



**CONESTOGA-ROVERS
& ASSOCIATES**

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May 16, 2014

Reference No. 096318

Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, M.S. 5500
Tallahassee, Florida 32399-2400

To Whom It May Concern:

Re: Title V Air Operation Permit Renewal
Final Permit 1050223-015-AV
Duke Energy Florida, Inc.
Tiger Bay Cogeneration Facility
Ft. Meade, Florida

Conestoga-Rovers & Associates (CRA) has enclosed a renewal to the Title V Air Operation Permit application number 1050223-015-AV for the Tiger Bay Cogeneration Facility. The following sections summarize the significant revisions made to permit 1050223-015-AV and the forms attached in support of this permit renewal.

1.0 Significant Revisions

Significant revisions in the permit include the following:

- Update the name of facility owner from Florida Power Corporation d/b/a Progress Energy Florida, Inc. to Duke Energy Florida, Inc.
- Removal of distillate fuel oil as a backup fuel for E.U. ID 001 in Subsection A and associated conditions.
- Removal of E.U. ID 003, auxiliary boiler, from the facility, and removal of Subsection B. from the permit 1050223-015-AV.
- Revision of language in sections A.6. and A.20. of permit 1050223-015-AV.
- No other changes are included in this renewal. Information submitted in the initial application for 1050223-015-AV remains current and requires no further revisions or updates.

2.0 Attachments

The following attachments are included in the Title V Air Operation Permit renewal package:

- DEP Form No. 62-210.900(1) – Application for Air Permit – Long Form
- Attachment A – Facility Location Map
- Attachment B – Facility Plot Plan

Equal
Employment Opportunity
Employer



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Reference No. 096318

- 2 -

- Attachment C – Process Flow Diagram
- Attachment D – Precautions to Prevent Emissions of Unconfined Particulate Matter
- Attachment E – List of Insignificant Activities
- Attachment F – Identification of Applicable Requirements
- Attachment G – Requested Changes to Current Title V Air Operation Permit
- Attachment H – Acid Rain Part: DEP Form No. 62-210.900(1)(a) – Acid Rain Part Application
- Attachment I – CAIR Part: DEP Form No. 62-210.900(1)(b) – CAIR Part
- Attachment J – Fuel Specifications
- Attachment K – Procedures for Startup and Shutdown

If you have any questions, please contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Amit Joshi, P.E.

AJ/cjg/1

cc: Chris Bradley, Duke Energy Florida, Inc.
Don Sutton, CRA
Zeke He, CRA

Florida Department of Environmental Protection Division of Air Resource Management

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: Duke Energy Florida, Inc.	
2. Site Name: Tiger Bay Cogeneration Facility	
3. Facility Identification Number: 1050223	
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	
2. Application Contact Mailing Address... Organization/Firm: Duke Energy Florida, Inc. Street Address: 299 First Avenue North, FL-903 City: St. Petersburg State: Florida Zip Code: 33701-3308	
3. Application Contact Telephone Numbers... Telephone: (727)820-5962 ext. Fax: (727)820-5229	
4. Application Contact E-mail Address: chris.bradley@duke-energy.com	

Application Processing Information (DEP Use)

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

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

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

Air Operation Permit

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

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

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

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

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

Application Comment

Duke Energy Florida, Inc. Tiger Bay Cogeneration Facility (Facility) is currently operating under the provisions of Title V Operation Permit Number 1050223-015-AV, effective January 1, 2010 through December 31, 2014.

The facility is required to submit a Title V permit renewal by May 20, 2014 as indicated on the permit. The facility is submitting this application and relevant documentation for the Title V permit renewal.

Attachment G contains requested changes to the current Title V permit conditions. As these changes also require a revision to an underlying air construction permit, Duke Energy Florida, Inc. requests the Department of Environmental Protection that the air construction permit 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	Combined-cycle Combustion Turbine (CT) and Heat Recovery Steam Generator (HRSG)	N/A	N/A

Application Processing Fee

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

Note: Pursuant to Rule 62-213.205(2), F.A.C., no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

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

APPLICATION INFORMATION

Application Responsible Official Certification

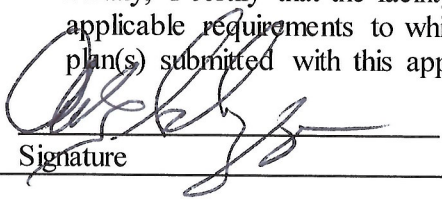
Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary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

