



Environmental Consulting & Technology, Inc.

May 19, 2009

Sent Via FedEx

Ms. Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

RECEIVED

MAY 20 2009

BUREAU OF AIR REGULATION

**Re: Progress Energy Florida
Tiger Bay Cogeneration Facility
Title V Air Operation Permit Renewal Application
Permit No. 1050223-014-AV**

Project No. : 1050223-015-AV

Dear Ms. Vielhauer:

On behalf of Progress Energy Florida (PEF), two copies of an application package to renew the PEF Tiger Bay Cogeneration Facility Title V Air Operation Permit No. 1050223-014-AV are enclosed for Department review. Pursuant to the requirements of Chapter 62-213.400, F.A.C., the application package contains the Department's *Application for Air Permit - Long Form* and all required supplemental facility and emission unit information.

Please contact Chris Bradley at (727) 820-5962 or email at Chris.Bradley@pgnmail.com if there are any questions regarding this application.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Thomas W. Davis, P.E.
Vice President

cc: Deborah Getzoff (w/enc)
FDEP Southwest District

Enclosures

3701 Northwest
98th Street
Gainesville, FL
32606

(352)
332-0444

FAX (352)
332-6722

TIGER BAY COGENERATION FACILITY

TITLE V OPERATION PERMIT RENEWAL APPLICATION

RECEIVED

MAY 20 2009

Prepared for:

BUREAU OF AIR REGULATION



Progress Energy

People. Performance. Excellence.
St. Petersburg, Florida

Prepared by:

ECT

Environmental Consulting & Technology, Inc.

*3701 Northwest 98th Street
Gainesville, Florida 32606*

ECT No. 090186-0100

May 2009

INTRODUCTION

The Florida Power Corporation (d/b/a Progress Energy Florida, Inc. [PEF]) Tiger Bay Cogeneration Facility is located at 3219 State Road 630 West in Fort Meade, Polk County, Florida. The Tiger Bay Cogeneration Facility is a nominal 270 megawatt (MW) electrical generation facility comprised of one combined-cycle combustion turbine (CT) and heat recovery steam generator (HRSG) unit (Emission Unit Identification [ID] No. 001), and one auxiliary boiler (Emission Unit ID No. 003), water treatment facilities, ancillary support equipment, as well as a variety of insignificant and unregulated emission units and activities.

The combined-cycle CT/HRSG unit is fired with natural gas. No. 2 fuel oil never used and No. 2 distillate fuel oil. The CT has a nominal generation capacity of 184 MW. Steam produced by the HRSG is routed to a steam turbine generator with a nominal generation capacity of 86 MW. Accordingly, the combined cycle CT/HRSG unit has a total nominal generation capacity of 270 MW. The CT/HRSG unit began commercial operation in July 1994 and is subject to New Source Performance Standard (NSPS) Subpart GG, *Standards of Performance for Stationary Gas Turbines* which applies to gas turbines constructed after October 3, 1977. The CT/HRSG unit was also subject to Prevention of Significant Deterioration (PSD) review, including Best Available Control Technology (BACT), as well as the Florida Facility Siting Act. The CT/HRSG unit is an affected emission unit under both the Acid Rain Program (ARP) and the Clean Air Interstate Rule (CAIR).

The natural gas-fired auxiliary boiler is subject to NSPS Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* which applies to small steam boilers constructed after June 9, 1989. The auxiliary boiler previously provided steam during periods of non-operation of the CT/HRSG unit to an adjacent process (i.e., US Agri-Chem) that permanently ceased operation in November 2005. The auxiliary boiler was shut down in September 2007 and has not been maintained in operational condition. However, the auxiliary boiler may be reactivated in the future should a steam host locate nearby or to provide process steam for the Tiger Bay Cogeneration Facility. In

accordance with the provisions of Rule 62-210.300(2)(a)3.b, Florida Administrative Code (F.A.C.), PEF requests a five year renewal of the operation permit for the auxiliary boiler.

Operation of the Tiger Bay Cogeneration Facility is currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit Renewal No. 1050223-012-AV issued with an effective date of January 1, 2005, and an expiration date of December 31, 2009. This Title V permit was recently revised on March 17, 2009 (reference Title V Air Operation Permit Revision No. 1050223-014-AV) to include CAIR requirements. The permit revision did not change the expiration date of December 31, 2009.

The FDEP Title V regulations are codified in Chapter 62-213, F.A.C., *Operation Permits for Major Sources of Air Pollution*. With respect to Title V air operation permit renewal deadlines, Rule 62-213.420(1)(a)2., F.A.C., requires the permittee to apply for a permit renewal at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Tiger Bay Cogeneration Facility, which has a Title V air operation permit expiration date of December 31, 2009, this regulatory deadline results in the requirement to submit a Title V air operation permit renewal application no later than May 20, 2009.

This application package, consisting of the FDEP's *Application for Air Permit – Long Form, Effective 3/16/08* and all required supplemental facility and emission unit information, constitutes PEF's Title V permit renewal application for the Tiger Bay Cogeneration Facility and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C. The following attachments are included as referenced in the permit application:

- ATTACHMENT A—Facility Location Map
- ATTACHMENT B—Facility Plot Plans
- ATTACHMENTS C-1, C-2—Process Flow Diagrams
- ATTACHMENT D—Precautions to Prevent Emissions of Unconfined Particulate Matter
- ATTACHMENT E—List of Insignificant Activities
- ATTACHMENT F—Identification of Applicable Requirements
- ATTACHMENT G—Compliance Report
- ATTACHMENT H—Requested Changes to Current Title V Air Operation Permit

ATTACHMENT I—Acid Rain Part
ATTACHMENT J—Clean Air Interstate Rule (CAIR) Part
ATTACHMENT K—Fuel Specifications
ATTACHMENT L—Procedures for Startup and Shutdown
ATTACHMENT M—Alternate Methods of Operation

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

APPLICATION FOR AIR PERMIT—LONG FORM



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: Florida Power Corporation dba Progress Energy Florida, Inc.	
2. Site Name: Tiger Bay Cogeneration Facility	
3. Facility Identification Number: 1050223-012-AV	
4. Facility Location: Street Address or Other Locator: 3219 State Road 630 West City: Ft. Meade County: Polk Zip Code: 33841-9778	
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: Florida Power Corporation dba Progress Energy Florida, Inc. Street Address: 299 First Avenue North, PEF-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 Email Address: Chris.Bradley@pgnmail.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 5-20-09	3. PSD Number (if applicable):
2. Project Number(s): 1050223-012-AV	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 Progress Energy Florida, Inc. (PEF) Tiger Bay Cogeneration Facility is currently authorized by Final Title V Operation Permit Number 1050223-014-AV. This permit was issued with an effective date of January 1, 2005 and an expiration date of December 31, 2009.

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 Tiger Bay Cogeneration Facility, this regulatory deadline requires the submittal of a Title V permit renewal application no later than May 20, 2009. This application and supporting documents constitutes PEF's request for renewal of Tiger Bay Cogeneration Facility Final Title V Operation Permit Revision Number 1050223-014-AV.

Attachment H contains requested changes to current Title V permit conditions. If the Department determines that these changes also require a revision to an underlying air construction permit, PEF requests that the air construction permit revisions be processed concurrently with the Title V renewal application.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
-001	Combustion Turbine and Heat Recovery Steam Generator	N/A	N/A
-003	Auxiliary Boiler	N/A	N/A

Application Processing Fee

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

Note: The PEF Tiger Bay Cogeneration Facility has been issued Final Title V Operation Permit Number 1050223-012-AV. An application processing fee is not required pursuant to Rule 62-213.205(4), F.A.C.

APPLICATION INFORMATION

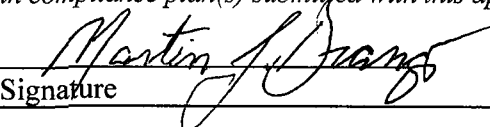
Owner/Authorized Representative Statement **NOT APPLICABLE**
Complete if applying for an air construction permit or an initial FESOP.

