ECT
Environmental Consulting & Technology, Inc.

April 22, 2010
ECT No. 100079-0100

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

Re: Calpine Operating Services Company, Inc. (COSCI)
Auburndale Peaker Energy Center (APEC) and Osprey Energy Center (OEC)
Title V Air Operation Permit Application

Dear Ms. Vielhauer: Project No.: 1050334-008-AV

COSCI operates an electrical generation facility located on West Derby Avenue in Auburndale, Polk County, Florida. The COSCI electrical generation facility is comprised of the APEC and the OEC. The APEC is owned by Auburndale Peaker Energy Center, LLC. The OEC is owned by Calpine Construction Finance Company, LP. Both ownership entities are wholly owned subsidiaries of the Calpine Corporation.

The APEC includes one nominal 170-megawatt (MW) Siemens 501D5A combustion turbine generator (CTG) operating in simple-cycle mode. The OEC includes two nominal 170-MW Siemens 501FD CTGs operating in combined-cycle mode, two fired heat recovery steam generators (HRSGs), and one common 200-MW steam turbine generator (STG). The OEC and APEC also include a variety of insignificant and unregulated emission units and activities.

Operation of the APEC and OEC are currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit No. 1050221-014-AV issued with an effective date of January 1, 2008, and an expiration date of December 31, 2012. This permit authorizes operation of the AEC, which includes three electrical generation facilities: (a) Auburndale Power Partners, LP (APP) combined-cycle combustion turbine unit, (b) APEC simple-cycle combustion turbine, and (c) OEC two combined-cycle combustion turbine units.

FDEP recently agreed to separate the AEC for Title V permitting purposes into two facilities consisting of: (1) the APP combined-cycle unit, and (2) the APEC and OEC electrical gener-

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98th Street
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32606

(352)
332-0444

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332-6722

ation equipment. On behalf of COSCI, four copies of a Title V air operation permit application for the APEC and OEC facility are enclosed for FDEP review. Pursuant to the requirements of Chapter 62-213.400, Florida Administrative Code (F.A.C.), the application package contains FDEP's Application for Air Permit – Long Form and the required supplemental facility and emission unit information.

Please contact Ms. Heidi Whidden at 713/570-4829 or e-mail at hwhidden@calpine.com if there are any questions regarding this application.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Thomas W. Davis, P.E.
Principal Engineer

TWD/dlm

Enclosures

CALPINE CONSTRUCTION FINANCE COMPANY, LP
AUBURNDALE PEAKER ENERGY CENTER, LLC

TITLE V AIR OPERATION PERMIT APPLICATION

Prepared for:

CALPINE®
NYSE CPN

CALPINE OPERATING SERVICES COMPANY, INC.
Auburndale, Florida

Prepared by:

ECT

Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 100079-0100

April 2010

INTRODUCTION

Calpine Operating Services Company, Inc. (COSCI), operates an electrical generation facility located on West Derby Avenue in Auburndale, Polk County, Florida. The COSCI electrical generation facility is comprised of the Auburndale Peaker Energy Center (APEC) and the Osprey Energy Center (OEC). APEC is owned by Auburndale Peaker Energy Center, LLC. OEC is owned by Calpine Construction Finance Company, LP. Both ownership entities are wholly owned subsidiaries of the Calpine Corporation.

APEC includes one nominal 170-megawatt (MW) Siemens 501D5A combustion turbine generator (CTG) operating in simple-cycle mode. OEC includes two nominal 170-MW Siemens 501FD CTGs operating in combined-cycle mode, two fired heat recovery steam generators (HRSGs), and one common 200-MW steam turbine generator (STG). OEC and APEC also include a variety of insignificant and unregulated emission units and activities.

The APEC simple-cycle CTG is fired primarily with pipeline natural gas. Low-sulfur distillate fuel oil (i.e., fuel oil containing no more than 0.05 weight percent sulfur) serves as a backup fuel source. The OEC CTGs and HRSG duct burners are fired solely with pipeline natural gas.

The APEC simple-cycle CTG and the OEC combined-cycle CTGs are each subject to New Source Performance Standard (NSPS), Subpart GG, Standards of Performance for Stationary Gas Turbines, which applies to gas turbines constructed after October 3, 1977. The OEC HRSG duct burners are subject to NSPS, Subpart Da, Standards of Performance for Electric Utility Generating Units Constructed After September 18, 1978, which applies to units capable of combusting more than 250 million British thermal units per hour (MMBtu/hr) heat input of fossil fuels. The APEC and OEC emission units were also subject to Prevention of Significant Deterioration (PSD) review, including best available control technology (BACT). The APEC CTG and OEC CTG/HRSG units are affected emission units under both the Acid Rain Program (ARP) and the Clean Air Interstate Rule (CAIR).

Operation of APEC and OEC is currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit No. 1050221-014-AV issued with an effective date of January 1, 2008, and an expiration date of December 31, 2012. This permit authorizes operation of the Auburndale Energy Complex (AEC), which includes the following three electrical generation facilities:

- Auburndale Power Partners (APP) combined-cycle CTG/HRSG unit.
- APEC simple-cycle CTG.
- OEC two combined-cycle CTG/HRSG units.

FDEP recently agreed to separate the AEC for Title V permitting purposes into two facilities consisting of: (1) the APP combined-cycle unit, and (2) the APEC and OEC electrical generation equipment. The APP facility was purchased by Atlantic Power Corporation and is currently operated by affiliates of Caithness Energy. APEC and OEC are both operated by COSCI.

As part of its agreement to separate the AEC into two facilities for Title V permitting purposes, FDEP requested the submittal of a Title V air operation permit application for each AEC facility. This application package, consisting of FDEP's Application for Air Permit – Long Form, Effective March 16, 2008, and all required supplemental facility and emission unit information, constitutes Calpine Corporation's Title V permit application for APEC and OEC. The following attachments are included as referenced in the permit application:

- A—Facility Location Map.
- B—Facility Plot Plan.
- C—Process Flow Diagram.
- D—Precautions to Prevent Emissions of Unconfined Particulate Matter.
- E—List of Insignificant Activities.
- F—Identification of Applicable Requirements.
- G—Compliance Report.
- H—Requested Changes to Current Title V Air Operation Permit.
- I—Acid Rain Part.
- J—Clean Air Interstate Rule (CAIR) Part.

- K—Fuel Specifications.
- L—Detailed Description of Control Equipment.
- M—Procedures for Startup and Shutdown.
- N—Alternate Methods of Operation.
- O—Responsible Official Notification Form.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR AIR PERMIT – LONG FORM

ECT
Environmental Consulting & Technology, Inc.

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: **Calpine Construction Finance Company, L.P. (OEC)** **Auburndale Peaker Energy Center, LLC (APEC)**	
2. Site Name: **Osprey and Auburndale Peaker Energy Centers**	
3. Facility Identification Number: **1050221**	
4. Facility Location: Street Address or Other Locator: **1651 West Derby Avenue** City: **Auburndale** County: **Polk** Zip Code: **33823**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Heidi M. Whidden, EHS Specialist**
2. Application Contact Mailing Address: Organization/Firm: **Calpine Corporation (c/o EHS Department)** Street Address: **717 Texas Avenue, Suite 1000** City: **Houston** State: **Texas** Zip Code: **77002**
3. Application Contact Telephone Numbers: Telephone: **(713) 570-4829** ext. Fax: **(please email)**
4. Application Contact E-mail Address: **hwhidden@calpine.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 4-23-10	3. PSD Number (if applicable):
2. Project Number(s): 1050334-008-AV	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

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

Air Operation Permit

☐ Initial Title V air operation permit.

☒ Title V air operation permit **(requested by FDEP)**.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

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

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

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

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

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

Application Comment

Operation of the Osprey Energy Center (OEC) and the Auburndale Peaker Energy Center (APEC) are currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit No. 1050221-014-AV issued with an effective date of January 1, 2008, and an expiration date of December 31, 2012. This permit authorizes operation of the Auburndale Energy Complex (AEC) which also includes the Auburndale Power Partners (APP) combined cycle combustion turbine electrical generation facility.

As part of its agreement to separate the Auburndale Energy Complex (AEC) into two facilities for Title V permitting purposes, FDEP requested the submittal of a Title V air operation permit application for each AEC operator. This application form and supplemental facility and emission unit information constitutes the Title V permit application for the OEC and APEC facility.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
006	120 MW Simple Cycle Combustion Turbine Generator; SC-1 (APEC)	N/A	N/A
007/009	170 MW Combined Cycle Combustion Turbine Generator / Heat Recovery Steam Generator with Duct Burner; CC-1 (OEC)	N/A	N/A
008/010	170 MW Combined Cycle Combustion Turbine Generator / Heat Recovery Steam Generator with Duct Burner; CC-2 (OEC)	N/A	N/A
011	8-Cell Cooling Tower (OEC)	N/A	N/A
003	Emergency Diesel Generator (OEC)	N/A	N/A

Application Processing Fee

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

Note: The OEC and APEC facility has been issued Final Title V Operation Permit Number 1050221-014-AV. An application processing fee is not required pursuant to Rule 62-213.205(4), F.A.C.

APPLICATION INFORMATION

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

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address:
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers:
   Telephone: ( ) - ext. Fax: ( ) -

4. Owner/Authorized Representative E-mail Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.

   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:
   Jason Goodwin, Director –Environmental, Health and Safety

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☒ 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.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☒ The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address:
   Organization/Firm: **Calpine Corporation (c/o EHS Department)**
   Street Address: **717 Texas Avenue, Suite 1000**
   City: **Houston** State: **Texas** Zip Code: **77002**

4. Application Responsible Official Telephone Numbers:
   Telephone: **(713) 570-4795** ext. Fax: **Please e-mail**

5. Application Responsible Official E-mail Address: **jgoodwin@calpine.com**

6. Application Responsible Official Certification:

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

   Signature _____ Date 4/20/10

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Thomas W. Davis**
   Registration Number: **36777**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Environmental Consulting & Technology, Inc.**
   Street Address: **3701 Northwest 98th Street**
   City: **Gainesville** State: **Florida** Zip Code: **32606-5004**
3. Professional Engineer Telephone Numbers:
   Telephone: **(352) 248 - 3351** ext. Fax: **(352) 332 - 6722**
4. Professional Engineer E-mail Address: **tdavis@ectinc.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(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

(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.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☒, 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.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, 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 ☐, 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.

(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 ☐, 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.