1. Application Responsible Official Name: Anthony Salvarezza, General Manager
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Duke Energy Florida, Inc. Street Address: 7700 County Road 555 City: Bartow State: Florida Zip Code: 33830
4. Application Responsible Official Telephone Numbers... Telephone: (863) 519 -6103 ext. Fax: (863) 519 - 6110
5. Application Responsible Official E-mail Address: Anthony.Salvarezza@duke-energy.com

APPLICATION INFORMATION

6. Application Responsible Official Certification:

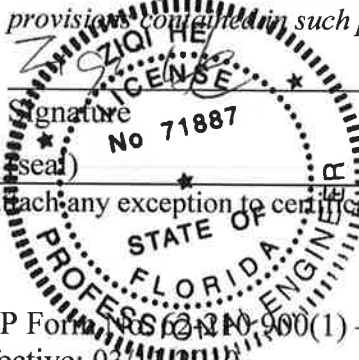
I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.


Signature

5/16/14
Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Ziqi He Registration Number: 71887
2. Professional Engineer Mailing Address... Organization/Firm: Conestoga-Rovers & Associates, Inc. Street Address: 4019 E Fowler Avenue City: Tampa State: Florida Zip Code: 33617
3. Professional Engineer Telephone Numbers... Telephone: (813) 971-3882 ext. Fax: (813) 971-1862
4. Professional Engineer E-mail Address: zhe@craworld.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input 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: <u>ZIQI HE</u> Date: <u>5/16/2014</u> 

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 (NAD 83) East (km) 416.2 North (km) 3069.22		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 27/44/56.2444 Longitude (DD/MM/SS) -81/50/59.5212	
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 : E.U. ID No. 003 (auxiliary boiler) is no longer in service and has been removed from the renewal application. The boiler is still located at the facility but is not currently in operation. Additionally the facility will no longer use No. 2 distillate fuel as backup fuel source E.U. 001 (combustion turbine), hence the references to this fuel have been removed from this renewal application. The ownership name has changed from Florida Power Corporation d/b/a Progress Energy Florida, Inc. to Duke Energy Florida, Inc.			

Facility Contact

1. Facility Contact Name: Tommy Oneal, Lead Environmental Specialist
2. Facility Contact Mailing Address... Organization/Firm: Duke Energy Florida, Inc. Street Address: 7700 County Road 555 <div style="display: flex; justify-content: space-between; margin-top: 10px;"> City: Bartow State: Florida Zip Code: 33830 </div>
3. Facility Contact Telephone Numbers: Telephone: (863) 519-6119 ext. Fax: (863) 519-6110
4. Facility Contact E-mail Address: Tommy.Oneal@duke-energy.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: <div style="display: flex; justify-content: space-between; margin-top: 10px;"> City: State: Zip Code: </div>
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 Part 60)	
9.	<input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10.	<input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11.	<input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12.	<p>Facility Regulatory Classifications Comment:</p> <p>E.U. ID 001 (Combustion Turbine and Heat Recovery Steam Generator) is subject to 40 CFR Part 60 New Source Performance Standard Subpart GG, Standards of Performance for Stationary Gas Turbines.</p> <p>The following engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT “4-Z’s” or “RICE MACT,” however, since the engines meet the Subpart ZZZZ definition of “existing units,” there are no unit specific applicable requirements that must be met pursuant to this rule at this time. The engines are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS}:</p> <ol style="list-style-type: none"> 1. 415 HP Detroit Diesel Emergency Generator – manufactured 1993, compression ignition 2. 210 HP Caterpillar Diesel Fire Pump – remanufactured April 1999, compression ignition 	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
SO2	B	N
NOX	A	N
CO	A	N
VOC	B	N
PM10	B	N

FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps - NOT APPLICABLE

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
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:
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

Additional Requirements for Title V Air Operation Permit Applications

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

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

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

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

Not Applicable (not a CAIR source)

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [1] of [1]

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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:
General Electric (GE) Model 7FA combustion turbine (CT) and heat recovery steam generator (HRSG)

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

4. Emissions Unit Status Code: A	5. Commence Construction Date: 08/16/1993	6. Initial Startup Date: 07/14/1997	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

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 [1]

Emissions Unit Control Equipment/Method: Control 1 of 1

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 ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 1,710.0 million Btu/hr LHV
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 8760 hours/year
6. Operating Capacity/Schedule Comment: The maximum heat input rate shown above is for baseload at 27°F while firing natural gas with a Lower Heating Value (LHV) of 950 Btu/cf.