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: () ext. Fax: ()
4. Owner/Authorized Representative Email 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: Martin J. Drango, 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, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: Florida Power Corporation dba Progress Energy Florida, Inc. Street Address: 3219 State Road 630 West City: Ft. Meade State: Polk Zip Code: 33841-9778
4. Application Responsible Official Telephone Numbers... Telephone: (863) 285-6103 ext. Fax: (863) 285-6110
5. Application Responsible Official E-mail Address: Martin.Drango@pgnmail.com
6. Application Responsible Official Certification: <i>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.</i> <div style="display: flex; justify-content: space-between;"><div>Signature </div><div>Date <u>5/15/09</u></div></div>

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Thomas W. Davis Registration Number: 36777
2. Professional Engineer Mailing Address... Organization/Firm: Environmental Consulting & Technology, Inc. Street Address: 3701 Northwest 98th Street City: Gainesville State: Florida Zip Code: 32606-5004
3. Professional Engineer Telephone Numbers... Telephone: (352) 332 - 0444 ext. Fax: (352) 332 - 6722
4. Professional Engineer Email Address: tdavis@ectinc.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 checked="" 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 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 _____ Date <u>5/19/09</u> (seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 East (km) 416.3 (NAD 83) North (km) 3,069.4		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: William C. Luke, Production Manager
2. Facility Contact Mailing Address... Organization/Firm: Florida Power Corporation dba Progress Energy Florida, Inc. Street Address: 3219 State Road 630 West City: Ft. Meade State: Polk Zip Code: 33841-9778
3. Facility Contact Telephone Numbers: Telephone: (863) 285-2601 ext. Fax: (863) 285-2610
4. Facility Contact Email Address: William.Luke@pgnmail.com

Facility Primary Responsible Official **NOT APPLICABLE**

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () -
4. Facility Primary Responsible Official E-mail Address:

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 checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR 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: The Combustion Turbine and Heat Recovery Unit (EU ID. 001) is subject to New Source Performance Standard Subpart GG, <i>Standards of Performance for Stationary Gas Turbines.</i> The Auxiliary Boiler (EU ID. 003) is subject to New Source Performance Standard Subpart Dc, <i>Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.</i>	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

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

FACILITY INFORMATION

B. EMISSIONS CAPS

<u>Facility-Wide or Multi-Unit Emissions Caps</u>	NOT APPLICABLE
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[illegible]

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

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: Attach. B <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: Attach. C <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: Attach. D <input type="checkbox"/> Previously Submitted, Date: _____

Additional Requirements for Air Construction Permit Applications **NOT APPLICABLE**

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 **NOT APPLICABLE**

1. List of Exempt Emissions Units:

☐ Attached, Document ID: _____ ☐ 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)

☒ Attached, Document ID: Attach. E ☐ Not Applicable

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)

☒ Attached, Document ID: Attach. F
☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)

☒ Attached, Document ID: Attach. G

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)

☐ Attached, Document ID: _____
☒ Equipment/Activities Onsite but Not Required to be Individually Listed
☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)

☐ Attached, Document ID: _____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:

☒ Attached, Document ID: Attach. H ☐ 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: **Attach. I** ☐ 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: **Attach. J** ☐ Previously Submitted, Date: _____

☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):

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

☒ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

EU 001

EMISSIONS UNIT INFORMATION

Section [1] of [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:
Combustion Turbine and Heat Recovery Steam Generator

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code: A	5. Commence Construction Date: N/A	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 49
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8. Federal Program Applicability: (Check all that apply)

- ☒ Acid Rain Unit
- ☒ CAIR Unit
- ☐ Hg Budget Unit

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

Manufacturer:

Model Number:

10. Generator Nameplate Rating:

270 MW (nominal - total for combustion turbine and steam turbine)

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Emissions Unit Control Equipment/Method: Control 1 of 2

1. Control Equipment/Method Description:

NO_x (Natural Gas) – Dry low-NO_x (DLN) combustion

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

Emissions Unit Control Equipment/Method: Control 2 of 2

1. Control Equipment/Method Description:

NO_x (No. 2 Distillate Fuel Oil) – Wet Injection

2. Control Device or Method Code: **028**

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 [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: 1,849.9 million Btu/hr, LHV
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: Maximum heat input rate shown in Field 3 is for No. 2 fuel oil at 27°F ambient temperature and baseload. Maximum heat input rate when firing natural gas is $1,710.0 \times 10^6$ Btu/hr, LHV at 27°F ambient temperature and baseload. -----

EMISSIONS UNIT INFORMATION

Section [1] of [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: TB-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V		6. Stack Height: 180 feet	
		7. Exit Diameter: 19.0 feet	
8. Exit Temperature: 210°F		9. Actual Volumetric Flow Rate: 1,072,000 acfm	
		10. Water Vapor: N/A %	
11. Maximum Dry Standard Flow Rate: N/A dscfm		12. Nonstack Emission Point Height: N/A 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

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D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate:** Segment 1 of 4

1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Natural Gas, Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 1.800	5. Maximum Annual Rate: 15,768	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 950 (LHV)
10. Segment Comment: Fields 4 and 5 maximum hourly and annual rates based on $1,710 \times 10^6$ Btu/hr at 27°F and 8,760 hours per year.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Distillate Oil (No. 2), Turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 14.452	5. Maximum Annual Rate: 3,742	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: 0.05	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 128 (LHV)
10. Segment Comment: Field 4 maximum hourly rate based on $1,849.9 \times 10^6$ Btu/hr at 27°F. Field 5 maximum annual rate is the limit specified by TV Permit No. 1050223-012-AV, Condition A.6.(b).		

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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
SO2			EL
NOX	025, 028		EL
CO			EL
VOC			EL
PM/PM10			EL
PB			EL
SAM (H₂SO₄ Mist)			EL
H015 (Arsenic Compounds)			EL
H021 (Beryllium Compounds)			EL
H114 (Mercury Compounds)			EL

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POLLUTANT DETAIL INFORMATION

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**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: N/A	
3. Potential Emissions: 99.7 lb/hour 35.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 99.7 lb/hr, 15.0 ton/yr (No. 2 Fuel Oil), 4.86 lb/hr, 21.3 ton/yr (Natural Gas) Reference: Conditions A.11. and A.12., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: <p>Hourly Rate (No. 2 Fuel Oil):</p> <p>SO2 = 99.7 lb/hr</p> <p>Annual Rate (No. 2 Fuel Oil and Natural Gas):</p> <p>SO2 = (15 ton/yr) + [(4.86 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 35.7 ton/yr</p>			
11. Potential, Fugitive, and Actual Emissions Comment: <p>No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.</p>			

**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 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.05 weight % S	4. Equivalent Allowable Emissions: 99.7 lb/hour 15.0 tons/year
5. Method of Compliance: Fuel sampling and analysis per applicable ASTM methods.	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.11. (No. 2 Fuel Oil)	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: N/A	4. Equivalent Allowable Emissions: 4.86 lb/hour 21.3 tons/year
5. Method of Compliance: Fuel sampling and analysis per applicable ASTM methods.	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.12. (Natural Gas)	

**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: N/A	
3. Potential Emissions: 326 lb/hour 462.1 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 326 lb/hr, 48.9 ton/yr (No. 2 Fuel Oil), 97.2 lb/hr, 425.7 ton/yr (Natural Gas) Reference: Conditions A.8. and A.9.(a)., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): NOX = 326 lb/hr Annual Rate (No. 2 Fuel Oil and Natural Gas): NOX = (48.9 ton/yr) + [(97.2 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 462.1 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.			

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POLLUTANT DETAIL INFORMATION

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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 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 42 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 326 lb/hour 48.9 tons/year
5. Method of Compliance: EPA Reference Method (RM) 20	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.8. (No. 2 Fuel Oil)	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 15 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 97.2 lb/hour 425.7 tons/year
5. Method of Compliance: EPA RM 20	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.9.(a) (Natural Gas)	

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POLLUTANT DETAIL INFORMATION

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**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: N/A	
3. Potential Emissions: 98.4 lb/hour 222.2 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 98.4 lb/hr, 14.8 ton/yr (No. 2 Fuel Oil), 48.8 lb/hr, 213.7 ton/yr (Natural Gas) Reference: Conditions A.16. and A.17., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: <p>Hourly Rate (No. 2 Fuel Oil):</p> <p>CO = 98.4 lb/hr</p> <p>Annual Rate (No. 2 Fuel Oil and Natural Gas):</p> <p>CO = (14.8 ton/yr) + [(48.8 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 222.2 ton/yr</p>			
11. Potential, Fugitive, and Actual Emissions Comment: <p>No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.</p>			

**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 **2**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 30 ppmvd	4. Equivalent Allowable Emissions: 98.4 lb/hour 14.8 tons/year
5. Method of Compliance: EPA RM 10	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.16. (No. 2 Fuel Oil)	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 15 ppmvd	4. Equivalent Allowable Emissions: 48.8 lb/hour 213.7 tons/year
5. Method of Compliance: EPA RM 10	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.17. (Natural Gas)	

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**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: N/A	
3. Potential Emissions: 7.5 lb/hour 13.0 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 7.5 lb/hr, 1.1 ton/yr (No. 2 Fuel Oil), 2.8 lb/hr, 12.3 ton/yr (Natural Gas) Reference: Conditions A.18. and A.19., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: <p>Hourly Rate (No. 2 Fuel Oil):</p> <p>VOC = 7.5 lb/hr</p> <p>Annual Rate (No. 2 Fuel Oil and Natural Gas):</p> <p>VOC = (1.1 ton/yr) + [(2.8 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 13.0 ton/yr</p>			
11. Potential, Fugitive, and Actual Emissions Comment: <p>No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.</p>			

**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 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: N/A	4. Equivalent Allowable Emissions: 7.5 lb/hour 1.1 tons/year
5. Method of Compliance: EPA RM 25A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.18. (No. 2 Fuel Oil)	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: N/A	4. Equivalent Allowable Emissions: 2.8 lb/hour 12.3 tons/year
5. Method of Compliance: EPA RM 25A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.19. (Natural Gas)	