THOMAS W. DAVIS — No. 36777 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Signature

4/19/10
Date

(seal)

Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone **17** East (km) **420.8** North (km) **3103.3**		2. Facility Latitude/Longitude: Latitude (DD/MM/SS) **28/03/06** Longitude (DD/MM/SS) **81/48/21**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4931**
7. Facility Comment : **Facility consists of the Osprey Energy Center (OEC) and the Auburndale Peaker Energy Center (APEC). OEC is owned by Calpine Construction Finance Company, L.P. APEC is owned by Auburndale Peaker Energy Center, LLC. The OEC and APEC are both operated by Calpine Operating Services Company Inc. (COSCI).**			

Facility Contact

1. Facility Contact Name: **Andrew Martin**
2. Facility Contact Mailing Address: Organization/Firm: **Calpine Operating Services Company, Inc.** Street Address: **1651 Derby Avenue** City: **Auburndale** State: **FL** Zip Code: **33823-3947**
3. Facility Contact Telephone Numbers: Telephone: **(863) 551-4662** ext. Fax: **(863) 551-4666**
4. Facility Contact E-mail Address:

Facility Primary Responsible Official

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: **Steven Smith, Plant Manager**
2. Facility Primary Responsible Official Mailing Address: Organization/Firm: **Calpine Operating Services Company, Inc.** Street Address: **1651 West Derby Avenue** City: **Auburndale** State: **FL** Zip Code: **33823-3947**
3. Facility Primary Responsible Official Telephone Numbers: Telephone: **(863) 551-4663** ext. Fax: **(863) 551-4666**
4. Facility Primary Responsible Official E-mail Address: **smiths@calpine.com**

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. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☐ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	

12. Facility Regulatory Classifications Comment:

The OEC combined cycle combustion turbines (EUs 007 and 008) and the APEC simple cycle combustion turbine (EU 006) are each subject to New Source Performance Standard (NSPS) Subpart GG, *Standards of Performance for Stationary Gas Turbines.*

The OEC heat recovery steam generator (HRSG) duct burners (DB) are subject to NSPS Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.*

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
CO	**A**	**N**
NO_x	**A**	**N**
PM_{10}	**SM**	**N**
SO_2	**SM**	**N**
VOC	**B**	**N**

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:

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)
   ☒ Attached, Document ID: **Attachment B** ☐ 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)
   ☒ Attached, Document ID: **Attachment C** ☐ 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)
   ☒ Attached, Document ID: **Attachment D** ☐ Previously Submitted, Date:____

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

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

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications NOT APPLICABLE

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☒ Attached, Document ID: **Attachment E** ☐ Not Applicable

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
   ☒ Attached, Document ID: **Attachment F**
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
   ☒ Attached, Document ID: **Attachment G**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:
   ☒ Equipment/Activities Onsite but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID: **Attachment H** ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☒ Attached, Document ID: **Attach. I** ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☒ Attached, Document ID: **Attach. J** ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

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:
Simple Cycle Combustion Turbine (APEC)

3. Emissions Unit Identification Number: **006**

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

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

☒ Acid Rain Unit

☒ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Siemens Westinghouse** Model Number: **501D5A**

10. Generator Nameplate Rating: **120.0** MW **(nominal)**

11. Emissions Unit Comment:

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **NO_x - Water Injection**
2. Control Device or Method Code: **028**

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

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:	**1,776** million Btu/hr **(HHV) @ 32°F compressor inlet air temperature and 100% Load (NG)** **1,726** million Btu/hr **(HHV) @ 32°F compressor inlet air temperature and 100% Load (FO)**
4. Maximum Incineration Rate:	pounds/hr tons/day
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**(a)** hours/year

6. Operating Capacity/Schedule Comment:

Maximum hourly heat input rates will vary with ambient conditions and combustion turbine characteristics.

HHV = higher heating value
NG = natural gas
FO = distillate fuel oil

(a) Combustion of NG is limited to no more than 2,227,400 × 10^6 Btu during any consecutive 12-month period. Combustion of FO is limited to no more than 400 hours during any consecutive 12-month period.

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: **SC-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: **50** feet	7. Exit Diameter: **22.0** feet
8. Exit Temperature: **1,000** °F	9. Actual Volumetric Flow Rate: **1,887,100** acfm	10. Water Vapor: **N/A** %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment: **Exhaust gas data based on natural gas-firing at 100% load and ISO conditions.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

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: **1.776**	5. Maximum Annual Rate: **2,227.4**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **1,020 (HHV)**
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines, Electric Generation, Distillate Oil (No. 2), Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **11.8**	5. Maximum Annual Rate: **4,720**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **0.10**	9. Million Btu per SCC Unit: **138 (HHV)**
10. Segment Comment: **No. 2 Fuel Oil combustion limited to 400 hours per year.**		

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
NO_x	**028**		**EL**
VOC			**EL**
CO			**EL**
PM_{10}			**EL**
SO_2			**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: **NO_x**	2. Total Percent Efficiency of Control: **75 %**
3. Potential Emissions: **245.0** lb/hour **115.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CT Vendor Data (Hourly)** Reference:	7. Emissions Method Code: **5, 0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (Distillate Fuel Oil):

NO_x = 245.0 lb/hr

Annual Rate (Natural Gas and Distillate Fuel Oil) = Title V Permit Limit

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 **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **25.0 ppmvd @ 15% O_2 (24-hour block average)**	4. Equivalent Allowable Emissions: **141.0** lb/hour **115.0** tons/year
5. Method of Compliance: **NO_x CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions are based on natural gas firing only. Equivalent allowable annual emission rate (12-month rolling total) is based on combined natural gas and distillate fuel oil firing.** **Permit No. 1050221-014-AV, Condition B.7.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **42.0 ppmvd @ 15% O_2 (24-hour block average)**	4. Equivalent Allowable Emissions: **245.0** lb/hour **115.0** tons/year
5. Method of Compliance: **NO_x CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions are based on distillate fuel oil firing only. Distillate fuel oil firing is limited to 400 hours per year. Equivalent allowable annual emission rate of 115.0 tons/yr (12-month rolling total) is based on combined natural gas and distillate fuel oil firing.** **Permit No. 1050221-014-AV, Condition B.7.**	

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: **10.3** lb/hour **7.6** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CT Vendor Data** Reference:	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (Distillate Fuel Oil):

VOC = 10.3 lb/hr

Annual Rate (Natural Gas and Distillate Fuel Oil):

VOC = [(10.3 lb/hr × 400 hr/yr) + (7.8 lb/hr × 1,400 hr/yr)] / 2,000 lb/ton = 7.6 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

Annual potential emissions based on 1,400 hr/yr for natural gas, and 400 hr/yr for distillate fuel oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **4.0 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **7.8** lb/hour **5.5** tons/year
5. Method of Compliance: **Good combustion practices**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing only.** **Permit No. 1050221-014-AV, Condition B.8.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **5.0 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **10.3** lb/hour **2.1** tons/year
5. Method of Compliance: **Good combustion practices**	
6. Allowable Emissions Comment (Description of Operating Method): **Distillate fuel oil firing only.** **Permit No. 1050221-014-AV, Condition B.8.**	

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.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **36.0** lb/hour **99.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CT Vendor Data (Hourly)** Reference:	7. Emissions Method Code: **5, 0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (Distillate Fuel Oil):

CO = 36.0 lb/hr

Annual Rate (Natural Gas and Distillate Fuel Oil) = Title V Permit Limit

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: **10.0 ppmvd @ 15% O_2 (24-hour block average)**	4. Equivalent Allowable Emissions: **N/A** lb/hour **99.0** tons/year
5. Method of Compliance: **CO CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions are for both natural gas and distillate fuel oil. Equivalent allowable annual emission rate (12-month rolling total) is based on combined natural gas and distillate fuel oil firing.** **Permit No. 1050221-014-AV, Condition B.9.**	

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/PM_{10}**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **58.5** lb/hour **13.7** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (Distillate Fuel Oil):

PM/PM_{10} = 58.5 lb/hr

Annual Rate (Natural Gas and Distillate Fuel Oil):

PM/PM_{10} = [(58.5 lb/hr × 400 hr/yr) + (2.9 lb/hr × 1,400 hr/yr)] / 2,000 lb/ton = 7.5 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

Annual potential emissions based on 1,400 hr/yr for natural gas, and 400 hr/yr for distillate fuel oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **2.9** lb/hour **2.0** tons/year
5. Method of Compliance: **Good combustion practices**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing.** **Permit No. 1050221-014-AV, Condition B.5.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **58.5** lb/hour **11.7** tons/year
5. Method of Compliance: **Good combustion practices**	
6. Allowable Emissions Comment (Description of Operating Method): **Distillate fuel oil firing.** **Permit No. 1050221-014-AV, Condition B.5.**	

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: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **74.9** lb/hour **21.4** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (Distillate Fuel Oil – 0.05 % S):

SO_2 = 74.9 lb/hr

Annual Rate (Natural Gas and Distillate Fuel Oil):

SO_2 = ([(2.0 grains S / 100 scf) × (2,227.41 × 10^6 scf/yr) × (lb / 7, 000 grains) × (2 lb SO_2 / lb S)] + [74.9 lb/hr × 400 hr/yr]) / 2,000 lb/ton

SO_2 = 21.4 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

Annual potential emissions based on 1,400 hr/yr for natural gas, and 400 hr/yr for distillate fuel oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2 grains/ 100 scf natural gas (monthly average)**	4. Equivalent Allowable Emissions: **9.1** lb/hour **6.4** tons/year
5. Method of Compliance: **40 CFR Part 75, Appendix D procedures**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing** **Permit No. 1050221-014-AV, Condition B.6.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.05 weight % S fuel oil**	4. Equivalent Allowable Emissions: **74.9** lb/hour **15.0** tons/year
5. Method of Compliance: **40 CFR Part 75, Appendix D procedures**	
6. Allowable Emissions Comment (Description of Operating Method): **Distillate fuel oil firing** **Permit No. 1050221-014-AV, Condition B.6.**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b)(1), F.A.C.** **Permit No. 1050221-014-AV, Condition B.4.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Recordkeeping**	
5. Visible Emissions Comment: *** During startup and shutdown, visible emissions may exceed 20% opacity for up to two hours in any 24 hour period.** **Rule 62-210.700(1), F.A.C.** **Permit No. 1050221-014-AV, Condition B.10a.**	

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 **3**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_x**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **CLD**	Serial Number: **U10006368**
5. Installation Date: **May 2002**	6. Performance Specification Test Date: **June 13, 2002**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition B.12**	

Continuous Monitoring System: Continuous Monitor **2** of **3**

1. Parameter Code: **O2**	2. Pollutant(s): **N/A**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT**	Serial Number: **30121567354**
5. Installation Date: **May 2002**	6. Performance Specification Test Date: **June 13, 2002**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition B.12**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement: ☐ Rule ☒ Other	
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT** Serial Number: **30121567354**	
5. Installation Date: **May 2002**	6. Performance Specification Test Date: **June 13, 2002**
7. Continuous Monitor Comment: **Permit No. 1050221-014-AV, Condition B.12**	

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)
   ☒ Attached, Document ID: **Attachment A** ☐ 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)
   ☒ Attached, Document ID: **Attachment K** ☐ 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)
   ☒ Attached, Document ID: **Attachment L** ☐ Not Applicable

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Attachment M** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **July 13, 2009**
   Test Date(s)/Pollutant(s) Tested: **June 4, 2009 / CO, NO_x, and VE**
   _____
   ☐ 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

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications NOT APPLICABLE

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **Attachment F** ☐ Not Applicable
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **Attachment N** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

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:
Combined cycle combustion turbine unit (CC-1) consisting of one nominal 170 MW combustion turbine generator (CTG) with a heat recovery steam generator (HRSG) equipped with 250 MMBtu/hr duct burners (DBs) – (OEC)

3. Emissions Unit Identification Number:
007 – nominal 170 MW CTG; 009 – HRSG with DBs

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

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

☒ Acid Rain Unit

☒ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Siemens Westinghouse** Model Number: **501FD**

10. Generator Nameplate Rating: **170** MW **(nominal - CTG)**

11. Emissions Unit Comment:
EUs 007/009 share a common 200 MW steam turbine generator with EUs 008/010.

Emissions Unit Control Equipment/Method: Control 1 of 3

1. Control Equipment/Method Description: **Dry Low NO_x (DLN) Combustion - CTG**
2. Control Device or Method Code: **025**

