QC) procedures outlined in the EPA methods were followed. All test equipment was calibrated before or during use in the field. Interference checks and response time checks were performed on each instrumental analyzer, as applicable, before field use. In the field, each analyzer and the entire instrument measurement system was checked for system bias before and following each test run using the calibration gases listed in Table 5. Appendix E contains the QA/QC checks.

4.2 Cylinder Gas Audit

The CEMS were challenged with an audit gas of known concentration, at two points: one at 20 to 30% of the span value and another at 50 to 60% of the span value.

The CO CEMS pollutant analyzer was challenged at each point three separate, non consecutive, times. All monitors were challenged with the calibration gases for a period of time which allowed sufficient stabilization.

Each monitor was sampling at normal operating conditions and temperatures. Calibration gases were sent through all probe filters, tubing, and other gas routing as it is during normal sampling operation.

CGA audit gases were calibrated in accordance with requirements of 40CFR60, Appendix F, Section 5.1.2 (3).

Calibration gas certificates of analysis (COAs) are located in the appropriate appendices.

4.3 Cycle Response Time Test

C.E.M. Solutions' personnel completed Unit 1 CEMS Cycle Time Tests. The CO monitor was challenged with zero and mid-level calibration gas.

To determine the system upscale response, an upscale level calibration gas was injected into the CEMS calibration system. The upscale time is the time it takes to for a 95.0 percent step change to be achieved between the stack emissions reading and the stable ending value.

To determine the downscale response, zero calibration gas was injected into the CEMS calibration system. The downscale time is the time it takes to for a 95.0 percent step change to be achieved between the stack emissions reading and the stable ending value.

Please Note: A stable value is equivalent to a reading with a change of less than 1.0 percent of the span value for 30 seconds.

Individual Cycle Time tests, supporting data and calibration gas certificates used during the test are located in Appendix B.

4.4 7-Day Calibration Error Test

The Calibration Error (CE) for each CO and CO₂ monitor was measured for 7 consecutive boiler operating days.

Immediately following each probe installation and initial manual calibration, a probationary "hands-off" calibration error check was performed in order to conditionally validate CEMS data.

No adjustments were made during the monitors during the test period. All calibration checks were performed "hands-off".

The daily calibration error tests were conducted approximately 24 hrs apart, to the extent practical.

Each day of the 7-Day Calibration Error test, the monitors were challenged at the zero and a mid level calibration concentration.

During the calibration error check, the calibration gas is passed through all filters, scrubbers, and other monitor components used during normal sampling. The monitors and gas sampling systems operated in their normal sampling mode during all phases of the calibration error checks.

Individual Calibration Error reports for the 7-Day Calibration Error Tests and calibration gas COAs can be viewed in Appendix C.

5.0 Test Results

The following presents the results of the test program. Supporting calculations and field data summaries are presented in Appendix B and F, respectively.

Table 6 summarizes the results of the Unit 1 RATA.

5.1 CO

5.1.1 CO RATA

The relative accuracy of the Unit 1 CO-Diluent CEMS was 1.4%, passing the alternate annual performance specification of 5.0% when using the applicable standard in the RA calculation.

5.1.2 CO Cylinder Gas Audit

Unit 1 CEMS High Range CO calibration error measurements averaged 1.40%, and 0.61% error at the low and mid-level gas concentrations, respectively, passing the applicable performance specification of 15.0 percent.

Unit 1 CEMS Low Range CO calibration error measurements averaged 10.08%, and 1.50% error at the low and mid-level gas concentrations, respectively, passing the applicable performance specification of 15.0 percent.

5.1.3 CO Response Time Tests

Unit 1 High Range CO analyzer longest system response time was 59 seconds, passing the performance specification of less than or equal to 90 seconds. The Unit 1 Low Range CO analyzer's longest system response time was 47 seconds, passing the performance specification of less than or equal to 90 seconds.

5.1.4 CO 7-Day Drift Tests

Unit 1 High Range CO analyzer's highest recorded calibration error check was 0.44% and 1.02% at the zero and mid-level gas concentrations, respectively, passing the performance specification of $\leq 5.0\%$.

Unit 1 Low Range CO analyzer's highest recorded calibration error check was 4.55% and 3.35% at the zero and mid-level gas concentrations, respectively, passing the performance specification of $\leq 5.0\%$.

Table 6: Unit 1 (EU-001) CO RATA Summary
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 1

Test Performed For:
 Duke Energy Florida
 Anclote
 Unit 1
 Rata
 Date: 8/2/13

Test Performed By:
 C.E.M. Solutions, Inc.
 1183 East Overdrive Circle
 Hernando, FL 34442
 (352) 489-4337

Run Number	Date of Run	Start Time	Stop Time	Unit Load MW	CO RM lbs/mmBtu	CEM lbs/mmBtu	Difference Like lbs/mmBtu
Run 1	2-Aug	10:37:00	10:58:00	479.00	0.000	0.002	-0.002
Run 2	2-Aug	11:18:00	11:39:00	479.00	0.001	0.002	-0.001
Run 3	2-Aug	11:52:00	12:13:00	479.00	0.001	0.002	-0.001
Run 4	2-Aug	12:29:00	12:50:00	479.00	0.001	0.003	-0.002
Run 5	2-Aug	13:02:00	13:23:00	479.00	0.001	0.002	-0.001
Run 6	2-Aug	13:36:00	13:57:00	479.00	0.001	0.003	-0.002
Run 7	2-Aug	14:09:00	14:30:00	479.00	0.001	0.003	-0.002
Run 8	2-Aug	14:42:00	15:03:00	479.00	0.001	0.003	-0.002
Run 9	2-Aug	15:16:00	15:37:00	479.00	0.001	0.003	-0.002

