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BUREAU OF AIR REGULATION

Auburndale Energy Campus

Auburndale Power Partners, L.P.

and

Auburndale Peaker Energy Center, LLC

Auburndale, Florida

Application for Renewal of Title V Air Operating Permit

June 2002



CALPINE

ISLAND CENTER
2701 N. ROCKY POINT DRIVE
SUITE 1200
TAMPA, FLORIDA 33607
813.637.7300
813.637.7399 (FAX)

June 27, 2002

Mr. Scott Sheplak
Bureau of Air Regulation
111 South Magnolia Drive
Suite 4
Tallahassee, Florida 32301

RECEIVED
JUN 28 2002
BUREAU OF AIR REGULATION

Re: Auburndale Energy Campus
Auburndale Power Partners, L.P. Permit No. 1050221-002-AV
Auburndale Peaker Energy Center, LLC, Permit No. 1050221-004-AC
Application for Renewal of Air Operating (Title V) Permit
FedEx: 832 654 564 991


Dear Mr. Sheplak:

Enclosed please find two copies of the subject permit application. These applications are submitted to satisfy the requirement for submission of the renewal application 180 days prior to the expiration of the current permit.

If you have any questions regarding the enclosed submittal or require additional information, please do not hesitate to contact me by telephone at (813) 637-7305 or via email at bborsch@calpine.com.

Sincerely,

Calpine Eastern Corporation


Benjamin M. H. Borsch, P.E.
Environmental Manager

Cc: Ms. A. Linero, Bureau of Air Regulation (w/o enclosure)
Mr. William Proses, SW District Air Program (w/ enclosure) FedEx: 832 654 480
Mr. Bob Callery, Calpine Eastern

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1. Application Summary

The Auburndale Energy Campus consists of two collocated combustion turbines along with ancillary and supporting equipment and facilities. One turbine, the Auburndale Cogeneration unit, owned by Auburndale Power Partners, L.P. (APP) is a 156 (nominal) MW unit operated in combined cycle with an unfired heat recovery steam generator. This unit also generates steam for use by two adjacent manufacturing facilities. The second turbine, owned by Auburndale Peaker Energy Center, LLC (APEC) is a 104 (nominal) MW unit operated in simple cycle. Both units are operated by Calpine Eastern Corporation.

Pursuant to Title V of the federal Clean Air Act and Amendments (CAAA) of 1990, this report constitutes an application for renewal of the operation permit for the Auburndale Energy Campus. The Energy Campus is classified as a major stationary source as defined in the Florida Administrative Code, Chapter 62-213, F.A.C. and is therefore required to obtain a major source operating permit. The cogeneration unit, in operation since 1994, is a Title V major source as facility-wide potential emissions exceed the major source emission threshold of 100 tons per year for oxides of nitrogen (NO_x), sulfur dioxide (SO₂), and carbon monoxide (CO). The simple cycle unit was added in 2002. In order to avoid requirements for a PSD review, this unit accepted operating limitations necessary to limit emissions to a level classified as a minor source. The initial Title V application issued to the cogeneration unit, and modified to allow the construction of the simple cycle unit expires on December 31, 2002. Application for renewal of an operating permit is required at least 180 days prior to the expiration date of the PSD permit, in this case July 2, 2002. With this document, Calpine has provided the data, demonstrations, certifications, and application forms required for renewal of this permit.

As a part of this permit application, Calpine, APP and APEC seek the following:

- ◆ Renewal of the major source operating (Title V) permit for the cogeneration unit;
- ◆ Inclusion of the simple cycle unit in the Title V permit; and
- ◆ Deletion of the Sulfuric Acid Mist requirements included in the previous permit, consistent with current FDEP practice

1.1. Site Description

The Energy Center is located near Auburndale, Florida in Polk County. An area map showing the location of the cogeneration facility on the U.S. Geological Survey 7.5 minute series topographic map is provided in Appendix A to this application. A plot plan of the facility showing the approximate location of the defined emission points is also located in Appendix A.

1.2. Description of Expected Operations

The primary components of the cogeneration system are the cogeneration combustion turbine, steam turbine, heat recovery steam generator (HRSG), and cooling tower. The

combustion turbine will operate primarily on natural gas, but may operate by firing fuel oil for a limited number of hours per year. The combustion turbine has an electric generation capacity of approximately 156 MW in combined cycle operation. This unit may operate up to 8,760 hours per year and has historically operated at a capacity factor above 90%

The simple cycle unit will operate primarily on natural gas, but may operate by firing fuel oil for a limited number of hours per year. The combustion turbine has an electric generation capacity of approximately 104 MW. The simple cycle unit will operate in peaking service and is expected to operate near its permitted operating capacity, between 20 and 25% of available hours.

1.3. *Permitting History*

The APP facility was issued an initial construction permit in December, 1992 and began operation in March 1994. Following the creation of the Title V permitting program, an initial Title V permit was issued for the facility in 1997 (Permit Number 1050221-002-AV). This permit covered the single combined cycle combustion turbine and ancillary equipment. In 2000 Calpine applied for the permit to construct the simple cycle unit to be owned by APEC. A permit for the construction of this unit was issued in September, 2001 (Permit Number 1050221-004-AC). Because Calpine desired to permit this unit without passing through the PSD review process, Calpine elected to "net out" the emissions from the two units. Thus the future emissions of the two units would be limited to a total less than the sum of the historical annual emissions of the APP unit and the major source threshold. As a result of this process, permit number 1050221-004-AC contains limitations on the NO_x emissions of both the simple cycle unit and the cogeneration unit, and reduces the allowable emissions of the cogeneration unit below those specified in permit number 105022-002-AV. Each permit was subsequently modified (via modification letters 1050221-005-AC and 1050221-006-AC) to allow for the use of wet compression as an operating mode.

1.4. *Request for Permit Application Shield*

Section 503(d) of the CAAA provides that once a timely and complete application for an operating permit has been filed, the applicant is shielded from enforcement action for operating without a permit until the permit has been issued or other action has been taken on the application. Florida Administrative Code incorporate the concept of an application shield for sources required to obtain a major source operating permit.

Calpine requests that the permit application shield be established for this facility on the presumption that FDEP will affirm that the application is administratively complete.

1.5. *Request for Permit Shield*

Section 504(f) of the CAAA defines the permit shield provision, whereby the permitting authority is empowered to provide that compliance with a Part 70 permit shall be deemed in compliance with all other applicable provisions of the Act. Florida Administrative Code (Chapter 62-213.460) incorporates the concept of a permit shield. A provision stating that

compliance with conditions of the major source operating permit shall be deemed compliance with all applicable requirements (as of the date of permit issuance) provided that the following conditions are met:

- Such applicable requirements are identified and included in the permit; and
- FDEP, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

Calpine is requesting through this application that FDEP include permit shield provisions in its Operating Permit consistent with this regulation. A listing of applicable regulations is presented on form 62-210.900(1), included in Section 6.

2. Process Description

Calpine operates the cogeneration unit under Standard Industrial Classification code 4911, Electrical Services. The primary components of the cogeneration facility are a combustion turbine, steam turbine, and a HRSG. The combustion turbine is a Siemens Westinghouse Model 501D5 design with an electric generation capacity of approximately 156 MW for the combined combustion and steam turbine generators. The combustion turbine may combust natural gas or Number 2 fuel oil. Reduction of NO_x emissions from the combustion turbine is achieved via the use of water injection during combustion followed by Selective Catalytic Reduction, during natural gas firing, which will reduce NO_x emitted to less than 15 ppm_{vd} at 15% O₂. During oil firing, water injection is used to control the NO_x emitted to less than 42 ppm_{vd} at 15% O₂. Exhaust air is directed to the HRSG for steam generation. Oil firing is restricted to a maximum of 400 hours per year.

The HRSG is a triple pressure unit providing its high pressure and intermediate pressure steam to the steam turbine. Low pressure steam is used within the Energy Center primarily for the HRSG deaerator with a small amount going to the low pressure section of the steam turbine or to the wastewater treatment system for process use. During operation for the adjacent steam host facilities, most of the intermediate pressure steam from the HRSG is routed to the steam sales header\ for process use.

Start-up operations for the combined cycle turbine require up to 240 minutes for the system to reach steady-state operation from the initial fuel firing. Shut-down operations require up to 180 minutes to lower the system from steady-state operation to cessation of fuel firing.

Calpine also operates the simple cycle unit under Standard Industrial Classification code 4911, Electrical Services. The combustion turbine is a Siemens Westinghouse Model 501D5A design with an electric generation capacity of approximately 104 MW. The combustion turbine may combust natural gas or Number 2 fuel oil. Reduction of NO_x emissions from the combustion turbine is achieved via the use of water injection during combustion which will reduce NO_x emitted to less than 25 ppm_{vd} at 15% O₂. During oil firing, water injection is used to control the NO_x emitted to less than 42 ppm_{vd} at 15% O₂. Oil firing is restricted to a maximum of 400 hours per year.

Process flow diagrams depicting the major process units for each turbine system including the emissions points is provided in Appendix A to supplement this description.

3. Emission Inventory

Emissions of both criteria pollutants (CO, NO_x, PM, SO₂) and non-criteria pollutants (VOC and HAP) are estimated. The emissions for criteria pollutants are based on the limits established in the two previously issued permits, 1050221-002-AV and 1050221-004-AC.

3.1. *Air Emissions Summary*

Emissions from the two combustion turbines are generated from firing natural gas or fuel oil. Combustion emissions are generally based on manufacturer supplied data, consistent with AP-42 emission factors compiled by the U.S. EPA.

Table 3-1 provides a listing of the potential emissions for PM, SO₂, NO_x, CO, and VOC from the Energy Campus. The emission levels presented for criteria pollutants reflect existing permit limits, or when no unit-specific emission limits apply, the maximum anticipated emissions at full capacity assuming continuous operation. Documentation for all emissions represented in this application is provided in Appendix C.

**TABLE 3-1. POTENTIAL COMBUSTION TURBINE EMISSIONS OF
PM, SO₂, NO_x, CO, AND VOC**

Pollutant	Potential Emissions (tpy)	Major Source (Yes/No)
PM	64.5	No
SO ₂	211.3	Yes
NO _x	292	Yes
CO	295.4	Yes
VOC	37.2	No

Emissions for other listed and insignificant emissions sources were not quantified in the initial permitting and contributions from these emissions. Projected emissions values from these units are shown in Appendix B.

4. Regulatory Review

A key objective of a Title V operating permit application is to compile all applicable Clean Air Act derived requirements into one document. Conceptually, these requirements can largely be categorized as (1) emission limits and work practice standards, or (2) testing, monitoring, record keeping, or reporting requirements. In order to compile a list of all the requirements a facility must comply with, it is first necessary to determine which Federal and State air regulations apply to the facility as a whole, or to individual emission units. This section documents the applicability determinations made for all Federal and State air quality regulations. Specific listings of applicable regulations are found on Form 62-210.900(1) found in Section 6.

4.1. Federal Regulatory Applicability

Applicability or non-applicability of the following federal regulatory programs is addressed: New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Risk Management Program (RMP), and the Acid Rain Program.

4.1.1. NEW SOURCE PERFORMANCE STANDARDS (NSPS)

NSPS require new, modified, or reconstructed sources to control emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions. Moreover, any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, except as noted. Following is a summary of the NSPS that apply to the Santa Rosa Energy Center.

4.1.1.1. NSPS SUBPART A - GENERAL PROVISIONS¹

Any source subject to a source-specific NSPS (in the case of the Auburndale Energy Campus turbines, NSPS Subpart GG) is also subject to the general provisions of NSPS Subpart A. NSPS Subpart A generally requires the following of facilities subject to a source-specific NSPS:

- Initial construction/reconstruction notification;
- Initial startup notification;
- Performance tests;
- Performance test date initial notification;
- General monitoring requirements;
- General record keeping requirements; and
- Semiannual monitoring system and/or excess emission reports.

¹ 40 CFR §60.1.

All of these requirements do not necessarily apply to all facilities subject to a source-specific NSPS. Source-specific NSPS provisions can supersede NSPS Subpart A as noted in the relevant Subpart.

4.1.1.2. NSPS SUBPART DA - STANDARDS OF PERFORMANCE FOR ELECTRIC UTILITY STEAM GENERATING UNITS FOR WHICH CONSTRUCTION IS COMMENCED AFTER SEPTEMBER 18, 1978²

NSPS Subpart Da provides standards of performance for electric utility steam generating units, capable of combusting more than 250 MMBtu/hr heat input from fossil fuel (alone or in combination with another fuel), for which construction or modification commenced after September 18, 1978.

Subpart Da is not applicable to the units at the Auburndale Energy Campus.

4.1.1.3. SPS SUBPART GG - STANDARDS OF PERFORMANCE FOR STATIONARY GAS TURBINES³

NSPS Subpart GG provides standards of performance for stationary gas turbines with a heat input at peak load equal to or greater than 10.7 GJ/hr (10.1 MMBtu/hr) based on the lower heating value of the fuel fired. The combustion turbine has a rated heat input of 1,780 MMBtu/hr (HHV) when firing natural gas, thus it is subject to this regulation. NO_x emission standards for natural gas combustion and fuel oil combustion are 114 ppmvd and 97.6 ppmvd, respectively.⁴

The requirements for SO₂ under this subpart are an emission limit of 150 ppmvd (at 15% oxygen) or a fuel sulfur limit of 0.8% by weight.

4.1.2. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPs)

The NESHAP, like the NSPS, establish emissions standards and work practice requirements for specific source categories and are codified at 40 CFR §63.⁵ However, the target of regulation under the NESHAP is emissions of any one of the 188 defined HAPs listed in Section 112(b) of the Clean Air Act.⁶ NESHAP require that an affected source

² 40 CFR §60.40a.

³ 40 CFR §60.330

⁴ 40 CFR §60.332(b)

⁵ Additional NESHAP, derived from the 1970 Clean Air Act Amendments, are promulgated at 40 CFR §61; however, these standards only apply to certain pollutants emitted from certain regulated processes, none of which apply to the Energy Center.

⁶ 40 CFR § 63.60 identifies pollutants removed from the defined HAP list.

Best Available Copy

meet Maximum Achievable Control Technology (MACT) standards to minimize HAP emissions. MACT typically represents an emission limit and/or work practice standard that has been demonstrated to minimize HAP emissions from a particular process or device. A major source not yet regulated by a source specific NESHAP may still be required to meet MACT pursuant to Section 112(g) of the Clean Air Act, which provides for case-by-case MACT evaluations of new major HAP sources.

As with NSPS standards, NESHAPs are primarily developed for particular industrial source categories. Therefore, the applicability of a particular NESHAP to a facility can be readily ascertained based on the industrial source category covered. All NESHAP regulations, both in 40 CFR Part 61 and 40 CFR Part 63 are categorically not applicable to energy generation facilities.

4.1.3. ACID RAIN REGULATIONS

In order to reduce acid rain in the United States and Canada, Title IV (40 CFR Part 72 *et seq.*) of the Clean Air Act Amendments of 1990 established the Acid Rain Program (ARP) to substantially reduce SO₂ and NO_x emissions from electric utility plants. Affected units are specifically listed in Tables 1 or 2 of 40 CFR § 73.10 under Phase I and Phase II of the program. Upon Phase III implementation, the Acid Rain Program in general applies to fossil fuel-fired combustion sources that drive generators for the purpose of generating electricity for sale. Any piece of equipment is subject to the regulations if it is a “utility XQW The regulaXQVGHIXQW XQWRPHQ “a unit owned or operated by a XQW...[t]hat serves a generator in any State that produces electricity for sale. A “utility” IVGHIGDV“any person that sells electricity.”⁷ As such the combustion turbine along with the HRSG, referred to as a combined cycle combustion turbine (CCCT), at the Energy Center are subject to the ARP regulations since it is a fossil fuel-fired combustion devices (i.e., units) that generates electricity to be sold (i.e., utility units). Accordingly, all subparts of the Acid Rain Program are potentially applicable to the Energy Center. The potentially applicable subparts are identified as follows:

- 40 CFR Part 72, Permits Regulations;
- 40 CFR Part 73, Allowance System;
- 40 CFR Part 75, Continuous Emission Monitoring;
- 40 CFR Part 77, Excess Emissions; and
- 40 CFR Part 78, Appeal Procedures for Acid Rain Program.