Emissions Unit Control Equipment/Method: Control 2 of 3

1. Control Equipment/Method Description: **Low NO_x Burners – HRSG DBs**
2. Control Device or Method Code: **205**

Emissions Unit Control Equipment/Method: Control 3 of 3

1. Control Equipment/Method Description: **Selective Catalytic Reduction (SCR) – CT/HRSG**
2. Control Device or Method Code: **139**

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:

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: **1,875** million Btu/hr **(LHV) @ ISO conditions without PAG**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum hourly heat input rates will vary with ambient conditions and combustion turbine characteristics.** **LHV = lower heating value** **PAG = power (steam) augmentation** **ISO = International Standard Organization reference conditions: 59° F, 60% relative humidity, and 14.7 psia.**	

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: **CC-1**	2. Emission Point Type Code: **2**	
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: **142** feet	7. Exit Diameter: **18.5** feet
8. Exit Temperature: **200** °F	9. Actual Volumetric Flow Rate: **1,021,100** acfm	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Exhaust gas temperature (Field 8) based on natural gas-firing at 100% load and ISO conditions.** **Actual volumetric flow rate (Field 9) based on 100% load, ISO conditions without DB firing or PAG.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines, Electric Generation, Natural Gas, Turbine [CTG]**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **2.04**	5. Maximum Annual Rate: **17,870**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **920 (LHV)**
10. Segment Comment: **Maximum hourly rate based on 100% load and 59 °F.** **Maximum annual rate based on 100% load, 59 °F and 8,760 hours per year**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 MMBtu/hr except Tangential [HRSG Duct Burners]**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **0.272**	5. Maximum Annual Rate: **2,383**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **920 (LHV)**
10. Segment Comment: **Maximum Hourly Rate = (250 MMBtu/hr) / (920 MMBtu/MMcf) = 0.272 MMcf/hr** **Maximum Annual Rate = (0.272 MMcf/hr) × (8,760 hr/yr) = 2,383 MMcf/yr**		

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
NO_x	**025/205**	**139**	**EL**
VOC			**EL**
CO			**EL**
PM_{10}			**EL**
SO_2			**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: **NO_x**	2. Total Percent Efficiency of Control: **90%**
3. Potential Emissions: **27.5** lb/hour **120.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DBs):

NO_x = 27.5 lb/hr

Annual Rate (with PAG and DBs):

NO_x = [(27.5 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 120.5 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **3**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **3.5 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **27.5** lb/hour **120.5** tons/year
5. Method of Compliance: **NO_x CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable with or without PAG and/or DB firing.** **Permit No. 1050221-014-AV, Condition C.6.a.**	

Allowable Emissions Allowable Emissions **2** of **3**

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: **27.5** lb/hour **N/A** tons/year
5. Method of Compliance: **EPA Reference Method 7E or 20**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.6.b.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

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

Allowable Emissions Allowable Emissions **3** of **3**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.1 MMBtu/hr (HRSG DBs - EU 009 only)**	4. Equivalent Allowable Emissions: **25.0** lb/hour **109.5N/A** tons/year
5. Method of Compliance: **EPA Reference Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 1050221-014-AV, Condition C.6.c.**	

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: **12.4** lb/hour **54.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

VOC = 12.4 lb/hr

Annual Rate (with PAG and DB firing):

VOC = [(12.4 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 54.3 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2.3 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **5.8** lb/hour **25.4** tons/year
5. Method of Compliance: **Compliance with CO emission limits serves as a surrogate for compliance with VOC emission limit.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable at base load without DB firing.** **Permit No. 1050221-014-AV, Condition C.9.f.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **4.6 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **12.4** lb/hour **54.3** tons/year
5. Method of Compliance: **Compliance with CO emission limits serves as a surrogate for compliance with VOC emission limit.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable at base load with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.9.f.**	

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: **152.0** lb/hour **665.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CTG Vendor Data** Reference:	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (60% CTG load):

CO = 152.0 lb/hr

Annual Rate (60% CTG Load):

CO = [(152.0 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 665.8 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **10 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **N/A** lb/hour **N/A** tons/year
5. Method of Compliance: **CO CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations without PAG, DB firing, or operation below 30% base CTG load (excluding periods of startup and shutdown).** **Permit No. 1050221-014-AV, Condition C.8.d.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **17 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **N/A** lb/hour **N/A** tons/year
5. Method of Compliance: **CO CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations with PAG, DB firing, or operation below 30% base CTG load (excluding periods of startup and shutdown).** **Permit No. 1050221-014-AV, Condition C.8.e.**	

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/PM_{10}**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **24.1** lb/hour **105.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

PM/PM_{10} = 24.1 lb/hr

Annual Rate (with PAG and DB firing):

PM/PM_{10} = [(24.1 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 105.6 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 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: **24.1** lb/hour **105.6** tons/year
5. Method of Compliance: **Exclusive use of pipeline natural gas**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.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):	

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: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **12.0** lb/hour **52.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CTG Vendor Data** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

SO_2 = ([(2.0 grains S / 100 scf) × (2,092,391 scf/hr) × (lb / 7, 000 grains) × (2 lb SO_2 / lb S)]
SO_2 = 12.0 lb/hr

Annual Rate (with PAG and DB firing):

SO_2 = [(12.0 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 52.6 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2 grains S / 100 scf (natural gas)**	4. Equivalent Allowable Emissions: **12.0** lb/hour **52.6** tons/year
5. Method of Compliance: **Fuel sulfur content monitoring per 40 CFR Part 75, Appendix D.**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 1050221-014-AV, Condition C.10.**	

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):	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ 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: **Permit No. 1050221-014-AV, Condition C.11.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Recordkeeping	
5. Visible Emissions Comment: *** Excess emission during periods of startup, shutdown or malfunction are permitted provided that best operational practices to minimize emissions are adhered to and the duration of the 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.** **Permit No. 1050221-014-AV, Condition C.12.**	

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 **3**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT**	Serial Number: **30082674393**
5. Installation Date: **March 21, 2004**	6. Performance Specification Test Date: **June 10, 2004**
7. Continuous Monitor Comment: **Permit No. 1050221-014-AV, Condition C.14**	

Continuous Monitoring System: Continuous Monitor **2** of **3**

1. Parameter Code: **O2**	2. Pollutant(s): **N/A**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT**	Serial Number: **30082674393**
5. Installation Date: **March 21, 2004**	6. Performance Specification Test Date: **June 10, 2004**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition C.14**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_x**
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **NGA-CLD** Serial Number: **U1006517**	
5. Installation Date: **March 21, 2004**	6. Performance Specification Test Date: **June 10, 2004**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition C.14**	

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **Attachment A** ☐ 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)
   ☒ Attached, Document ID: **Attachment K** ☐ 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)
   ☒ Attached, Document ID: **Attachment L** ☐ Not Applicable

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Attachment M** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **July 13, 2009**
   Test Date(s)/Pollutant(s) Tested: **June 2, 2009 / CO, NO_x, NH_3, and VE**
   _____
   ☐ 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

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

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

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **Attachment F** ☐ Not Applicable
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **Attachment N** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

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:
Combined cycle combustion turbine unit (CC-2) consisting of one nominal 170 MW combustion turbine generator (CTG) with a heat recovery steam generator (HRSG) equipped with 250 MMBtu/hr duct burners (DBs) – (OEC)

3. Emissions Unit Identification Number:
008 – nominal 170 MW CTG; 010 – HRSG with DBs

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

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

☒ Acid Rain Unit

☒ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Siemens Westinghouse** Model Number: **501FD**

10. Generator Nameplate Rating: **170** MW **(nominal - CTG)**

11. Emissions Unit Comment:
EUs 008/010 share a common 200 MW steam turbine generator with EUs 007/009.

Emissions Unit Control Equipment/Method: Control 1 of 3

1. Control Equipment/Method Description: **Dry Low NO_x (DLN) Combustion - CTG**
2. Control Device or Method Code: **025**

Emissions Unit Control Equipment/Method: Control 2 of 3

1. Control Equipment/Method Description: **Low NO_x Burners – HRSG DBs**
2. Control Device or Method Code: **205**

Emissions Unit Control Equipment/Method: Control 3 of 3

1. Control Equipment/Method Description: **Selective Catalytic Reduction (SCR) – CT/HRSG**
2. Control Device or Method Code: **139**

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:

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: **1,875** million Btu/hr **(LHV) @ ISO conditions without PAG**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum hourly heat input rates will vary with ambient conditions and combustion turbine characteristics.** **LHV = lower heating value** **PAG = power (steam) augmentation** **ISO = International Standard Organization reference conditions: 59° F, 60% relative humidity, and 14.7 psia.**	

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: **CC-2**	2. Emission Point Type Code: **2**	
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: **142** feet	7. Exit Diameter: **18.5** feet
8. Exit Temperature: **200** °F	9. Actual Volumetric Flow Rate: **1,021,100** acfm	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Exhaust gas temperature (Field 8) based on natural gas-firing at 100% load and ISO conditions.** **Actual volumetric flow rate (Field 9) based on 100% load, ISO conditions without DB firing or PAG.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines, Electric Generation, Natural Gas, Turbine [CTG]**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **2.04**	5. Maximum Annual Rate: **17,870**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **920 (LHV)**
10. Segment Comment: **Maximum hourly rate based on 100% load and 59 °F. Maximum annual rate based on 100% load, 59 °F and 8,760 hours per year**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 MMBtu/hr except Tangential [HRSG Duct Burners]**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **0.272**	5. Maximum Annual Rate: **2,383**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **920 (LHV)**
10. Segment Comment: **Maximum Hourly Rate = (250 MMBtu/hr) / (920 MMBtu/MMcf) = 0.272 MMcf/hr Maximum Annual Rate = (0.272 MMcf/hr) × (8,760 hr/yr) = 2,383 MMcf/yr**		

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
NO_x	**025/205**	**139**	**EL**
VOC			**EL**
CO			**EL**
PM_{10}			**EL**
SO_2			**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: **NO_x**	2. Total Percent Efficiency of Control: **90%**
3. Potential Emissions: **27.5** lb/hour **120.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DBs):

NO_x = 27.5 lb/hr

Annual Rate (with PAG and DBs):

NO_x = [(27.5 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 120.5 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **3**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **3.5 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **27.5** lb/hour **120.5** tons/year
5. Method of Compliance: **NO_x CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable with or without PAG and/or DB firing.** **Permit No. 1050221-014-AV, Condition C.6.a.**	

Allowable Emissions Allowable Emissions **2** of **3**

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: **27.5** lb/hour **N/A** tons/year
5. Method of Compliance: **EPA Reference Method 7E or 20**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.6.b.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

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

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.1 MMBtu/hr (HRSG DBs - EU 009 only)**	4. Equivalent Allowable Emissions: **25.0** lb/hour **109.5N/A** tons/year
5. Method of Compliance: **EPA Reference Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 1050221-014-AV, Condition C.6.c.**	

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: **12.4** lb/hour **54.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

VOC = 12.4 lb/hr

Annual Rate (with PAG and DB firing):

VOC = [(12.4 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 54.3 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2.3 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **5.8** lb/hour **25.4** tons/year
5. Method of Compliance: **Compliance with CO emission limits serves as a surrogate for compliance with VOC emission limit.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable at base load without DB firing.** **Permit No. 1050221-014-AV, Condition C.9.f.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **4.6 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: **12.4** lb/hour **54.3** tons/year
5. Method of Compliance: **Compliance with CO emission limits serves as a surrogate for compliance with VOC emission limit.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emission limit applicable at base load with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.9.f.**	