Average: 479.00 0.001 0.003 -0.002 lbs/mmBtu

Method of RA Determination: Applicable Standard

Standard Deviation: 0.0005
 Confidence Coefficient: 0.0004
 T-Factor: 2.306
 Number of runs Reported: 9
 Applicable Standard: 0.15 lbs/mmBtu
Relative Accuracy: 1.4 %
 Maximum RA 5.0 %
RA Status Passed

Note:
 All ppm values are corrected to lbs/mmbtu CO
 using RM CO2 and CEM CO2 as diluents

Opacity Audit Form

Auditor(s): Chris Vaughn/Ben Carrico

Audit Date: 10/29/2013

Site Information

Site Identification: Progress Energy
 Site Contact: S. Hamilton
 Stack Number: 1

Location: Anclote
 Phone: 727-943-3001
 Extension: _____

Monitor Information

Monitor Manufacturer: Durag
 Transceiver Serial No: 421291
 Remote Serial No: 419304

Model Number: D-R 290
 Reflector S/N: 421430
 Reflector Type: III

Pre-Audit Data

Site Opacity Limit	40.0%	1
Stack Exit Inside Diameter in Inches	288.00	2
Stack Inside Diameter at Monitor in Inches	168.00	3
Calculated Optical Path Length Correction Factor	1.71429	4
Source-Sited Optical Path Length Correction Factor	1.71400	5
Source Sited Zero Calibration Value	0.00	6
Source Sited Span Calibration Value	45.00	7
Instrument Range Setting	100	8
Zero Reference Value (mA)	4.00	9
Window Check Value (mA)	3.95	10
Opacity Data Recorder Value (%)	-0.10	11
Span Check Value (mA)	11.20	12
Opacity Data Recorder Value (%)	45.00	13
STRCF (mA)	1.71	14
STRCF Data Recorder Value	12.09	15

Filter Information

Filter Serial No.	Value	Corrected Value	Expiration Date
<u>RS64</u> 16	<u>8.20</u> 19	<u>13.81</u> 22	<u>6/28/2014</u> 25
<u>UZ90</u> 17	<u>16.40</u> 20	<u>26.59</u> 23	<u>6/28/2014</u> 26
<u>VW93</u> 18	<u>30.40</u> 21	<u>46.38</u> 24	<u>6/28/2014</u> 27

Opacity Audit Run Data

Zero	Low	Mid	High	Zero
<u>0.20</u> 28	<u>14.30</u> 29	<u>27.10</u> 30	<u>46.90</u> 31	
	<u>14.30</u> 32	<u>27.10</u> 33	<u>46.80</u> 34	
	<u>14.30</u> 35	<u>27.10</u> 36	<u>46.90</u> 37	
	<u>14.30</u> 38	<u>27.10</u> 39	<u>46.90</u> 40	
	<u>14.10</u> 41	<u>27.10</u> 42	<u>46.90</u> 43	<u>0.20</u> 44

Audit Results

Stack Exit Correlation Error (%)	<u>-0.02</u> 45
Zero Error (%)	<u>-0.31</u> 46
Span Error (%)	<u>0.00</u> 47

Low Range Difference		Δ Low	$(\Delta \text{ Low})^2$
14.30	13.81	0.49	0.2401
14.30	13.81	0.49	0.2401
14.30	13.81	0.49	0.2401
14.30	13.81	0.49	0.2401
14.10	13.81	0.29	0.0841
		<u>2.25</u>	<u>1.0445</u>

Mid Range Difference		Δ Mid	$(\Delta \text{ Mid})^2$
27.10	26.59	0.51	0.2601
27.10	26.59	0.51	0.2601
27.10	26.59	0.51	0.2601
27.10	26.59	0.51	0.2601
27.10	26.59	0.51	0.2601
		<u>2.55</u>	<u>1.3005</u>

Date/Time	1_COMS: OPACITY (PCT) Raw Value
10/29/2013 11:39	2.3
10/29/2013 11:39	2
10/29/2013 11:39	2
10/29/2013 11:39	1.8
10/29/2013 11:39	1.9
10/29/2013 11:39	0.3
10/29/2013 11:40	0.1
10/29/2013 11:40	2.2
10/29/2013 11:40	1.5
10/29/2013 11:40	0.2
10/29/2013 11:40	0.2
10/29/2013 11:40	0.2
10/29/2013 11:41	0.2
10/29/2013 11:41	0.2
10/29/2013 11:41	0.1
10/29/2013 11:41	0.2
10/29/2013 11:41	2.8
10/29/2013 11:41	14.3
10/29/2013 11:42	14.3
10/29/2013 11:42	14.3
10/29/2013 11:42	14.3
10/29/2013 11:42	14.3
10/29/2013 11:42	14.3
10/29/2013 11:42	11.2
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:43	27.1
10/29/2013 11:44	30.5
10/29/2013 11:44	46.9
10/29/2013 11:44	46.9
10/29/2013 11:44	46.9
10/29/2013 11:44	46.9
10/29/2013 11:44	46.8
10/29/2013 11:45	46.9
10/29/2013 11:45	12.5
10/29/2013 11:45	14.3
10/29/2013 11:45	14.3
10/29/2013 11:45	14.3
10/29/2013 11:45	14.3
10/29/2013 11:45	14.3
10/29/2013 11:45	14.3
10/29/2013 11:46	14.3
10/29/2013 11:46	14.3
10/29/2013 11:46	15.6
10/29/2013 11:46	27.1
10/29/2013 11:46	27.1
10/29/2013 11:46	27.1
10/29/2013 11:47	27.1
10/29/2013 11:47	27.1

G.E.M. SOLUTIONS, INC. DATE 10-29-13
 CUSTOMER Duke Energy
 PLANT Anclote UNIT 1
 AUDITOR (S) C. Vaughn / B. Carrico
 STRCF 1.714