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**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/PM10		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 17 lb/hour 40.9 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 17 lb/hr, 2.6 ton/yr (No. 2 Fuel Oil), 9.0 lb/hr, 39.4 ton/yr (Natural Gas) Reference: Conditions A.14. and A.15., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: <p>Hourly Rate (No. 2 Fuel Oil):</p> <p>PM/PM10 = 17 lb/hr</p> <p>Annual Rate (No. 2 Fuel Oil and Natural Gas):</p> <p>PM/PM10 = (2.6 ton/yr) + [(9.0 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 40.9 ton/yr</p>			
11. Potential, Fugitive, and Actual Emissions Comment: <p>No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.</p>			

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**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 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 20% opacity	4. Equivalent Allowable Emissions: 17 lb/hour 2.6 tons/year
5. Method of Compliance: EPA RM 9	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.14. (No. 2 Fuel Oil) Visible emissions (VE) is used as a surrogate for PM/PM10 per TV Permit No. 1050223-012-AV, Condition A.48. If VE non-compliance occurs, PM/PM10 stack testing per EPA RM 5 or 17, or EPA RM 201A and 202 is required.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 10% opacity	4. Equivalent Allowable Emissions: 9.0 lb/hour 39.4 tons/year
5. Method of Compliance: EPA RM 9	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.15. (Natural Gas) Visible emissions (VE) is used as a surrogate for PM/PM10 per TV Permit No. 1050223-012-AV, Condition A.48. If VE non-compliance occurs, PM/PM10 stack testing per EPA RM 5 or 17, or EPA RM 201A and 202 is required.	

**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: PB (Lead)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 0.0165 lb/hour 0.00247 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 0.0165 lb/hr, 0.00247 ton/yr (No. 2 Fuel Oil) Reference: Condition A.27., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): PB = 0.0165 lb/hr Annual Rate (No. 2 Fuel Oil): PB = 0.00247 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year.			

**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: N/A
3. Allowable Emissions and Units: 8.9×10^{-6} lb/10⁶ Btu	4. Equivalent Allowable Emissions: 0.0165 lb/hour 0.00247 tons/year
5. Method of Compliance: N/A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.27. (No. 2 Fuel Oil)	

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: SAM (H₂SO₄ Mist)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 1.22 lb/hour 2.7 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 1.22 lb/hr, 0.183 ton/yr (No. 2 Fuel Oil), 0.595 lb/hr, 2.6 ton/yr (Natural Gas) Reference: Conditions A.20. and A.21., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): SAM = 1.22 lb/hr Annual Rate (No. 2 Fuel Oil and Natural Gas): SAM = (0.183 ton/yr) + [(0.595 lb/hr x 8,501 hr/yr)/(2,000 lb/ton)] = 2.7 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year. At baseload and 27°F ambient temperature, this is equivalent to 259 hrs/yr of fuel oil-firing. Remainder of annual hours (8,501 hrs/yr) assigned to natural gas-firing.			

**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 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: N/A	4. Equivalent Allowable Emissions: 1.22 lb/hour 0.183 tons/year
5. Method of Compliance: EPA RM 8 or Mass Balance	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.20. (No. 2 Fuel Oil)	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: N/A	4. Equivalent Allowable Emissions: 0.595 lb/hour 2.6 tons/year
5. Method of Compliance: EPA RM 8 or Mass Balance	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.21. (Natural Gas)	

**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: H015 (Arsenic Compounds)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 0.00777 lb/hour 0.00117 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 0.00777 lb/hr, 0.00117 ton/yr (No. 2 Fuel Oil) Reference: Condition A.25., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): Arsenic Compounds = 0.00777 lb/hr Annual Rate (No. 2 Fuel Oil): Arsenic Compounds = 0.00117 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year.			

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**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: N/A
3. Allowable Emissions and Units: 4.2×10^{-6} lb/10⁶ Btu	4. Equivalent Allowable Emissions: 0.00777 lb/hour 0.00117 tons/year
5. Method of Compliance: N/A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.25. (No. 2 Fuel Oil)	

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

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POLLUTANT DETAIL INFORMATION

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**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: H021 (Beryllium Compounds)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 0.00462 lb/hour 0.000694 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 0.00462 lb/hr, 0.000694 ton/yr (No. 2 Fuel Oil) Reference: Condition A.26., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): Beryllium Compounds = 0.00462 lb/hr Annual Rate (No. 2 Fuel Oil): Beryllium Compounds = 0.000694 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year.			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

POLLUTANT DETAIL INFORMATION

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**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: N/A
3. Allowable Emissions and Units: 2.5×10^{-6} lb/10⁶ Btu	4. Equivalent Allowable Emissions: 0.00462 lb/hour 0.000694 tons/year
5. Method of Compliance: N/A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.26. (No. 2 Fuel Oil)	

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: H114 (Mercury Compounds)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 0.0055 lb/hour 0.000832 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 0.0055 lb/hr, 0.000832 ton/yr (No. 2 Fuel Oil) Reference: Condition A.24., TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate (No. 2 Fuel Oil): Mercury Compounds = 0.0055 lb/hr Annual Rate (No. 2 Fuel Oil): Mercury Compounds = 0.000832 ton/yr			
11. Potential, Fugitive, and Actual Emissions Comment: No. 2 fuel oil use is limited to 3,742,347 gallons per year.			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

POLLUTANT DETAIL INFORMATION

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**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: N/A
3. Allowable Emissions and Units: 3.0×10^{-6} lb/10⁶ Btu	4. Equivalent Allowable Emissions: 0.0055 lb/hour 0.000832 tons/year
5. Method of Compliance: N/A	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition A.24. (No. 2 Fuel Oil)	

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 [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: VE 20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: TV Permit No. 1050223-012-AV, Condition A.22. (No. 2 Fuel Oil)	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE 10	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: TV Permit No. 1050223-012-AV, Condition A.23. (Natural Gas)	

EMISSIONS UNIT INFORMATION

Section [1] of [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 2

1. Parameter Code: EM	2. Pollutant(s): NO_x
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO/SPECTRUM SYSTEMS Model Number: 42C Serial Number: 42C-58587-318	
5. Installation Date: 10/19/1997	6. Performance Specification Test Date: 10/19/1997
7. Continuous Monitor Comment: Required by 40 CFR Part 75 (Acid Rain Program), 40 CFR Part 96 (CAIR), and NSPS Subpart GG excess emissions monitoring. Also used as a continuous as a continuous compliance method pursuant to 40 CFR Part 64 (Compliance Assurance Monitoring).	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: CO2	2. Pollutant(s): N/A
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: CALIFORNIA ANALYTICAL Model Number: ZRH1 Serial Number: N6M0530T	
5. Installation Date: 10/19/1997	6. Performance Specification Test Date: 10/19/1997
7. Continuous Monitor Comment: Required by 40 CFR Part 75 (Acid Rain Program), 40 CFR Part 96 (CAIR), and NSPS Subpart GG excess emissions monitoring. Also used as a continuous as a continuous compliance method pursuant to 40 CFR Part 64 (Compliance Assurance Monitoring).	

EMISSIONS UNIT INFORMATION

Section [1] of [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: Attach. C <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: Attach. K <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: _____ <input checked="" type="checkbox"/> Not Applicable
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: Attach. L <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 type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: November 6, 2008 Test Date(s)/Pollutant(s) Tested: October 17, 2008/NO_x, SO₂, CO, and VE <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

Section [1] of [2]

Additional Requirements for Air Construction Permit Applications **NOT APPLICABLE**

- ## **Additional Requirements for Title V Air Operation Permit Applications**

- ### **Additional Requirements Comment**

EU 003

EMISSIONS UNIT INFORMATION

Section [2] of [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:

Auxiliary Boiler

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code: A	5. Commence Construction Date: N/A	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 49
--	---	--	---

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

- ☐ Acid Rain Unit
- ☐ CAIR Unit
- ☐ Hg Budget Unit

9. Package Unit:

Manufacturer: **Cleaver-Brooks**Model Number: **DL-94**

10. Generator Nameplate Rating: **N/A** MW

11. Emissions Unit Comment:

The auxiliary boiler was shut down in September 2007 and has not been maintained in operational condition. However, the auxiliary boiler may be reactivated in the future should a steam host locate nearby or to provide process steam for the Tiger Bay Cogeneration Facility. In accordance with the provisions of Rule 62-210.300(2)(a)3.b, Florida Administrative Code (F.A.C.), PEF request a five year renewal of the operation permit for the auxiliary boiler.

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Emissions Unit Control Equipment/Method: Control of **NOT APPLICABLE**

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 [2] of [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: 100 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 6,000 hours/year
6. Operating Capacity/Schedule Comment: Please refer to Emissions Unit Comment on Page 44 for information regarding the current operational status of the auxiliary boiler.

Section [2] of [2]

(Optional for unregulated emissions units.)