EMISSIONS UNIT INFORMATION

Section [1] of [1]

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

1. Identification of Point on Plot Plan or Flow Diagram: TBGS-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

Section [1] of [1]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

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: 1.8	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: Maximum Hourly Rate = 1,710 MMBtu/hr ÷ 950 MMBtu/MMcf (LHV) = 1.8 MMcf/hr Maximum Annual Rate = 1.8 MMcf/hr × 8760 hr/yr = 15,768 MMcf/yr		

Segment Description and Rate: Segment __ of __

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
NOX	025		EL
CO			EL
VOC			EL
PM/PM10			EL
H ₂ SO ₄ Mist (Sulfuric Acid Mist, SAM)			EL

**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: 4.86 lb/hour 21.3 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 4.86 lb/hr, 21.3 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.8		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas: 4.86 lb/hr, See Table 1 – Allowable Emission Rates of Permit No. AC53-214903/PSD-FL-190 Annual rate of natural gas = (4.86 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 21.3 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 1

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: Vendor fuel sampling and analysis per applicable ASTM method	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.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):	

Allowable Emissions Allowable Emissions of

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

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 97.2 lb/hour 425.7 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 97.2 lb/hr, 425.7 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.6		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas: 97.2 lb/hr, Based on BACT analysis from Permit Nos. AC53-214903/PSD-FL-190 Annual rate of natural gas = (97.2 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 425.7 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

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

1. Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 15 ppmvd at 15% O2	4. Equivalent Allowable Emissions: 97.2 lb/hour 425.7 tons/year
5. Method of Compliance: CEMS with an annual RATA	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.6	

Allowable Emissions Allowable Emissions ___ of ___

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

Allowable Emissions Allowable Emissions ___ of ___

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

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 48.8 lb/hour 213.7 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 48.8 lb/hr, 213.7 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.13		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas: 48.8 lb/hr, 15 ppmvd @ 15% O₂, based on BACT analysis from Permit Nos. AC53-214903/PSD-FL-190 Annual rate of natural gas = (48.8 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 213.7 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 15 ppmvd at 15% O2	4. Equivalent Allowable Emissions: 48.8 lb/hour 213.7 tons/year
5. Method of Compliance: EPA Method 10	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.13	

Allowable Emissions Allowable Emissions ___ of ___

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

Allowable Emissions Allowable Emissions ___ of ___

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

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 2.8 lb/hour 12.3 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 2.8 lb/hr, 12.3 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.15		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas: 2.8 lb/hr, Based on BACT analysis from Permit Nos. AC53-214903/PSD-FL-190 Annual rate of natural gas = (2.8 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 12.3 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

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

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 Method 25A	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.15	

Allowable Emissions Allowable Emissions __ of __

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

Allowable Emissions Allowable Emissions __ of __

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

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM/PM10		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 9.0 lb/hour 39.4 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 9.0 lb/hr, 39.4 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.11		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas: 9.0lb/hr, Based on BACT analysis from Permit Nos. AC53-214903/PSD-FL-190 Annual rate of natural gas = (9.0 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 39.4 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 1

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: 9.0 lb/hour 39.4 tons/year
5. Method of Compliance: EPA Method 9 – Visible Emissions	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.11	

Allowable Emissions Allowable Emissions ___ of ___

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

Allowable Emissions Allowable Emissions ___ of ___

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

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: Sulfuric Acid Mist (SAM, H₂SO₄)		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 0.595 lb/hour 2.6 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A to tons/year			
6. Emission Factor: 0.595 lb/hr, 2.6 ton/yr for natural gas Reference: Final Title V Operation Permit Number 1050223-015-AV, Condition A.17		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tons/year		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tons/year		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly rate of natural gas = 4.86 lb/hr SO₂ x 0.08 conversion ÷ 64 lb/lb-mol SO₂ X 98 lb/lb-mol H₂SO₄ = 0.595 lb/hr H₂SO₄ Based on hourly rate of natural gas emissions of SO₂ and 8% conversion of SO₂ to H₂SO₄. Annual rate of natural gas = (0.595 lb/hr x 8760 hr/yr) ÷ (2000 lb/ton) = 2.6 tons/yr			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

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

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 Method 8 or Mass balance based on a conversion rate for SO₂ to H₂SO₄ of 8%. See Table 1 – Allowable Emission Rates of Permit No. AC53-214903/PSD-FL-190	
6. Allowable Emissions Comment (Description of Operating Method): Final Title V Operation Permit Number 1050223-015-AV, Condition A.17	