FILTERS:	S/N	VALUE	CORR	EXP
L	<u>R564</u>	<u>8.2</u>	<u>13.64</u>	<u>6-28-14</u>
M	<u>0290</u>	<u>16.4</u>	<u>26.43</u>	<u>6-28-14</u>
H	<u>VW93</u>	<u>30.4</u>	<u>46.26</u>	<u>6-28-14</u>

10/29/2013 11:55	14.2
10/29/2013 11:56	14.1
10/29/2013 11:56	14.1
10/29/2013 11:56	14.1
10/29/2013 11:56	14.1
10/29/2013 11:56	11.5
10/29/2013 11:56	21.6
10/29/2013 11:57	27.2
10/29/2013 11:57	27.1
10/29/2013 11:57	27.2
10/29/2013 11:57	27.1
10/29/2013 11:57	27.1
10/29/2013 11:57	30.1
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:58	46.9
10/29/2013 11:59	0.2
10/29/2013 11:59	0.2
10/29/2013 11:59	0.2
10/29/2013 11:59	0.2
10/29/2013 11:59	0.1
10/29/2013 11:59	0.1

**ATTACHMENT
APP-EU2-I6
COMPLIANCE DEMONSTRATION REPORTS**

CEMS Recertification and RATA Report

Completed for:

***Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2 (EU-002)***

Test Report Number: 20-6392-02-001

Test Completed: January 14, 2014



**CO CEMS Certification
and RATA Report**

**Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2 (EU-002)
Holiday, Florida**

C.E.M. Solutions Project No.: 6392

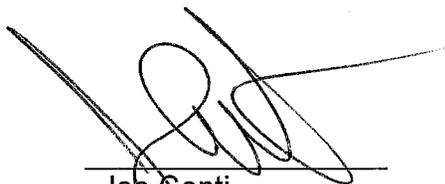
Testing Completed: January 6 – 14, 2014

C.E.M. Solutions, Inc. Report Number: 20-6392-02-001

C.E.M. Solutions, Inc.
1183 E. Overdrive Circle.
Hernando, Florida 34442
Phone: 352-4898-4337

Declaration of Conformance to ASTM D 7036-04: Standard Practice for Competence of Air Emission Testing Bodies

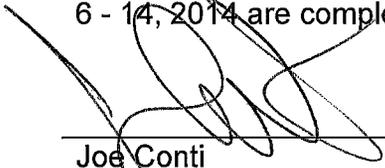
C.E.M. Solutions operates in conformance with the requirements of ASTM D 7036-04: Standard Practice for Competence of Air Emission Testing Bodies through the use of a quality system which incorporates a quality manual, internal audit system, systematic training of personnel and rigorous review of test methods and operating procedures.



Joe Conti
Quality Assurance Manager,
C.E.M. Solutions, Inc.

Statement of Validity

I hereby certify the information and data provided in this emissions test report for tests performed at the Duke Energy Florida, Inc. Anclote Power Plant on January 6 - 14, 2014 are complete and accurate to the best of my knowledge.



Joe Conti
Quality Assurance Manager,
C.E.M. Solutions, Inc.

Project Background

Name of Source Owner: Duke Energy Florida, Inc.

Address of Owner: 299 First Avenue North
St. Petersburg, FL 33701

Source Identification: Facility: 1010017
Emissions Unit: EU -001

Location of Source: Pasco County, Florida

Type of Operation: SIC Code 4911

Tests Performed: Method 1 – Traverse Points
Method 3A – Determination of CO₂ and O₂
Method 10 – Determination of Carbon Monoxide
Method 19 – Determination of Emissions Rates
Relative Accuracy Test Audit
7-Day Calibration Error Check
Cycle Time Test
Cylinder Gas Audit

Test Supervisor (QI): Mr. Alex Houseal

Test Technicians: Mr. Derek Kopera
Mr. Ben Carrico

Date(s) Tests Conducted: Cylinder Gas Audit: January 6, 2014
Cycle Time Tests: January 6, 2014
7-Day Cal Error: January 8 – 14, 2014
Relative Accuracy Test Audit: January 14, 2014

Site Test Coordinator: Ms. Suzanne Hamilton
Mr. Charles Dufeny

State Regulatory Observers: No Observers Present

Table of Contents

- 1.0 Introduction 1
- 2.0 Facility Description2
 - 2.1 Process Equipment2
 - 2.2 Regulatory Applicability/Performance Standards2
 - 2.3 Applicable Regulatory Requirements2
 - 2.4 Recertification Tests Performance Standards2
- 3.0 Test Program/Operating Conditions.....4
 - 3.1 Cylinder Gas Audit Operating Conditions4
 - 3.2 Cycle Response Time Test Operating Conditions4
 - 3.3 7-Day Calibration Error Test.....4
 - 3.4 Relative Accuracy Test Audits (RATAs)4
- 4.0 Test Methods5
 - 4.1 CO Relative Accuracy Test Audit (RATA).....5
 - 4.1.1 Sampling Location/Traverse Points/Test Run Duration6
 - 4.1.2 Quality Assurance/Quality Control Procedures7
 - 4.2 Cylinder Gas Audit.....7
 - 4.3 Cycle Response Time Test.....8
 - 4.4 7-Day Calibration Error Test.....8
- 5.0 Test Results 10
 - 5.1 CO 10
 - 5.1.1 CO RATA 10
 - 5.1.2 CO Cylinder Gas Audit 10
 - 5.1.3 CO Response Time Tests 10
 - 5.1.4 CO 7-Day Drift Tests 10

List of Tables

- Table 1: Summary of Test Results..... 1
- Table 2: CEMS Analyzer Serial Numbers3
- Table 3: Summary of EPA Reference Methods5
- Table 4: Summary of EPA Reference Method Instrumentation5
- Table 5: Reference Method Calibration Span and Calibration Gases.....6
- Table 6: Unit 2 (EU-002) CO RATA Summary 11

Appendices

Appendix A: Facility Operating Data

Appendix B: Mathematical Equations

Appendix C: Sample Location Diagram/Traverse Points

Appendix D: Reference Method Calibration Gas Certificates of Analysis

Appendix E: Reference Method QA/QC

Appendix F: Reference Method Data

Appendix F-1: RATA

Appendix F-2: Linearity Test Data

Appendix F-3: Cycle Time Test Data

Appendix F-4: 7-Day Calibration Error Test Data

Appendix G: Accreditations and Certifications

1.0 Introduction

Duke Energy Florida, Inc. retained C.E.M. Solutions, Inc. to perform certification testing of the Unit 2 (EU-002) Continuous Emissions Monitoring Systems (CEMS), at its Anclote Power Plant facility located in Holiday, Florida. Tests were conducted in accordance with the United States Environmental Protection Agency's (USEPA) requirements in the Code of Federal Regulations, Title 40, Part 60. The CEMS certification test program was conducted from January 6, 2014 through January 14, 2014.