1. Identification of Point on Plot Plan or Flow Diagram: TB-2		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V		6. Stack Height: 40 feet	
7. Exit Diameter: 4.0 feet		8. Exit Temperature: 320°F	
9. Actual Volumetric Flow Rate: 29,200 acfm		10. Water Vapor: N/A %	
11. Maximum Dry Standard Flow Rate: ----- --N/A dscfm		12. Nonstack Emission Point Height: N/A 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 [2] of [2]

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

1. Segment Description (Process/Fuel Type): External Combustion Boilers, Industrial, Natural Gas, Boilers 10 - 100 x 10⁶ Btu/hr		
2. Source Classification Code (SCC): 1-02-006-02		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 0.095	5. Maximum Annual Rate: 571	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,050 HHV
10. Segment Comment: Fields 4 and 5 maximum hourly and annual rates based on 100 x 10⁶ Btu/hr heat input, 6,000 hrs/yr operation, and natural gas heat content of 1,050 Btu/ft³. Show calculation		

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 [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
NOX			EL
CO			NS

EMISSIONS UNIT INFORMATION

Section [2] of [2]

POLLUTANT DETAIL INFORMATION

Page [1] of [4]

**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: N/A	
3. Potential Emissions: 10 lb/hour 30 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 0.10 lb/10⁶ Btu, HHV Reference: Condition B.8, TV Permit No. 1050223-012-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): ----- Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: <p>Hourly Rate:</p> <p>NOX = (0.10 lb/10⁶ Btu) x (100 x 10⁶ Btu/hr) = 10 lb/hr</p> <p>Annual Rate:</p> <p>NOX = (10 lb/hr) x (6,000 hr/yr) x (1 ton/2,000 lb) = 30 ton/yr</p>			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATION

Section [2] of [2]

POLLUTANT DETAIL INFORMATION

Page [2] of [4]

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: N/A
3. Allowable Emissions and Units: 0.10 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 10 lb/hour 30 tons/year
5. Method of Compliance: EPA RM 7E	
6. Allowable Emissions Comment (Description of Operating Method): TV Permit No. 1050223-012-AV, Condition B.8.	

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 [2]

POLLUTANT DETAIL INFORMATION

Page [3] of [4]

**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: N/A	
3. Potential Emissions: 8.0 lb/hour 24 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year			
6. Emission Factor: 84 lb/10⁶ ft³ natural gas Reference: Table 1.4-1, AP-42			7. Emissions Method Code: 3
8.a. Baseline Actual Emissions (if required): Tons/year N/A		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A	
10. Calculation of Emissions: Hourly Rate: $\text{CO} = (0.095 \times 10^6 \text{ ft}^3/\text{hr}) \times (84 \text{ lb}/10^6 \text{ ft}^3) = 8.0 \text{ lb/hr}$ Annual Rate: $\text{CO} = (8.0 \text{ lb/hr}) \times (6,000 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 24 \text{ ton/yr}$			
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. **NOT APPLICABLE**

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 [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 1

1. Visible Emissions Subtype: VE 20	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	
5. Visible Emissions Comment: Rule 62-296.406(1), F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring. **NOT APPLICABLE**

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 [2] of [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: Attach. C <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: Attach. K <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: _____ <input checked="" type="checkbox"/> Not Applicable
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
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 checked="" type="checkbox"/> Not Applicable Please refer to Emissions Unit Comment on Page 44 for information regarding the current operational status of the auxiliary boiler. 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

Section [2] of [2]

Additional Requirements for Air Construction Permit Applications **NOT APPLICABLE**

☐ Attached, Document ID: ☐ Not Applicable

☐ Attached, Document ID: ☐ Not Applicable☐ Attached, Document ID: ☐ Not Applicable

1. Identification of Applicable Requirements:

2. Compliance Assurance Monitoring:

☐ Attached, Document ID: _____ ☒ Not Applicable

3. Alternative Methods of Operation:

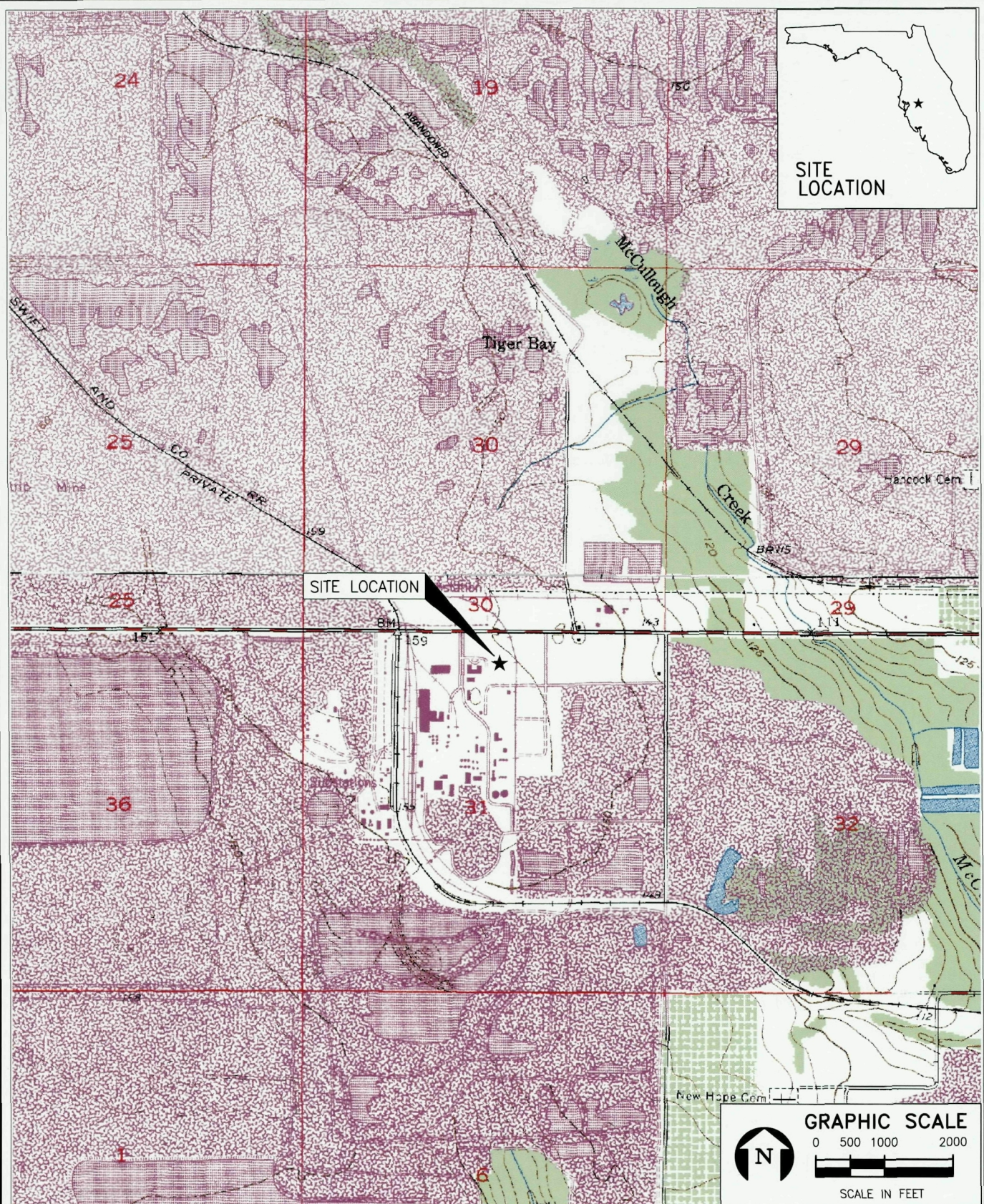
☐ Attached, Document ID: _____ ☒ Not Applicable

4. Alternative Modes of Operation (Emissions Trading):

☐ Attached, Document ID: _____ ☒ Not Applicable

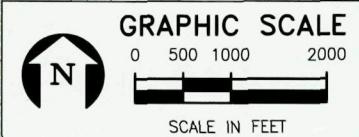
[illegible]

ATTACHMENT A
FACILITY LOCATION MAP



SITE
LOCATION

SITE LOCATION



ATTACHMENT A.

TIGER BAY GENERATING STATION FACILITY LOCATION MAP

Sources: USGS Quads; Homeland, FL, 1986 & Bowling Green, FL, 1987; ECT, 2009.