Allowable Emissions Allowable Emissions of

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

Allowable Emissions Allowable Emissions of

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

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 Method 9	
5. Visible Emissions Comment: Final Title V Operation Permit Number 1050223-015-AV, Condition A.19	

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 [1] of [1]

H. CONTINUOUS MONITOR INFORMATION**Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 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 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 compliance method pursuant to 40 CFR Part 64 (Compliance Assurance Monitoring).	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. C</u> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. J</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. K</u> <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:

Attached, Document ID: _____

Test Date(s)/Pollutant(s) Tested: _____

Previously Submitted, Date: 10/08/2013

Test Date(s)/Pollutant(s) Tested: 09/04/2013/NOX, SO2, H2SO4, CO, Visible Emissions

To be Submitted, Date (if known): _____

Test Date(s)/Pollutant(s) Tested: _____

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.

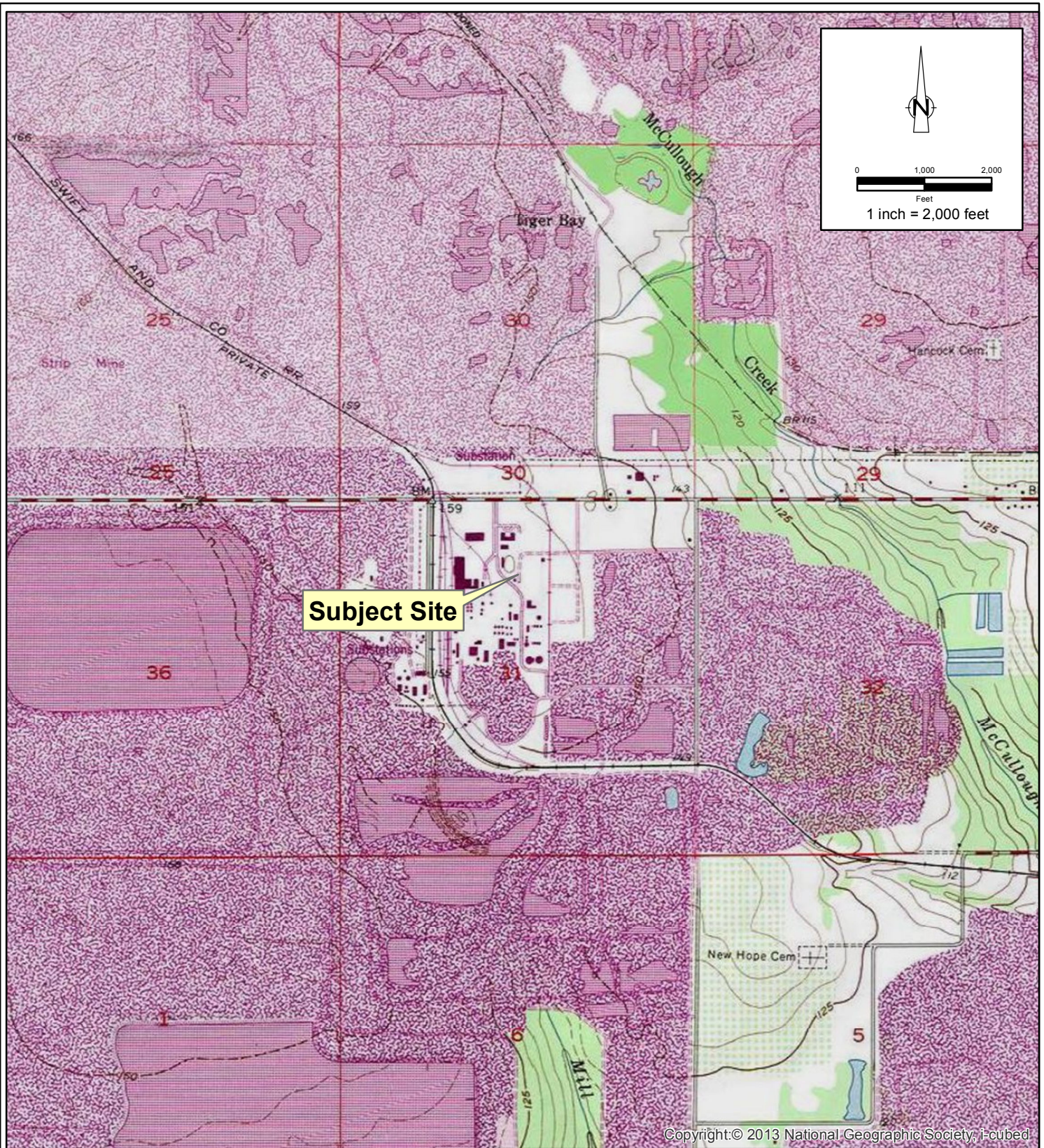
7. Other Information Required by Rule or Statute:

Attached, Document ID: _____

Not Applicable

Attachment A

Facility Location Map



Copyright: © 2013 National Geographic Society, i-cubed

SOURCE: USGS 7.5 MINUTE QUADS
 "BOWLING GREEN AND HOMELAND, FLORIDA"

LAT/LONG: 27.745° NORTH, 81.851° WEST
 COORDINATE: NAD83 DATUM, DECIMAL DEGREES

Attachment A

FACILITY LOCATION MAP
 TIGER BAY COGENERATION FACILITY
 POLK COUNTY, FLORIDA
 Duke Energy Florida, Inc.



Attachment B

Facility Plot Plan



ATTACHMENT B

TIGER BAY COGENERATION FACILITY PLOT PLAN

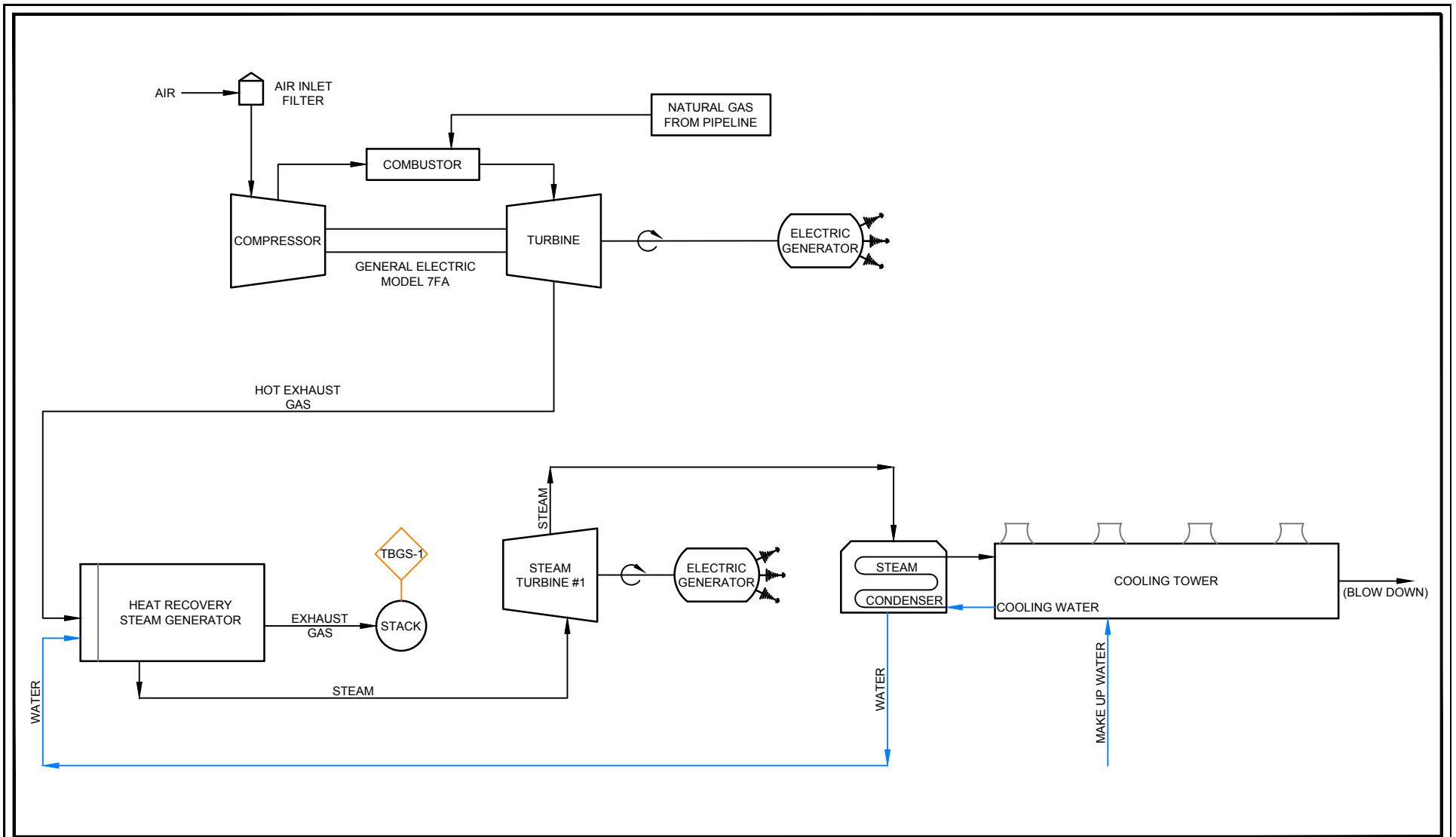
Source: ECT, 2009.