Suzanne Hamilton of the Duke Energy Anclote Power Plant coordinated plant operations throughout the test program. All testing was conducted in accordance with test methods promulgated by the Florida Department of Environmental Protection (FDEP).

The test program and results are presented and discussed in this report.

**Table 1: Summary of Test Results
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2**

Parameter	Test	Test Result	Performance Criteria
CO High Range	Cylinder Gas Audit	Low level: 3.52 % Mid level: 0.55 %	≤15.0%
CO Low Range	Cylinder Gas Audit	Low level: 2.15 % Mid level: 3.69 %	≤15.0%
CO High Range	Cycle Response Time	47 seconds	≤ 90 seconds
CO Low Range	Cycle Response Time	57 seconds	≤ 90 seconds
CO High Range	7-Day Drift	Zero level: 0.30 % Upscale level: 1.05%	≤5.0%
CO Low Range	7-Day Drift	Zero level: 2.60 % Upscale level: 1.95 %	≤5.0%
CO	RATA	0.6 %	5.0% RA

2.0 Facility Description

Unit 2 (EU-002) is a fossil fuel fired steam generator capable of firing natural gas exclusively with a designed heat input rating of 5500 mmbtu/hr to achieve the gross nameplate capacity rating of 556.2 MW.

2.1 Process Equipment

Unit 1 and 2 share a common 499 foot exhaust stack. CEMs probes and reference method testing ports are located in horizontal ducts prior to flue gas combination. Emissions from both units are uncontrolled.

2.2 Regulatory Applicability/Performance Standards

The applicable regulatory requirements and test performance standards are discussed herein.

2.3 Applicable Regulatory Requirements

In accordance with 40CFR60, Appendix B and Appendix F, the Anclote Plant was required to complete the following certification tests:

- a) Cylinder Gas Audit
- b) Cycle Time Test
- c) 7-Day Calibration Error Test
- d) Relative Accuracy Test Audit

2.4 Certification Tests Performance Standards

The Anclote CEMS are subject to the following performance standards required by 40CFR60, Appendix B and Appendix F:

- a) Cylinder Gas Audit: The calibration error shall not exceed or deviate from the reference values of the low and mid level gases by more than 15.0%.
- b) Cycle Response Time Test: The cycle response time shall not exceed 90 seconds
- c) 7-Day Calibration Error Test: For CO, the monitors shall not deviate from the reference values of either the zero or upscale calibration gas by more than 2.5% of the instrument span. For CO₂, the monitor shall not deviate from the reference value of either the zero or upscale calibration gas by more than 0.5%, as calculated using the term |R-A| in equation A-5 of Appendix A.

- d) Relative Accuracy Test Audit: The relative accuracy of the CO-Diluent, and CO₂ CEMS shall not exceed 10.0%.

**Table 2: CEMS Analyzer Serial Numbers
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2**

Location/Description	Serial Number
Thermo Environmental Instruments, Model 48i CO	CM13090063

3.0 Test Program/Operating Conditions

The test program was conducted to determine the accuracy of the Unit 2 CEMS in regards to Title V Operating Permit number 1010017-013-AC from January 6, 2014 through January 14, 2014. During the CO lb/mmBtu RATA, Unit 2 operated at 350 MW.

3.1 Cylinder Gas Audit Operating Conditions

Unit 2 Stack CO Cylinder Gas Audits were conducted January 6, 2014, while there was a fire in the boiler.

3.2 Cycle Response Time Test Operating Conditions

The Unit 2 CO Cycle Response Time Test was completed on January 6, 2014, while the boiler was operating.

3.3 7-Day Calibration Error Test

The Unit 2 CO 7- Day Calibration Error Test was completed on January 8 through January 14, 2014. Each day's calibration error check was completed while the boiler was operating.

3.4 Relative Accuracy Test Audits (RATAs)

Unit 2 CEMS RATA was conducted on January 14, 2014 at the designated High operating level, also designated as the normal operating level. Unit 2 operated at an average of 350 gross megawatts.

Operating data during the RATAs are located in the Emissions Test reports located in Appendix D.

4.0 Test Methods

All testing was performed in accordance with methods approved by the United States Environmental Protection Agency (EPA) and FDEP. The following discusses the methods, as well as quality assurance and sample handling procedures.

Table 3 summarizes the EPA test methods utilized to complete the test program.

**Table 3: Summary of EPA Reference Methods
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2**

EPA Method	Description
1	Sample and Velocity Traverses for Stationary Sources
2	Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot)
3A	Determination of Carbon Dioxide and Oxygen
10	Determination of Carbon Monoxide
19	Determination of Emissions Rates

4.1 CO Relative Accuracy Test Audit (RATA)

CO reference method (RM) data was determined using instrument analyzer procedures. In addition, diluent gas concentrations of carbon dioxide (CO₂) were also measured via instrumental methods. CO₂ data was used to calculate CO pollutant emissions in pounds per million. Data collected by the reference method is compared to the CEMS data. Mathematical equations used to determine calculated emissions standards and RATA accuracy are located in Appendix B. Table 4 summarizes the EPA methods and instrumentation:

**Table 4: Summary of EPA Reference Method Instrumentation
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2**

Pollutant	EPA Method	Instrument	Serial Number
CO	USEPA 10	TEI Model 48c	48C-74094-375
CO ₂	USEPA 3A	Servomex	1415D/3379

All reference method analyzers used meet or exceed applicable performance specifications detailed in the appropriate method.