ATTACHMENT B
FACILITY PLOT PLAN



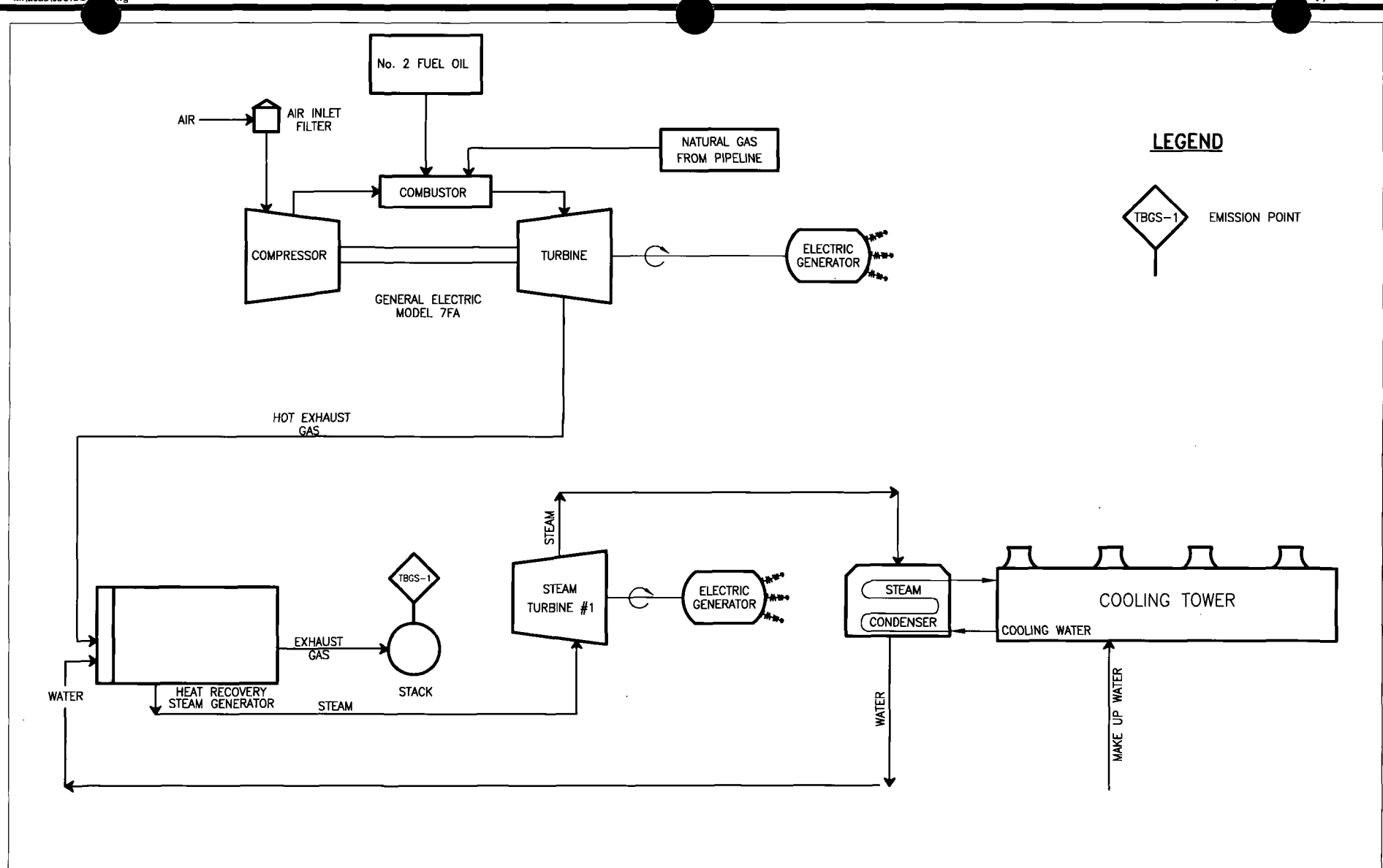
ATTACHMENT B

TIGER BAY COGENERATION FACILITY PLOT PLAN

Source: ECT, 2009.



ATTACHMENTS C-1 AND C-2
PROCESS FLOW DIAGRAMS



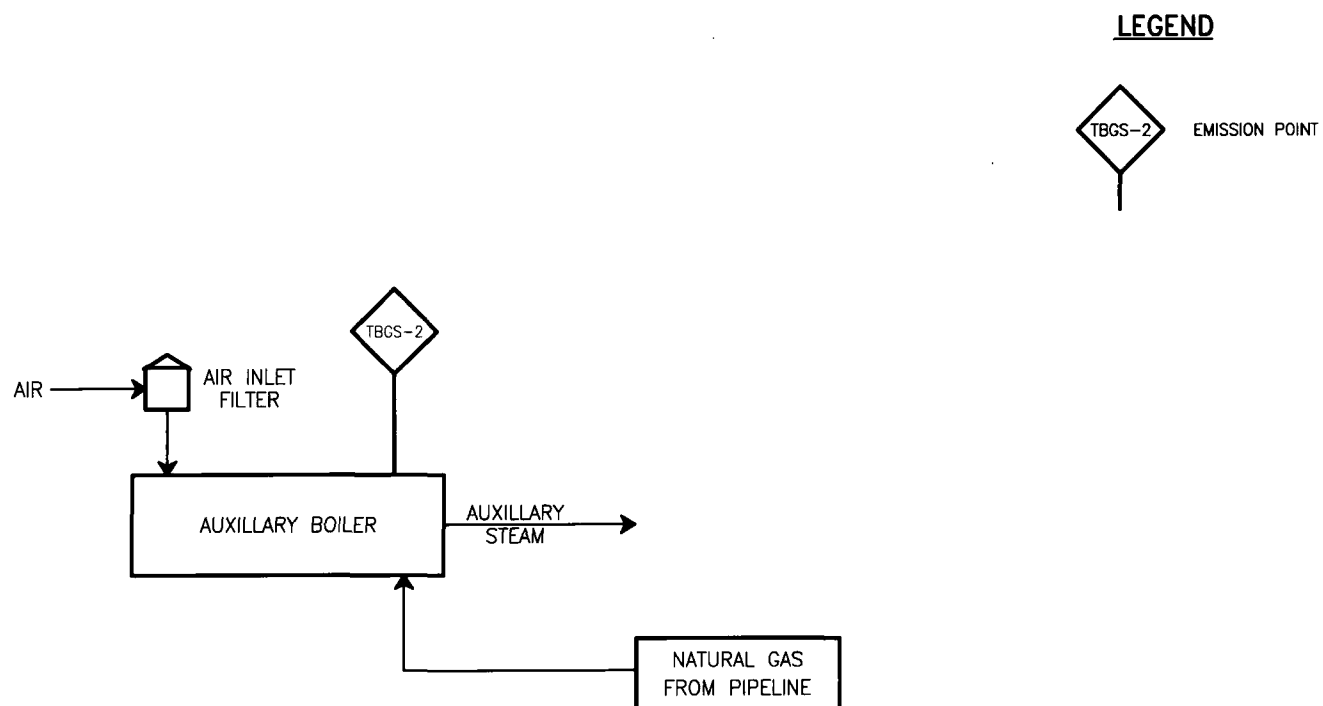
ATTACHMENT C-1.

TIGER BAY COGENERATION FACILITY

COMBUSTION TURBINE AND HEAT RECOVERY STEAM GENERATOR - PROCESS FLOW DIAGRAM

Source: ECT, 2009.

**Progress Energy**



ATTACHMENT C-2.
TIGER BAY COGENERATION FACILITY
AUXILLARY BOILER PROCESS FLOW DIAGRAM

Source: ECT, 2009.



ATTACHMENT D

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

ATTACHMENT D

TIGER BAY COGENERATION FACILITY PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter (PM) emissions that may result from operations at the Tiger Bay Cogeneration Facility include:

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

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

- Paving and maintenance of roads, parking areas, and yards.
- Chemical (dust suppressants) or water application to:
 - Unpaved roads.
 - Unpaved yard areas.
 - Open stock piles.
- Removal of PM from roads and other paved areas to prevent reentrainment and from buildings or work areas to prevent airborne particulate.
- 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.
- Enclosure or covering of conveyor systems.
- Other techniques, as necessary

ATTACHMENT E

LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT E

TIGER BAY COGENERATION FACILITY LIST OF INSIGNIFICANT 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. Surface coating operations within a single facility, provided:
 - a. The surface coating operation shall use only coatings containing 5.0 percent or less VOC, by volume, or the total quantity of coatings containing greater than 5.0 percent VOC, by volume, used at the facility shall not exceed 6.0 gallons per day, averaged monthly, where the quantity of coatings used includes all solvents and thinners used in the process or for cleanup.
 - b. Such operations are not subject to any unit-specific applicable requirement.
14. Fossil fuel steam generators, hot water generators, and other external combustion heating units with heat input capacity equal to or less than 10 million British thermal units per hour (mmBtu/hr), provided the following conditions are met with respect to each such unit.
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The rated heat input capacity of the unit is equal to or less than 10 mmBtu/hr and, collectively, the total rated heat input capacity of all units claiming this exemption at the same facility is less than 10 mmBtu/hr.
 - c. The unit shall not burn used oil or any fuels other than natural gas or propane, except that fuel oil with a sulfur content not exceeding 1.0 percent by weight may be burned during periods of natural gas curtailment.