4.1.3.1. ARP PERMITS REGULATION - 40 CFR 72

The pertinent subparts of this section are Subparts A, B, C, and I. Subpart A of 40 CFR 72 outlines the general requirements for sources and units affected by the ARP such as permit, monitoring, emission, record keeping and reporting, and liability. Subpart B lists the requirements and responsibilities associated with the title of designated representative. Subpart C contains the requirements

⁷ 40 CFR § 72.2.

for ARP permit applications. Subpart I provides requirements for compliance certification, specifically the annual compliance certification report.⁸

4.1.3.2. SULFUR DIOXIDE ALLOWANCE SYSTEM - 40 CFR 73

Part 73 establishes requirements for the allocation of SO₂ emissions allowances and the maintenance of the account using the Allowance Tracking System maintained by U.S. EPA for each ton of SO₂ emissions per year.

4.1.3.3. CONTINUOUS EMISSION MONITORING - 40 CFR 75

Part 75 provides the unit specific requirements for monitoring, record keeping, and reporting of SO₂, NO_x, and carbon dioxide (CO₂) emissions, volumetric flow, and opacity data.⁹ The combustion turbine and HRSG with duct burner are subject to the continuous monitoring requirements of 40 CFR 75.

40 CFR 75 Subpart B sets forth monitoring provisions for opacity, SO₂, NO_x, and CO₂ emissions for all affected units (in this case, the CCCT).¹⁰ Specific provisions for monitoring opacity for gas-fired units¹¹ under 40 CFR § 75.14(c) state that a unit qualifying as gas-fired, based on information submitted by the designated representative in the monitoring plan, is exempt from the opacity monitoring requirements of Part 75.

The APP cogeneration unit at the Energy Center qualifies as a gas-fired unit; therefore it is exempt from the opacity monitoring requirements.

The APEC simple cycle turbine has been exempted from the opacity monitoring requirements by Specific Condition 15 of FDEP permit number 1050221-004-AC.

4.1.3.4. EXCESS EMISSIONS - 40 CFR 77

Excess emission occurrences require payment of penalties. The penalty per ton of excess SO₂ or NO_x is determined using the base value of \$2,000 and an annual adjustment factor based on the Consumer Price Index (CPI) for 1990 and the current year. Payment is required within 30 days of notice that recordation has occurred for the year in which the excess emissions occurred.¹²

⁸ 40 CFR § 72.90.

⁹ 40 CFR § 75.1(a)

¹⁰ 40 CFR § 75.10(a)

¹¹ 40 CFR § 72.2

¹² 40 CFR § 77.6

In addition to the penalty payment, the designated representative must submit an offset plan within 60 days after the end of the calendar year in which the excess SO₂ emissions occurred.¹³ The plan must include the following:

- Identification number for the unit.
- Whether the unit had excess emissions in the previous year.
- Explanation of how and why the excess emissions occurred.
- Any measures taken to prevent excess emissions in the future.
- Number of allowances deducted and their serial numbers, optional.
- Statement indicating whether the excess emissions will be deducted from the unit's compliance subaccount or whether they will be deducted on a specified future date if it can be demonstrated that a current deduction will interfere with electric reliability.

The U.S. EPA will determine whether the offset plan is complete within 30 days of submission. Even if complete, additional information may be requested. Using the submitted plan, U.S. EPA will prepare a draft plan that is subject to a 30-day public comment period. The designated representative will receive a copy of all public comments. The comments will be considered and the final plan approved or revised.

4.1.4. STRATOSPHERIC OZONE PROTECTION REGULATIONS

40 CFR 82 Subpart F, Stratospheric Ozone Protection, applies to the maintenance of refrigeration equipment at facilities that contain ozone-depleting substances. Calpine relies upon subcontracted maintenance assistance for any maintenance operation performed on the refrigeration equipment that is subject to this regulation. Calpine verifies certification of the subcontractor personnel and equipment upon procurement of services.

4.2. *FDEP Regulations*

FDEP regulations fall under two main categories, those regulations that are generally applicable (e.g., permitting requirements), and those that have specific applicability (e.g., PM standards for manufacturing equipment). The generally applicable requirements are straightforward (e.g., filing of emission statements) and, as such, are not discussed in further detail. The specific requirements associated with several regulations are detailed in the applicable requirements portion of Form 62-210.900(1).

4.3. *Current State Air Permit Provisions*

The remaining requirements with which the Energy Center must comply with are the provisions contained in the state air permits previously issued to the facility. Permit provisions common to all emission units (with the exception of emission limits) are:

- Compliance with future rules and regulations upon promulgation;
- Application for new operating permit— apply within 30 days of facility transfer or sale;

¹³ 40 CFR §77.4

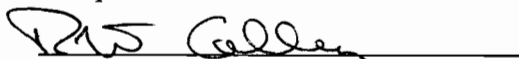
- Revision of permit for new sources, replacements, alterations, design changes, or control devices;
- Provision of sampling ports, ladders, platforms, and other safety equipment to facilitate testing (except distillate fuel oil storage tank);
- Operation of air pollution control devices and capture systems at all times with the goal of minimizing air contaminant emissions;
- Notification to the Department within 24 hours if a breakdown of equipment causes increased emission of air contaminants;
- Submission of reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required;
- Additions and revisions to the conditions of this Permit will be made, if necessary;
- Nothing in this Permit or conditions thereto shall negate any authority granted to the Department pursuant to Florida Statutes;
- Precautions to prevent fugitive dust shall be taken; and
- Measures to abate odorous emissions shall be taken if necessary.

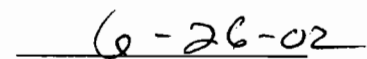
5. Compliance Certification and Plan

The permit application requires the inclusion of a compliance plan and certification. The following items list steps to be followed to meet applicable regulatory requirements. Additional items are included in the appendices as discussed below.

- The Energy Campus will monitor and ensure compliance with the majority of the applicable requirements via the continuous emissions monitors (CEM) for each combustion turbine stack.
- Required monitoring reports will be submitted electronically each quarter, using data supplementing procedures per 40 CFR Subpart 75. Additionally, excess emissions reports are submitted to FDEP quarterly as required in the facility PSD Condition 29.
- As required by the previously issued permits, the NO_x CEMs is installed on each combustion turbine exhaust stack, subject to the requirements of the Acid Rain Permitting program and monitoring requirements. Procedures specified under 40 CFR Part 75, *Continuous Emission Monitoring* are followed. This compliance certification presumes that the monitoring requirements included in the existing facility permits and the Acid Rain Permitting program meet the intent and requirement of the applicable NSPS requirements.
- The CO CEM required by permit number 1050221-004-AC installed in the combustion turbine exhaust stack of the simple cycle unit, is subject to the requirement listed in that permit, but is not subject to requirement of Part 75.
- In general, all monitoring, record keeping, and reporting requirements are met via compliance with the Acid Rain Permitting program and the applicable permit requirements, stack testing and CEMS. Compliance certifications presented in this application presume that excess emissions reporting in accordance with the permit emissions limits and compliance requirements meet the intent of the applicable NSPS requirements.
- Permit Conditions 24 and 45 requires that compliance with the SO₂ emission limit shall be demonstrated via fuel sulfur content and through a custom fuel monitoring program.
- The Acid Rain Compliance test Protocols submitted in 1994 and 2002 and the performance test protocols, submitted in 1994 and 2002 served as the compliance test plans for all initial testing. The Part 75 Monitoring Plan as approved by the EPA and FDEP, will assist in the ongoing compliance with the requirement associated with the issued permits and Title V.
- No violations of the referenced permits, plans, or regulations have occurred at the site at the time of this submission.

"I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete."


Bob Callery, General Manager


Date

6. Application Forms



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: <i>Auburndale Power Partners, L.P., Auburndale Peaker Energy Center, LLC</i>	
2. Site Name: <i>Auburndale Energy Center</i>	
3. Facility Identification Number:	<i>1050221</i> [] Unknown
4. Facility Location: Street Address or Other Locator: <i>1501 Derby Road</i> City: <i>Auburndale</i> County: <i>Polk</i> Zip Code: <i>33823-4079</i>	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: <i>Benjamin Borsch, P.E., Environmental Manager</i>	
2. Application Contact Mailing Address: Organization/Firm: <i>Calpine Eastern Corporation</i> Street Address: <i>2701 N. Rocky Point Drive, Suite 1200</i> City: <i>Tampa</i> State: <i>FL</i> Zip Code: <i>33607</i>	
3. Application Contact Telephone Numbers: Telephone: <i>(813) 637-7305</i> Fax: <i>(813) 637-7395</i>	

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- ☐ Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- ☐ Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

- ☒ Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: 1050221-004-AC

Operation permit number to be revised: 1050221-002-AV

- ☐ Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

- ☐ Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: _____

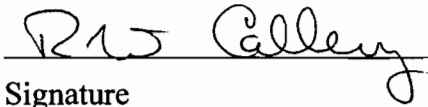
Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- ☐ Air construction permit to construct or modify one or more emissions units.
- ☐ Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- ☐ Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: <i>Bob Callery, General Manager</i>
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: <i>Calpine Eastern Corporation</i> Street Address: <i>1501 Derby Avenue</i> City: <i>Auburndale</i> State: <i>FL</i> Zip Code: <i>33823</i>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <i>(863) 965-1561</i> Fax: <i>(863) 965-1924</i>
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.</i> <div style="display: flex; justify-content: space-between;"><div style="text-align: center;"> Signature</div><div style="text-align: center;"><u>6-26-07</u> Date</div></div>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: <i>Benjamin M. H. Borsch</i> Registration Number: <i>0043875</i>
2. Professional Engineer Mailing Address: Organization/Firm: <i>Calpine Eastern Corporation</i> Street Address: <i>2701 N. Rocky Point Drive, Suite 1200</i> City: <i>Tampa</i> State: <i>FL</i> Zip Code: <i>33607</i>
3. Professional Engineer Telephone Numbers: Telephone: <i>(813) 637-7305</i> Fax: <i>(813) 637-7395</i>

4. 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.

If the purpose of this application is to obtain a Title V source 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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.



Signature _____

Date 6/27/02

Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
<i>EU-001</i>	<i>156 MWe (nominal) Natural Gas Fired Combustion Turbine w/ Unfired HRSG</i>		
<i>EU-002</i>	<i>Fuel Oil Storage Tanks (2)</i>		
<i>EU-003</i>	<i>Emergency Generators Note: This unit is unregulated and is discussed in Appendix D</i>		
<i>EU-004</i>	<i>Heating Units and Engines Note: This unit is unregulated and is discussed in Appendix D</i>		
<i>EU-005</i>	<i>Surface Coating Operations Note: This unit is unregulated and is discussed in Appendix D</i>		
<i>EU-006</i>	<i>104 MWe (nominal) Natural Gas Fired Combustion Turbine</i>		

Application Processing FeeCheck one: ☐ Attached - Amount: \$ _____ ☒ Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Renewal application for existing facility including emissions units EU-001 through EU-005, covered by operating permit 1050221-002-AV. Application also includes:

- ◆ *the addition of a second combustion turbine, EU-006 constructed under permit 1050221-004-AC;*
- ◆ *request to delete sulfuric acid mist requirement from the permit*

2. Projected or Actual Date of Commencement of Construction:

See comment below.

3. Projected Date of Completion of Construction:

See comment below.

Application Comment

Facilities covered by operating permit 1050221-004-AV commenced operation March 1994.

Facilities covered by construction permit 1050221-002-AC began construction in September 2001. According to the definition of 40 CFR Part 75, commercial operation commenced on May 15, 2002.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 420.8 North (km): 3,103.2			
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: C	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4931
7. Facility Comment (limit to 500 characters): <i>This facility consists of two units, separately owned (emission units EU-001 through EU-005 are owned by Auburndale Power Partners, L.P., emission unit EU-006 is owned by Auburndale Energy Center, LLC) but under common control. All units are operated by Calpine Eastern Corporation.</i>			

Facility Contact

1. Name and Title of Facility Contact: <i>Jeffrey Shaske, Compliance Specialist</i>		
2. Facility Contact Mailing Address: Organization/Firm: <i>Calpine Eastern Corporation</i> Street Address: <i>1501 Derby Road</i> City: <i>Auburndale</i> State: <i>FL</i> Zip Code: <i>33823</i>		
3. Facility Contact Telephone Numbers: Telephone: <i>(863) 965-1561</i> Fax: <i>(863) 965-1924</i>		

Facility Regulatory Classifications**Check all that apply:**

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input checked="" type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters): <i>Please see Section 3.1.2 of the report text for additional information.</i>	

List of Applicable Regulations

<i>Chapter 62-4</i>	<i>Permits – General Procedures for Permitting</i>
<i>Chapter 62-4, Rule 62-4.050 (4)(a)(1)</i>	<i>Processing Fee Air Pollution Permits</i>
<i>Chapter 62-103</i>	<i>Administrative Procedure – Public Notice of Application, Proposed Agency Action, and Petition for Administrative Hearing</i>
<i>Chapter 62-204, Rule 62-204.220</i>	<i>Ambient Air Quality Protection</i>
<i>Chapter 62-204, Rule 62-204.240 (1)(d)</i>	<i>Ambient Air Quality Standards</i>

<i>Chapter 62-204, Rule 62-204.260</i>	<i>Prevention of Significant Deterioration Increments</i>
<i>Chapter 62-204, Rule 62-204.360</i>	<i>Designation of Prevention of Significant Deterioration Areas</i>
<i>Chapter 62-204, Rule 62-204.800</i>	<i>Federal Regulations Adopted by Reference</i>
<i>Chapter 62-210, Rule 62-210.300 (1)</i>	<i>Air Permits Required (Air Construction)</i>
<i>Chapter 62-210, Rule 62-210.300 (2)</i>	<i>Major Source Operating Permits</i>
<i>Chapter 62-210, Rule 62-210.300 (3)</i>	<i>Exemptions</i>
<i>Chapter 62-210, Rule 62-210.300 (5)</i>	<i>Notification of Startup (Applies to facilities with operating permits where there are extended shutdown periods greater than 1 year.)</i>
<i>Chapter 62-210, Rule 62-210.300 (6)</i>	<i>Emissions Unit Reclassification (Applies to facilities with expired or revoked operating permits.)</i>
<i>Chapter 62-210, Rule 62-210.350</i>	<i>Public Notice and Comments (References Chapter 62.103) Additional notices are required for Title V facilities.</i>
<i>Chapter 62-210, Rule 62-210.370</i>	<i>Reports (Annual Reporting Requirements)</i>
<i>Chapter 62-210, Rule 62-210.550</i>	<i>Stack Height Policy</i>
<i>Chapter 62-210, Rule 62-210.650</i>	<i>Circumvention</i>
<i>Chapter 62-210, Rule 62-210.700</i>	<i>Excess Emissions</i>
<i>Chapter 62-210, Rule 62-210.900</i>	<i>Forms and Instructions</i>
<i>Chapter 62-212, Rule 62-212.300</i>	<i>General Preconstruction Review Requirements and Annual Reports (Forms and Instructions)</i>
<i>Chapter 62-212, Rule 62-212.400</i>	<i>Prevention of Significant Deterioration (PSD) – Florida construction review requirements for construction in clean air areas.</i>

<i>Chapter 62-213, Rule 62-213</i>	<i>Operating Permits for Major Sources of Air Pollution (Annual Fees, Forms and Instructions, Permit Revisions and Content, and Permit Shield)</i>
<i>Chapter 62-214, Rule 62-214</i>	<i>Requirements for Sources Subject to the Federal Acid Rain Program</i>
<i>Chapter 62-256, Rule 62-256</i>	<i>Prohibitions (Opening Burning)</i>
<i>Chapter 62-296, Rule 62-296.320</i>	<i>General Pollutant Emission Limiting Standards (Objectionable Odors, Open Burning, Unconfined Emissions of Particulate Matter)</i>
<i>Chapter 62-297, Rule 62-297.310</i>	<i>General Test Requirements</i>
<i>Chapter 62-297, Rule 62-297.401</i>	<i>Compliance Test Methods</i>
<i>Chapter 62-297, Rule 62-297.520</i>	<i>EPA Continuous Monitor Performance Specifications</i>
<i>Chapter 62-297, Rule 62-297.620</i>	<i>Exceptions and Approval of Alternate Procedures and Requirements. (Testing)</i>
<i>40 CFR Part 52, Section 52.21</i>	<i>Prevention of significant deterioration of air quality. Those parts of the CFR in addition to or more stringent than the requirements in FDEP rules (62-212.400)</i>
<i>40 CFR Part 72 and 75</i>	<i>Acid Rain Program (NO_x) and Continuous Emissions Monitoring</i>
<i>40 CFR Part 60, Subpart A</i>	<i>General Provisions, New Source Performance Standards</i>
<i>40 CFR Part 60, Subpart GG (60.330 through 60.335)</i>	<i>Standards of Performance for Stationary Gas Turbines</i>
<i>See Section 4 of the report text for additional information.</i>	

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C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID: <u>Appendix A</u> [] Not Applicable [] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: <u>Appendix A</u> [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: <u>Appendix B</u> [] Not Applicable [] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: <u>Appendix C</u> [] Not Applicable [] Waiver Requested
5. Fugitive Emissions Identification: [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
6. Supplemental Information for Construction Permit Application: [] Attached, Document ID: _____ [X] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: [X] Attached, Document ID: <u>Appendix E</u> [] Not Applicable
9. List of Equipment/Activities Regulated under Title VI: [X] Attached, Document ID: <u>Appendix F</u> [] Equipment/Activities On site but Not Required to be Individually Listed [] Not Applicable
10. Alternative Methods of Operation: [X] Attached, Document ID: <u>Appendix G</u> [] Not Applicable
11. Alternative Modes of Operation (Emissions Trading): [] Attached, Document ID: _____ [X] Not Applicable
12. Identification of Additional Applicable Requirements: [] Attached, Document ID: _____ [X] Not Applicable
13. Risk Management Plan Verification: [] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) [] Plan to be submitted to CEPPO (Date required: _____) [X] Not Applicable
14. Compliance Report and Plan: [] Attached, Document ID: <u>Section 5</u> [] Not Applicable
15. Compliance Certification (Hard-copy Required): [] Attached, Document ID: <u>Section 5</u> [] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <i>156 MWe (nominal) Natural Gas Fired Combustion Turbine with unfired Heat Recovery Steam Generator</i>			
4. Emissions Unit Identification Number:		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
ID: <i>EU-0001</i>			
5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit? [X] Yes
<i>A</i>	<i>March 1994</i>	<i>49</i>	
9. Emissions Unit Comment: (Limit to 500 Characters) <i>The combustion turbine is a Siemens Westinghouse 501D5. The unit has a nominal rating of 156 MWe, including the capacity of the steam turbine, at 100% load, 1,214 MMBtu/hr (LHV), at ISO conditions. Generating capacity and heat input will vary with seasonal weather conditions.</i>			

Emissions Unit Control Equipment

A.