Duke Energy Florida, Inc.

People. Performance. Excellence.

Attachment C

Process Flow Diagram



Attachment C

PROCESS FLOW DIAGRAM
 TIGER BAY COGENERATION FACILITY
 POLK COUNTY, FLORIDA
Duke Energy Florida, Inc.

LEGEND



Attachment D

Precautions to Prevent Emissions of Unconfined Particulate Matter

Precautions to Prevent Emissions of Unconfined Particulate Matter

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

- Vehicular traffic on paved and unpaved roads.
- 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.
- Removal of PM from roads and other paved areas to prevent re-entrainment and from buildings or work areas to prevent airborne particulates.
- 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.
- Other techniques, as necessary.

Attachment E

List of Insignificant Activities

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. Steam turbine lube oil vents
14. Gas turbine lube oil reservoirs and vents.
15. Gas turbine dump tank vents.
16. Used oil storage tanks.
17. Turbine and lube oil storage tanks.
18. Potable water treatment equipment.
19. Fuel storage tanks less than 550 gallons – gasoline and diesel fuel
20. Architectural (equipment) maintenance painting.
21. Natural gas valve venting or relief valves.
22. Fresh water cooling tower and related equipment. No chromium-based water treatment chemicals shall be used in the cooling towers.
23. Evaporation of non-hazardous boiler cleaning chemicals.
24. The following engines are subject to regulation under 40 CFR 63, Subpart ZZZZ also known as (a.k.a.) MACT “4-Z’s” or “RICE MACT,” however, since the engines meet the Subpart ZZZZ definition of “existing units,” there are no unit specific applicable requirements that must be met pursuant to this rule at this time. The engines are considered to be ‘existing’ units for purposes of 40 CFR 60 Subpart IIII also known as (a.k.a.) NSPS “4-I’s” or “CI-ICE” {CI engines pre-May 2006 are exempt from the NSPS}:

Identification	Model Year/Construction (Manufacturer) Date	Manufacturer Name	Type	Horsepower (HP)
Diesel Emergency Generator	1993	Detroit Diesel	Compression Ignition (CI)	415
Diesel Fire Pump	April 1999 (remanufactured)	Caterpillar	Compression Ignition (CI)	210

There is no air pollution control equipment associated with this/these unit(s).

Attachment F

Identification of Applicable Requirements

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.

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 Plant-wide 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.

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

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)(I): 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: 1050223-015-AV, Section III., Emissions Unit No. 001; Permit Condition Nos. A.1. through A.43., 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.]

Attachment G

Requested Changes to Current Title V Air Operation Permit

Requested Changes to Current Title V Permit

The following specific changes to the current Tiger Bay Cogeneration Facility Title V Permit No. 1050223-015-AV are requested.

Specific Changes

Subsection A.

- a. Removal of distillate fuel oil firing as a backup fuel source for E.U. ID 001. The removal of this fuel will require the following modifications to be made throughout Subsection A.
 1. Complete removal of the following Conditions that are specifically related to the use of distillate fuel oil as a backup fuel at the facility:
 - a. Condition A.2.b.
 - b. Condition A.3.b.
 - c. Condition A.5.
 - d. Condition A.7.
 - e. Condition A.9.
 - f. Condition A.10.
 - g. Condition A.12.
 - h. Condition A.14.
 - i. Condition A.16.
 - j. Condition A.18.
 - k. Condition A.24.b.
 - l. Condition A.41.
 2. Modification of the following Conditions that reference the use of distillate fuel oil as a backup fuel at the facility:
 - a. Condition A.
 - b. Condition A.3.a.
 - c. Condition A.4.
 - d. Condition A.32.
- b. Modification of the language in Condition A.6. Please see proposed language below:

A.6. Nitrogen Oxides - while Burning Natural Gas.