ATTACHMENT E

TIGER BAY COGENERATION FACILITY LIST OF INSIGNIFICANT ACTIVITIES

15. Fossil fuel steam generators, hot water generators, and other external combustion heating units with heat input capacity less than 100 mmBtu/hr, provided the following conditions are met with respect to each such unit.
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The rated heat input capacity of the unit is less than 100 mmBtu/hr and, collectively, the total rated heat input capacity of all units claiming this exemption at the same facility is less than 250 mmBtu/hr.
 - c. The unit shall not burn more than the maximum annual amount of a single fuel, as given in 15.e., or equivalent maximum annual amounts of multiple fuels, as addressed in 15.f.
 - d. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 15.g., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 15.h..
 - e. If burning only one (1) type of fuel, the annual amount of fuel burned by the unit shall not exceed 150 million standard cubic feet of natural gas, one million gallons of propane, one million gallons of fuel oil with a sulfur content not exceeding 0.05 percent, by weight, 290,000 gallons of fuel oil with a sulfur content not exceeding 0.5 percent, by weight, or 145,000 gallons of fuel oil with a sulfur content not exceeding 1.0 percent, by weight.
 - f. If burning more than one (1) type of fuel, the equivalent annual amount of each fuel burned by the unit shall not exceed the maximum annual amount of such fuel, as given in 15.e., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total annual amount of the fuel burned by the unit to the total annual amount of such fuel allowed to be burned by the unit pursuant to 15.e. The sum of the fuel percentages for all fuels burned by the unit must be less than or equal to 100 percent.
 - g. If burning only one (1) type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 375 million standard cubic feet of natural gas, 2.5 million gallons of 44 propane, 2.5 million gallons of fuel oil with a sulfur content not exceeding 0.05 percent, by weight, 290,000 gallons of fuel oil with a sulfur content not exceeding 0.5 percent, by weight, or 145,000 gallons of fuel oil with a sulfur content not exceeding 1.0 percent, by weight.
 - h. If burning more than one (1) type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 15.g., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total annual amount of the fuel burned by all units claiming this exemption at the same facility to the total annual amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 15.g. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
16. One (1) or more emergency generators provided:

ATTACHMENT E

TIGER BAY COGENERATION FACILITY LIST OF INSIGNIFICANT ACTIVITIES

- a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The unit shall not burn used oil or any fuels other than natural gas, propane, gasoline, and diesel fuel.
 - c. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 16.d., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 16.e.
 - d. If burning only one (1) type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 2,700 gallons of gasoline, 32,000 gallons of diesel fuel, 144,000 gallons of propane, or 4.4 million standard cubic feet of natural gas.
 - e. If burning more than one (1) type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 16.d., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total amount of the fuel burned by all units claiming this exemption at the same facility to the total amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 16.d. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
17. General purpose internal combustion engines, and other reciprocating internal combustion devices, provided the following conditions are met with respect to each such unit.
- a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The unit shall not burn used oil or any fuels other than natural gas, propane, gasoline, and diesel fuel.
 - c. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 17.d., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 17. e.
 - d. If burning only one (1) type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 2,700 gallons of gasoline, 32,000 gallons of diesel fuel, 144,000 gallons of propane, or 4.4 million standard cubic feet of natural gas.
 - e. If burning more than one (1) type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 17.d., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total amount of the fuel burned by all units claiming this exemption at the same facility to the total amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 17.d. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
18. Steam turbine and auxiliary boiler lube oil vents.

ATTACHMENT E

TIGER BAY COGENERATION FACILITY LIST OF INSIGNIFICANT ACTIVITIES

19. Gas turbine lube oil reservoirs and vents.
20. Gas turbine dump tank vents.
21. Used oil storage tanks.
22. Turbine and lube oil storage tanks.
23. Diesel fuel oil storage tanks.
24. No. 2 fuel oil storage tanks.
25. Potable water treatment equipment.
26. Storage tanks less than 550 gallons.
27. Architectural (equipment) maintenance painting.
28. Diesel fuel oil and No. 2 fuel oil truck unloading.
29. Natural gas valve venting or relief valves.
30. Fresh water cooling tower and related equipment.
31. Any other emissions unit or activity that:
 - a. It would be subject to no unit-specific applicable requirement.
 - b. It would neither emit nor have the potential to emit:
 - (I) 500 pounds per year or more of lead and lead compounds expressed as lead;
 - (II) 1,000 pounds per year or more of any hazardous air pollutant;
 - (III) 2,500 pounds per year or more of total hazardous air pollutants; or
 - (IV) 5.0 tons per year or more of any other regulated pollutant.
 - c. Its emissions, in combination with the emissions of other units and activities at the facility, would not 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.
 - d. In the case of a proposed new emissions unit at an existing facility, the emissions of such unit, in combination with the emissions of any other proposed new or modified units and activities at the facility, would not result in a modification subject to the preconstruction review requirements of subparagraph 62-204.800(11)(d)2., Rule 62-212.400 or 62-212.500, F.A.C.
 - e. In the case of a proposed new pollutant-emitting activity, such activity would not constitute a modification of any existing non-exempt emissions unit at a non-Title V source or any existing non-insignificant emissions unit at a Title V source.

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT F

TIGER BAY COGENERATION FACILITY IDENTIFICATION OF APPLICABLE REQUIREMENTS

A. FACILITY-WIDE REQUIREMENTS

Federal:

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State:

CHAPTER 62-4, F.A.C.: PERMITS, effective 03-16-08

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

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 10-12-08

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

ATTACHMENT F

TIGER BAY COGENERATION FACILITY IDENTIFICATION OF APPLICABLE REQUIREMENTS

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

62-210.360, F.A.C.: Administrative Permit Corrections.

62-210.370(2), F.A.C.: Computation of Emissions.

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

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.

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

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

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 10-06-08

62-212.300, F.A.C.: General Preconstruction Review Requirements.

62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD).

62-212.500, F.A.C.: Preconstruction Review for Nonattainment Areas.

62-212.710, F.A.C.: Air Emissions Bubble.

62-212.720, F.A.C.: Actuals Plantwide Applicability Limits (PALS).

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 10-12-08

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

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

62-213.405, F.A.C.: Concurrent Processing of Permit Applications.

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

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

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

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

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

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

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

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

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

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

62-213.900(7), F.A.C.: Statement of Compliance Form.

ATTACHMENT F

TIGER BAY COGENERATION FACILITY IDENTIFICATION OF APPLICABLE REQUIREMENTS

62-213.900(8), F.A.C.: Responsible Official Notification Form.

CHAPTER 62-256, F.A.C.: OPEN BURNING AND FROST PROTECTION FIRES, effective 10-06-08

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 10-06-08

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

62-296.320(3), F.A.C.: Permitted Open Burning.

62-296.320(4)(b), F.A.C.: General Visible Emissions Standard.

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

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

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

62-297.320, F.A.C.: Standards for Persons Engaged in Visible Emissions Observations.

62-297.401, F.A.C.: Compliance Test Methods.

62-297.440, F.A.C.: Supplementary Test Procedures.

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, effective 12-24-07

CHAPTER 62-110, F.A.C.: EXCEPTION TO THE UNIFORM RULES OF PROCEDURE, effective 07-01-98

B. COMBUSTION TURBINE AND HEAT RECOVERY STEAM GENERATOR; EU ID NO. 001

ACID RAIN PROGRAM (ARP)

40 CFR 72: Permits Regulation

40 CFR 75: Continuous Emissions Monitoring

40 CFR 77: Excess Emissions

40 CFR 78: Appeal Procedures

CLEAN AIR INTERSTATE RULE (CAIR)

40 CFR 96: NO_x Budget Trading Program and CAIR NO_x and SO₂ Trading Programs for State Implementation Plans

ATTACHMENT F

TIGER BAY COGENERATION FACILITY IDENTIFICATION OF APPLICABLE REQUIREMENTS

NEW SOURCE PERFORMANCE STANDARDS

40 CFR 60, Subpart A: General Provisions

§60.7: Notification and Recordkeeping

§60.8: Performance Tests

§60.11: Compliance with Standards and Maintenance Requirements

§60.12: Circumvention

§60.13: Monitoring Requirements

§60.19: General Notification and Reporting Requirements

40 CFR 60, Subpart GG: Standards of Performance for Stationary Gas Turbines

§60.330: Applicability and Designation of Affected Facility

§60.331: Definitions

§60.332(a)(1): Standard for Nitrogen Oxides

§60.333: Standard for Sulfur Dioxide

§60.334(b), (c), (h), (i), and (j): Monitoring of Operations

§60.335: Test Methods and Procedures

Rule 62-213.413, F.A.C.: Fast-Track Revision of Acid Rain Parts.

CHAPTER 62-214, F.A.C.: REQUIREMENTS FOR SOURCES SUBJECT TO THE FEDERAL ACID RAIN PROGRAM, effective 03-16-08

Rule 62-296.470, F.A.C.: Implementation of Federal Clean Air Interstate Rule (CAIR).

FINAL Permit No: 1050223-012-AV, Section III., Emissions Unit No. 001; Permit Condition Nos. A.0. through A.68., Section IV (Acid Rain Part), and Section V (CAIR Part).