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Selective Catalytic Reduction is employed to reduce emissions of NOx. This system was added to the unit in October and November 2000.

2. Control Device or Method Code(s): 065

B.

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Water injection is used for NOx control during fuel oil firing and may be used for additional NOx reduction during natural gas firing

2. Control Device or Method Code(s): 028

C.

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Clean fuel (natural gas and low sulfur fuel oil) will be combusted in the combustion turbine to minimize emissions of SO₂, PM, and PM₁₀. This code (030) is the closest match for low sulfur fuel, also.

2. Control Device or Method Code(s): 030

Emissions Unit Details

1. Initial Startup Date: <i>March 1994</i>		
2. Long-term Reserve Shutdown Date: <i>Not Applicable</i>		
3. Package Unit: <i>Combustion Turbine</i> <div style="display: flex; justify-content: space-between;"> Manufacturer: <i>Siemens Westinghouse</i> Model Number: <i>SW 501D5</i> </div>		
4. Generator Nameplate Rating: <i>Appr. 104 Simple Cycle and 156 Combined Cycle</i> MW <i>Unit will not be operated in Simple Cycle mode</i>		
5. Incinerator Information: <i>Not Applicable</i>		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: <i>1,214 MMBtu/hr (LHV) @ ISO Conditions</i>	mmBtu/hr
2. Maximum Incineration Rate: <i>Not Applicable</i>	lb/hr tons/day
3. Maximum Process or Throughput Rate: <i>Not Applicable</i>	
4. Maximum Production Rate: <i>156 MWe @ ISO conditions</i>	
5. Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): <i>The heat input will vary with load conditions and ambient air temperatures. Wet compression is an allowed operating mode at temperatures above 60 °F (FDEP Permit Modification 1050221-005-AC, issued 2/26/02)</i>	

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

<i>Chapter 62-204, Rule 62-204 (1)(d)</i>	<i>Ambient Air Quality Standards</i>
<i>Chapter 62-210, Rule 62-210.300 (1)</i>	<i>Air Permits</i>
<i>Chapter 62-212, Rule 62-212.400</i>	<i>Prevention of Significant Deterioration (PSD) – Florida construction review requirements for construction in clean air areas.</i>
<i>40 CFR Part 52, Section 52.21</i>	<i>Prevention of significant deterioration of air quality. Those parts in addition to requirements in FDEP rules (62-212.400</i>
<i>40 CFR Part 72 and 75</i>	<i>Acid Rain Program (NO_x) and Continuous Emission Monitoring</i>
<i>40 CFR Part 60, Subpart A</i>	<i>General Provisions, New Source Performance Standards</i>
<i>40 CFR Part 60, Subpart GG (60.330 through 60.335)</i>	<i>Standards of Performance for Stationary Gas Turbines</i>
<i>40 CFR 60§60.332(a)(1)</i>	<i>Natural Gas Firing: NO_x emissions shall not exceed 0.0075* (14.4/ Rated Capacity in kJ/Watt-Hr)+ F, where rated capacity for the worst-case operating mode is 13.48 kJ/Watt – Hr for 1,101.9 MMBtu/hr heat input and 77.6 MWe. F is 0. This correlates to an emission limited of 0.0080% NO_x @15% O₂, dry basis or 80 ppmvd @ 15% O₂, for the Auburndale turbines at 50% load and 92°F based on vendor data for near ISO conditions. This case represents the most stringent limit for all operating modes.</i>
<i>40 CFR 60§60.332(f)</i>	<i>Stationary gas turbines using water or steam injection for control of NO_x emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.</i>
<i>40 CFR 60§60.333(a)</i>	<i>SO₂ emissions shall never exceed 150 ppmv @ 15% O₂ dry basis.</i>
<i>40 CFR 60§60.333(b)</i>	<i>Fuel shall not be burned which is in excess of 0.8% by weight sulfur.</i>

40 CFR 60§60.334(a)	<i>The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within +5.0 percent and shall be approved by the Administrator. The turbines at the Auburndale Energy Campus have been permitted to use NO_x CEMS in lieu of this requirement by FDEP.</i>
40 CFR 60§60.334(b)	<i>Sulfur and nitrogen content of fuel being fired. Calpine is proposing that NO_x CEMS be used in lieu of daily monitoring of the nitrogen content in the natural gas fired in the combustion turbine and because pipeline quality natural gas will be fired. This provision exists in the APP permit. APP is permitted to use natural gas sulfur content reported by the gas supplier, and checked by weekly in lieu of daily monitoring of the sulfur content of natural gas. Fuel Oil is sampled for sulfur content with each received shipment.</i>
40 CFR 60§60.334(c)	<i>Monitoring of Operations – For the purpose of reports required under §60.7(c).</i>
40 CFR 60§60.335	<i>Performance Testing Requirements.</i>
<i>Appendix M contains a copy of the current Title V permit (1050221-002-AV) with subsequent pages</i>	<i>Specific Performance, record keeping, and reporting requirements.</i>

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? <i>STK-0001</i>		2. Emission Point Type Code: <i>1</i>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <i>The natural gas-fired combustion turbine exhaust gases will pass through the heat recovery steam generator (HRSG) and exit through the stack.</i>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <i>EU-0001</i>			
5. Discharge Type Code: <i>V</i>	6. Stack Height: <i>160</i> feet	7. Exit Diameter: <i>18</i> feet	
8. Exit Temperature: Appr. 196 - 216 °F	9. Actual Volumetric Flow Rate: <i>See Comments</i> <i>839, 747 acfm</i>	10. Water Vapor: <i>Approximately 10 %</i>	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: <i>Not Applicable</i> feet	
13. Emission Point UTM Coordinates: Zone: <i>17</i> East (km): <i>420.8</i> North (km): <i>3103.3</i>			
14. Emission Point Comment (limit to 200 characters): <i>Exhaust data based on natural gas firing at 100% load and 72 °F ambient temperature.</i>			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <i>Natural Gas Combustion for the Combustion Turbine.</i>		
2. Source Classification Code (SCC): <i>2-01-002-01 Internal Combustion Electric Generation, Natural Gas, Turbine</i>		3. SCC Units: <i>Million Cubic Feet Burned</i>
4. Maximum Hourly Rate: <i>1.252×10^6 scf @ 1,000Btu/scf</i>	5. Maximum Annual Rate: <i>$10,976 \times 10^6$ scf @ 1,000 Btu/scf</i>	6. Estimated Annual Activity Factor: <i>Not Applicable</i>
7. Maximum % Sulfur: <i>Negligible</i>	8. Maximum % Ash: <i>Negligible</i>	9. Million Btu per SCC Unit: <i>1,000 MMBtu/10^6 scf</i>
10. Segment Comment (limit to 200 characters): <i>Several Sources Classification Codes (SCC) were close matches to the proposed unit, however, the SCC used is the same as that used for US EPA AP-42 5th Ed. Section 3.1. (Note: vendor emissions information was used in calculations for all emissions estimates rather than values present in Section 3.1 of AP-42).</i>		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <i>No. 2 Fuel Oil Combustion for the Combustion Turbine.</i>		
2. Source Classification Code (SCC): <i>2-01-002-01 Internal Combustion Electric Generation, Turbine</i>		3. SCC Units: <i>Thousand Gallons Burned</i>
4. Maximum Hourly Rate: <i>9.56 x 10³ gallons</i>	5. Maximum Annual Rate: <i>3824 x 10³ gallons</i>	6. Estimated Annual Activity Factor: <i>Not Applicable</i>
7. Maximum % Sulfur: <i>0.05</i>	8. Maximum % Ash: <i>Negligible</i>	9. Million Btu per SCC Unit: <i>131</i>
10. Segment Comment (limit to 200 characters): <i>Operation using No. 2 fuel oil is limited to 400 hours per year.</i>		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<i>NOX</i>	<i>065</i>	<i>030</i>	<i>EL</i>
<i>CO</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>PM</i>	<i>0</i>	<i>030</i>	<i>SM</i>
<i>PM10</i>	<i>0</i>	<i>030</i>	<i>SM</i>
<i>SO2</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>VOC</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>PB</i>	<i>0</i>	<i>0</i>	<i>EL</i>
		<i>Note: 030 is used for clean fuel firing.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>CO</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>
3. Potential Emissions: <i>73.0 lb/hour 196.4 tons/year</i> <i>Emissions based on ISO conditions as reflected in PSD permit</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: <i>0.0358 lb/MMBtu</i> Reference: <i>Manufacturer Data</i>	7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i>	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Not to exceed 21 ppm_{vd} corrected to 15% O₂ at minimum load and 43.5 lb/hr. These values are consistent with the current permit.</i>	4. Equivalent Allowable Emissions: <i>43.5 lb/hour 190.5 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage and annual test by Method 10.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per specific condition A.10 of permit 1050221-002-AC</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Not to exceed 25 ppm_{vd} corrected to 15% O₂ and 73 lb/hr when firing No. 2 fuel oil. These values are consistent with the current permit.</i>	4. Equivalent Allowable Emissions: <i>73 lb/hour 14.6 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage and annual test by Method 10.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per specific condition A.10 of permit 1050221-002-AC</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>NOX</i>	2. Total Percent Efficiency of Control: <i>75%</i>
3. Potential Emissions: <i>230.0 lb/hour</i> <i>Emissions based on ISO conditions as reflected in current permit</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters): <u><i>Annual Emissions Calculation</i></u> <i>Limited to 177 TPY in order to meet requirements for netting out with EU-006 per FDEP permit 1050221-004-AC.</i>	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i>	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>OTHER BACT / ESC PSD</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>15 ppm_{vd} @ 15% O₂ based on 24 hour block average. Values are consistent with current permit.</i>	4. Equivalent Allowable Emissions: <i>78.6 lb/hour (natural gas)</i> <i>177 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>NOX CEMS (CEMS is also used in lieu of nitrogen fuel sampling.) RATA test (Method 7E) testing replaces annual Method 20.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters). <i>This proposed emission restriction is more stringent than that required be 40 CFR Part 60, Subpart GG, Section 60.332(a)(1) which was calculated to be approximately 80 ppmvd @ 15% O₂ for the worst cast load and ambient conditions.</i> <i>Specific emissions conditions are expected to be consistent with permits 1050221-002-AV and 1050221-004-AC</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>42 ppm_{vd} @ 15% O₂ based on 24 hour block average. Values are consistent with current permit.</i>	4. Equivalent Allowable Emissions: <i>230 lb/hour (natural gas) 46 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>NOX CEMS (CEMS is also used in lieu of nitrogen fuel sampling.) RATA test (Method 7E) testing replaces annual Method 20.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters). <i>Specific emissions conditions are expected to be consistent with permits 1050221-002-AV and 1050221-004-AC</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PM</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>
3. Potential Emissions: <i>36.8 lb/hour</i> <i>51.3 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i> <i>PM10 emissions assumed to be equivalent to PM emissions.</i>	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 10% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: <i>10.5 lb/hour 46.0 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. A.4, A.5, and A.6 of Permit 1050221-002-AV.</i> <i>Annual testing is waived as long as opacity emissions do not exceed 10% per specific conditions of Permit 1050221-002-AV.</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 10% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: 36.8 lb/hour 7.36 tons/year
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. A.4, A.5, and A.6 of Permit 1050221-002-AV. Emissions limits applicable during No. 2 oil firing. Use of No. 2 fuel oil limited to 400 hrs/yr.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PM10</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>36.8 lb/hour</i>	<i>51.3 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i> <i>PM10 emissions assumed to be equivalent to PM emissions.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 10% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: <i>10.5 lb/hour 46.0 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. A.4, A.5, and A.6 of Permit 1050221-002-AV.</i> <i>Annual testing is waived as long as opacity emissions do not exceed 10% per specific conditions of Permit 1050221-002-AV.</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 10% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: 36.8 lb/hour 7.36 tons/year
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with recordkeeping of fuel usage. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. A.4, A.5, and A.6 of Permit 1050221-002-AV. Emissions limits applicable during No. 2 oil firing. Use of No. 2 fuel oil limited to 400 hrs/yr.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>SO₂</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>70.0 lb/hour</i>	<i>181.2 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: <i>0.0006 lb/MMBtu</i> Reference: <i>Engineering Calculations</i>		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters): 		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Natural Gas Usage</i>	4. Equivalent Allowable Emissions: <i>40 lb/hour 175.2 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Annual calculation based on fuel usage and 0.0006 lb SO₂/MMBtu emission factor</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition A.7 of Permit 1050221-004-AV</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>No. 2 Fuel Oil Firing</i>	4. Equivalent Allowable Emissions: <i>70 lb/hour 14 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>None required.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emissions limits applicable during No. 2 fuel oil firing.</i> <i>Use of No. 2 fuel oil limited to 400 hrs/yr</i> <i>Per Specific Condition A.7 of Permit 1050221-002-AV.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>VOC</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>10 lb/hour</i>	<i>27.1 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas (8,460 hr/yr) and No. 2 fuel oil (400 hrs/yr).</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Natural Gas Firing</i>	4. Equivalent Allowable Emissions: <i>6.0 lb/hour 26.3 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with record keeping of fuel usage, and annual calculation.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emission limits during Natural Gas firing.</i> <i>Per Specific Condition A.9 of permit 1050221-002-AV</i>	

Emissions Unit Information Section 1 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Fuel Oil Firing</i>	4. Equivalent Allowable Emissions: <i>10.0 lb/hour 2.0 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with record keeping of fuel usage and annual calculation.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emission limits during Fuel Oil firing. Per Specific Condition A.9 of permit 1050221-002-AV</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PB</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>0.13 lb/hour</i>	<i>0.03 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential emissions set equal to allowable emissions</i> <i>Hourly rate based on No. 2 Fuel Oil combustion.</i> <i>Annual emissions based on combustion of No. 2 fuel oil.</i>		