Emissions were tested using an in-stack dilution extraction probe. Gas samples were continuously extracted from the stack by a gas sample probe and diluted at a ratio of approximately 100:1 with clean, dry instrument air (dilution air). Samples were then transported to gas analyzers, located in the environmentally controlled test trailer for analysis by the reference method analyzers.

Instrument outputs were recorded continuously with a Windows compatible personal computer, compiled into 15 second averages, and stored in a database for future reference.

Instrument ranges and calibration gases were chosen in accordance with each pollutant's applicable EPA method. Instrument ranges and calibration gases used are shown in Table 5:

**Table 5: Reference Method Calibration Span and Calibration Gases
Duke Energy Florida, Inc.
Anclote Power Plant
Unit 2**

Pollutant	Test Location	Calibration Span	Calibration Gases^a
CO	Unit 2	97.52 ppm	0.0 ppm CO 46.66 ppm CO 97.52 ppm CO
CO ₂	Unit 2	19.69 %	0.0 % CO ₂ 9.62 % CO ₂ 19.69% CO ₂

^a Concentrations of CO and CO₂ are in a balance of purified nitrogen (N₂). All analyzers were zeroed with ultra high purity N₂. All calibration gases have been certified to NIST traceable standards.

Calibration gas Certificates of Analysis can be found in Appendix D.

4.1.1 Sampling Location/Traverse Points/Test Run Duration

The 14 feet by 27.6 feet rectangular ducts on Units 1 and 2 have an inner diameter, at the sample location, of 27.6 feet (331.0"). The emissions sampling location is 90 feet downstream from the nearest flow disturbance, and 75 feet upstream from the nearest duct bend.

Gas sample traverse points were located in accordance with 40CFR, Part 60, Appendix A, Performance Specification 2, Section 8.1.3.2 at 0.4 meters, 1.2 meters and 2.0 meters from the inner wall of the stack. Each point was sampled for seven minutes, equaling a total of 21 minutes per test run. A minimum of nine

test runs were completed. A diagram of the sample location can be viewed in Appendix C.

4.1.2 Quality Assurance/Quality Control Procedures

All sampling, analytical, and Quality Assurance/Quality Control (QA/QC) procedures outlined in the EPA methods were followed. All test equipment was calibrated before or during use in the field. Interference checks and response time checks were performed on each instrumental analyzer, as applicable, before field use. In the field, each analyzer and the entire instrument measurement system was checked for system bias before and following each test run using the calibration gases listed in Table 5. Appendix E contains the QA/QC checks.

4.2 Cylinder Gas Audit

The CEMS were challenged with an audit gas of known concentration, at two points: one at 20 to 30% of the span value and another at 50 to 60% of the span value.

The CO CEMS pollutant analyzer was challenged at each point three separate, non consecutive, times. All monitors were challenged with the calibration gases for a period of time which allowed sufficient stabilization.

Each monitor was sampling at normal operating conditions and temperatures. Calibration gases were sent through all probe filters, tubing, and other gas routing as it is during normal sampling operation.

CGA audit gases were calibrated in accordance with requirements of 40CFR60, Appendix F, Section 5.1.2 (3).

Calibration gas certificates of analysis (COAs) are located in the appropriate appendices.

4.3 Cycle Response Time Test

C.E.M. Solutions' personnel completed Unit 2 CEMS Cycle Time Tests. The CO monitor was challenged with zero and mid-level calibration gas.

To determine the system upscale response, an upscale level calibration gas was injected into the CEMS calibration system. The upscale time is the time it takes to for a 95.0 percent step change to be achieved between the stack emissions reading and the stable ending value.

To determine the downscale response, zero calibration gas was injected into the CEMS calibration system. The downscale time is the time it takes to for a 95.0 percent step change to be achieved between the stack emissions reading and the stable ending value.

Please Note: A stable value is equivalent to a reading with a change of less than 1.0 percent of the span value for 30 seconds.

Individual Cycle Time tests, supporting data and calibration gas certificates used during the test are located in Appendix B.

4.4 7-Day Calibration Error Test

The Calibration Error (CE) for each CO and CO₂ monitor was measured for 7 consecutive boiler operating days.

Immediately following each probe installation and initial manual calibration, a probationary "hands-off" calibration error check was performed in order to conditionally validate CEMS data.

No adjustments were made during the monitors during the test period. All calibration checks were performed "hands-off".

The daily calibration error tests were conducted approximately 24 hrs apart, to the extent practical.

Each day of the 7-Day Calibration Error test, the monitors were challenged at the zero and a mid level calibration concentration.

During the calibration error check, the calibration gas is passed through all filters, scrubbers, and other monitor components used during normal sampling. The monitors and gas sampling systems operated in their normal sampling mode during all phases of the calibration error checks.

Individual Calibration Error reports for the 7-Day Calibration Error Tests and calibration gas COAs can be viewed in Appendix C.

5.0 Test Results

The following presents the results of the test program. Supporting calculations and field data summaries are presented in Appendix B and F, respectively.

Table 6 summarizes the results of the Unit 2 RATA.

5.1 CO

5.1.1 CO RATA

The relative accuracy of the Unit 2 CO-Diluent CEMS was 0.6%, passing the alternate annual performance specification of 5.0% when using the applicable standard in the RA calculation.

5.1.2 CO Cylinder Gas Audit

Unit 2 CEMS High Range CO calibration error measurements averaged 3.52%, and 0.55% error at the low and mid-level gas concentrations, respectively, passing the applicable performance specification of 15.0 percent.