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: **152.0** lb/hour **665.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CTG Vendor Data** Reference:	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (60% CTG load):

CO = 152.0 lb/hr

Annual Rate (60% CTG Load):

CO = [(152.0 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 665.8 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **10 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **N/A** lb/hour **N/A** tons/year
5. Method of Compliance: **CO CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations without PAG, DB firing, or operation below 30% base CTG load.** **Permit No. 1050221-014-AV, Condition C.8.d.**	

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **17 ppmvd @ 15% O_2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **N/A** lb/hour **N/A** tons/year
5. Method of Compliance: **CO CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations with PAG, DB firing, or operation below 30% base CTG load (excluding periods of startup and shutdown).** **Permit No. 1050221-014-AV, Condition C.8.e.**	

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/PM_{10}**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **24.1** lb/hour **105.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

PM/PM_{10} = 24.1 lb/hr

Annual Rate (with PAG and DB firing):

PM/PM_{10} = [(24.1 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 105.6 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **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: **24.1** lb/hour **105.6** tons/year
5. Method of Compliance: **Exclusive use of pipeline natural gas**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions limit applicable during operations with PAG and DB firing.** **Permit No. 1050221-014-AV, Condition C.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):	

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: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **12.0** lb/hour **52.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **CTG Vendor Data** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): Tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): Tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**

10. Calculation of Emissions:

Hourly Rate (with PAG and DB firing):

SO_2 = ([(2.0 grains S / 100 scf) × (2,092,391 scf/hr) × (lb / 7, 000 grains) × (2 lb SO_2 / lb S)]
SO_2 = 12.0 lb/hr

Annual Rate (with PAG and DB firing):

SO_2 = [(12.0 lb/hr × 8,760 hr/yr)] / 2,000 lb/ton = 52.6 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2 grains S / 100 scf (natural gas)**	4. Equivalent Allowable Emissions: **12.0** lb/hour **52.6** tons/year
5. Method of Compliance: **Fuel sulfur content monitoring per 40 CFR Part 75, Appendix D.**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 1050221-014-AV, Condition C.10.**	

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):	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ 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: **Permit No. 1050221-014-AV, Condition C.11.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Recordkeeping	
5. Visible Emissions Comment: *** Excess emission during periods of startup, shutdown or malfunction are permitted provided that best operational practices to minimize emissions are adhered to and the duration of the 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.** **Permit No. 1050221-014-AV, Condition C.12.**	

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 **3**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT**	Serial Number: **30082674392**
5. Installation Date: **March 23, 2004**	6. Performance Specification Test Date: **June 10, 2004**
7. Continuous Monitor Comment: **Permit No. 1050221-014-AV, Condition C.14**	

Continuous Monitoring System: Continuous Monitor **2** of **3**

1. Parameter Code: **O2**	2. Pollutant(s): **N/A**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **MLT**	Serial Number: **30082674392**
5. Installation Date: **March 23, 2004**	6. Performance Specification Test Date: **June 10, 2004**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition C.14**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_x**
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information: Manufacturer: **Rosemount Analytical** Model Number: **NGA-CLD** Serial Number: **U1006821**	
5. Installation Date: **March 23, 2004**	6. Performance Specification Test Date: **May 6, 2004**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program) and 40 CFR Part 96 (CAIR).** **Permit No. 1050221-014-AV, Condition C.14**	

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **Attachment A** ☐ 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)
   ☒ Attached, Document ID: **Attachment K** ☐ 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)
   ☒ Attached, Document ID: **Attachment L** ☐ Not Applicable

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Attachment M** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **July 13, 2009**
   Test Date(s)/Pollutant(s) Tested: **June 3-4, 2009 / CO, NO_x, NH_3, and VE**
   _____
   ☐ 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

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

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

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):	
☐ Attached, Document ID:	☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):	
☐ Attached, Document ID:	☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)	
☐ Attached, Document ID:	☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:	
☒ Attached, Document ID: **Attachment F**	☐ Not Applicable
2. Compliance Assurance Monitoring:	
☐ Attached, Document ID: _____	☒ Not Applicable
3. Alternative Methods of Operation:	
☒ Attached, Document ID: **Attachment N**	☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):	
☐ Attached, Document ID: _____	☒ Not Applicable

Additional Requirements Comment

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:
8-cell mechanical draft cooling tower (OEC).

3. Emissions Unit Identification Number: **011**

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

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

☐ Acid Rain Unit

☐ CAIR Unit

☐ Hg Budget Unit

9. Package Unit: **N/A**
Manufacturer: Model Number:

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

11. Emissions Unit Comment:

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **Mist (Drift) Eliminators – Low Velocity (V<250 ft/min)**
2. Control Device or Method Code: **015**

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:

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **140,000 gal/min**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

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: **T1 – T8**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **8-cell cooling tower with individual exhaust fans.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **55** feet	7. Exit Diameter: **28** feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
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: **Cooling tower consists of 8 cells with individual exhaust fans.** **Stack height and diameter are provided in Fields 6 and 7 for each cell exhaust.** **Exhaust volume and temperatures vary with ambient temperatures.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

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

1. Segment Description (Process/Fuel Type): **Cooling Tower, Process Cooling, Mechanical Draft. Cooling tower water recirculation rate.**		
2. Source Classification Code (SCC): **3-85-001-01**	3. SCC Units: **Million gallons**	
4. Maximum Hourly Rate: **8.4**	5. Maximum Annual Rate: **73,584**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment:		

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:		

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
PM/PM_{10}	**015**	**N/A**	**NS**

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **2.0** lb/hour **8.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.002 % drift loss rate** Reference: **AP-42, Section 13.4**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. **NOT APPLICABLE**

Allowable Emissions Allowable Emissions of

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

Allowable Emissions Allowable Emissions of

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

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_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.5** lb/hour **6.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.002 % drift loss rate** Reference: **AP-42, Section 13.4**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year **N/A**	8.b. Baseline 24-month Period: **N/A** From: To:
9.a. Projected Actual Emissions (if required): tons/year **N/A**	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years **N/A**
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. **NOT APPLICABLE**

Allowable Emissions Allowable Emissions of

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

Allowable Emissions Allowable Emissions of

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

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation. **NOT APPLICABLE**

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation of

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor __ of __ **NOT APPLICABLE**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor __ of __

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **Attachment A** ☐ 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)
   ☐ Attached, Document ID: ☒ Not Applicable

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)
   ☐ Attached, Document ID: ☒ Not Applicable

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

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

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):	
☐ Attached, Document ID:	☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):	
☐ Attached, Document ID:	☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)	
☐ Attached, Document ID:	☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

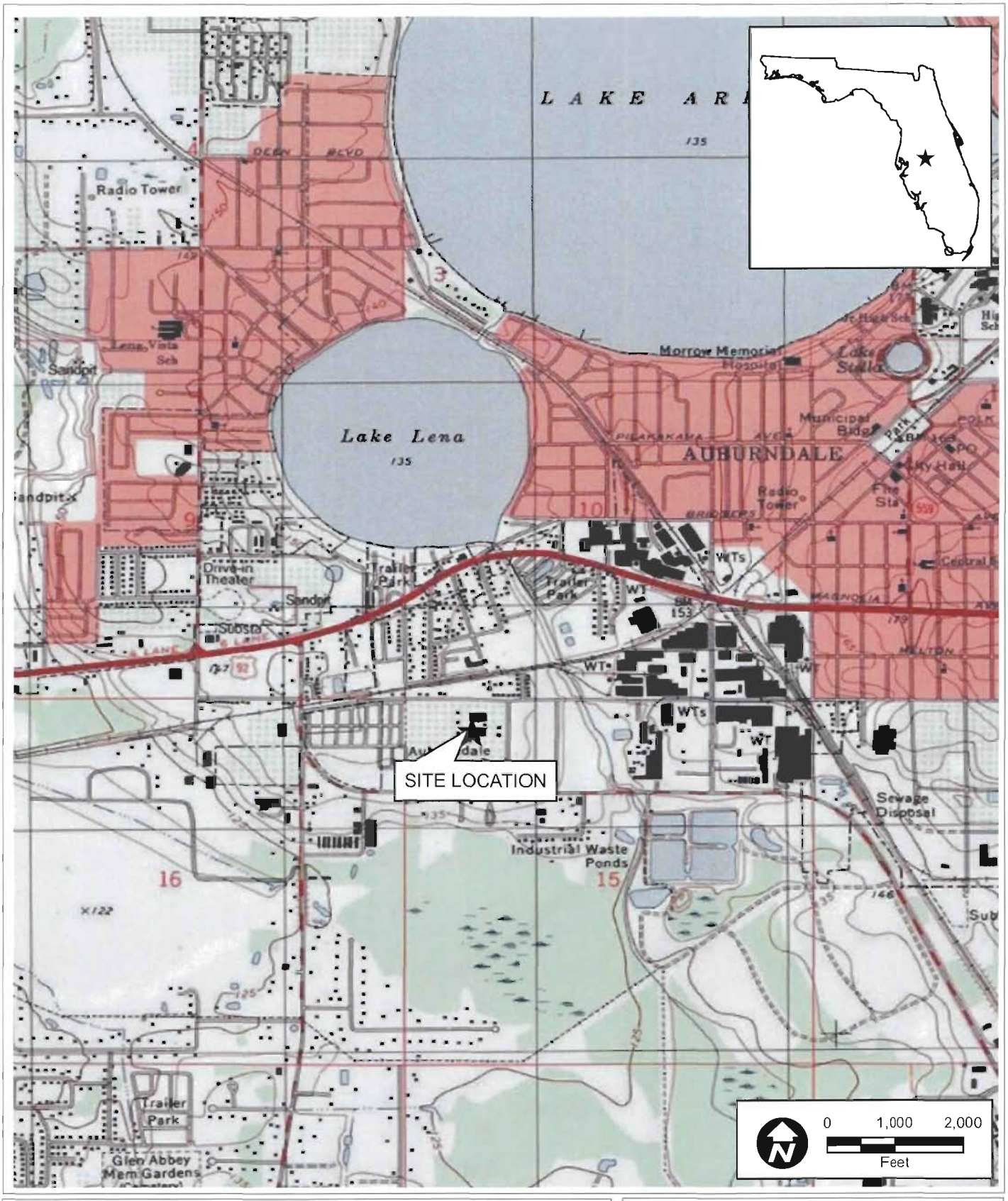
1. Identification of Applicable Requirements:	
☒ Attached, Document ID: **Attachment F**	☐ Not Applicable
2. Compliance Assurance Monitoring:	
☐ Attached, Document ID: _____	☒ Not Applicable
3. Alternative Methods of Operation:	
☐ Attached, Document ID: _____	☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):	
☐ Attached, Document ID: _____	☒ Not Applicable

Additional Requirements Comment

ATTACHMENT A

FACILITY LOCATION MAP

File: M:\acad\100147\Location.mxd



ATTACHMENT A.
OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
FACILITY LOCATION MAP

Sources: USGS Quad; Auburndale, 2000; ECT, 2010.

CALPINE®

ATTACHMENT B

FACILITY PLOT PLANS

ATTACHMENT B-1

AUBURNDALE PEAKER ENERGY CENTER PLOT PLAN

Source: ECT, 2010.