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: <i>0.13 lb/hour 0.03 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Limitation of fuel oil combustion to 400 hrs/yr.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition A.3 of Permit No. 1050221-002-AV</i>	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: <i>VE10</i>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <i>10 % (6 min. avg.)</i> Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <i>Initial compliance testing then annually when operating the combustion turbine. Annual opacity testing is required for fossil fuel steam generators, per F.A.C. Rule 62-296.405 (1) (a)].</i>	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: <i>VE10</i>	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <i>10 %</i> Exceptional Conditions: <i>20% (other than base load)</i> Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <i>Annual testing by Method 9.</i>	
5. Visible Emissions Comment (limit to 200 characters): <i>Per Specific Conditions A.4 and A.5 of Permit No. 1050221-002-AV</i>	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: <u>Appendix B</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: <u>Appendix H</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: _____ [] Not Applicable [] Waiver Requested <i>See Sections 2 and 5 of the report text</i>
4. Description of Stack Sampling Facilities [X] Attached, Document ID: <u>Appendix I</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report [] Attached, Document ID: _____ [X] Previously submitted, Date: RATA Completed 10/30/01. _____ [] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application [] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable <i>None Identified.</i>
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <i>Appendix G</i> [] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [X] Not Applicable
13. Identification of Additional Applicable Requirements [] Attached, Document ID: _____ [X] Not Applicable
14. Compliance Assurance Monitoring Plan [X] Attached, Document ID: <i>Appendix J</i> _____ [] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>Appendix K</u> [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ [] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <i>Distillate Fuel Oil Storage Tanks STR-001 and STR-002</i>			
4. Emissions Unit Identification Number:		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
ID: <i>EU-0002</i>			
5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
<i>A</i>	<i>March 1994</i>	<i>49</i>	<input type="checkbox"/> Yes
9. Emissions Unit Comment: (Limit to 500 Characters)			
<i>Distillate fuel oil storage tanks STR-001 and STR-002 qualify as a group of unregulated process units and therefore the two tanks are classified as an unregulated emissions unit.</i>			
<i>Estimated emissions from STR-001 and STR-002 are collectively below significant amounts, i.e. less than 5 tons per year of VOC.</i>			

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
24	hours/day	7 days/week
52	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): <i>Not applicable, unregulated emissions unit.</i>		

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet	
8. Exit Temperature:	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor:	
11. Maximum Dry Standard Flow Rate:		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): <i>Not applicable, Unregulated emissions unit</i>			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <i>Distillate Fuel Oil Storage Tank Breathing Losses</i>		
2. Source Classification Code (SCC): <i>4-03-010-19</i>		3. SCC Units: <i>1000 Gallons Stored</i>
4. Maximum Hourly Rate: <i>0.00</i>	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash: <i>None</i>	9. Million Btu per SCC Unit: <i>N/A</i>
10. Segment Comment (limit to 200 characters): <i>Field 6, Estimated Annual Activity Factor, has unit of thousand gallons stored and represents the total storage capacity of STR-001 and STR-002.</i> <i>Total storage capacity of STR-001 and STR-002 (Field 6) is 1,000,000 gallons.</i>		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<i>VOC</i>	<i>088</i>		<i>WP</i>

(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): <i>Not Applicable.</i>	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): <i>Not Applicable</i>	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [] Attached, Document ID:____ [X] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification [] Attached, Document ID:_____ [X] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [] Attached, Document ID:_____ [X] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities [] Attached, Document ID:_____ [X] Not Applicable [] Waiver Requested
5. Compliance Test Report [] Attached, Document ID:_____ [] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID:_____ [X] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID:_____ [X] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application [] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment: Not Applicable, Unregulated Emissions Unit.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

<p>11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>15. Acid Rain Part Application (Hard-copy Required)</p> <p><input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>Appendix E</u></p> <p><input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____</p> <p><input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <i>104 MWe (nominal) Natural Gas Fired Combustion Turbine.</i>			
4. Emissions Unit Identification Number: ID: <i>EU-0006</i>		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
5. Emissions Unit Status Code: <i>A</i>	6. Initial Startup Date: <i>June 2002</i>	7. Emissions Unit Major Group SIC Code: <i>49</i>	8. Acid Rain Unit? <input checked="" type="checkbox"/> Yes
9. Emissions Unit Comment: (Limit to 500 Characters) <i>The combustion turbine is a Siemens Westinghouse 501D5A. The unit has a nominal rating of 104 MWe operating in simple cycle mode.</i>			

Emissions Unit Control Equipment

A.

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Water injection for NOx control, during both natural gas and fuel oil firing. Limited firing hours.

2. Control Device or Method Code(s): *028*

B.

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Initial Startup Date:
June 2002

2. Long-term Reserve Shutdown Date:
Not Applicable

3. Package Unit: *Combustion Turbine*
 Manufacturer: *Siemens Westinghouse* Model Number: *SW 501D5A*

4. Generator Nameplate Rating: *135 MW*

5. Incinerator Information: *Not Applicable*
 Dwell Temperature: °F
 Dwell Time: seconds
 Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1369	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
<i>Not Applicable</i>		
3. Maximum Process or Throughput Rate:		
<i>Not Applicable</i>		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
24	hours/day	7 days/week
<i>See Comment</i>	weeks/year	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): <i>The heat input will vary with load conditions and ambient air temperatures. Wet compression is an allowed operating mode at temperatures above 60 °F (FDEP Permit Modification 1050221-006-AC, issued April 2002)</i>		

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

<i>Chapter 62-204, Rule 62-204 (1)(d)</i>	<i>Ambient Air Quality Standards</i>
<i>Chapter 62-210, Rule 62-210.300 (1)</i>	<i>Air Permits</i>
<i>Chapter 62-212, Rule 62-212.400</i>	<i>Prevention of Significant Deterioration (PSD) – Florida construction review requirements for construction in clean air areas.</i>
<i>40 CFR Part 52, Section 52.21</i>	<i>Prevention of significant deterioration of air quality. Those parts in addition to requirements in FDEP rules (62-212.400</i>
<i>40 CFR Part 72 and 75</i>	<i>Acid Rain Program (NO_x) and Continuous Emission Monitoring</i>
<i>40 CFR Part 60, Subpart A</i>	<i>General Provisions, New Source Performance Standards</i>
<i>40 CFR Part 60, Subpart GG (60.330 through 60.335)</i>	<i>Standards of Performance for Stationary Gas Turbines</i>
<i>40 CFR 60§60.332(a)(1)</i>	<i>Natural Gas Firing: NO_x emissions shall not exceed 0.0075* (14.4/ Rated Capacity in kJ/Watt-Hr)+ F, where rated capacity for the worst-case operating mode is 13.48 kJ/Watt – Hr for 1,101.9 MMBtu/hr heat input and 77.6 MWe. F is 0. This correlates to an emission limited of 0.0080% NO_x @15% O₂, dry basis or 80 ppmvd @ 15% O₂, for either of the Auburndale turbines at 50% load and 92°F based on vendor data for near ISO conditions. This case represents the most stringent limit for all operating modes.</i>
<i>40 CFR 60§60.332(f)</i>	<i>Stationary gas turbines using water or steam injection for control of NO_x emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.</i>
<i>40 CFR 60§60.333(a)</i>	<i>SO₂ emissions shall never exceed 150 ppmv @ 15% O₂ dry basis.</i>
<i>40 CFR 60§60.333(b)</i>	<i>Fuel shall not be burned which is in excess of 0.8% by weight sulfur.</i>

<i>40 CFR 60§60.334(a)</i>	<i>The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within +5.0 percent and shall be approved by the Administrator.</i>
<i>40 CFR 60§60.334(b)</i>	<i>Sulfur and nitrogen content of fuel being fired. Calpine is proposing that NO_x CEMS be used in lieu of daily monitoring of the nitrogen content in the natural gas fired in the combustion turbine and because pipeline quality natural gas will be fired. This provision exists in the APP permit. APP is permitted to use natural gas sulfur content reported by the gas supplier, and checked by weekly in lieu of daily monitoring of the sulfur content of natural gas. Fuel Oil is sampled for sulfur content with each received shipment.</i>
<i>40 CFR 60§60.334(c)</i>	<i>Monitoring of Operations – For the purpose of reports required under §60.7(c).</i>
<i>40 CFR 60§60.335</i>	<i>Performance Testing Requirements.</i>
<i>Appendix M contains a copy of the current Title V permit (1050221-oo2-AV) with subsequent pages</i>	<i>Specific Performance, record keeping, and reporting requirements.</i>

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? <i>STK-0006</i>		2. Emission Point Type Code: <i>1</i>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <i>The natural gas-fired combustion turbine exhaust gases will pass through the heat recovery steam generator (HRSG) and exit through the stack.</i>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <i>EU-0001</i>			
5. Discharge Type Code: <i>V</i>	6. Stack Height: <i>50</i> feet	7. Exit Diameter: <i>22</i> feet <i>Equivalent Diameter</i>	
8. Exit Temperature: <i>994</i> °F	9. Actual Volumetric Flow Rate: <i>See Comments</i> <i>1,887,143 acfm</i>	10. Water Vapor: <i>Approximately 10 %</i>	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: <i>Not Applicable</i> feet	
13. Emission Point UTM Coordinates: Zone: <i>17</i> East (km): <i>420.8</i> North (km): <i>3103.3</i>			
14. Emission Point Comment (limit to 200 characters): <i>Exhaust data based on natural gas firing at ISO operating condition for natural gas; for oil 1,006 F and 1,897,143 ACFM.</i>			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <i>Natural Gas Combustion for the Combustion Turbine.</i>		
2. Source Classification Code (SCC): <i>2-01-002-01 Internal Combustion Electric Generation, Natural Gas, Turbine</i>	3. SCC Units: <i>Million Cubic Feet Burned</i>	
4. Maximum Hourly Rate: <i>1.49 x 10⁶ scf @ 1,000Btu/scf</i>	5. Maximum Annual Rate: <i>2,227.4 x 10⁶ scf @ 1,000 Btu/scf</i>	6. Estimated Annual Activity Factor: <i>Not Applicable</i>
7. Maximum % Sulfur: <i>Negligible</i>	8. Maximum % Ash: <i>Negligible</i>	9. Million Btu per SCC Unit: <i>1,000 MMBtu/10⁶ scf</i>
10. Segment Comment (limit to 200 characters): <i>Several Sources Classification Codes (SCC) were close matches to the proposed unit, however, the SCC used is the same as that used for US EPA AP-42 5th. Ed. Section 3.1. (Note: vendor emissions information was used in calculations for all emissions estimates rather than values present in Section 3.1 of AP-42).</i>		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <i>No. 2 Fuel Oil Combustion for the Combustion Turbine.</i>		
2. Source Classification Code (SCC): <i>2-01-002-01 Internal Combustion Electric Generation, Turbine</i>	3. SCC Units: <i>Thousand Gallons Burned</i>	
4. Maximum Hourly Rate: <i>10.9 x10³ gallons</i>	5. Maximum Annual Rate: <i>4368 x10³ gallons</i>	6. Estimated Annual Activity Factor: <i>Not Applicable</i>
7. Maximum % Sulfur: <i>0.05</i>	8. Maximum % Ash: <i>Negligible</i>	9. Million Btu per SCC Unit: <i>131</i>
10. Segment Comment (limit to 200 characters): <i>Operation using No. 2 fuel oil is limited to 400 hours per year.</i>		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<i>NOX</i>	<i>028</i>	<i>030</i>	<i>EL</i>
<i>CO</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>PM</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>PM10</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>SO2</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>VOC</i>	<i>0</i>	<i>030</i>	<i>EL</i>
<i>PB</i>	<i>0</i>	<i>0</i>	<i>EL</i>
		<i>Note: 030 is used for clean fuel firing</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>CO</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>
3. Potential Emissions: <i>144.0 lb/hour</i> <i>99 tons/year</i> <i>Emissions based on ISO conditions as reflected in PSD permit</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i>	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Not to exceed 10 ppm_{vd} corrected to 15% O₂ at maximum load while firing natural gas. These values are consistent with permit no. 1050221-004-AC.</i>	4. Equivalent Allowable Emissions: <i>141 lb/hour 99 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Continuous emissions monitoring and annual performance tests as specified in conditions 13, 22, 23, and 31 of permit no. 1050221-004-AC.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per specific condition 13 of permit 1050221-004-AC</i>	

Emissions Unit Information Section 3 of 3

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Not to exceed 10 ppm_{vd} corrected to 15% O₂ at maximum load when firing No. 2 fuel oil. These values are consistent with permit no. 1050221-004-AC.</i>	4. Equivalent Allowable Emissions: 144 lb/hour 99 tons/year
5. Method of Compliance (limit to 60 characters): <i>Continuous emissions monitoring and annual performance tests as specified in conditions 13, 22, 23, and 31 of permit no. 1050221-004-AC.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per specific condition 13 of permit 1050221-004-AC.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>NOX</i>	2. Total Percent Efficiency of Control:	
3. Potential Emissions: <i>245.0 lb/hour</i>	<i>115 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters): <u>Annual Emissions Calculation</u> <i>Limited to 115 TPY in order to meet requirements for netting out with EU-001 per FDEP permit 1050221-004-AC.</i>		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>OTHER</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>25 ppm_{vd} @ 15% O₂ based on 24 hour block average. Values are consistent with current permit.</i>	4. Equivalent Allowable Emissions: <i>141 lb/hour (natural gas)</i> <i>115 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>NOX CEMS (CEMS is also used in lieu of nitrogen fuel sampling.) RATA test (Method 7E) testing replaces annual Method 20.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters). <i>This proposed emission restriction is more stringent than that required by 40 CFR Part 60, Subpart GG, Section 60.332(a)(1) which was calculated to be approximately 80 ppmvd @ 15% O₂ for the worst cast load and ambient conditions.</i> <i>Specific emissions conditions are expected to be consistent with permits 1050221-004-AC.</i>	

Emissions Unit Information Section 3 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>42 ppm_{vd} @ 15% O₂ based on 24 hour block average. Values are consistent with current permit.</i>	4. Equivalent Allowable Emissions: <i>245 lb/hour (natural gas) 49 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>NOX CEMS (CEMS is also used in lieu of nitrogen fuel sampling.) RATA test (Method 7E) testing replaces annual Method 20.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters). <i>Specific emissions conditions are expected to be consistent with permit 1050221-004-AC</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PM</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>58.5 lb/hour</i>	<i>13.2 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i> <i>PM10 emissions assumed to be equivalent to PM emissions.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 20% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: <i>2.9 lb/hour 4.0 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>VE (Method 9) test <20% opacity along with the use of clean burning fuels.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. 15 of Permit 1050221-004-AC.</i> <i>Annual testing is waived as long as opacity emissions do not exceed 20% per specific conditions of Permit 1050221-004-AC.</i>	

Emissions Unit Information Section 3 of 3

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 20% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: <i>58.5 lb/hour 11.7 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>VE (Method 9) test <20% opacity along with the use of clean burning fuels. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. 15 of Permit 1050221-002-AV. Emissions limits applicable during No. 2 oil firing. Use of No. 2 fuel oil limited to 400 hrs/yr.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PM10</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>58.5 lb/hour</i>	<i>13.2 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters): 		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i> <i>PM10 emissions assumed to be equivalent to PM emissions.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 20% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: <i>2.9 lb/hour 4.0 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>VE (Method 9) test <20% opacity along with the use of clean burning fuels.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. 15 of Permit 1050221-004-AC.</i> <i>Annual testing is waived as long as opacity emissions do not exceed 20% per specific conditions of Permit 1050221-004-AC.</i>	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>VE test, not to exceed 20% opacity. Tested via Method 9 in accordance with the requirements of the current permit.</i>	4. Equivalent Allowable Emissions: 58.5 lb/hour 11.7 tons/year
5. Method of Compliance (limit to 60 characters): <i>VE (Method 9) test <20% opacity along with the use of clean burning fuels. Annual test via Method 5 or 17 is waived.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition No. 15 of Permit 1050221-002-AV. Emissions limits applicable during No. 2 oil firing. Use of No. 2 fuel oil limited to 400 hrs/yr.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>SO2</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>74.9 lb/hour</i>	<i>30.1 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: <i>0.0006 lb/MMBtu</i> Reference: <i>Engineering Calculations</i>		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>OTHer</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Natural Gas Usage, 2,227,400 MMBtu/yr</i>	4. Equivalent Allowable Emissions: <i>8.5 lb/hour 6.9 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Combustion of clean burning fuels. Annual calculation based on fuel usage and 0.0006 lb SO₂/MMBtu emission factor</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Conditions 5 and 15 of Permit No. 1050221-004-AC</i>	

Emissions Unit Information Section 3 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>OTHER</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>No. 2 Fuel Oil Firing</i>	4. Equivalent Allowable Emissions: <i>74.9 lb/hour 14.98 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>None required.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emissions limits applicable during No. 2 fuel oil firing.</i> <i>Use of No. 2 fuel oil limited to 400 hrs/yr</i> <i>Per Specific Conditions 5 and 15 of Permit 1050221-004-AC.</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>VOC</i>	2. Total Percent Efficiency of Control:	
3. Potential Emissions: <i>19.1 lb/hour</i>	<i>10.1 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential Emissions set equal to allowable emissions</i> <i>Hourly emission rate based on No. 2 fuel oil combustion</i> <i>Annual emissions based on prorated combustion of natural gas and No. 2 fuel oil.</i> <i>Operation on No. 2 fuel oil limited to 400 hr/yr. Operation on natural gas limited to 2,227,400 MMBtu/yr.</i>		