Unit 2 CEMS Low Range CO calibration error measurements averaged 2.15%, and 3.69% error at the low and mid-level gas concentrations, respectively, passing the applicable performance specification of 15.0 percent.

5.1.3 CO Response Time Tests

Unit 2 High Range CO analyzer longest system response time was 47 seconds, passing the performance specification of less than or equal to 90 seconds. The Unit 2 Low Range CO analyzer's longest system response time was 57 seconds, passing the performance specification of less than or equal to 90 seconds.

5.1.4 CO 7-Day Drift Tests

Unit 2 High Range CO analyzer's highest recorded calibration error check was 0.30% and 1.05% at the zero and mid-level gas concentrations, respectively, passing the performance specification of $\leq 5.0\%$.

Unit 2 Low Range CO analyzer's highest recorded calibration error check was 2.60% and 1.95% at the zero and mid-level gas concentrations, respectively, passing the performance specification of $\leq 5.0\%$.

Opacity Audit Form

Auditor(s): Chris Vaughn/Ben Carrico

Audit Date: 10/29/2013

Site Information

Site Identification: Progress Energy
 Site Contact: S. Hamilton
 Stack Number: 2

Location: Anclote
 Phone: 727-943-3001
 Extension: _____

Monitor Information

Monitor Manufacturer: Durag
 Transceiver Serial No: 421292
 Remote Serial No: 421652

Model Number: D-R 290
 Reflector S/N: 419626
 Reflector Type: III

Pre-Audit Data

Site Opacity Limit	40.0%	1
Stack Exit Inside Diameter in Inches	288.00	2
Stack Inside Diameter at Monitor in Inches	168.00	3
Calculated Optical Path Length Correction Factor	1.71429	4
Source Sited Optical Path Length Correction Factor	1.71400	5
Source Sited Zero Calibration Value	0.00	6
Source Sited Span Calibration Value	45.00	7
Instrument Range Setting	100	8
Zero Reference Value (mA)	4.00	9
Window Check Value (mA)	4.02	10
Opacity Data Recorder Value (%)	0.10	11
Span Check Value (mA)	11.19	12
Opacity Data Recorder Value (%)	44.90	13
STRCF (mA)	1.71	14
STRCF Data Recorder Value	12.09	15

Filter Information

Filter Serial No:	Value	Corrected Value	Expiration Date
RS64 <small>16</small>	8.20 <small>19</small>	13.73 <small>22</small>	6/28/2014 <small>25</small>
UZ90 <small>17</small>	16.40 <small>20</small>	26.51 <small>23</small>	6/28/2014 <small>26</small>
VW93 <small>18</small>	30.40 <small>21</small>	46.33 <small>24</small>	6/28/2014 <small>27</small>

Opacity Audit Run Data

Zero	Low	Mid	High	Zero
0.10 ₂₈	14.00 ₂₉	27.00 ₃₀	46.80 ₃₁	
	14.00 ₃₂	26.90 ₃₃	46.80 ₃₄	
	14.00 ₃₅	26.90 ₃₆	46.80 ₃₇	
	14.00 ₃₈	26.90 ₃₉	46.80 ₄₀	
	14.00 ₄₁	26.90 ₄₂	46.80 ₄₃	0.10 ₄₄

Audit Results

Stack Exit Correlation Error (%)	-0.02 ₄₅
Zero Error (%)	0.12 ₄₆
Span Error (%)	-0.06 ₄₇

Low Range Difference		Δ Low	$(\Delta \text{ Low})^2$
14.00	13.73	0.27	0.0729
14.00	13.73	0.27	0.0729
14.00	13.73	0.27	0.0729
14.00	13.73	0.27	0.0729
14.00	13.73	0.27	0.0729
		1.35	0.3645

Mid Range Difference		Δ Mid	$(\Delta \text{ Mid})^2$
27.00	26.51	0.49	0.2401
26.90	26.51	0.39	0.1521
26.90	26.51	0.39	0.1521
26.90	26.51	0.39	0.1521
26.90	26.51	0.39	0.1521
		2.05	0.8485

10/29/2013 11:31	26.9
10/29/2013 11:32	26.9
10/29/2013 11:32	26.9
10/29/2013 11:32	26.9
10/29/2013 11:32	26.9
10/29/2013 11:32	26.9
10/29/2013 11:32	38
10/29/2013 11:33	46.8
10/29/2013 11:33	46.8
10/29/2013 11:33	46.8
10/29/2013 11:33	46.8
10/29/2013 11:33	46.8
10/29/2013 11:33	46.8
10/29/2013 11:34	17.7
10/29/2013 11:34	0.1
10/29/2013 11:34	0.1
10/29/2013 11:34	0.1
10/29/2013 11:34	0.1
10/29/2013 11:34	0.1

**ATTACHMENT
APP-EU9-I6
COMPLIANCE DEMONSTRATION REPORTS**



October 1, 2013

Mr. Erin Anthony DiBacco, Environmental Manager
Compliance & Enforcement
Florida Department of Environmental Protection
Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637

Re: Natural Gas Fired Process Heater Certification
Duke Energy Florida
Anclote Station
Permit No.: 1010017-013-AC

Dear Mr. DiBacco:

The attached certification fulfills the requirements of Condition 3, Section 3, Subsection C of Permit No. PSD-FL-419/1010017-013-AC. This condition allows Anclote to submit Manufacturer certification of emissions characteristics of the purchased model that are at least as stringent as the BACT values. The unit 1 natural gas process heater was placed in service on September 16, 2013. The unit 2 natural gas process heater is expected to be placed in service before December 31, 2013. This certification applies to both heaters. Note that each heater has a 9.8 MMBtu/hr heat input design rather than the 16.5 MMBtu/hr listed in the permit. This is due to a design change after application submittal.

Please contact Suzanne Hamilton at (727) 943-3001 if you have any questions.