CALPINE

ATTACHMENT B-2

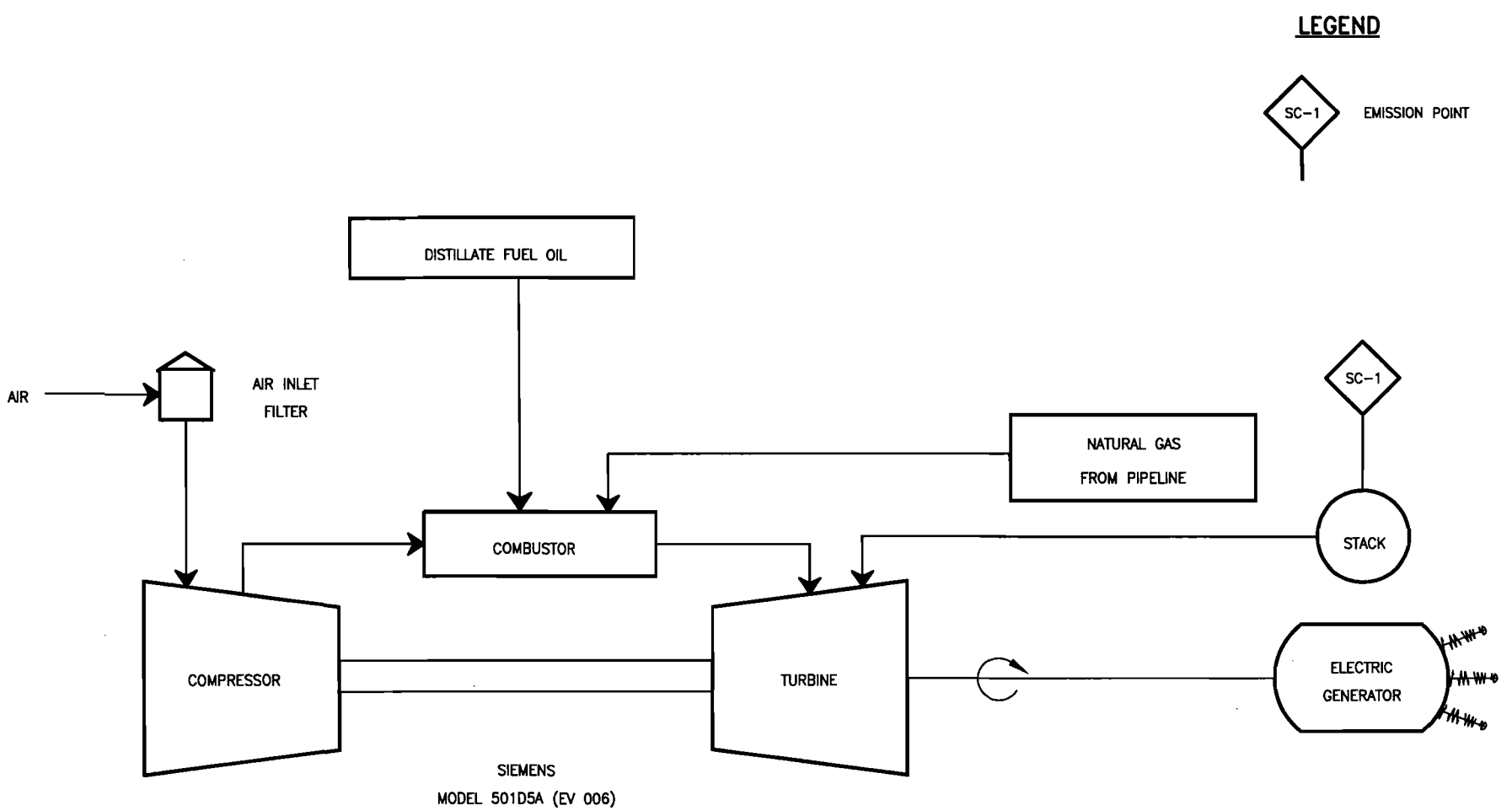
OSPREY ENERGY CENTER PLOT PLAN

Source: ECT, 2010.

CALPINE

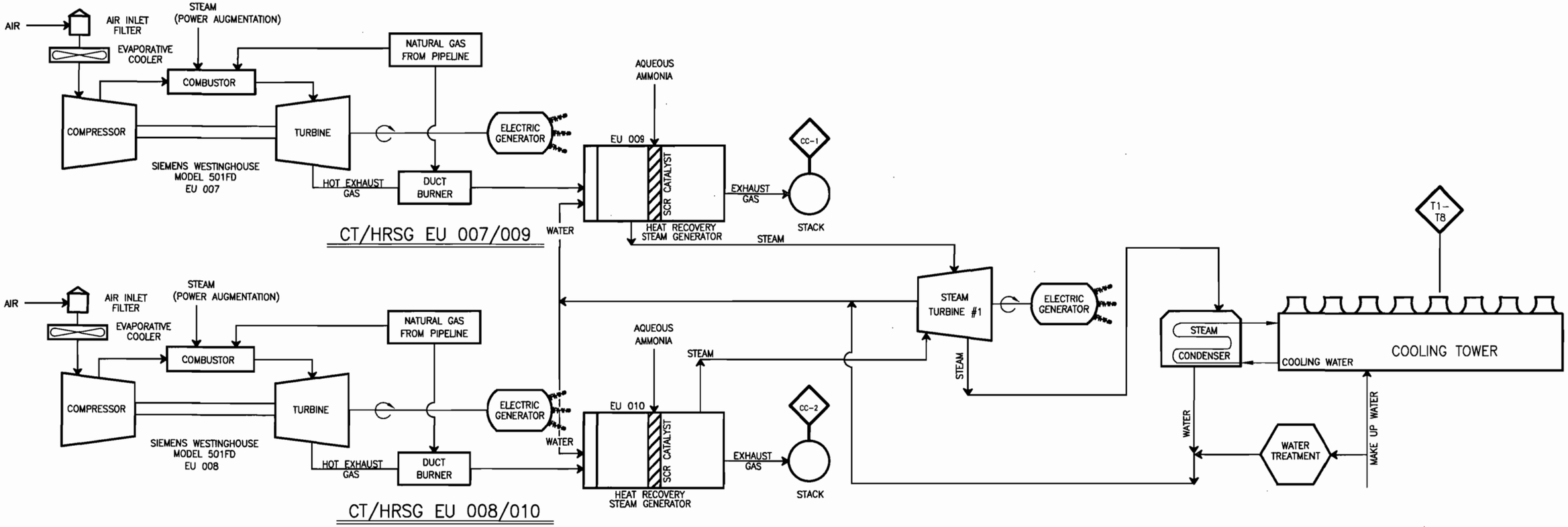
ATTACHMENT C

PROCESS FLOW DIAGRAMS



ATTACHMENT C-1.
AUBURNDALE PEAKER ENERGY CENTER
PROCESS FLOW DIAGRAM
Source: ECT, 2010.

CALPINE®



ATTACHMENT C-2.

OSPREY ENERGY CENTER PROCESS FLOW DIAGRAM

Source: ECT, 2010.

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ATTACHMENT D

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT D

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter (PM) emissions that may result from operations at the Osprey and Auburndale Peaker Energy Centers include:

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

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

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

ATTACHMENT E

LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT E

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
LIST OF INSIGNIFICANT ACTIVITIES

1. Comfort heating with a gross maximum heat input of less than one million Btu per hour.
2. Vacuum pumps in laboratory operations.
3. Belt or Drum Sanders having a total sanding surface of five square feet or less and other equipment used exclusively on woods or plastics or their products having a density of 20 pounds per cubic foot or more.
4. Equipment used exclusively for space heating, other than boilers.
5. Laboratory equipment used exclusively for chemical or physical analyses (including fume hoods and vents).
6. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
7. Degreasing units using heavier-than-air vapors exclusively, except any unit using or emitting any substance classified as a hazardous air pollutant.
8. No. 2 Fuel Oil Truck Unloading Equipment.
9. Oil/Water Separators.
10. Freshwater cooling towers. The cooling towers do not use chromium-based water treatment
1. chemicals
11. Refrigeration Units.
12. Lube Oil Vents Associated with Rotating Equipment.
13. Lube Oil Tank Vents.
14. Internal combustion engines used for transportation of passengers and freight.
15. Steam cleaning equipment.
16. Fire and safety equipment.
17. Brazing, soldering, or welding equipment.
18. Petroleum Lube Systems
19. Application of fungicide, herbicide, or pesticide
20. Non-halogenated solvent storage and cleaning operations that do not use any substance containing a hazardous air pollutant
21. Vehicle refueling operations and associated fuel storage
22. Storage tanks less than 2150 gallons
23. General plant maintenance activities including, but not limited to, welding, grinding, and general vehicle repairs (excluding air conditioning systems)
24. Water and wastewater equipment
25. Turbine Vapor Extractor
26. Wet surface air coolers
27. Sand blasting and abrasive grit blasting where temporary enclosures are used to contain particulate matter emissions
28. Vehicular traffic on plant roadways and grounds
29. Architectural (equipment) maintenance painting
30. One (1) 1,250-kW emergency generator diesel engine. Excluding emergencies, the generator diesel engine will operate no more than 311 hours per year for routine testing and maintenance.
31. One (1) 265-HP fire water pump diesel engine
32. Distillate fuel oil storage tanks

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT F

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
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 06-29-09

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.

ATTACHMENT F

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
IDENTIFICATION OF APPLICABLE REQUIREMENTS

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 06-29-09

62-212.300, F.A.C.: General Preconstruction Review Requirements.
62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD).
62-212.500, F.A.C.: Preconstruction Review for Nonattainment Areas.
62-212.710, F.A.C.: Air Emissions Bubble.
62-212.720, F.A.C.: Actuals Plantwide Applicability Limits (PALS).

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

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.405, F.A.C.: Concurrent Processing of Permit Applications.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.

ATTACHMENT F

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
IDENTIFICATION OF APPLICABLE REQUIREMENTS

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 01-07-10

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. SIMPLE CYCLE COMBUSTION TURBINE; EU ID NO. 006

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 SO_2 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)(1): Standard for Nitrogen Oxides
- §60.333: Standard for Sulfur Dioxide
- §60.334(b),(c), (h), (i), and (j): Monitoring of Operations
- §60.335: Test Methods and Procedures

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

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

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

FINAL Permit No: 1050221-014-AV, Section 3., Subsection B. Simple Cycle Combustion Turbine, EU 006; Permit Condition Nos. B.1. through B.19.

C. COMBINED CYCLE COMBUSTION TURBINE UNITS; EU ID NO. 007 - 010

ACID RAIN PROGRAM (ARP)
40 CFR 72: Permits Regulation
40 CFR 75: Continuous Emissions Monitoring

ATTACHMENT F

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
IDENTIFICATION OF APPLICABLE REQUIREMENTS

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 SO_2 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
(EU ID 007, 008)
- §60.330: Applicability and Designation of Affected Facility
- §60.331: Definitions
- §60.332(a)(1): Standard for Nitrogen Oxides
- §60.333: Standard for Sulfur Dioxide
- §60.334(c), (h), (i), and (j): Monitoring of Operations
- §60.335: Test Methods and Procedures

40 CFR 60, Subpart Da: Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978;
(EU ID 009, 010)
- §60.40Da: Applicability and Designation of Affected Facility
- §60.41Da: Definitions
- §60.42Da(a)(1), (b): Standard for Particulate Matter
- §60.43Da(b): Standard for Sulfur Dioxide
- §60.44Da(d)(1): Standard for Nitrogen Oxides
- §60.48Da(c), (k), and (q): Compliance Provisions
- §60.49Da(a)(2) and (3), and (o): Emissions Monitoring
- §60.50Da(a), (b)(3), and(c)(4): Compliance Determination Procedures and Methods
- §60.51Da(a), (i), and (j): Reporting Requirements
- §60.52Da(a) and (b): Recordkeeping Requirements

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

ATTACHMENT F

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
IDENTIFICATION OF APPLICABLE REQUIREMENTS

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: 1050221-014-AV, Section 3., Subsection C. Combined Cycle Combustion Turbine Units, EU 007 - 010; Permit Condition Nos. C.1. through C.23.