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <i>OTHER</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Natural Gas Firing. 4.0 ppm_{vd} @ 15% O₂</i>	4. Equivalent Allowable Emissions: <i>7.5 lb/hour 6.3 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with record keeping of fuel usage, and annual calculation following initial emissions test.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emission limits during Natural Gas firing.</i> <i>Per Specific Conditions 5 and 16 of permit 1050221-002-AV</i>	

Emissions Unit Information Section 3 of 3

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions: <i>Not Applicable</i>
3. Requested Allowable Emissions and Units: <i>Fuel Oil Firing. 5.0 ppm_{vd} @ 15%O₂</i>	4. Equivalent Allowable Emissions: <i>19.1 lb/hour 3.8 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Good combustion practices along with record keeping of fuel usage and annual calculation following initial emissions test.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Emission limits during Fuel Oil firing. Per Specific Conditions 5 and 16 of permit 1050221-004-AC</i>	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: <i>PB</i>	2. Total Percent Efficiency of Control: <i>Not Applicable</i>	
3. Potential Emissions: <i>0.13 lb/hour</i>	<i>0.03 tons/year</i>	4. Synthetically Limited? <i>Yes</i>
5. Range of Estimated Fugitive Emissions: <i>Not Applicable</i> [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor:		7. Emissions Method Code: <i>0</i>
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <i>Potential emissions set equal to allowable emissions</i> <i>Hourly rate based on No. 2 Fuel Oil combustion.</i> <i>Annual emissions based on combustion of No. 2 fuel oil.</i>		

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code: <i>RULE</i>	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: <i>0.13 lb/hour 0.03 tons/year</i>
5. Method of Compliance (limit to 60 characters): <i>Limitation of fuel oil combustion to 400 hrs/yr.</i>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <i>Per Specific Condition 5 of Permit No. 1050221-004-AC</i>	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: <i>VE20</i>	2. Basis for Allowable Opacity: [X] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <i>Initial compliance testing then annually when operating the combustion turbine. Annual opacity testing by Method 9..</i>	
5. Visible Emissions Comment (limit to 200 characters): <i>Per Specific Conditions 15 of Permit No. 1050221-004-AC</i>	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: Exceptional Conditions: Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Rosemount Analytical Model Number: 195005 Serial Number: U1006368	
5. Installation Date: May 2002	6. Performance Specification Test Date: June 13, 2002
7. Continuous Monitor Comment (limit to 200 characters): <i>Required by Specific Conditions 13 and 31 of Permit No. 1050221-004-AC. The NOx CEMS shall be used in lieu of the water to fuel ratio monitoring system..</i>	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: EM	2. Pollutant(s): O2
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Fisher Rosemount Model Number: NGA2000 Serial Number: 30121567354	
5. Installation Date: May 2002	6. Performance Specification Test Date: June 13, 2002
7. Continuous Monitor Comment (limit to 200 characters): <i>Required by 40 CFR Part 75.</i>	

Emissions Unit Information Section 3 of 3

Continuous Monitoring System: Continuous Monitor 3 of 3

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement: [X] Rule [] Other	
4. Monitor Information: <div style="display: flex; justify-content: space-between;"> <div> Manufacturer: Rosemount Model Number: MLT1.2M </div> <div> Serial Number: </div> </div>	
5. Installation Date: <i>May 2002</i>	6. Performance Specification Test Date: <i>June 13, 2002</i>
7. Continuous Monitor Comment (limit to 200 characters): <i>Required by Special Conditions 14 and 31 of permit number 1050221-004-AC.</i>	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>Appendix B</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>Appendix H</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested <i>See Sections 2 and 5 of the report text</i>
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>Appendix</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable Compliance Test Completed June 13, 14 2002 <p style="text-align: center;">Submittal Required by July 29, 2002</p>
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <i>None Identified.</i>
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>Appendix G</u> [] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: <u> </u> [X] Not Applicable
13. Identification of Additional Applicable Requirements [] Attached, Document ID: <u> </u> [X] Not Applicable
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: <u> </u> [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>Appendix K</u> [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: <u> </u> [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: <u> </u> [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: <u> </u> [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: <u> </u> [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: <u> </u> [] Not Applicable

APPENDIX A

**AREA MAP
FACILITY LAYOUT**

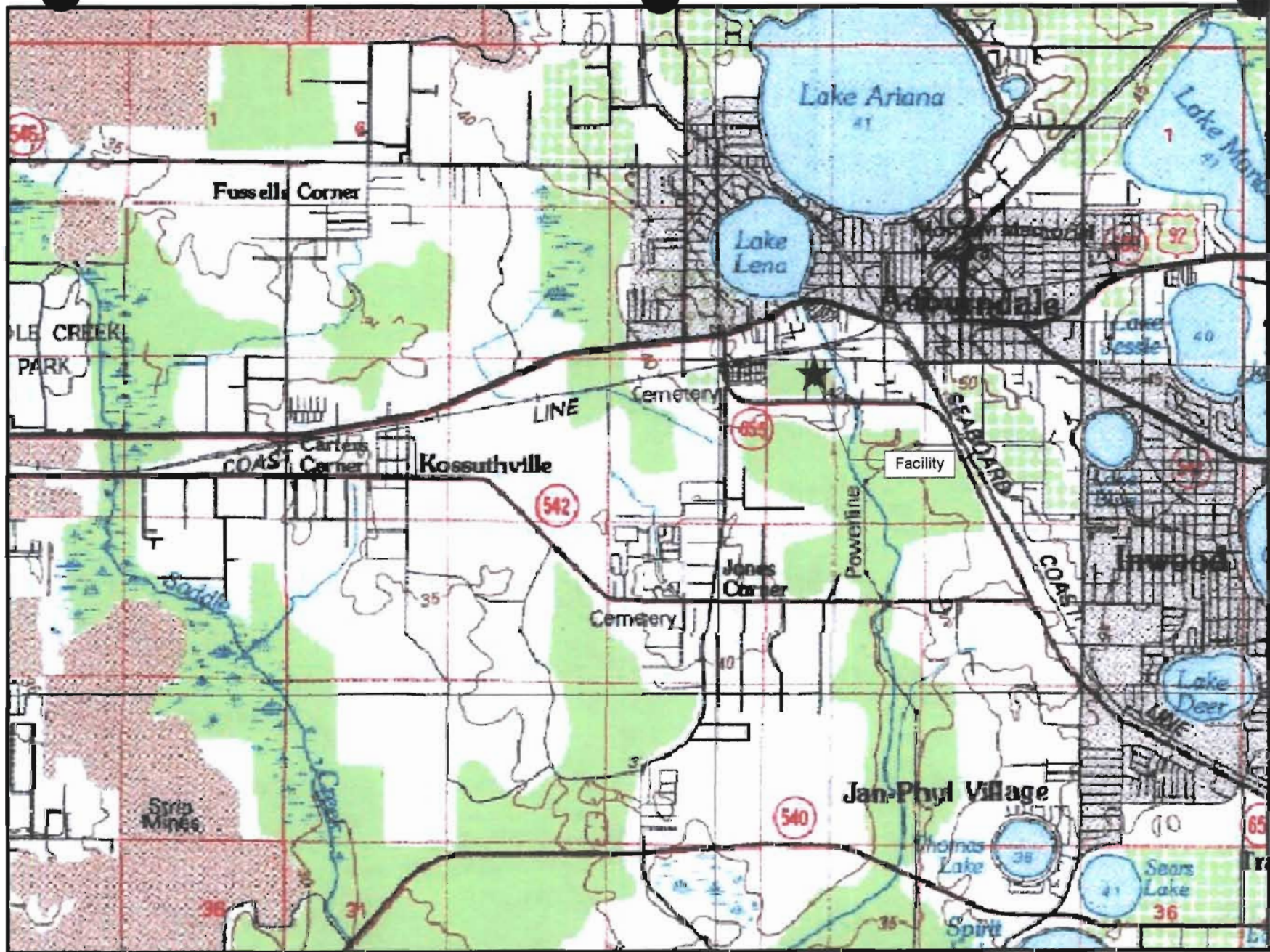


Figure 1-1
Facility Location

Auburnville Power Plant and Auburnville Peaker Energy Center
Auburnville Power Partners, L.P. and Auburnville Peaker Energy Center, L.L.C.
Calpine Eastern Operations



✕	FOUND 4"x4" CONCRETE MONUMENT WITH DISC STAMPED "PICKETT & ASSOC., INC. LB 364"	M/H	LIGHT POLE
R/W	RIGHT OF WAY	W/V	WATER VALVE
EOP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
—OH—	OVERHEAD UTILITY LINES	L/S	LIFT STATION
☆	UTILITY POLE	—	CHAIN LINK FENCE
—	CLY ANCHOR	—STM—	STORM SEWER
O.R.	OFFICIAL RECORDS	A/C	AIR CONDITIONING PAD
TECO	TAMPA ELECTRIC COMPANY	O/F PAD	CONCRETE OVERTFLOW PAD
F/H	FIRE HYDRANT	—SAN—	SANITARY SEWER
C/B	CATCH BASIN	E/T	ELECTRIC TRANSFORMER
		CP TEST	CATHODIC PROTECTION TEST
		<u>~~~~~</u>	HEDGE ROW
		☒	FIRE HYDRANT HOUSE

1. COMPREHENSIVE PLAN AND LAND DEVELOPMENT CODE

- IMPERVIOUS SURFACE RATIO: 71%
- NO TREES OR TREE STANDS ARE LOCATED ON SITE
- NO PARKING (EXPANSION REQUIRED): NO EMPLOYEES WILL BE REQUIRED
- NO NEW SIGNS, DUMPSTERS AND TRASH COMPACTORS PROPOSED
- NO COMMON AREAS OR OPEN SPACE
- NO DEVELOPMENT PHASING
- NO DEVELOPMENT LIMITATION OR RESOURCE PROTECTION AREAS

2. UTILITIES

- NO ADJACENT EASEMENTS OR RIGHTS OF WAYS AFFECTED
- NO PROPOSED FACILITY EASEMENTS FOR MAINTENANCE BY POLK COUNTY
- NO OFFSITE UTILITY EXTENSIONS PROPOSED
- NO NEW UTILITY CONNECTIONS PROPOSED EXCEPT FOR CONVEYANCE OF ELECTRICITY TO TAMPA ELECTRIC COMPANY

3. ACCESS

ALL PAVED AND STABILIZED AREAS OF THE SITE ARE SHOWN ON THIS DRAWING. ACCESS WILL BE TO COUNTY ROAD 544A (WEST DERBY AVENUE) VIA EXISTING DRIVEWAY. DEVELOPMENT WITHIN 150' OF THE PROPOSED PROJECT INCLUDES NATURAL GAS PIPELINES AND VALVES, FUEL OIL STORAGE TANKS AND CONTAINMENT SYSTEM, FUEL OIL UNLOADING AND PUMP BUILDINGS, MECHANICAL DRAFT COOLING TOWER, WASTEWATER HOLDING TANKS, AND A WAREHOUSE/MAINTENANCE BUILDING.

4. FIRE PROTECTION

ADDITIONAL FIRE PROTECTION SYSTEMS PROPOSED FOR THE PEAKER PROJECT INCLUDE: FIRE DETECTION AND SUPPRESSION EQUIPMENT (FIREMASTER 200 WITH HALON SUBSTITUTE), CO2 FIRE PROTECTION SYSTEMS FOR THE TURBINE ENCLOSURE, MECHANICAL AND ELECTRICAL PACKAGES; WATER DELUGE SYSTEMS FOR THE STEP UP AND AUXILIARY TRANSFORMERS; AND SEVERAL HOSE SYSTEMS POSITIONED AROUND THE UNIT, WHICH ARE TIED INTO THE EXISTING FIRE WATER SYSTEM. THERE ARE NO SPECIAL OCCUPANCIES TO BE INCLUDED ON THE SITE.

5. HAZARDOUS MATERIALS

ADJUTANT AMMONIA AND SULFURIC ACID ARE THE TWO SITE HAZARDOUS MATERIALS AS OUTLINED IN 40 CFR PART 355, APPENDIX A. THESE MATERIALS ARE ASSOCIATED WITH POLLUTION CONTROL EQUIPMENT (A SELECTIVE CATALYTIC REDUCTION) AND NEUTRALIZATION OF WASTEWATER FOR THE EXISTING ELECTRICAL GENERATING FACILITY. NO REGULATED HAZARDOUS MATERIAL IS REQUIRED FOR THE PROPOSED PEAKING UNIT.

6. ENVIRONMENTALLY SENSITIVE AREAS AND ECOLOGICAL COMMUNITIES

THERE ARE NO FLOOD HAZARD AREAS, INCLUDING FLOOD WAYS, FLOOD PLAINS, OR WETLANDS ON SITE (SEE FIGURE B-2 OF THE IMPACT STATEMENT). THERE IS NO SCRUB OR ECOLOGICAL COMMUNITIES TO BE PROTECTED ON THIS SITE.

7. PROPERTY NOTES

- PROPERTY SIZE: 10.0 ACRES (435,600 S.F.)
- PEAKER PROJECT AREA: APPROXIMATELY 0.8 ACRES (35,000 S.F.)

- 1) CP TEST STATIONS, IF ANY, OTHER THAN SHOWN WERE NOT FOUND
- 2) STEEL PIPES FILLED WITH CONCRETE IN USE AS GUARD POSTS AROUND VARIOUS IMPROVEMENTS ARE NOT SHOWN
- 3) THE DESIGNATION OF "HAND HOLE" LABELED HEREON MAY ALSO BE REFERRED TO AS "CONDUIT PULL BOX"

BASE MAP TAKEN FROM DRAWING PROVIDED BY CALPINE CORPORATION, ENTITLED "SITE ARRANGEMENT PLAN - WESTINGHOUSE 5010 - SIMPLE CYCLE", DATED 9/13/00.




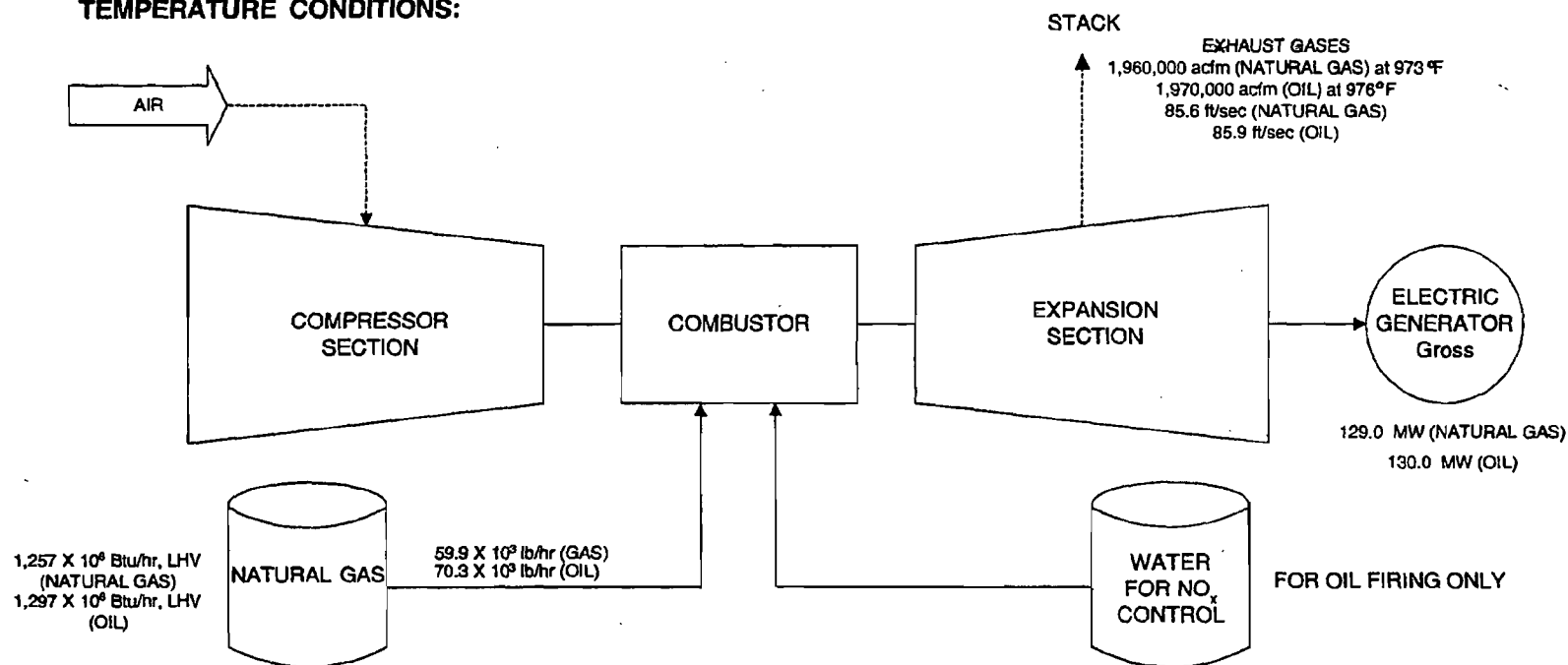
REV	DATE	DESCRIPTION										CAD BY	CHK BY	ENV BY											
PROJECT:		Auburndale Power Partners, L.P. Auburndale Peaker Project Polk County, Florida																							
SHEET TITLE:																									
Site Layout																									
 Golden Associates Tampa, Florida										PROJECT No.				003951SY				FILE No.: FIVWPFIGURE 2-Subwg							
										CLIENT PROJ. No.				DRAFTING SUBTITLE:											
										DES BY		AC 09/500		CAD BY		MJS 09/500		SCALE:		1" = 40'					
										CHK BY															
										DWG BY		PAC 11/003													
										Figure 2-5															