[Please see Attachment H for requested changes to the current Title V Air Operation Permit.]

C. AUXILIARY BOILER; EU ID NO. 003

NEW SOURCE PERFORMANCE STANDARDS

40 CFR 60, Subpart A: General Provisions

§60.7: Notification and Recordkeeping

§60.8: Performance Tests

§60.11: Compliance with Standards and Maintenance Requirements

§60.12: Circumvention

§60.13: Monitoring Requirements

§60.19: General Notification and Reporting Requirements

ATTACHMENT F

TIGER BAY COGENERATION FACILITY IDENTIFICATION OF APPLICABLE REQUIREMENTS

40 CFR 60, Subpart Dc: Standards of Performance for Small Industrial –Commercial-Institutional Steam Generating Units

§60.40c: Applicability and Delegation of Authority

§60.41c: Definitions

[Note: NSPS Subpart Dc does not contain any emission standards, monitoring, or recordkeeping requirements that are applicable to natural gas-fired units.]

Rule 62-296.406, F.A.C.: Fossil Fuel Steam Generators with less than 250 Million Btu Per Hour Heat Input..

FINAL Permit No: 1050223-012-AV, Section III., Emissions Unit No. 003; Permit Condition Nos. B.1. through B.30.

[Please see Attachment H for requested changes to the current Title V Air Operation Permit.]

ATTACHMENT G
COMPLIANCE REPORT

ATTACHMENT G

TIGER BAY COGENERATION FACILITY COMPLIANCE REPORT

Attachment F to this Title V operation permit renewal application identifies the requirements that are applicable to the emission units that comprise this Title V source.

A copy of the most recent Tiger Bay Cogeneration Facility Annual Statement of Compliance – Title V Source is provided in this attachment.

10.1.5

Electronically
Filed



February 25, 2008

CERTIFIED MAIL NO: 7004 2510 0003 4522 1581

Mr. Bill Schroeder
Florida Department of Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL 33637

Re: Florida Power Corporation dba Progress Energy Florida Inc.
Tiger Bay Cogeneration- Title V Compliance Certification

Dear Mr. Schroeder:

Progress energy Florida submits the enclosed Title V Compliance Certification statement for the 2007 reporting year for the above reference facility.

Please contact Mr. Tommy Oneal at (863) 519-6119 or Mr. Tony Flavors at (863) 519-6165, if you have any questions.

I, the undersigned, am the reasonable 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 that, based on information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate, and complete.

Sincerely,

Martin J. Drango, P.E.
Plant Manager

Attachment

U.S. Postal Service TM	
CERTIFIED MAIL TM RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark Here

7004 2510 0003 4522 1581

PS: Mr. Bill Schroeder
FDEP Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637

Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Bill Schroeder
FDEP Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ YesIf YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail☐ Express Mail☐ Registered☐ Return Receipt for Merchandise☐ Insured Mail☐ C.O.D.

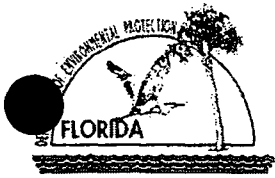
4. Restricted Delivery (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label)

7004 2510 0003 4522 1581



Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☒ Annual Requirement ☐ Transfer of Permit ☐ Permanent Facility Shutdown

REPORTING PERIOD*	REPORT DEADLINE**
January 1 through December 31 of 2007 (year)	March 1, 2008

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Florida Power Corporation dba. Progress Energy Florida

Site Name: Tiger Bay Plant Facility ID No. 1050223-012-AV County: Polk

COMPLIANCE STATEMENT (Check only one of the following three options)

☐ A. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

☒ B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

☐ C. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph B. above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, 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.

Martin J. Drango
(Signature of Title V Source Responsible Official)

2/28/08
(Date)

Name: Martin J. Drango, P.E.

Title: Plant Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, 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.

J. Michael Kennedy
(Signature of Acid Rain Source Designated Representative)

2-27-08
(Date)

Name: J. Michael Kennedy

Title: Principal Environmental Specialist

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Progress Energy Florida
Tiger Bay Plant
Deviations from Permit Conditions

During January 1st to June 30th 2007, there were no deviations for the Tiger Bay Plant. This was previously summarized in the quarterly excess emissions report.

<u>Date</u>	<u>Time</u>	<u>Duration</u>	<u>Parameter</u>	<u>Description</u>
-------------	-------------	-----------------	------------------	--------------------

No deviations for Tiger Bay

Progress Energy Florida
Tiger Bay Plant
Deviations from Permit Conditions

During July 1st to December 31st 2007, the following deviations occurred for the Tiger Bay Plant. These were previously summarized in the quarterly excess emissions reports.

<u>Date</u>	<u>Time</u>	<u>Duration</u>	<u>Parameter</u>	<u>Description</u>
-------------	-------------	-----------------	------------------	--------------------

No deviations for Tiger Bay

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Bill Schroeder
FDEP Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637

2. Article Number
(Transfer from service label)

7004 2510 0003 4522 1581

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- ☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

- D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

- ☐ Yes

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Tommy ONeal HE44
Hines Plant, Progress Energy Corp.
7700 County Road 555
Bartow, FL 33830

ATTACHMENT H

**REQUESTED CHANGES TO CURRENT
TITLE V AIR OPERATION PERMIT**

ATTACHMENT H

TIGER BAY COGENERATION FACILITY REQUESTED CHANGES TO CURRENT TITLE V PERMIT

The following general and specific changes to the current Tiger Bay Cogeneration Facility Title V Permit No. 1050223-012-AV are requested.

A. General Changes

The Tiger Bay Cogeneration Facility combustion turbine is subject to New Source Performance Standard (NSPS) Subpart GG, *Standards of Performance for Stationary Gas Turbines*. The current Title V permit includes Subpart GG requirements in Subsection A of the permit. Consistent with recent FDEP Title V permits, placing all applicable NSPS Subpart A and GG requirements in separate Appendices to the renewed Title V permit is requested.

Similarly, all general Department compliance testing requirements (i.e., those contained in Chapter 62-297) could be placed in a separate Appendix.

B. Specific Changes

1. Condition A.24.

This condition establishes a BACT emission limit for mercury. Use of backup distillate fuel oil is limited to no more than 3,742,327 gallons per year per Condition A.6.(b). This limit on fuel oil use equates to an oil-firing heat input of $516,441 \times 10^6$ Btu/yr, on a higher heating value (HHV) basis assuming a distillate fuel oil heat content of 138,000 Btu/gal, HHV. The oil-fired gas turbine AP-42 Table 3.1-5. emission factor for mercury is 0.0000012 lb/10⁶ Btu, HHV. This data translates to a potential mercury emission rate of 0.00031 tons per year, which is below the Rule 62-210.200(280), F.A.C. PSD significant emission rate PSD applicability threshold of 0.1 tons per year for mercury. Accordingly, deletion of Condition A.24. is requested.

~~A.24. Mercury. Mercury emissions from the CT shall not exceed 3.0×10^{-6} lbs/MMBtu, 5.5×10^{-3} lbs/hr nor 8.32×10^{-4} TPY, while firing distillate fuel oil.
[AC53-214903; PSD-FL-190]~~

ATTACHMENT H

TIGER BAY COGENERATION FACILITY REQUESTED CHANGES TO CURRENT TITLE V PERMIT

2. Conditions A.25. and A.26.

These conditions establish BACT emission limits for arsenic and beryllium. Since these pollutants are no longer regulated under the FDEP PSD regulatory program, deletion of these permit limits is requested.

~~A.25. Arsenic. Arsenic emissions from the CT shall not exceed 4.2×10^{-6} lbs/MMBtu, 7.77×10^{-3} lbs/hr nor 1.17×10^{-3} TPY, while firing distillate fuel oil. [AC53-214903; PSD FL 190]~~

~~A.26. Beryllium. Beryllium emissions from the CT shall not exceed 2.5×10^{-6} lbs/MMBtu, 4.62×10^{-3} lbs/hr nor 6.94×10^{-4} TPY, while firing distillate fuel oil. [AC53-214903; PSD FL 190]~~

3. Condition A.27.

This condition establishes a BACT emission limit for lead. Use of backup distillate fuel oil is limited to no more than 3,742,327 gallons per year per Condition A.6.(b). This limit on fuel oil use equates to an oil-firing heat input of $516,441 \times 10^6$ Btu/yr, on a higher heating value (HHV) basis assuming a distillate fuel oil heat content of 138,000 Btu/gal, HHV. The oil-fired gas turbine AP-42 Table 3.1-5. emission factor for lead is 0.000014 lb/ 10^6 Btu, HHV. This data translates to a potential lead emission rate of 0.0036 tons per year, which is below the Rule 62-210.200(280), F.A.C. PSD significant emission rate applicability threshold of 0.6 tons per year for lead. Accordingly, deletion of Condition A.27. is requested.