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

Sincerely,

A handwritten signature in black ink, appearing to read "William C. Luke", with a long horizontal flourish extending to the right.

William C. Luke
Plant Manager/Responsible Official

WCL/srh
Enclosures
Electronic submittal



Process Heating Systems Design,
Engineering, & Service

4875 Deen Rd
Marietta, GA 30066
Phone: 770-427-5770
Fax: 678-254-1762
www.sigmathermal.com

Emission Certification
for
Fuel Gas Heaters
for the
Anclote Natural Gas Conversion Project

May 7, 2013

Dear Mr. Joyce:

Sigma Thermal hereby certifies that the emission levels for the heaters purchase on contract # 645851 shall be equal to or less than the values indicated below. Note that certification is only in affect when the heater is operating within the parameters noted on Sigma Thermal Drawings, Manual, and in quote STQ120520-3. Feel free to contact me with any questions or concerns.

Maximum NOx: 0.09 lbs/MMBTU
Maximum CO: 0.08 lbs/MMBTU

These are both corrected to 3% O₂ dry and from 100% through 50% MCR.

Thank you,

A handwritten signature in black ink, appearing to read "Larry Stephens".

Larry Stephens
Project Manager
Sigma Thermal Inc.
678-324-5736

SYSTEM DESIGN DATA – FORCED DRAFT

Sigma Thermal Process Bath Heater Datasheet							
<i>Customer Name</i>		<i>Progress Energy</i>		<i>Project Name</i>		<i>Anclote</i>	
<i>Date completed</i>		<i>September 28, 2012</i>		<i>Project Location</i>		<i>Holiday, FL</i>	
<i>Revision number</i>		<i>A</i>		<i>Sales Engineer</i>		<i>Charlie Wadlington</i>	
Process Fluid Description				Burner Fuel Type			
Natural Gas				Natural Gas			
Mass Flow	237,000	lb / hr		NOx Required (if any)	0.09	lb / MM Btu	
Heater Inlet Temperature	0	°F		CO Required (if any)	0.08	lb / MM Btu	
Heater Outlet Temperature	50	°F		Steady State Firing Rate (HHV Basis)	8,919,234	Btu / hr	
Heater Inlet Pressure	150	lb / in ² (g)		Burner Design Margin	10%		
Required Heat Input	6,178,400	Btu / hr		Design Firing Rate (HHV Basis)	9,811,157	Btu / hr	
Fouling Factor	0.002	hr-ft ² -°F / BTU		Combustion Air Design Temperature	60	°F	
Required Coil Surface Area	541	ft ²		Total Gas Consumption @ Steady State	8,778	(std)ft ³ / hr	
Supplied Coil Surface Area	735	ft ²		Total Air Consumption @ Steady State	1,578	(act)ft ³ / min	
Excess Coil Surface Area	36	%		Total Gas Consumption @ High Fire	9,656	(std)ft ³ / hr	
Calculated Pressure Drop	3.65	lb / in ² (g)		Total Air Consumption @ High Fire	1,735	(act)ft ³ / min	
Bath Fluid	PGlycol 0.4			Selected Burner Make	Power Flame		
Bath Operating Temperature	190	°F		Burner Model	CM9B-G-30		
Bath Operating Pressure	0	lb / in ² (g)		Quantity of Burners / Firetubes	1		
Total Firetube Surface Area	327	ft ²		Oxygen Trim	No		
Average Firetube Flux Rate	18,910	Btu / hr / ft ²		Fully Metered / Cross Limited	No		
Thermal Efficiency	77.1%	% LHV Basis		Burner Duty Cycle	Continuous		
Coil Pipe Schedule				Estimated Shell Length			
SCH40				24			
Coil Pipe Material				Shell Diameter Selected			
SA-106-B				108			
Coil Design Pressure				Estimated Heater Fill Volume			
270 lb / in ² (g)				9,574 gal			
Coil Design Temperature				Calculated Expansion Volume			
250 °F				460 gal			
Header Diameter (If Applicable)				Expansion Tank Diameter			
16.0 in				28 in			
Header Flange Rating				Expansion Tank Length			
300#				20 ft			
Header Pipe Schedule				Actual Expansion Tank Volume			
SCH40				640 gal			
Corrosion Allowance				Excess Expansion Volume Available			
1/16 in				28% gal			
Coil Code of Construction				Shell / Exp. Design Pressure			
ASME Section VIII				ATM lb / in ² (g)			
Applicable Piping Code / Standard				Shell / Exp. Tank Design Temperature			
ASME B31.1				250 °F			
Firetube Code of Construction				Heater Shell Code of Construction			
AWS D1.1				AWS D1.1			
Estimated Heater Weight - Empty				Estimated Installed Length			
35,473 lb				32 ft			
Estimated Heater Weight - Full				Estimated Installed Height			
118,928 lb				13 ft			
Skid Frame Required / Included				Estimated Installed Width			
Yes				13 ft			
Maximum Ambient Temperature				Control Panel Area Classification			
100 °F				Class I Div. II			
Minimum Ambient Temperature				Skid Area Classification			
0 °F				Class I Div. II			
Elevation (above mean sea level)				Fuel Train / BMS Code Compliance			
50 ft				NFPA 86			
Fuel Train Type				Fuel Train Mounting Location			
Sigma Thermal Standard				Heater Mounted			
Fuel Train Construction				Wiring Standards			
NPT				Sigma Thermal Standard			
Motor Requirements				Electrical Code of Construction			
Standard Efficiency TEFC				NEC			
BMS Type				Combustion Control Type			
Standard				Standard			
Instrumentation				Control Panel Certification			
Custom				UL			
Motor Starters				Primary Voltage			
By Others				460V / 3 / 60Hz			
Minimum Electrical Enclosures Rating				Control Voltage			
4X				120V / 1 / 60Hz			
Paint Colors				Overall Paint Specification			
Per Customer Specification				Per Customer Specification			