Figure 2-5

PROCESS FLOW DIAGRAMS

**32°F AMBIENT
TEMPERATURE CONDITIONS:**



**NOTE: SEE APPENDIX A FOR DESIGN INFORMATION
AND STACK PARAMETERS FOR EACH FUEL.**

Figure 2-2
Simplified Flow Diagram of Proposed "D" Class
Combustion Turbine
Base-load, Annual Design Conditions

Process Flow Legend

Solid/Liquid →
Gas →
Steam →

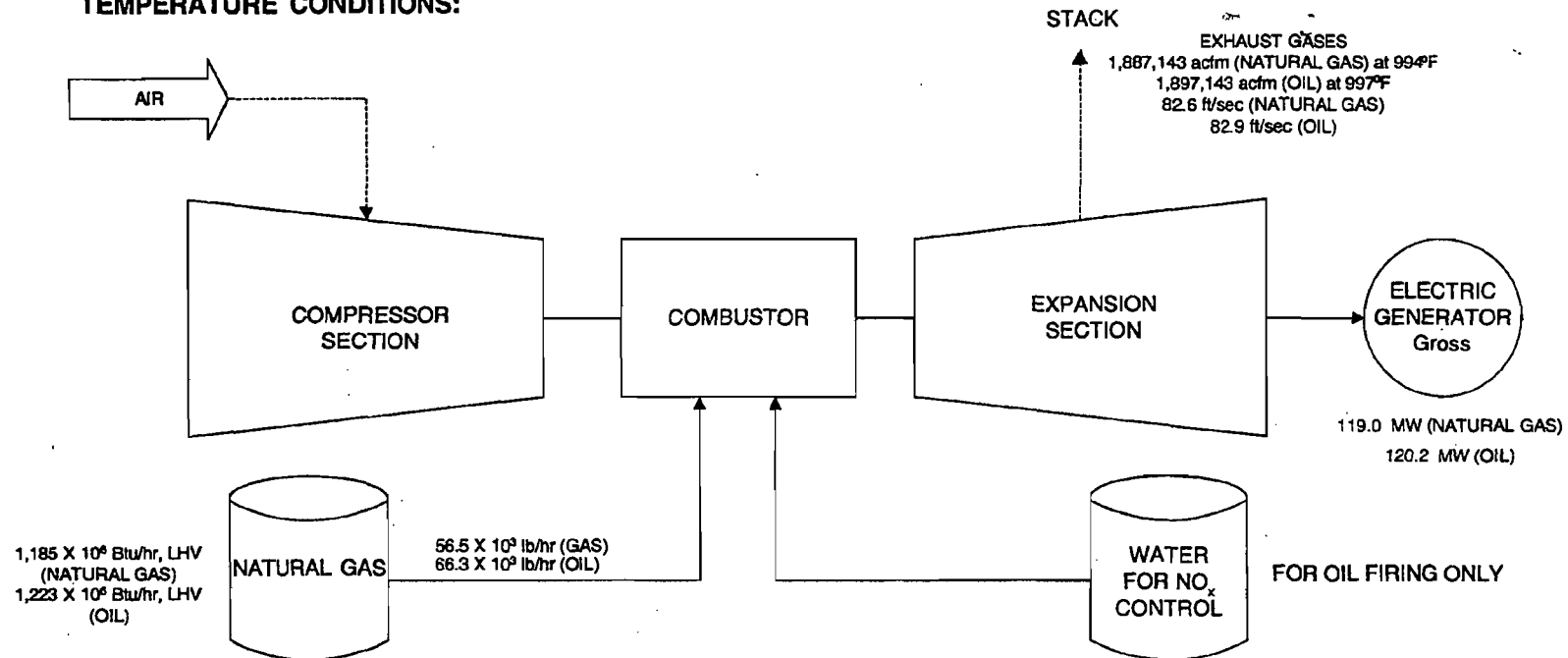
Project No. 0039515Y\F1\WP\

Filename: Figures 2-2 through 2-4.vsd

Date: 12/11/00



59°F AMBIENT
TEMPERATURE CONDITIONS:



NOTE: SEE APPENDIX A FOR DESIGN INFORMATION
AND STACK PARAMETERS FOR EACH FUEL.

Figure 2-3
Simplified Flow Diagram of Proposed "D" Class
Combustion Turbine
Baseload, Winter Design Conditions

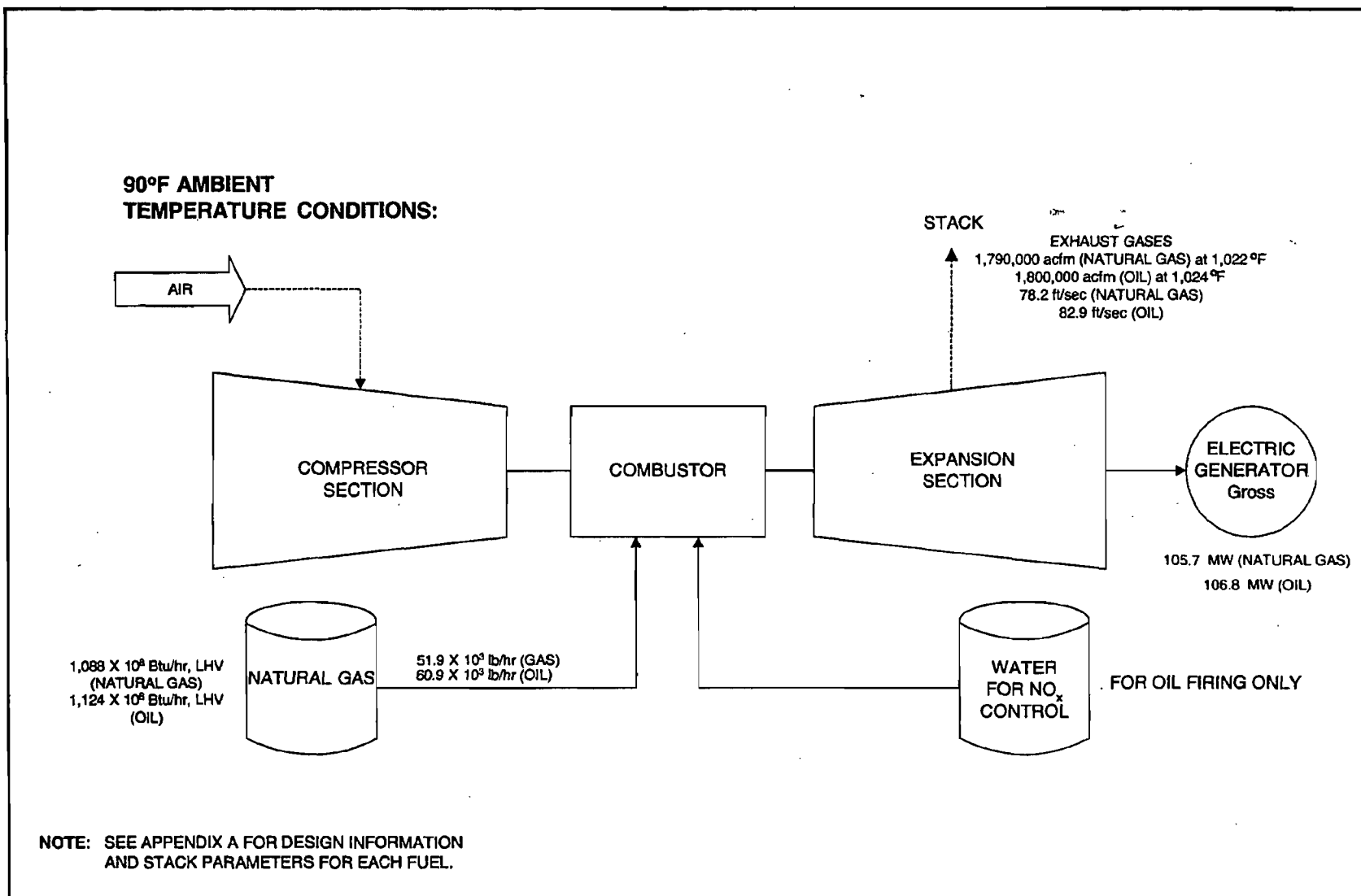
Process Flow Legend
Solid/Liquid →
Gas - - - - -
Steam = = = = =

Project No. 0039515YF1\WP\

Filename: Figures 2-2 through 2-4.vsd

Date: 12/11/00





2-17

Figure 2-4
Simplified Flow Diagram of Proposed "D" Class
Combustion Turbine
Baseload, Summer Design Conditions

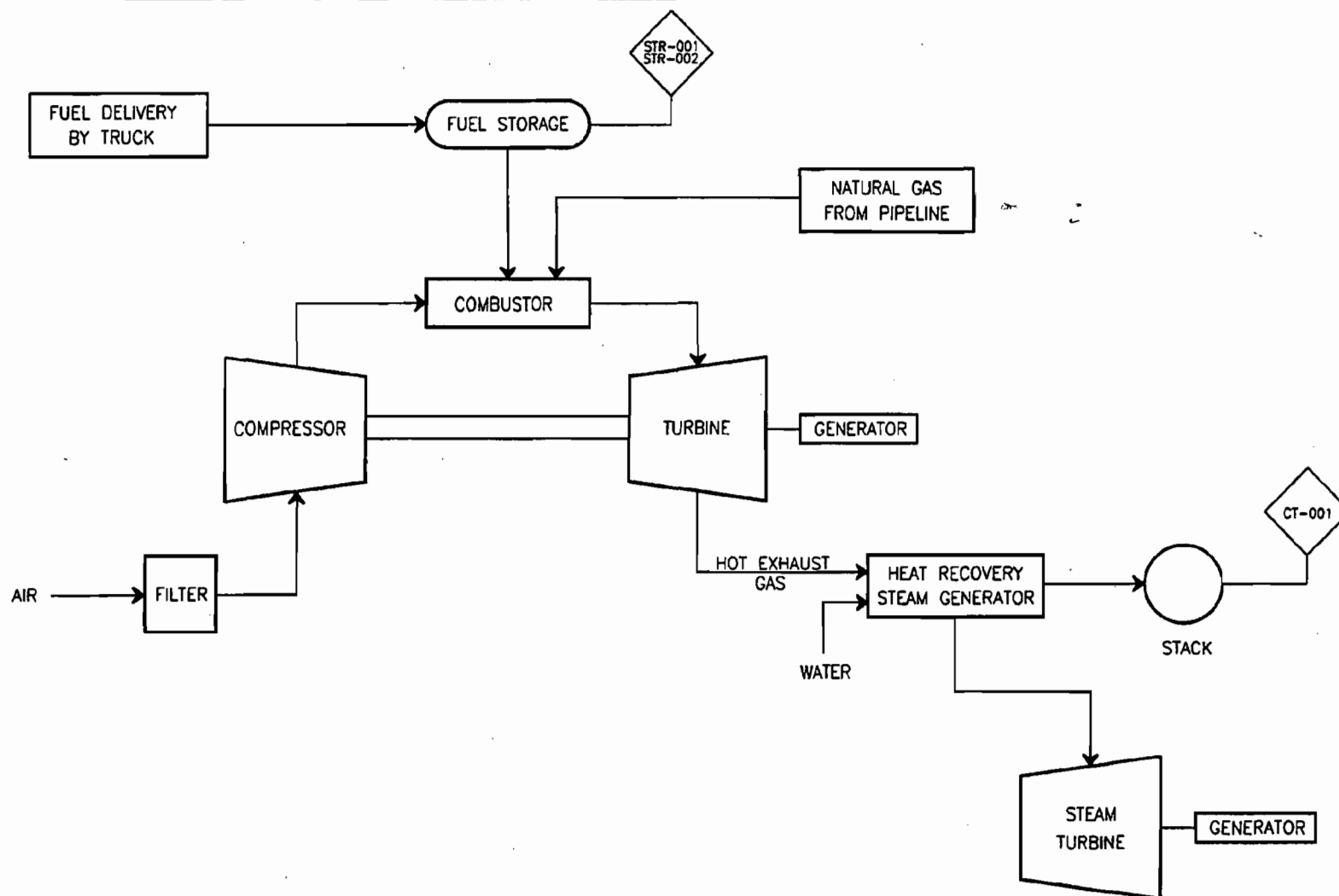
Process Flow Legend
 Solid/Liquid →
 Gas →
 Steam →

Project No. 0039515YV1\WP\

Filename: Figures 2-2 through 2-4.vsd

Date: 12/11/00





DOCUMENT I.D.3.

AUBURNDALE COGENERATION FACILITY
PROCESS FLOW DIAGRAM

Source: ECT, 1995.

ECT

Environmental Consulting & Technology, Inc.

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- Chemical or water application to:
 - Unpaved roads
 - Unpaved yard areas
- Paving and maintenance of roads, parking areas and yards.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary

APPENDIX D

LIST OF EXEMPT OR UNREGULATED ACTIVITIES

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, through it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

E.U ID No.	Brief Description of Emissions Units and /or Activity
-003	One or more emergency generators which are not subject to Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
-004	One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
-005	Surface coating operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOCs, by volume.

APPENDIX E

LIST OF INSIGNIFICANT ACTIVITIES

List of Insignificant Activities

In addition to the designated emissions units, the Auburndale Energy Campus operates equipment or work practices which produce insignificant emissions below the *deminimis* threshold.

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

Emissions Units and/or Activities Descriptions

1. Comfort heating with a gross maximum heat input of less than one million Btu per hour.
2. Vacuum pumps in laboratory operations
3. 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 operation 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 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.

APPENDIX F

LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

**LIST OF EQUIPMENT/ACTIVITIES
REGULATED UNDER TITLE VI**

The Auburndale Cogeneration Facility includes three air conditioning units that contain greater than fifty pounds of Title VI regulated refrigerant charge. These units are located as follows:

- Unit #1 - Main Generation Building
- Unit #2 - Main Generation Building
- Unit #3 - Zero Discharge Facility

APPENDIX G

ALTERNATE OPERATING MODES

Alternate Methods of Operation
Auburndale Energy Campus

Unit	Equipment	Operation Method No.	Fuel Type	Wet Compression	Maximum Operating Hours		
					(hours/day)	(Days/Week)	(Hours/Year)
EU001	CT/HRSG	1	Natural Gas	Off	24	7	8,760
		2 ^a	Natural Gas	On	24	7	8760
		3	Oil	Off	24	7	400
EU006	CT	1 ^b	Natural Gas	Off	24	7	1,400
		2	Natural Gas	On	24	7	7,000
		3	Oil	Off	24	7	400

^a Only allowed if the ambient temperature is greater than 60°F.

^b Based on engineering assumptions and permitted use limit of 2,227,400 MMBtu of Natural Gas.

APPENDIX H

FUELS ANALYSIS

Fuel Analysis

As required by Title V Permit 1050221-002-AV Section A16, the Auburndale Energy Campus samples each shipment of distillate fuel oil for sulfur content and collects sulfur content data from the natural gas supplier bi-monthly. The following sample fuel data is included in this appendix:

- 12/17/01 sample analysis of distillate fuel oil Tank 1A South (Last distillate fuel oil shipment to Tank 1A South);
- 12/17/01 sample analysis of distillate fuel oil Tank 1B North (Last distillate fuel oil shipment to Tank 1B North); and
- Daily natural gas chromatograph and sulfur readings for Perry Stream #2.