FINAL Permit No: 1050221-014-AV, Section 5., Appendix I, Cooling Tower, EU 011; Permit Condition No 1.

ATTACHMENT G

COMPLIANCE REPORT

ATTACHMENT G

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS COMPLIANCE REPORT

Attachment F to this Title V operation permit renewal application identifies the requirements that are applicable to the emission units that comprise this Title V source. Each emissions unit is in compliance, and will continue to comply, with the respective applicable requirements.

The 2009 Annual Statement of Compliance form for the APEC and OEC is included with this attachment.

717 TEXAS AVENUE, SUITE 1000
HOUSTON, TX 77002

CALPINE CORPORATION

NYSE CPN

February 26, 2010

VIA FEDERAL EXPRESS
TRACKING NO. 7984 2687 8980

Southwest District Office
Florida Department of Environmental Protection
13051 N. Telecom Parkway,
Temple Terrace, Florida 33637.

RE: **Annual Title V Compliance Statement**
Auburndale Energy Complex
Facility ID: 1050221

Please accept the attached Title V compliance statement for 2009 for the Auburndale Energy Complex. As required by the permit, a copy of this certification is being submitted to Region IV of the Environmental Protection Agency.

In 2008 Calpine Operating Services Company, Inc. (Calpine) was the operator of all three (e) facilities (Auburndale Power Plant: EU001-005, Auburndale Peaker Energy Center: EU006, and Osprey Energy Center: EU007-11) at the Auburndale Energy Complex. As of January 1, 2009, EU001-005 is operated by Teton Operating Services, LLC (Teton). Calpine continues operating EU006-11. The operators and owners of these emissions units are currently under discussions with DEP to separate the current Title V into two (2) separate permits. Until discussions are closed, this report will account for operation from all three (3) facilities.

If you have any technical questions, please contact Heidi Whidden at (713) 570-4829.

Sincerely,

Jason Goodwin, P.E.
Director—EHS
Responsible Official

CC: US EPA—Region 4; (with enclosure)
VIA FEDERAL EXPRESS, TRACKING NO. 7984 2688 4883
Heidi Whidden, Calpine (electronic)
Andrew Martin, Calpine (electronic)
Steve Wunderlich, Caithness (electronic)
Tom Grace, Caithness (electronic)

Auburndale Energy Complex
2009 Title V Certification Attachment

Facility

1. EU001-011
2. Conditions II(8) and TV(24.3)
3. Condition requires the facility submit an annual operating report that summarizes the actual operations rates and emissions from the facility to the Compliance Authority by March 1st of each year. [Rule 62-210.370(3) FAC]. However, Rule 62-210.370(3)(c) was modified in 2008 to read:

   "The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office."
4. Records review
5. See above.
6. Facility submitted certification statement on 4/30/09 and submitted the EAOR electronically on 4/30/09. Facility has met the updated rule and FDEP has provided concurrence that this is not a permit deviation. However, the facility has noted to ensure full disclosure.
7. See above.

Auburndale Peaker Energy Center

1. EU006
2. Condition III(B.12b)
3. Condition requires the facility to complete quality assurance procedures for the CO monitor per 40 CFR 60, Appendix F.
4. Records review.
5. No data invalidated.
6. During preparation of the 4th quarter excess emission report, the facility identified no CO CGA was completed on EU006 during the fourth quarter. The facility incident review determined that EU006 operated 31 hours in Quarter 4 (all within October) and it was the operator's understanding that the unit was exempt from completing the CO CGA based on the Part 75 168 hour linearity exemption. Due to the facility not operating since October 2009, no operating data was invalidated due to this event. The facility has retrained the operator.
7. Verbal report to FDEP on 1/19/2010 and written report to FDEP on 1/27/2010.

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

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

× **Annual Requirement**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
January 1 through December 31 of 2009 (year)	3/1/2010

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

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

Facility Owner/Company Name: Auburndale Power Partners, LP (EU001-5); Auburndale Peaker Energy Center, LLC (EU006); and Calpine Construction Finance Company, LP (EU007-011)

Site Name: Auburndale Energy Complex Facility ID No. 1050221 County: Polk

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

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

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

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

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

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

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

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

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

(Signature of Title V Source Responsible Official) 2/26/10 *(Date)*

Name: Jason M. Goodwin Title: Director - EHS (East Reg'n)

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

(Signature of Acid Rain Source Designated Representative) 2/26/10 *(Date)*

Name: Jason M. Goodwin Title: Director - EHS (East Reg'n)

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

ATTACHMENT H

REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

ATTACHMENT H

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS REQUESTED CHANGES TO CURRENT TITLE V PERMIT

Facility Information

- Revise Section 1, Subsection B.8 as follows:

  Revise section to reference new Annual Operating Report date of April 1st of each year.

EU-001 through EU005—Combined Cycle Unit—Auburndale Power Partners LP

- Revise Section 3, Subsection A and any other applicable sections as follows:

  Remove all references to EU001-EU005.

EU006—Simple Cycle Unit—Auburndale Peaker Energy Center, LLC

- Revise Section 3, Subsection B.12(a) and (b) to read (additions have been underlined):

  "a. The NO_x and O_2 monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75 Subpart B and C. ~~Annual~~ RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. RATA tests required for the O_2 monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The permittee shall conduct a~~n annual~~ RATA test at 100% output in accordance with the applicable CEMS requirements. The span for the O_2 monitor shall not be greater than 21%.

  b. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. ~~The O2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3.~~ Quality assurance procedures shall conform to ... The span for the CO monitor shall not be greater than 100 ppmvd ~~corrected to 15% oxygen~~. ~~The RATA tests required for the oxygen monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the O2 monitor shall not be greater than 21%.~~"

  Due to the O_2 analyzer being subject to the Acid Rain/CAIR rules and subsequently to 40 CFR Part 75, the facility requests the analyzer be held to the standards of Part 75.

In addition Part 75 requires Semi-annual (two operating quarters) or annual (four operating quarters) RATA testing based on the results of the previous RATA. Therefore, the word annual has been struck.

- Revise Section 3, Subsection B.12(d) to read (modifications have been underlined):

  "The CO, NO_x, and O_2 data ... Periods of data excluded for startup and shutdown shall not exceed two hours (120 minutes) in any operating day. Periods of malfunctions shall not exceed two hours (120 minutes) in any operating day. All periods of data excluded for all start-up, shutdown or malfunction episode shall be consecutive for each episode. Periods of data excluded for all startup, shutdown or malfunction episodes shall not exceed four hours (240 minutes) in any operating day. An operating day is defined as a day (midnight to midnight) that contains operation. The owner or operator shall minimize..."

  Previous conversations with the Department has confirmed that the start-up, shut-down, and malfunction exclusions apply daily and not on a rolling 24-hour period. If the exclusions were applied on a rolling 24-hour period, a unit could not startup at 6:00 am on Day 1 and then restart the unit at 4:00 am on Day 2. Use of a rolling exclusion was never the intent of the permit application and would cause significant dispatch issues for the State. In addition the Department has previously confirmed that the facility may exclude startup, shutdown, and malfunction data on a minute basis. This request has been made to provide written clarification within the permit.

- Revise Section 3, Subsection B.12(e) to read (modifications have been underlined):

  "The 24-hour block averages are calculated as follows: starting at midnight of each operating data, a 24-hour block average shall be calculated from 24-valid hourly average emission rate values. A valid hourly emission rate shall be calculated for each hour in which at least two measurements are obtained at least 15-minutes apart. The owner shall use all valid measurements or data points collected over the hour to calculate the hourly averages. All data points..."

  This request has been made to assist in CEMS standardization between OEC and APEC. When operation of APEC was moved from the APP control room to the OEC control room the APEC CEMS was also integrated into the OEC CEMS. The requested language is pulled directly from the OEC Title V CEMS requirement currently located in Section 3, Subsection C.14(j).

ATTACHMENT H

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
REQUESTED CHANGES TO CURRENT TITLE V PERMIT

EU007 through EU010—Combustion Turbine—Osprey Energy Center

- Revise Section 3, Subsection C.12 to read (modifications have been underlined):

  "Excess Emissions. Excess emissions resulting from startup, shutdown, or malfunctions shall be permitted provided that best operational practices are adhered to and the duration of excess emission shall be minimized. Excess emission occurrences shall in no case exceed 2 hours (120 minutes) in any operating day permitted except during both "cold start-up" to, and shutdowns from, combined cycle plant operation. During cold start-up to combined cycle operation, up to 4 hours (240 minutes) of excess emissions are allowed. During shutdowns from combined cycle operation, up to three hours (180 minutes) of excess emissions are allowed. Cold start up is defined as startup to combined cycle operation following breaker open of the combustion turbine with no operation above 60% load in the interim for a minimum of 48-hours (2880 minutes). An operating day is defined as a day (midnight to midnight) that contains operation."

  Previous conversations with the Department has confirmed that the start-up, shut-down, and malfunction exclusions apply daily and not on a rolling 24-hour period. If the exclusions were applied on a rolling 24-hour period, a unit could not startup at 6:00 am on Day 1 and then restart the unit at 4:00 am on Day 2. Use of a rolling exclusion was never the intent of the permit application and would cause significant dispatch issues for the State.

  Additional conversations with the Department have clarified the definition of cold startup to allow for operation less than 60% load in the 48-hour "no-operation" window. The "cold start" 4-hour excursion allows for the facility to come up to temperature and run properly. In the event the facility starts under cold start conditions and trips prior to reaching 60% load, the facility has not been properly heated to allow for a next day start-up under the "hot" start allocation of 2-hours.

  Further discussions with FDEP has provided guidance that the excess emission hour exclusion may be calculated on a minute basis. This request has been made to provide written clarification within the permit.

- Revise Section 3, Subsection C.14(h) and (i) to read (additions have been underlined):

"h. *NO_x and O_2 CEMS:* The NO_x and O_2 monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Pert 75 Subpart B and C. Recordkeeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. ~~Annual~~ RATA tests required for the NOx monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. RATA tests required for the O_2 monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the NO_x monitor shall be based on the emission standards. The span for the O_2 monitor shall not be greater than 21%. The use of missing data ... established in 40 CFR 60.332.

i. *CO ~~and O2 CEMS~~:* The permittee shall install, operate and maintain a CO CEMS certified pursuant to Performance Specification 4 in Appendix B of 40 CFR 60. ~~The oxygen monitor shall be certified per Performance Specification 3 in Appendix B of 40 CFR 60.~~ Quality assurance procedures shall conform ... The span for the CO monitor shall be based on the emission standards. ~~The RATA tests required for the oxygen monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the O2 monitor shall not be greater than 21%.~~"

Due to the O_2 analyzer being subject to the Acid Rain/CAIR rules and subsequently to 40 CFR Part 75, the facility requests the analyzer be held to the standards of Part 75.

In addition Part 75 requires Semi-annual (two operating quarters) or annual (four operating quarters) RATA testing based on the results of the previous RATA. Therefore, the word annual has been struck.