ATTACHMENT B
FACILITY EMISSION CALCULATIONS

Table 1: Natural Gas Steam Fired Generator Organic HAP Emission Estimates				
Organic Compound	Emission Factors		Emissions (lb/hr)	Emissions (TPY)
	Natural Gas^a (lb/10⁶ scf)	Rating^c	Natural Gas	Natural Gas
2-Methylnaphthalene	2.40E-05	D	1.3E-04	5.6E-04
3-Methylchloranthrene	1.80E-06	E	9.5E-06	4.2E-05
7,12-Dimethylbenz(a)anthracene	1.60E-05	E	8.5E-05	3.7E-04
Acenaphthene	1.80E-06	E	9.5E-06	4.2E-05
Acenaphthylene	1.80E-06	E	9.5E-06	4.2E-05
Acetaldehyde ^d	9.00E-04	--	4.8E-03	2.1E-02
Acrolein ^d	8.00E-04	--	4.2E-03	1.9E-02
Anthracene	2.40E-06	E	1.3E-05	5.6E-05
Benz(a)anthracene	1.80E-06	E	9.5E-06	4.2E-05
Benzene ^d	1.70E-03	--	9.0E-03	3.9E-02
Benzo(a)pyrene	1.20E-06	E	6.3E-06	2.8E-05
Benzo(g,h,i)perylene	1.20E-06	E	6.3E-06	2.8E-05
Benzo(k)fluoranthene	1.80E-06	E	9.5E-06	4.2E-05
Chrysene	1.80E-06	E	9.5E-06	4.2E-05
Dibenzo(a,h)anthracene	1.20E-06	E	6.3E-06	2.8E-05
Dichlorobenzene	1.20E-03	E	6.3E-03	2.8E-02
Ethylbenzene ^d	2.00E-03	--	--	--
Fluoranthene	3.00E-06	E	1.6E-05	6.9E-05
Fluorene	2.80E-06	E	1.5E-05	6.5E-05
Formaldehyde ^d	3.60E-03	--	1.9E-02	8.3E-02
Hexane ^d	1.30E-03	--	6.9E-03	3.0E-02
Indeno(1,2,3-cd)pyrene	1.80E-06	E	9.5E-06	4.2E-05
Naphthalene ^d	3.00E-04	--	1.6E-03	6.9E-03
Phenanathrene	1.70E-05	D	9.0E-05	3.9E-04
Propylene ^d	1.55E-02	--	8.2E-02	3.6E-01
Pyrene	5.00E-06	E	2.6E-05	1.2E-04
Toluene ^d	7.80E-03	--	4.1E-02	1.8E-01
Xylenes ^d	5.80E-03	--	--	--
Polycyclic Organic Matter (POM) ^b	--	--	--	--
Total	0.041			
		Total HAP Emissions	0.18	0.77
		Maximum Individual HAP Emissions	0.08	0.36
Emissions based on:				
		Heat Input	5500	
		HHV	1040	
		Operating Hours	8760	

Notes:

^a Emission Factors for natural gas based on EPA AP-42 (7/98) Table 1.4-3.

^b POM is a HAP as defined by Section 112(b) of the Clean Air Act.

^c EPA Emission Factor Ratings: A-Excellent; B-Above Average; C-Average; D-Below Average; E-Poor.

^d Emission factor for natural gas based on AB2588 Combustion Emission Factors (5/01).

Source: Golder, 2014.

Table 2: Natural Gas Steam Fired Generator Metal HAP Emission Estimates

Metals	Emission Factors		Emissions (lb/hr)	Emissions (TPY)
	Natural Gas ^a (lb/10 ⁶ scf)	Rating ^b	Natural Gas	Natural Gas
Arsenic	2.0E-04	E	1.1E-03	4.6E-03
Beryllium	1.2E-05	E	6.3E-05	2.8E-04
Cadmium	1.1E-03	D	5.8E-03	2.5E-02
Chromium	1.4E-03	D	7.4E-03	3.2E-02
Cobalt	8.4E-05	D	4.4E-04	1.9E-03
Lead	--	--	--	--
Manganese	3.8E-04	D	2.0E-03	8.8E-03
Mercury	2.6E-04	D	1.4E-03	6.0E-03
Nickel	2.1E-03	C	1.1E-02	4.9E-02
Selenium	2.4E-05	E	1.3E-04	5.6E-04
Total	5.6E-03			
	Total HAP Emissions		0.03	0.13
	Maximum Individual HAP Emissions		0.01	0.05
Emissions based on:				
	Heat Input		5500	MMBtu/hr
	HHV		1040	MMBtu/10 ⁶ scf
	Operating Hours		8760	hr

Notes:

^a Emission Factors for natural gas based on EPA AP-42 (7/98) Table 1.4-4.

^b EPA Emission Factor Ratings: A-Excellent; B-Above Average; C-Average; D-Below Average; E-Poor.

Source: Golder, 2014.

Table 3: Natural Gas Steam Fired Generator No 1. & 2 HAPs Emissions Estimates	
Natural Gas Steam Generator No. 1 (TPY)	
Organic	0.8
Metal	0.13
Natural Gas Steam Generator No. 2 (TPY)	
Organic	0.8
Metal	0.13
Total:	1.8 TPY
Emissions based on:	8760 hr/yr

Source: Golder, 2014.

Table 4: Surface Coating Emission Estimates			
Component	VOC Content (% by Volume)	Specific Gravity	Mix Ratio
Paint	33.6%	1.6843	4/5
Hardener	31.3%	1.0339	1/5
Mixture Average	33.14%	1.554	
Surface Coatings			
(lb/gal)	VOC (lb/gal)		
12.96	4.30		
Amount Surface Coating (Gal)/10,000 lb VOC:			2328

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Inc.
5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA
Tel: (813) 287-1717
Fax: (813) 287-1716