Power Engineering and Environmental Affairs, Laboratory

5012 Causeway Blvd * Tampa FL 33619 * Ph (813)630-7378 * Fax (813)630-7360 * CompQAP #910140G * DOH

Report Jeff Shaske, Auburndale

Report 01/14/2002

Laboratory ID: AA63590

Sample

Location Auburndale Power, #2 Diesel LS

Sampled Date CUSTOMER
12/17/2001

SAMPLE DESCRIPTION: TANK1A SOUTH

Date 12/21/2001

Laboratory Results

Parameter	Result	Units	MDL	Lower Limit	Upper Limit	Violation Check
Sulfur in Petroleum Products	0.04	%	0.02			
Gross Heat of Combustion, Oils, (HHV)	19373	BTU/Lb.	1			
Gross Heat of Combustion, Oils, (HHV)	138168	BTU/Gal.	1			
Gross Heat of Combustion, Oils, (HHV)	5803056	BTU/Barrel	1			
Pounds / Gallon @ 60 Deg. F	7.132	Lbs./Gal.	0.001		9.5	
Relative Density 60/60 Deg. F	0.8565		0.0001			
Density @ 15 C (59 F)	0.8561	kg/L	0.0001			
API Gravity @ 60 Deg. F	33.7	Degrees API	0.1			

Comments:

Robert L. Dorey
Manager, Environmental Services

Report AA6359 -011402 16

Page 1 of 1

Analyses reported by this laboratory are based upon material supplied by the client. Laboratory Services does not imply that the contents of the sample received by this laboratory are the same as all such material in the environment from which the sample was taken. Our results relate only to the sample or samples as tested.

Electric assumes no responsibility and makes no warranty or representation, express or implied, as to the suitability of the sample material for any specific use.

Power Engineering and Environmental Affairs, Laboratory

5012 Causeway Blvd * Tampa Fl. 33619 * Ph (813)630-7378 * Fax (813)630-7360 * CompQAP #910140G * DOH

Report Jeff Shaske, Auburndale

Report 01/14/2002
Laboratory ID: AA63591

Sample

Location Auburndale Power, #2 Diesel LS

Sampled Date CUSTOMER
12/17/2001

SAMPLE DESCRIPTION: TANK1B NORTH

Date 12/21/2001

Laboratory Results

Parameter	Result	Units	MDL	Lower Limit	Upper Limit	Violation Check
Sulfur in Petroleum Products	0.04	%	0.02			
Gross Heat of Combustion, Oils, (HHV)	19337	BTU/Lb.	1			
Gross Heat of Combustion, Oils, (HHV)	137989	BTU/Gal.	1			
Gross Heat of Combustion, Oils, (HHV)	5795538	BTU/Barrel	1			
Pounds / Gallon @ 60 Deg. F	7.136	Lbs./Gal.	0.001		9.5	
Relative Density 60/60 Deg. F	0.8571		0.0001			
Density @ 15 C (59 F)	0.8566	kg/L	0.0001			
API Gravity @ 60 Deg. F	33.6	Degrees API	0.1			

Comments:

Robert L. Dorey
Manager, Environmental Services

Report AA6359 -011402 16

Page 1 of 1

Analyses reported by this laboratory are based upon material supplied by the client. Laboratory Services does not imply that the contents of the sample received by this

laboratory are the same as all such material in the environment from which the sample was taken. Our results relate only to the sample or samples as tested.

Tampa

Electric assumes no responsibility and makes no warranty or representation, express or implied, as to the suitability of the sample material for any specific use.

daily chromatograph

date requested: Jun 26 2002 7:23AM

The data contained herein is preliminary data and therefore should be used for contemporaneous operational purposes only and may be subject to change at month end. This data is provided to assist our customers in tracking their gas usage as closely as possible on a real-time basis. The information contained on this web page is not to be considered billable information. This data will be subject to additional verification and possible modification prior to billing.

Chromatograph Report For: 8031 - PERRY STREAM #2																
download																
Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	lbutan	Nbutan	lpenta	Npenta	C6	C7	H2	Helium	Oxygen
06/25/2002	1048	0.795	0.475	0.594	94.379	3.253	0.665	0.158	0.139	0.045	0.026	0.064	0	0	0	0
06/24/2002	1048	0.787	0.489	0.594	94.384	3.261	0.653	0.155	0.137	0.045	0.026	0.066	0	0	0	0
06/23/2002	1048	0.816	0.436	0.594	94.451	3.166	0.682	0.165	0.144	0.047	0.026	0.066	0	0	0	0
06/22/2002	1046	0.828	0.460	0.593	94.537	3.129	0.633	0.151	0.132	0.043	0.025	0.062	0	0	0	0
06/21/2002	1048	0.810	0.479	0.595	94.381	3.205	0.679	0.163	0.145	0.046	0.026	0.067	0	0	0	0
06/20/2002	1048	0.812	0.466	0.594	94.427	3.174	0.675	0.164	0.145	0.046	0.026	0.066	0	0	0	0
06/19/2002	1047	0.824	0.445	0.594	94.552	3.089	0.656	0.158	0.140	0.045	0.026	0.065	0	0	0	0
06/18/2002	1042	0.783	0.465	0.590	94.925	2.946	0.531	0.121	0.112	0.037	0.023	0.058	0	0	0	0
06/17/2002	1041	0.794	0.470	0.589	95.014	2.872	0.508	0.117	0.109	0.036	0.023	0.057	0	0	0	0
06/16/2002	1040	0.774	0.443	0.588	95.218	2.724	0.494	0.117	0.112	0.037	0.024	0.057	0	0	0	0
06/15/2002	1041	0.788	0.426	0.589	95.214	2.680	0.522	0.126	0.118	0.039	0.025	0.060	0	0	0	0
06/14/2002	1044	0.791	0.466	0.591	94.898	2.823	0.599	0.145	0.139	0.045	0.028	0.065	0	0	0	0
06/13/2002	1042	0.773	0.445	0.590	95.117	2.720	0.557	0.133	0.129	0.041	0.026	0.060	0	0	0	0
06/12/2002	1039	0.702	0.460	0.587	95.445	2.518	0.513	0.123	0.122	0.038	0.024	0.055	0	0	0	0
06/11/2002	1040	0.700	0.440	0.587	95.429	2.562	0.514	0.121	0.120	0.036	0.023	0.054	0	0	0	0
06/10/2002	1040	0.727	0.444	0.587	95.355	2.627	0.505	0.117	0.115	0.035	0.023	0.053	0	0	0	0
06/09/2002	1042	0.757	0.439	0.589	95.091	2.779	0.555	0.126	0.126	0.040	0.026	0.060	0	0	0	0
06/08/2002	1043	0.832	0.444	0.591	94.826	2.995	0.527	0.124	0.122	0.041	0.027	0.062	0	0	0	0
06/07/2002	1042	0.840	0.453	0.591	94.848	2.959	0.527	0.125	0.124	0.040	0.026	0.058	0	0	0	0
06/06/2002	1041	0.830	0.430	0.590	94.996	2.906	0.496	0.115	0.110	0.037	0.024	0.057	0	0	0	0
06/05/2002	1041	0.859	0.420	0.590	94.893	2.980	0.509	0.117	0.108	0.036	0.022	0.055	0	0	0	0
06/04/2002	1042	0.879	0.437	0.591	94.756	3.065	0.523	0.118	0.111	0.036	0.022	0.052	0	0	0	0
06/03/2002	1041	0.912	0.458	0.592	94.719	3.019	0.530	0.124	0.117	0.039	0.025	0.057	0	0	0	0
06/02/2002	1037	0.889	0.435	0.588	95.328	2.499	0.500	0.123	0.110	0.037	0.023	0.054	0	0	0	0
06/01/2002	1038	0.900	0.477	0.590	95.142	2.566	0.542	0.134	0.118	0.040	0.024	0.056	0	0	0	0
05/31/2002	1037	0.851	0.484	0.588	95.374	2.439	0.498	0.124	0.110	0.039	0.024	0.058	0	0	0	0
05/30/2002	1036	0.820	0.441	0.587	95.570	2.342	0.481	0.116	0.108	0.038	0.024	0.060	0	0	0	0
05/29/2002	1035	0.806	0.422	0.585	95.717	2.295	0.446	0.107	0.091	0.036	0.022	0.058	0	0	0	0
05/28/2002	1035	0.799	0.442	0.586	95.602	2.407	0.455	0.105	0.087	0.032	0.019	0.052	0	0	0	0
05/27/2002	1035	0.832	0.441	0.586	95.604	2.371	0.455	0.103	0.089	0.031	0.019	0.054	0	0	0	0
05/26/2002	1037	0.807	0.416	0.587	95.488	2.468	0.502	0.113	0.098	0.033	0.021	0.055	0	0	0	0
05/25/2002	1038	0.827	0.405	0.587	95.446	2.493	0.490	0.115	0.104	0.036	0.023	0.060	0	0	0	0
05/24/2002	1037	0.832	0.371	0.587	95.550	2.435	0.472	0.113	0.102	0.037	0.023	0.064	0	0	0	0
05/23/2002	1036	0.905	0.354	0.587	95.665	2.284	0.440	0.115	0.097	0.042	0.026	0.072	0	0	0	0
05/22/2002	1036	0.854	0.400	0.586	95.555	2.442	0.432	0.107	0.091	0.036	0.022	0.060	0	0	0	0
05/21/2002	1041	0.865	0.339	0.590	95.264	2.549	0.585	0.148	0.125	0.042	0.023	0.059	0	0	0	0
05/20/2002	1043	0.831	0.427	0.591	94.930	2.841	0.577	0.139	0.125	0.042	0.025	0.064	0	0	0	0
05/19/2002	1042	0.872	0.383	0.590	95.111	2.649	0.583	0.144	0.125	0.042	0.025	0.065	0	0	0	0
05/18/2002	1042	0.813	0.401	0.590	95.082	2.751	0.559	0.134	0.118	0.044	0.027	0.071	0	0	0	0
05/17/2002	1046	0.817	0.386	0.593	94.826	2.865	0.654	0.162	0.137	0.050	0.029	0.073	0	0	0	0
05/16/2002	1044	0.786	0.386	0.591	95.045	2.760	0.615	0.147	0.125	0.044	0.026	0.065	0	0	0	0
05/15/2002	1042	0.734	0.410	0.588	95.218	2.740	0.541	0.123	0.108	0.039	0.024	0.062	0	0	0	0
05/14/2002	1043	0.742	0.431	0.590	95.066	2.821	0.561	0.131	0.114	0.042	0.026	0.065	0	0	0	0

05/13/2002	1041	0.725	0.417	0.588	95.283	2.733	0.500	0.114	0.099	0.040	0.025	0.064	0	0	0	0
05/12/2002	1041	0.737	0.410	0.588	95.336	2.671	0.493	0.114	0.100	0.042	0.027	0.070	0	0	0	0
05/11/2002	1045	0.725	0.395	0.590	94.905	3.052	0.557	0.122	0.110	0.041	0.026	0.067	0	0	0	0
05/10/2002	1047	0.765	0.373	0.592	94.767	3.087	0.600	0.139	0.122	0.046	0.028	0.072	0	0	0	0
05/09/2002	1046	0.744	0.374	0.591	94.937	2.938	0.596	0.137	0.123	0.046	0.030	0.074	0	0	0	0
05/08/2002	1042	0.734	0.398	0.589	95.191	2.775	0.530	0.126	0.108	0.042	0.026	0.068	0	0	0	0
05/07/2002	1040	0.720	0.407	0.587	95.408	2.651	0.471	0.112	0.097	0.040	0.026	0.069	0	0	0	0
05/06/2002	1040	0.681	0.408	0.586	95.497	2.609	0.466	0.112	0.095	0.041	0.026	0.067	0	0	0	0
05/05/2002	1041	0.749	0.408	0.588	95.239	2.756	0.501	0.118	0.097	0.041	0.026	0.065	0	0	0	0
05/04/2002	1038	0.791	0.401	0.587	95.384	2.681	0.439	0.096	0.081	0.037	0.025	0.065	0	0	0	0
05/03/2002	1034	0.821	0.412	0.585	95.609	2.514	0.382	0.080	0.070	0.033	0.022	0.058	0	0	0	0
05/02/2002	1033	0.766	0.403	0.583	95.926	2.294	0.356	0.080	0.068	0.031	0.021	0.053	0	0	0	0
05/01/2002	1032	0.757	0.406	0.582	95.979	2.292	0.332	0.074	0.062	0.029	0.020	0.050	0	0	0	0
04/30/2002	1032	0.784	0.420	0.583	95.877	2.308	0.362	0.080	0.070	0.030	0.020	0.049	0	0	0	0
04/29/2002	1033	0.784	0.421	0.584	95.868	2.286	0.376	0.086	0.078	0.031	0.021	0.050	0	0	0	0
04/28/2002	1033	0.797	0.431	0.584	95.812	2.294	0.391	0.090	0.080	0.032	0.021	0.052	0	0	0	0
04/27/2002	1034	0.790	0.439	0.585	95.677	2.414	0.395	0.092	0.082	0.034	0.022	0.056	0	0	0	0
04/26/2002	1035	0.779	0.433	0.585	95.678	2.407	0.407	0.095	0.083	0.035	0.023	0.059	0	0	0	0
04/25/2002	1034	0.720	0.421	0.584	95.853	2.331	0.401	0.088	0.079	0.033	0.022	0.054	0	0	0	0
04/24/2002	1033	0.711	0.417	0.582	95.981	2.286	0.361	0.079	0.066	0.029	0.019	0.050	0	0	0	0
04/23/2002	1034	0.718	0.410	0.583	95.838	2.391	0.391	0.082	0.072	0.029	0.019	0.050	0	0	0	0
04/22/2002	1034	0.699	0.428	0.583	95.824	2.417	0.372	0.082	0.073	0.032	0.022	0.052	0	0	0	0
04/21/2002	1034	0.763	0.432	0.584	95.785	2.374	0.375	0.088	0.076	0.032	0.022	0.054	0	0	0	0
04/20/2002	1033	0.732	0.438	0.583	95.885	2.320	0.362	0.084	0.074	0.032	0.022	0.052	0	0	0	0
04/19/2002	1034	0.742	0.436	0.584	95.751	2.419	0.372	0.087	0.077	0.034	0.024	0.057	0	0	0	0
04/18/2002	1033	0.750	0.423	0.584	95.860	2.334	0.364	0.086	0.075	0.032	0.022	0.053	0	0	0	0
04/17/2002	1034	0.721	0.443	0.583	95.836	2.377	0.360	0.083	0.073	0.031	0.021	0.053	0	0	0	0
04/16/2002	1033	0.763	0.404	0.583	95.866	2.350	0.356	0.084	0.070	0.032	0.020	0.054	0	0	0	0
04/15/2002	1032	0.752	0.412	0.583	95.951	2.296	0.337	0.080	0.067	0.031	0.020	0.053	0	0	0	0
04/14/2002	1032	0.771	0.399	0.583	95.969	2.272	0.340	0.080	0.067	0.031	0.020	0.051	0	0	0	0
04/13/2002	1032	0.747	0.402	0.582	96.052	2.231	0.329	0.076	0.064	0.029	0.020	0.051	0	0	0	0
04/12/2002	1032	0.777	0.413	0.583	95.920	2.310	0.329	0.078	0.065	0.032	0.021	0.055	0	0	0	0
04/11/2002	1033	0.829	0.418	0.584	95.753	2.391	0.353	0.080	0.066	0.032	0.022	0.057	0	0	0	0
04/10/2002	1034	0.818	0.432	0.585	95.582	2.546	0.362	0.083	0.068	0.032	0.022	0.055	0	0	0	0
04/09/2002	1033	0.788	0.431	0.584	95.699	2.483	0.352	0.081	0.066	0.030	0.020	0.050	0	0	0	0
04/08/2002	1032	0.781	0.415	0.583	95.922	2.305	0.337	0.080	0.066	0.029	0.018	0.047	0	0	0	0
04/07/2002	1034	0.778	0.427	0.584	95.773	2.378	0.378	0.086	0.074	0.032	0.021	0.052	0	0	0	0
04/06/2002	1032	0.809	0.416	0.584	95.824	2.367	0.351	0.075	0.062	0.029	0.020	0.048	0	0	0	0
04/05/2002	1035	0.839	0.395	0.586	95.577	2.497	0.419	0.093	0.074	0.034	0.022	0.050	0	0	0	0
04/04/2002	1033	0.736	0.398	0.583	95.937	2.321	0.360	0.078	0.063	0.031	0.022	0.053	0	0	0	0
04/03/2002	1035	0.777	0.389	0.585	95.737	2.404	0.404	0.096	0.076	0.035	0.023	0.059	0	0	0	0
04/02/2002	1036	0.781	0.404	0.586	95.627	2.466	0.414	0.098	0.081	0.038	0.025	0.065	0	0	0	0
04/01/2002	1036	0.760	0.436	0.586	95.613	2.455	0.429	0.098	0.082	0.038	0.026	0.064	0	0	0	0
03/31/2002	1035	0.756	0.456	0.585	95.688	2.400	0.410	0.092	0.077	0.036	0.024	0.060	0	0	0	0
03/30/2002	1033	0.762	0.710	0.587	95.369	2.425	0.427	0.094	0.083	0.039	0.028	0.063	0	0	0	0
03/29/2002	1037	0.806	0.435	0.587	95.462	2.536	0.438	0.103	0.090	0.039	0.026	0.065	0	0	0	0
03/28/2002	1036	0.751	0.431	0.585	95.671	2.434	0.407	0.096	0.079	0.038	0.025	0.068	0	0	0	0
03/27/2002	1037	0.730	0.454	0.586	95.575	2.513	0.421	0.097	0.080	0.038	0.025	0.066	0	0	0	0
03/26/2002	1037	0.780	0.441	0.586	95.489	2.545	0.435	0.101	0.086	0.037	0.024	0.061	0	0	0	0

FGT

Last Updated

6/26/02 6:56

Total Sulfur Total Sulfur

Previous Day Avg Previous Day Avg

ppm Grains/hcf

Station Name 06/24/02 06/24/02

Perry 36" Stream #1 2.4 0.150

Perry 30" Stream #2 2.8 0.177

Perry 24" Stream #3 2.9 0.179

Brooker 24" Stream 5.1 0.322

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information provided.