 - a. Nitrogen oxide emissions from the CT shall not exceed 15 ppmvd at 15 percent oxygen, 97.2 lbs/hr nor 425.7 TPY, while burning natural gas. This limit will be achieved by using appropriate combustion technology improvements or SCR. ~~If SCR is chosen as the control technology, the maximum nitrogen oxides emissions limits shall not exceed 10 ppmvd at 15 percent oxygen, 64.8 lbs/hr, nor 283.8 TPY.~~
 - b. The maximum allowable nitrogen oxide emissions resulting from a start up or shut down of the CT shall not exceed an average of 120 lbs/hour, based on a 24-hour period commencing with the beginning of a start up or ending with a shut down of the unit. The 24-hour average shall be based on all available data excluding calibration data and periods of emissions due to malfunction during the start up period.

- c. Modification of the excess emissions limitations in Condition A.20.b. Please see proposed language below:

A.20. Excess Emissions.

- a. Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.
- b. Excess emissions resulting from activities related to optimization of operations and maintenance of the combustion turbine, HRSG, steam turbine and/or associated equipment including, but not limited to, combustor tuning sessions, shall be permitted provided the tuning session is performed in accordance with the manufacturer's specifications and in no case shall exceed 72 hours in any calendar year. A "tuning session" would occur after a combustor change-out, a repair to a combustor, or as required to maintain compliance. Prior to performing any tuning session, the permittee shall provide the Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.

Subsection B. - Removal of Auxiliary Boiler, E.U. ID 003 from Tiger Bay Cogeneration Facility. This emissions source has been shut down, dismantled and removed from the facility. Complete removal of Subsection B. and all associated conditions.

Attachment H

Acid Rain Part

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: New Revised Renewal

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Plant name Tiger Bay Cogeneration	State FL	ORIS/Plant 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."

If unit a SO₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO ₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
1		Yes		

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

**STEP 3,
Continued.**

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

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

Effect on Other Authorities.

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

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

STEP 4

For SO₂ Opt-in units only.

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

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

In column "h" enter the hours.

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

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

STEP 5

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

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

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

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

STEP 6

For SO₂ Opt-in units only.

Attach additional requirements, certify and sign.

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

Signature	Date
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STEP 7

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


Certification (for designated representative or alternate designated representative only)

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

Name Jeffrey R. Swartz	Title Vice President, Florida – Power Generation Operations
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Owner Company Name **Duke Energy Florida, Inc.**

Phone (727) 820-5188	E-mail address Jeffrey.Swartz@duke-energy.com
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Signature 	Date 5/1/2014
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Attachment I

CAIR Part

Clean Air Interstate Rule (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.

This submission is: New Revised Renewal

STEP 1

Identify the source by plant name and ORIS or EIA plant code

Plant Name: Tiger Bay Cogeneration	State: Florida	ORIS or EIA Plant Code: 7699
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STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

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

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO _x) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO ₂) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO _x Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
1	X	X	X		

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

STEP 3

Read the standard requirements.

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_x Emission Requirements.

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

Excess Emissions Requirements.

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

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

**STEP 3,
Continued**

Liability.

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

Effect on Other Authorities.

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

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

SO₂ Emission Requirements.

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

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:

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

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

**STEP 3,
Continued**

Recordkeeping and Reporting Requirements.

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

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

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

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

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

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

Liability.

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

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

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

Effect on Other Authorities.

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

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

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

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

(ii) [Reserved];

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

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

NO_x Ozone Season Emission Requirements.

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

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

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

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

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

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

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

Plant Name (from STEP 1) **Tiger Bay Cogeneration**

Excess Emissions Requirements.

**STEP 3,
Continued**

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

Recordkeeping and Reporting Requirements.

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

(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.

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

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

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

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

Liability.

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

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

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

Effect on Other Authorities.


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

STEP 4

Certification (for designated representative or alternate designated representative only)

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

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

Name Jeffrey R. Swartz	Title Vice President, Florida – Power Generation Operations
Owner Company Name Duke Energy Florida, Inc.	
Phone (727) 820-5188	E-mail address Jeffrey.Swartz@duke-energy.com
Signature 	Date 5/1/2014

Attachment J

Fuel Specifications



DATE: 28-Jan-2014

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8985 Columbia Road
Cape Canaveral, FL, 32920
U.S.A.
Tel: +1-(321)-784-1941
Fax: +1-(321)-784-1943

DUKE ENERGY
HINES ENERGY COMPLEX
7700 CR 555
BARTOW
UNITED STATES
33830

Certificate of Analysis: PC14-00013.003

CLIENT ORDER NUMBER :	Job# 313620	SGS ORDER NO.:	--
CLIENT ID :	JANUARY 2014	PRODUCT DESCRIPTION :	Natural Gas
LOCATION :	Duke Energy - Hines Energy Complex	SOURCE ID :	Florida Gas Transmission
SAMPLE SOURCE :	Natural Gas Line	SAMPLED BY :	Duke Energy
SAMPLE TYPE :	Submitted Sample	RECEIVED	27-Jan-2014
SAMPLED :	24-Jan-2014	COMPLETED :	28-Jan-2014
ANALYSED :	28-Jan-2014		