~~A.27. Lead. Lead emissions from the CT shall not exceed 8.9×10^{-6} lbs/MMBtu, 1.65×10^{-2} lbs/hr nor 2.47×10^{-3} TPY, while firing distillate fuel oil. [AC53-214903; PSD FL 190]~~

ATTACHMENT H

TIGER BAY COGENERATION FACILITY REQUESTED CHANGES TO CURRENT TITLE V PERMIT

4. Condition A.34(a)(2)

This condition lists specific ASTM methods for natural gas sulfur content analyses. Since these methods may change or be replaced, use of methods consistent with 40 CFR Part 75, Appendix D procedures is requested as follows:

A.34. The following custom fuel monitoring schedules shall be used at this facility:

(a) Natural Gas.

Pursuant to 40 CFR 60.334(b)(2), a custom fuel monitoring schedule shall be followed for the natural gas fired at this facility and shall be as follows:

(1) Monitoring of fuel nitrogen content shall not be required when NG is the only fuel being fired in the turbines.

(2) Sulfur Monitoring

- a. Analysis for fuel sulfur content of the NG fired at this facility shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82, as referenced in 40 CFR 60.335(b)(2). Alternatively, fuel sulfur content may be evaluated using the methods specified in Section 2.3.3.1.2 of Appendix D to 40 CFR Part 75, as amended. Sulfur content monitoring is not required for gaseous fuels that meet the 40 CFR §60.331(u) definition of “natural gas” in accordance with the procedures specified in 40 CFR §60.334(h)(3).

{Permitting Note: Retention of vendor delivery receipts is an acceptable alternative in-lieu of on-site fuel testing, as long as the tests performed by the vendor meet the above conditions.}

5. Condition A.43

This condition lists specific ASTM methods for fuel oil sulfur content analyses. Since these methods may change or be replaced, use of methods consistent with 40 CFR Part 75, Appendix D procedures is requested as follows:

A.43. Sulfur Dioxide – Sulfur Content. The owner or operator shall determine compliance with the sulfur content standard of 0.05 percent, by weight, as follows: ASTM D 2880-96, ASTM 1552-95, or the latest editions, shall be used to determine the

ATTACHMENT H

TIGER BAY COGENERATION FACILITY REQUESTED CHANGES TO CURRENT TITLE V PERMIT

sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, D 3246-92, or the latest editions, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. Alternatively, fuel oil sulfur content may be evaluated using the methods specified in Section 2.2.5 of Appendix D to 40 CFR Part 75, as amended.

[40 CFR 60.335(d); and, applicant request.]

{Permitting Note: Retention of vendor delivery receipts is an acceptable alternative in lieu of on-site fuel testing, as long as the tests performed by the vendor meet the above conditions.}

6. Condition B.11.

This condition requires an annual test for VE for the auxiliary boiler. As discussed in the Introduction, the auxiliary boiler previously provided steam during periods of non-operation of the CT/HRSG unit to an adjacent process (i.e., US Agri-Chem) that permanently ceased operation in November 2005. The auxiliary boiler was shut down in September 2007 and has not been maintained in operational condition. Accordingly, the following change to Condition B.11 is requested:

B.11. Visible Emissions: ~~Unit 003 shall be tested annually for visible emissions, in accordance with the requirements listed below.~~ Annual emissions compliance testing for visible emissions is not required for this emissions unit while burning pipeline natural gas for less than 400 hours per year. Pipeline natural gas is defined in 40 CFR 72.2.

[Rule 62-297.320(7)(a)4., F.A.C.; and, 1050223-009-AC.]

ATTACHMENT I
ACID RAIN PART

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: **Renewal**

STEP 1

Identify the source by
plant name, State, and
ORIS code

Plant Name	Tiger Bay Facility	State	Fl.	ORIS Code	7699
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STEP 2

Enter the unit ID# for every
Acid Rain unit at the Acid
Rain source in column "a."
For new units, enter the
requested information in
columns "c" and "d."

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.90(1)	c New Units Commence Operation Date	d New Units Monitor Certification Deadline
1	Yes	No	
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Tiger Bay Facility

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 Department 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 Department; 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.

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 Department:
 - (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

Tiger Bay Facility

Plant Name (from Step 1)

STEP 3,
Cont'd.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, 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

Read the
certification
statement, sign,
and dateCertification

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 Patricia Q. West

Signature

Patricia Q. West

Date

5/1/09



Certificate of Representation

Page 1

For more information, see instructions and refer to 40 CFR 72.24

This submission is: ☐ New ☒ Revised (revised submissions must be completed in full; see instructions)

This submission includes combustion or process sources under 40 CFR part 74 ☐

STEP 1

Identify the source by plant name, State, and ORIS code.

Plant Name	State	ORIS Code
Tiger Bay Facility	FL	7699

STEP 2

Enter requested information for the designated representative.

Name	Patricia Q. West		
Address	Florida Power Corporation d/b/a Progress Energy Florida, Inc. Post Office Box 14042, PEF 903 St. Petersburg, FL 33733		
Phone Number	(727) 820-5739	Fax Number	(727) 820-5229
E-mail address (if available)	Patricia.West@pgnmail.com		

STEP 3

Enter requested information for the alternate designated representative, if applicable.

Name	Brenda E. Brickhouse		
Address	Florida Power Corporation d/b/a Progress Energy Florida, Inc. P.O. Box 14042, PEF 903 St. Petersburg, FL 33733		
Phone Number	(727) 820-5153	Phone Number	(727) 820-5153
E-mail address (if available)	Brenda.Brickhouse@pgnmail.com		

STEP 4

Complete Step 5, read the certifications, and sign and date. For a designated representative of a combustion or combustion or process process source under 40 CFR part 74, the references in the certifications to "affected unit" or "affected units" also apply to the combustion or process source under 40 CFR part 74 and the references to "affected source" also apply to the source at which the source is located.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the 'designated representative' for the affected unit at the source identified in this certificate of representation, in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

Plant Name (from Step 1)

Tiger Bay FacilityCertificate - Page 2
Page 1 of 1

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

<i>Patricia A. West</i> Signature (designated representative)	Date <i>5/1/09</i>
Signature (alternate designated representative)	Date

STEP 5

Provide the name of every owner and operator of the source and each affected unit (or combustion or process source) they own and or operate.

Name Progress Energy Corporation					<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Operator
ID# 1	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

ATTACHMENT J

CAIR PART

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

STEP 1

Plant Name: TIGER BAY COGENERATION FACILITY	State: Florida	ORIS or EIA Plant Code: 7699
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STEP 2

For new units, enter the requested information in columns "e" and "f."

[illegible]

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.

TIGER BAY COGENERATION FACILITY
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.

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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.

TIGER BAY COGENERATION FACILITY
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 <i>5/1/09</i>

ATTACHMENT K
FUEL SPECIFICATIONS

ATTACHMENT K

TIGER BAY COGENERATION FACILITY FUEL ANALYSES OR SPECIFICATIONS

A. No. 2 Fuel Oil (typical composition)

Specification	Units	Value
Heat Content (nominal)	Btu/gal (HHV)	138,000
Sulfur Content	Weight %	0.05
Ash Content	Weight %	0.1

B. Natural Gas (typical composition)

Component	Mole Percent (by volume)
<u>Gas Composition</u>	
Hexane+	0.018
Propane	0.190
I-butane	0.010
N-butane	0.007
Pentane	0.002
Nitrogen	0.527
Methane	96.195
CO ₂	0.673
Ethane	2.379
<u>Other Characteristics</u>	
Heat content (HHV)	1,050 Btu/ft ³ at 14.73 psia, dry
Real specific gravity	0.5776
Sulfur content	0.5 gr/100 scf

Note: Btu/ft³ = British thermal units per cubic foot.
 psia = pounds per square inch absolute.
 gr/100 scf = grains per 100 standard cubic foot.

ATTACHMENT L

**PROCEDURES FOR
STARTUP AND SHUTDOWN**

ATTACHMENT L

TIGER BAY COGENERATION FACILITY PROCEDURES FOR STARTUP AND SHUTDOWN

Combustion Turbine and Heat Recovery Steam Generator

Startup for the combustion turbine begins with “lighting off” of the machine on natural gas.

If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective actions taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to stop. The CT is then put “on turning gear” to prevent possible disfiguration of the turbine components.

ATTACHMENT M
ALTERNATE METHODS OF OPERATION

ATTACHMENT M

TIGER BAY COGENERATION FACILITY ALTERNATIVE METHODS OF OPERATION

COMBUSTION TURBINE (EU ID 001)

Method No.	Fuel Type	Fuel Sulfur Content (Wt %)	Heat Input Range, LHV ¹ (10 ⁶ Btu/hr)	Maximum Operating Hours		
				(Hrs/Dy)	(Dys/Wk)	(Hrs/Yr)
1	Natural Gas	0.05	0 – 1,710	24	7	8,760
2	No. 2 Fuel Oil	0.05	0 – 1,849.9	24	7	²

¹ Heat input rates are at combustion turbine base load and 27°F ambient temperature operating conditions.

² No. 2 fuel oil use is limited to no more than 3,742,327 gallons per calendar year.