Appendix H. – Insignificant Emission Units and Activities

- Revise description of Item 30 – emergency generator diesel engine as follows:

  One (1) 1,250-kW emergency generator diesel engine. Excluding emergencies, the generator diesel engine will operate no more than 311 hours per year for routine testing and maintenance.

Please see attached calculations of potential emission rates for the emergency generator diesel engine.

POTENTIAL EMISSION INVENTORY WORKSHEET

Osprey and Auburndale Peaker Energy Centers

EG-ENG

EMISSION SOURCE TYPE

DIESEL ENGINES - CRITERIA POLLUTANTS

FACILITY AND SOURCE DESCRIPTION

Emission Source Description:	Stationary Diesel Engine **(Insignificant Emission Unit)**
Emission Control Method(s)/ID No.(s):	None
Emission Point Description:	Emergency Generator Diesel Engine

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Emission Factor (lb/hp-hr) x Engine Rating (hp)

Emission (ton/yr) = Emission Factor (lb/hp-hr) x Engine Rating (hp) x Operating Period (hrs/yr) x (1 ton/ 2,000 lb)

Source: ECT, 2010.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours:	311	hrs/yr	
Engine Rating:	1,680	hp	
Fuel Flow:	24,063	gal/yr	
Fuel Flow:	77.3	gal/hr	
Diesel Fuel Oil Sulfur Content:	0.05	weight %	
Diesel Fuel Oil Heat Content:	138,000	Btu/gal (HHV)	
Heat Input:	10.67	MMBtu/hr (HHV)	

Criteria Pollutant	Emission Factor (g/hp-hr)	Emission Factor (lb/hp-hr)	Potential Emission Rates (lb/hr)	Potential Emission Rates (tpy)
NO_x	6.90	0.01521	25.6	3.98
CO	8.50	0.01874	31.5	4.90
HC	0.97	0.00214	3.6	0.56
SO_2	0.18	0.00040	0.7	0.11
PM	0.40	0.00088	1.5	0.23
PM_{10}	0.40	0.00088	1.5	0.23

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours (annual)	ECT, 2010.
Fuel Flow Rate (gal/yr)	Detroit Diesel, 2000.
Emission Factors (except SO_2)	Detroit Diesel, 2000.
Emission Factor (SO_2)	AP-42, Table 3.4-1., EPA, 1996.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by:	T.Davis	Date:	Apr-10
Data Entered by:	T.Davis	Date:	Apr-10

ATTACHMENT I

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.

Auburndale Peaker Energy Center (APEC) **Osprey Energy Center (OEC)** Plant name	**Florida** State	**55833 (APEC)** **55412 (OEC)** ORIS/Plant Code

STEP 2
Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

For new units or SO_2 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
6 (APEC)	**No**	**Yes**	**N/A**	**N/A**
CT1 (OEC)	**No**	**Yes**	**N/A**	**N/A**
CT2 (OEC)	**No**	**Yes**	**N/A**	**N/A**
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

Auburndale Peaker Energy Center (APEC)
Osprey Energy Center (OEC)
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 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,

STEP 3, Continued.

Auburndale Peaker Energy Center (APEC)
Osprey Energy Center (OEC)
Plant Name (from STEP 1)

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 72.7or 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 SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 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

Auburndale Peaker Energy Center (APEC)
Osprey Energy Center (OEC)

STEP 5

For SO_2 Opt-in units only.

(Not required for SO_2 Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO_2 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 SO_2 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 SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

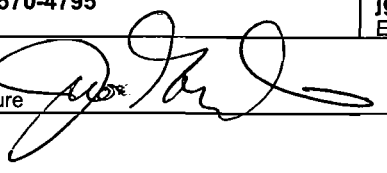
Signature	Date

STEP 7

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

Certification (for designated representative or alternate designated representative only)

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

Jason Goodwin Name	**Director, Environmental, Health, and Safety** Title
Auburndale Peaker Energy Center, LLC (APEC); Calpine Construction Finance Company, LP (OEC) Owner Company Name	
(713) 570-4795 Phone	**jgoodwin@calpine.com** E-mail address
Signature 	Date 4/20/10

ATTACHMENT J

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:	State:	ORIS or EIA Plant Code:
Auburndale Peaker Energy Center (APEC) **Osprey Energy Center (OEC)**	**Florida**	**55833 (APEC)** **55412 (OEC**

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
6 (APEC)	**X**	**X**	**X**	**N/A**	**N/A**
CT1 (OEC)	**X**	**X**	**X**	**N/A**	**N/A**
CT2 (OEC)	**X**	**X**	**X**	**N/A**	**N/A**

STEP 3

Read the standard requirements.

Auburndale Peaker Energy Center (APEC)
Osprey Energy Center (OEC)

Plant Name (from STEP 1)

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.

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 SO_2 TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR SO_2 source and each CAIR SO_2 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 SO_2 source and each CAIR SO_2 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 SO_2 source and each SO_2 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 SO_2 source with the following CAIR SO_2 Emission Requirements.

SO_2 Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO_2 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 SO_2 units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR SO_2 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 SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO_2 Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 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 SO_2 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 SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO_2 unit.

Excess Emissions Requirements.

If a CAIR SO_2 source emits SO_2 during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 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.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 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 SO_2 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 SO_2 Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO_2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO_2 Trading Program.

(2) The CAIR designated representative of a CAIR SO_2 source and each CAIR SO_2 unit at the source shall submit the reports required under the CAIR SO_2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program.

(2) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 source or the CAIR designated representative of a CAIR SO_2 source shall also apply to the owners and operators of such source and of the CAIR SO_2 units at the source.

(3) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 unit or the CAIR designated representative of a CAIR SO_2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO_2 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 SO_2 source or CAIR SO_2 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, 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.

STEP 3, Continued

Auburndale Peaker Energy Center (APEC) **Osprey Energy Center (OEC**
Plant Name (from STEP 1)

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Liability.

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

Effect on Other Authorities.

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

STEP 4

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 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.

Jason Goodwin Name	**Director, Environmental, Health, and Safety** Title
Auburndale Peaker Energy Center, LLC (APEC); Calpine Construction Finance Company, LP (OEC) Owner Company Name	
(713) 570-4795 Phone	**jgoodwin@calpine.com** E-mail address
Signature	Date 4/20/10

ATTACHMENT K

FUEL SPECIFICATIONS

ATTACHMENT K

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
FUEL SPECIFICATIONS

A. Distillate Fuel Oil (APEC – EU ID 006)

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

B. Natural Gas, typical composition (APEC – EU 006, OEC EU ID 007 - -010)

Component	Mole Percent (by volume)
<u>Gas Composition</u>	
Hexane+	0.018
Propane	0.190
I-butane	0.010
N-butane	0.007
Pentane	0.002
Nitrogen	0.527
Methane	96.195
CO_2	0.673
Ethane	2.379
<u>Other Characteristics</u>	
Heat content (HHV)	1,050 Btu/ft^3 at 14.73 psia, dry
Real specific gravity	0.5776
Sulfur content	2.0 gr/100 scf

Note: Btu/ft^3 = British thermal units per cubic foot.
psia = pound per square inch absolute.
gr/100 scf = grain per 100 standard cubic feet.

ATTACHMENT L

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT L

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

A. Simple-Cycle Combustion Turbine (APEC; EU ID 006)

Water Injection—NO_x Control

Injection of water into the primary combustion zone of a combustion turbine (CT) reduces the formation of thermal nitrogen oxides (NO_x) by decreasing the peak combustion temperature. Water injection decreases the peak flame temperature by diluting the combustion gas stream and acting as a heat sink by absorbing heat necessary to: (a) vaporize the water (latent heat of vaporization), and (b) raise the vaporized water temperature to the combustion temperature. High purity water must be employed to prevent turbine corrosion and deposition of solids on the turbine blades.

The maximum amount of water that can be injected depends on the CT combustor design. Excessive rates of injection will cause flame instability, combustor dynamic pressure oscillations, thermal stress (cold-spots), and increased emissions of carbon monoxide (CO) and volatile organic compounds (VOCs) due to combustion inefficiency. Accordingly, the efficiency of water injection to reduce NO_x emissions also depends on turbine combustor design. For a given CT design, the maximum water to fuel ratio (and maximum NO_x reduction) will occur up to the point where cold-spots and flame instability adversely effect the safe, efficient, and reliable operation of the CT.

A NO_x continuous emissions monitoring system (CEMS) is used to confirm that the appropriate water to fuel ratio is applied.

B. Combined-Cycle Combustion Turbine Units (OEC; EU ID 007 to 010)

Dry Low-NO_x (DLN) Combustors—NO_x Control

DLN combustors premix turbine fuel and air prior to combustion in the primary zone. Use of a premix burner results in a homogeneous air/fuel mixture without an identifiable flame front. For this reason, the peak and average flame temperatures are the same, causing a decrease in thermal NO_x emissions in comparison to a conventional diffusion burner. DLN combustor technology was developed for natural gas-fired combustion turbine

generators (CTGs) and is not currently available for CTGs fired with distillate fuel oil due to the different combustion characteristics of the two fuels.

Selective Catalytic Reduction (SCR)—NO_x Control

SCR reduces NO_x emissions by reacting ammonia with exhaust gas NO_x to yield nitrogen and water vapor in the presence of a catalyst. Ammonia is injected upstream of the catalyst bed where the following primary reactions take place:

$$4NH_3 + 4NO + O_2 \rightarrow 4N_2 + 6H_2O$$

$$4NH_3 + 2NO_2 + O_2 \rightarrow 3N_2 + 6H_2O$$

The catalyst serves to lower the activation energy of these reactions, which allows the NO_x conversions to take place at a lower temperature than the exhaust gas. The optimum temperatures range from as low as 350 to as high as 1,100 degrees Fahrenheit (°F) (typically 600 to 750°F), depending on the catalyst. Typical SCR catalysts include metal oxides (titanium oxide and vanadium), noble metals (combinations of platinum and rhodium), zeolite (aluminosilicates), and ceramics.

Factors affecting SCR performance include space velocity (volume per hour of flue gas divided by the volume of the catalyst bed), ammonia-to-NO_x molar ratio, and catalyst bed temperature. Space velocity is a function of catalyst bed depth. Decreasing the space velocity (increasing catalyst bed depth) will improve NO_x removal efficiency by increasing residence time but will also cause an increase in catalyst bed pressure drop. The reaction of NO_x with ammonia theoretically requires a one-to-one molar ratio. The ammonia-to-NO_x molar ratios greater than one-to-one are necessary to achieve high NO_x removal efficiencies due to imperfect mixing and other reaction limitations. However, the ammonia-to-NO_x molar ratios are typically maintained at one-to-one or lower to prevent excessive unreacted ammonia (ammonia slip) emissions. Reaction temperature is critical for proper SCR operation. Below this critical temperature range, the reduction reactions shown will not proceed. At temperatures exceeding the optimal range, oxidation of ammonia will take place resulting in an increase in NO_x emissions.

ATTACHMENT M

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT M

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
PROCEDURES FOR STARTUP AND SHUTDOWN

Starting Sequence

Startup of the Siemens Westinghouse 501D5A and 501FD combustion turbines (CTs) is implemented by means of a computer-controlled startup sequencer. The startup sequencer is given a *START* command by the control room operator. The startup sequencer then controls startup and synchronization of the CT to the power grid, while the control room operator monitors the CT startup and other plant processes.