PROPERTY	METHOD	RESULT	UNITS
Ideal Gross Heating Value	ASTM D3588	1034	Btu/ft ³
Ideal Net Heating Value	ASTM D3588	932	Btu/ft ³
Ideal Relative Density	ASTM D3588	0.5826	---
Sulfur Compounds in Natural Gas and Gaseous Fuels by GC	ASTM D5504		
Hydrogen Sulfide		0.00410	ppm(mole)
Total Sulfur		0.00410	ppm
Total Sulfur		0.00024	gr/100ft ³
Analysis of Natural Gas and Similar Gaseous mixtures by GC	GPA 2261		
Hexanes and Heavier		<0.010	% Mole
Nitrogen		0.431	% Mole
Methane		95.820	% Mole
Carbon Dioxide		0.524	% Mole
Ethane		2.486	% Mole
Propane		0.369	% Mole
Iso-Butane		0.094	% Mole
n-Butane		0.120	% Mole
Iso-Pentane		0.022	% Mole
n-Pentane		0.131	% Mole

- Result is outside of test method limits and/or analytical range used in method precision study

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the above results. Users of the data shown on this report should refer to the latest published revisions of ASTM D-3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

AUTHORISED SIGNATORY

Jason Hobbs
Laboratory Supervisor

280120141615000004556

Page 1 of 2

OGC-En_report-2013-05-30-V58

SGS North America Inc.

Oil, Gas & Chemicals Services 8985 Columbia Road, Cape Canaveral, FL, 32920, U.S.A. Tel: +1-(321)
-784-1941 Fax: +1-(321)-784-1943



DATE: 28-Jan-2014

SGS Oil, Gas and Chemicals
SGS Port Canaveral
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Fax: +1-(321)-784-1943

DUKE ENERGY
HINES ENERGY COMPLEX
7700 CR 555
BARTOW
UNITED STATES
33830

Certificate of Analysis: PC14-00013.004

CLIENT ORDER NUMBER :	Job# 313620	SGS ORDER NO.:	--
CLIENT ID :	JANUARY 2014	PRODUCT DESCRIPTION :	Natural Gas
LOCATION :	Duke Energy - Hines Energy Complex	SOURCE ID :	Gulfstream
SAMPLE SOURCE :	Natural Gas Line	SAMPLED BY :	Duke Energy
SAMPLE TYPE :	Submitted Sample	RECEIVED	27-Jan-2014
SAMPLED :	24-Jan-2014	COMPLETED :	28-Jan-2014
ANALYSED :	28-Jan-2014		

PROPERTY	METHOD	RESULT	UNITS
Ideal Gross Heating Value	ASTM D3588	1047	Btu/ft ³
Ideal Net Heating Value	ASTM D3588	944	Btu/ft ³
Ideal Relative Density	ASTM D3588	0.5866	---
Sulfur Compounds in Natural Gas and Gaseous Fuels by GC	ASTM D5504		
Hydrogen Sulfide		0.01385	ppm(mole)
Total Sulfur		0.01498	ppm
Total Sulfur		0.00088	gr/100ft ³
Analysis of Natural Gas and Similar Gaseous mixtures by GC	GPA 2261		
Hexanes and Heavier		<0.010	% Mole
Nitrogen		0.203	% Mole
Methane		95.374	% Mole
Carbon Dioxide		0.429	% Mole
Ethane		2.914	% Mole
Propane		0.560	% Mole
Iso-Butane		0.162	% Mole
n-Butane		0.273	% Mole
Iso-Pentane		0.046	% Mole
n-Pentane		0.036	% Mole

**** End of Analytical Results ****

- Result is outside of test method limits and/or analytical range used in method precision study

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the above results. Users of the data shown on this report should refer to the latest published revisions of ASTM D-3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

AUTHORISED SIGNATORY

Jason Hobbs
Laboratory Supervisor

2801201416150000004556

Page 2 of 2

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Attachment K

Procedures for Startup and Shutdown

Procedures for Startup and Shutdown

Combustion Turbine and Heat Recovery Steam Generator

Startup for the combustion turbine begins with “Flame On” 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. 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 a stop. The combustion turbine is then put “on turning gear” to prevent possible disfiguration of the turbine components.