Shutdown Sequence

CT shutdown occurs in a similar fashion as startup. Shutdown of the Siemens Westinghouse 501D5A and 501FD CTs is implemented by means of a computer-controlled shutdown sequencer. The shutdown sequencer is given a *STOP* command by the control room operator. The shutdown sequencer then reduces CT load, disconnects the CT from the power grid (opens the generator breaker), closes the fuel supply to the CT, and allows the CT to cool in a controlled manner. Once the CT has cooled sufficiently, the CT is allowed to coast until rotation stops. The CT will automatically go on turning gear.

ATTACHMENT N

ALTERNATE METHODS OF OPERATION

ATTACHMENT N

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
ALTERNATIVE METHODS OF OPERATION

A. SIMPLE-CYCLE COMBUSTION TURBINE (APEC: EU ID 006)

Method Number	Fuel Type	Fuel Sulfur Content (wt %)	Heat Input Range, HHV* (MMBtu/hr)	Maximum Operating Hours		
				hr/day	day/wk	hr/yr
1	Natural gas	N/A	0 to 1,776	24	7	†
2	Distillate fuel oil	0.05	0 to 1,726	24	7	400‡

* Heat input rates are higher heating values (HHV) at a compressor inlet air temperature of 32°F and 100-percent load. Heat input rates will vary depending on ambient conditions and combustion turbine characteristics.

† Firing of natural gas is limited to no more than 2,227,400 MMBtu during any consecutive 12-month period (equivalent to approximately 1,400 hr/yr at base load).

‡ Firing of distillate fuel oil is limited to no more than 400 hours during any consecutive 12-month period.

ATTACHMENT N

OSPREY AND AUBURNDALE PEAKER ENERGY CENTERS
ALTERNATIVE METHODS OF OPERATION

B. COMBINED-CYCLE COMBUSTION TURBINE UNITS (OEC: EU ID 007 THROUGH 010)

Method Number	Fuel Type	Operating Mode	Heat Input Range, LHV* (MMBtu/hr)	Maximum Operating Hours		
				hr/day	day/wk	hr/yr
1	Natural gas (normal operation)	Not applicable	0 to 1,875	24	7	8,760
2	Natural gas	With duct burners	0 to 250†	24	7	8,760
3	Natural gas	With power (steam) augmentation	N/A	24	7	8,760
4	Natural gas	With IAC	N/A	24	7	8,760
5	Natural gas	Any combination of Methods 2 through 4	N/A	24	7	8,760

Note: IAC = combustion turbine generator compressor inlet air cooling (fogging).

*Heat input rates are lower heating values (LHV) at International Standards Organization (ISO) conditions (59°F, 14.7 psia, and 60-percent relative humidity). Heat input rates will vary depending on ambient conditions and the combustion turbine characteristics.
†Heat input range is for DB only.

ATTACHMENT O

RESPONSIBLE OFFICIAL NOTIFICATION FORM

Department of Environmental Protection

Division of Air Resource Management

RESPONSIBLE OFFICIAL NOTIFICATION FORM

Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.

Identification of Facility

1. Facility Owner/Company Name: **Auburndale Peaker Energy Center, LLC** **Calpine Construction Finance Company, LP**	
2. Site Name: **Osprey and Auburndale Peaker Energy Centers**	3. County: **Polk**
4. Title V Air Operation Permit/Project No. *(leave blank for initial Title V applications)*: **New Title V permit to be issued.**	

Notification Type *(Check one or more)*

☐ **INITIAL**: Notification of responsible officials for an initial Title V application.

☐ **RENEWAL**: Notification of responsible officials for a renewal Title V application.

☐ **CHANGE**: Notification of change in responsible official(s).

Effective date of change in responsible official(s) **Effective date of new permit**

Primary Responsible Official

1. Name and Position Title of Responsible Official:
   Jason Goodwin, Director of Environmental, Health, and Safety
2. Responsible Official Mailing Address:
   Organization/Firm: **Calpine Operating Services Company, Inc.**
   Street Address: **717 Texas Avenue, Suite 1000**
   City: **Houston** State: **TX** Zip Code: **77002-2743**
3. Responsible Official Telephone Numbers:
   Telephone: **(713) 570-4795** Fax: **(713) 332-5168**
4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[X] 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.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[X] The designated representative at an Acid Rain source.

5. Responsible Official Statement:

I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.

Signature

4/20/10
Date

Additional Responsible Official

1.	Name and Position Title of Responsible Official: **Steven Smith, Plant Manager**
2.	Responsible Official Mailing Address: Organization/Firm: **Calpine Operating Services Company, Inc.** Street Address: **1651 West Derby Avenue** City: **Auburndale** State: **FL** Zip Code: **33823-4062**
3.	Responsible Official Telephone Numbers: Telephone: **(863) 551-4663** Fax: **(863) 551-4666**
4.	Responsible Official Qualification *(Check one or more of the following options, as applicable)*: [X] 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. [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively. [ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. [X] The designated representative at an Acid Rain source.

Note: Please see attached Responsible Official (RO) and Designated Representative (DR) delegation memos.

717 TEXAS AVENUE, SUITE 1000
HOUSTON, TX 77002

CALPINE CORPORATION

NYSE CPN

MEMORANDUM

DATE: February 1, 2010

TO: Jason Goodwin, Director – Environmental, Health & Safety

FROM: Don Neal, Vice President, Environmental, Health & Safety
Calpine Operating Services Company, Inc.

CC: Shonnie Daniel, VP & Managing Counsel – Calpine Legal

SUBJECT: **Designated Representative/Responsible Official/ - Environmental, Health & Safety, East Region Operations**

Pursuant to the *Calpine Power Company Environmental, Health & Safety Responsibility and Authority Guidelines for Limited Partnerships, Limited Liability Companies and Subsidiary Corporations (copy attached)*, I hereby authorize Jason Goodwin, Director, Environmental, Health & Safety, to serve as the Designated Representative/Responsible Official for Environmental, Health & Safety and Regional EHS Director for Calpine's East Region Operations.

This Delegation of Authority expires on December 31, 2010.

Sincerely,

Don Neal
Vice President
Environmental, Health & Safety
Calpine Operating Services Company, Inc.

Environmental Health & Safety Responsibility and Authority
Guidelines for Limited Partnerships, Limited Liability Companies
And Subsidiary Corporations

A number of routine Environmental, Health & Safety (EHS) reports and filings that are submitted to regulatory agencies on behalf of the project entities within Calpine Power Company's various regions require a certification in which the signatory is required to attest to his authority to act on behalf of the owners and/or operator of the facility. However, under current project entity formation documents, the authority and responsibility to act on behalf of a Calpine entity, as a representative with regard to EHS reporting and compliance matters is not explicit.

To address the lack of explicit authority, the positions of "Plant Manager/General Manager" and "Regional EHS Director" should be authorized via a Delegation of Authority Memorandum by each project entity to act as follows:

1. Plant Managers/General Managers

For each project entity, the person holding the position of Plant Manager/General Manager is authorized and required to act on behalf of the project entity for all routine and/or re-occurring EHS compliance and reporting required by permit, regulation, or contract including but not limited to: periodic storm/waste water discharge reports, quarterly emissions reports, and annual reports summarizing annual compliance of the project with existing permit contract and regulatory limitations.

This responsibility shall include the Plant Manager/General Manager serving as the Designated Representative/Responsible Official for all routine and/or re-occurring EHS compliance and reporting under all titles of the Clean Air Act, the Clean Water Act and in similar capacity for other federal, state or local EHS regulatory programs.

2. Regional EHS Director

The person holding the position of Regional EHS Director is authorized to act as an alternate to the Plant Manager/General Manager on behalf of the project for all matters set forth under Item 1, above.

In addition to the above, the Regional EHS Director is authorized to serve as the primary point of contact with federal, state and local EHS regulatory agencies, concerning queries, modifications to permits and plans, enforcement actions and regulatory/policy clarification and development.

The Regional EHS Director also is authorized to serve as the Responsible Official regarding all applicable permit documents and is authorized to make technical and administrative filings related to permit applications, modifications, renewals, as well as represent the company with respect to notices of violations, safety citations, and management of environmental commodities.

The Regional EHS Director is additionally authorized to make representations and administrative filings as required under the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards rules.

717 TEXAS AVENUE, SUITE 1000
HOUSTON, TX 77002

CALPINE CORPORATION

NYSE CPN

MEMORANDUM

DATE: February 1, 2010

TO: Steven Smith, Plant Manager – Auburndale Peaker Energy Center and Osprey Energy Center

FROM: Don Neal, Vice President – Environmental, Health & Safety
Calpine Operating Services Company, Inc.

CC: Shonnie Daniel, VP & Managing Counsel – Calpine Legal
Jason Goodwin, Director – Environmental Health & Safety

SUBJECT: **Designated Representative/Responsible Official – Plant Manager – Auburndale Peaker Energy Center, LLC and Calpine Construction Finance Company, L.P./Osprey Energy Center**

Pursuant to the *Calpine Power Company Environmental, Health & Safety Responsibility and Authority Guidelines for Limited Partnerships, Limited Liability Companies and Subsidiary Corporations (copy attached)*, I hereby authorize Steven Smith, Plant Manager – Auburndale Peaker Energy Center and Osprey Energy Center, to serve as the Designated Representative/Responsible Official – Plant Manager at the Auburndale Peaker Energy Center, LLC and Calpine Construction Finance Company, L.P./Osprey Energy Center facilities.

This Delegation of Authority expires on December 31, 2010.

Sincerely,

Don Neal

Don Neal
Vice President
Environmental, Health & Safety
Calpine Operating Services Company, Inc.

Environmental Health & Safety Responsibility and Authority
Guidelines for Limited Partnerships, Limited Liability Companies
And Subsidiary Corporations

A number of routine Environmental, Health & Safety (EHS) reports and filings that are submitted to regulatory agencies on behalf of the project entities within Calpine Power Company's various regions require a certification in which the signatory is required to attest to his authority to act on behalf of the owners and/or operator of the facility. However, under current project entity formation documents, the authority and responsibility to act on behalf of a Calpine entity, as a representative with regard to EHS reporting and compliance matters is not explicit.

To address the lack of explicit authority, the positions of "Plant Manager/General Manager" and "Regional EHS Director" should be authorized via a Delegation of Authority Memorandum by each project entity to act as follows:

1. Plant Managers/General Managers

For each project entity, the person holding the position of Plant Manager/General Manager is authorized and required to act on behalf of the project entity for all routine and/or re-occurring EHS compliance and reporting required by permit, regulation, or contract including but not limited to: periodic storm/waste water discharge reports, quarterly emissions reports, and annual reports summarizing annual compliance of the project with existing permit contract and regulatory limitations.

This responsibility shall include the Plant Manager/General Manager serving as the Designated Representative/Responsible Official for all routine and/or re-occurring EHS compliance and reporting under all titles of the Clean Air Act, the Clean Water Act and in similar capacity for other federal, state or local EHS regulatory programs.

2. Regional EHS Director

The person holding the position of Regional EHS Director is authorized to act as an alternate to the Plant Manager/General Manager on behalf of the project for all matters set forth under Item 1, above.

In addition to the above, the Regional EHS Director is authorized to serve as the primary point of contact with federal, state and local EHS regulatory agencies, concerning queries, modifications to permits and plans, enforcement actions and regulatory/policy clarification and development.

The Regional EHS Director also is authorized to serve as the Responsible Official regarding all applicable permit documents and is authorized to make technical and administrative filings related to permit applications, modifications, renewals, as well as represent the company with respect to notices of violations, safety citations, and management of environmental commodities.

The Regional EHS Director is additionally authorized to make representations and administrative filings as required under the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards rules.