This information is provided on a best efforts basis and is an estimate.

The information is not used for billing purposes.

Florida Gas is not responsible for any reliance on this information by any party.

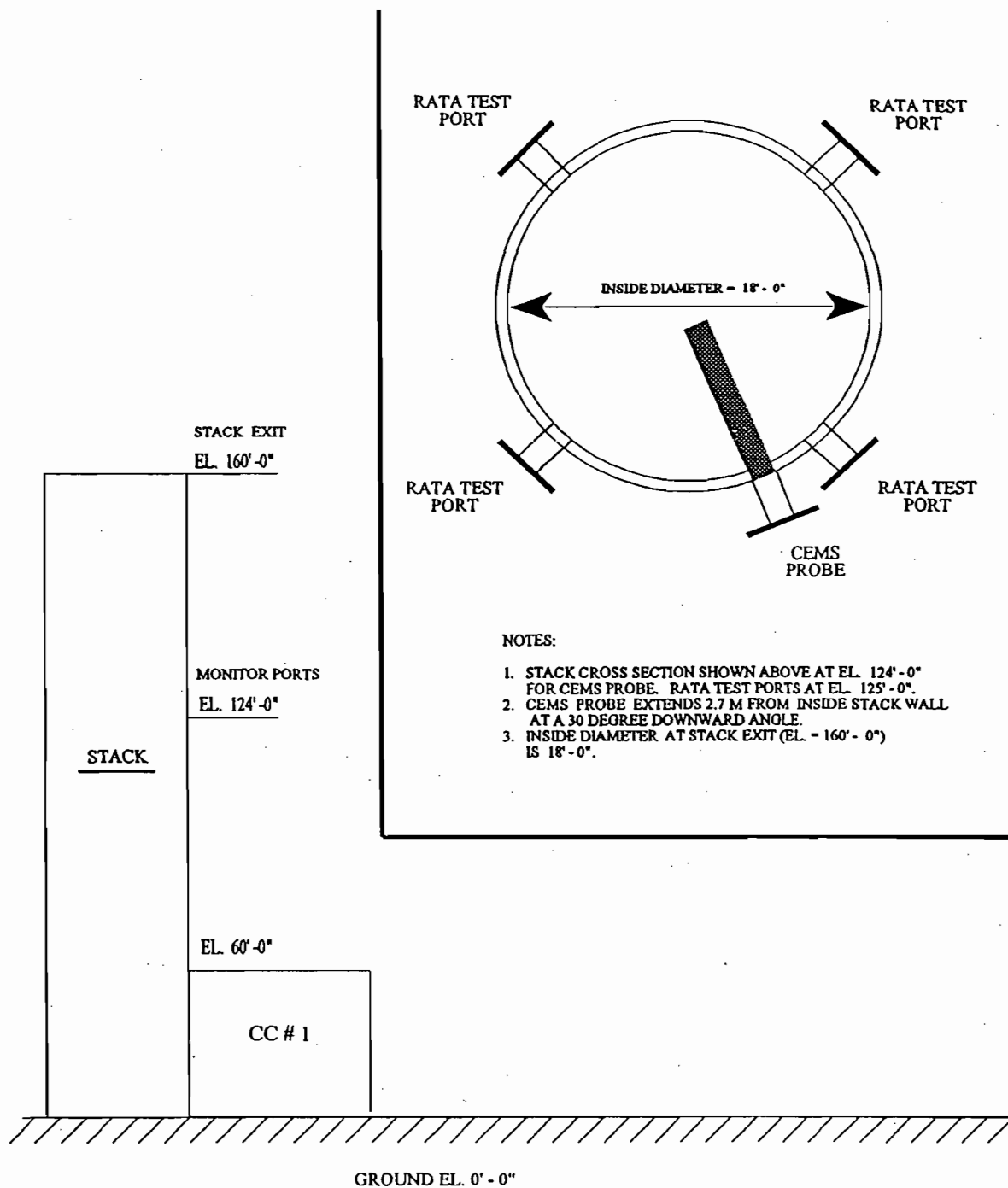
Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30" Stream #2 Avg Grains/hcf	Perry 24" Stream #3 15SA24PSUL.A Avg ppm	Perry 24" Stream #3 Avg Grains/hcf	Brooker 24" Stream BRO124PSUL.A Avg ppm	Brooker 24" Stream Avg Grains/hcf
06/23/02	33	2.378	0.149	3.168	0.198	3.154	0.197	5.377	0.336
06/22/02	32	2.023	0.126	3.082	0.193	3.258	0.204	4.851	0.303
06/21/02	31	1.973	0.123	2.746	0.172	2.944	0.184	4.927	0.308
06/20/02	30	1.756	0.110	3.072	0.192	3.155	0.197	4.771	0.298
06/19/02	29	1.195	0.075	3.035	0.190	3.263	0.204	4.674	0.292
06/18/02	28	0.827	0.052	3.460	0.216	3.563	0.223	4.778	0.299
06/17/02	27	1.083	0.068	3.435	0.215	3.336	0.208	3.581	0.224
06/16/02	26	0.793	0.050	2.713	0.170	2.607	0.163	2.766	0.173
06/15/02	25	0.974	0.061	3.153	0.197	3.238	0.202	1.407	0.088
06/14/02	24	0.756	0.047	2.676	0.167	2.859	0.179	3.566	0.223
06/13/02	23	1.014	0.063	2.361	0.148	2.636	0.165	4.079	0.255
06/12/02	22	0.820	0.051	2.926	0.183	3.143	0.196	4.453	0.278
06/11/02	21	0.789	0.049	2.432	0.152	2.702	0.169	3.725	0.233
06/10/02	20	0.381	0.024	1.925	0.120	1.982	0.124	3.121	0.195
06/09/02	19	0.383	0.024	1.564	0.098	1.737	0.109	2.885	0.180
06/08/02	18	0.439	0.027	1.877	0.117	2.012	0.126	2.625	0.164
06/07/02	17	0.392	0.025	1.382	0.086	1.411	0.088	2.658	0.166
06/06/02	16	0.489	0.031	1.247	0.078	1.236	0.077	3.037	0.190
06/05/02	15	0.473	0.030	1.792	0.112	2.015	0.126	3.923	0.245
06/04/02	14	0.782	0.049	1.511	0.094	1.652	0.103	3.889	0.243
06/03/02	13	1.112	0.070	1.807	0.113	1.894	0.118	3.965	0.248
06/02/02	12	0.890	0.056	0.961	0.060	1.018	0.064	4.748	0.297
06/01/02	11	0.840	0.052	1.027	0.064	1.044	0.065	4.898	0.306
05/31/02	10	1.725	0.108	2.906	0.182	3.035	0.190	4.675	0.292
05/30/02	9	4.538	0.284	9.749	0.609	10.411	0.651	4.569	0.286
05/29/02	8	2.863	0.179	4.293	0.268	4.439	0.277	4.058	0.254
05/28/02	7	1.688	0.106	3.118	0.195	3.683	0.230	3.334	0.208
05/27/02	6	1.718	0.107	2.477	0.155	2.665	0.167	2.896	0.181
05/26/02	5	2.105	0.132	2.942	0.184	3.304	0.206	2.986	0.187
05/25/02	4	2.128	0.133	3.668	0.229	4.185	0.262	3.135	0.196
05/24/02	3	2.366	0.148	4.319	0.270	5.000	0.312	3.628	0.227
05/23/02	2	3.001	0.188	4.979	0.311	5.480	0.343	4.575	0.286
05/22/02	1	3.906	0.244	4.767	0.298	5.002	0.313	4.650	0.291

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APPENDIX I

DESCRIPTION OF STACK SAMPLING FACILITIES

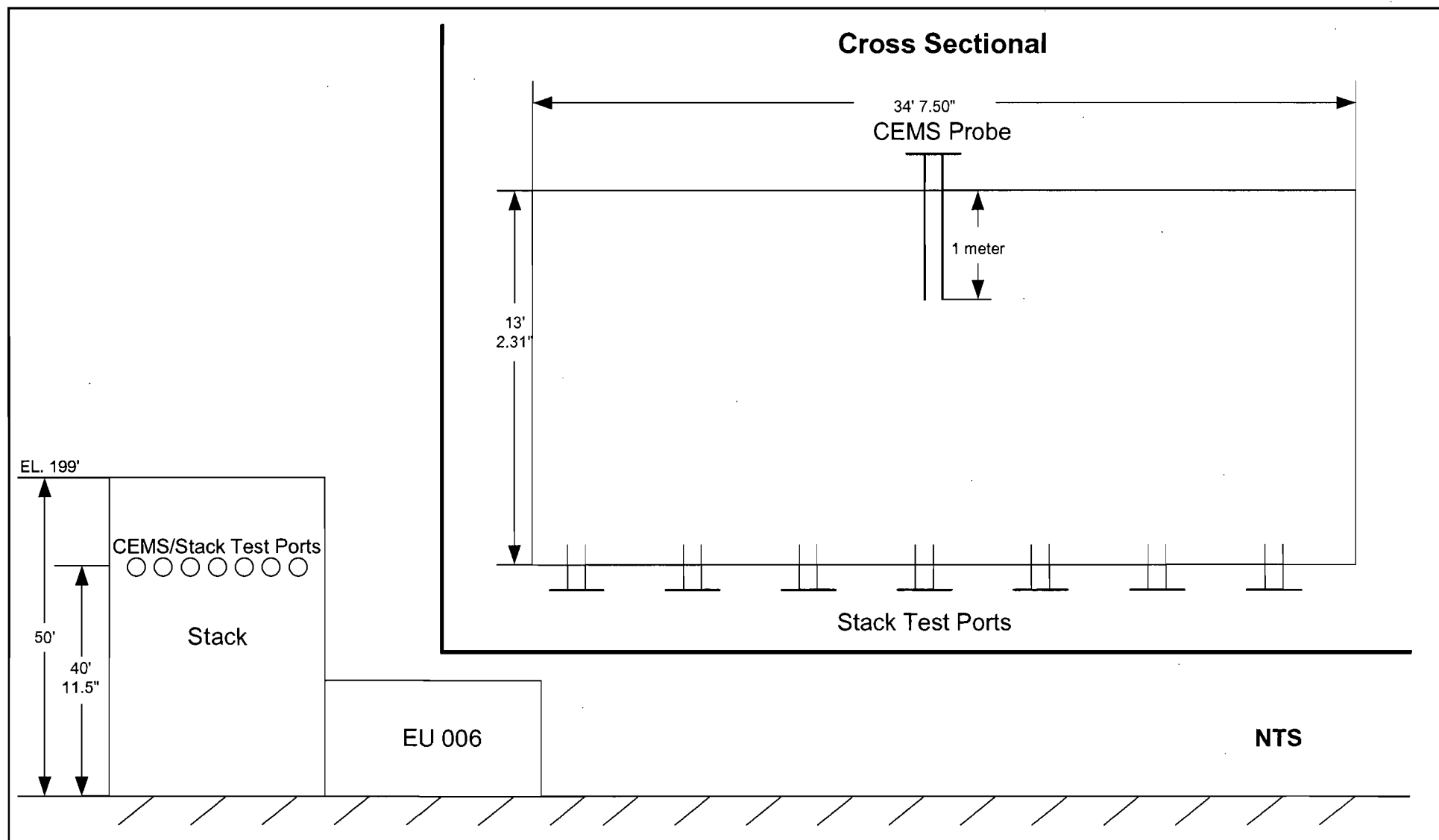


AUBURNDALE COGENERATION FACILITY
ENGINEERING DRAWING

Source: ECT, 1995.

ECT

Environmental Consulting & Technology, Inc.



Auburndale Peaker Energy Center
Emission Unit 006
Stack Drawing

Source: Calpine, 2002



Calpine Eastern

APPENDIX J

COMPLIANCE ASSURANCE MONITORING

Compliance Assurance Monitoring Plan

Compliance Assurance Monitoring Plan - If the emissions unit addressed in this section is subject to the compliance assurance monitoring requirements of 40 CFR Part 64, provide the required monitoring plan.

This plan is provided to meet the requirements of 40 CFR 64. These requirements are applicable to EU-001 which is both a major source of several pollutants and employs a qualifying control device for NO_x control.

Limits for NO_x emissions for this unit are specified in FDEP permit no. 1050221-002-AV with additional conditions in permit no. 1050221-004-AC.

- ◆ The maximum average NO_x concentration over a 24 hour daily period in the exhaust gas from this unit is 15 ppm_{vd} corrected to 15% O₂ in the exhaust stream.
- ◆ The annual average NO_x concentration shall be less than 9 ppm_{vd}, calculated as shown in specific condition 31 of permit no. 1050221-004-AC.
- ◆ The total NO_x emission for any 12 month period shall not exceed 177 tons.

NO_x is directly monitored using a continuous emissions monitor. Ranges for the monitor are set in accordance with the requirements of 40 CFR Part 75, so that expected normal operating ranges, in compliance with the permit limits fall between 20 and 80 percent of the span of the instruments.

Calibration of the instrument is performed daily when the unit is in operation in accordance with manufacturers recommendations and the requirements of Part 75.

Monitoring of the emissions from this unit using the CEM is in accordance with the requirements of the permits and Part 75 constitutes presumptively acceptable monitoring as defined by 40 CFR 64.4(b).

The Quality Assurance Test Data as required for submission by this part has been submitted previously during the quarterly EDR process. The most recent RATA was completed on October 31, 2001.

No changes have been made to the unit, control system, emissions monitoring system, or data capture system that would result in a change in the operation or settings of any of these since the most recent performance tests.

Specific elements of the monitoring system and program are given in the Part 75 monitoring plan submitted to FDEP and attached here.

MONITORING PLAN
MONITORING DATA CHECKING SOFTWARE 4.0

06/27/2002
PAGE 1

FACILITY INFORMATION (RT 102)

ORIS Code/Facility ID: 54658 EPA FINDS ID: 1050221 EPA AIRS ID: State ID: 1050221
Plant Name: AUBURNDALE State: FL Latitude: 280315 Longitude: 0814821
County Code: 105 County Name: POLK Source Category/Type: COGENERATION
Primary SIC Code/Description: 4911 Electric Services

UNIT OPERATION INFORMATION (RT 504)

Unit ID	Unit Short Name	Boiler Type	Max Heat Input (mmBtu)	1st Comm Operation Date	Retirement Date	Stack Exit Height	Stack Base Elevation	Area At Stack Exit	Area At Flow Monitor
1	UNIT 1	CC	1600.0	12/28/1994	/ /	150	149	254	
6	UNIT 6	CT	1591.0	05/15/2002	/ /	50	149	398	

Boiler Type Codes: CC - Combined cycle, CT - Combustion turbine

MONITORING DATA CHECKING SOFTWARE 4.0
FACILITY NAME: AUBURNDALE ORIS CODE: 54658

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UNIT PROGRAM INFORMATION (RT 505)

Unit ID	Program	Unit Class	Reporting Frequency	Program Participation Date	State Regulation Code	State/Local Regulatory Agency Code
1	ARP	P2	Q	12/28/1994	FL	
6	ARP	P2	Q	06/11/2002		

Unit Class Codes: P2 - Phase II (ARP only)

Reporting Frequency Codes: Q - Quarterly

EIA Cross Reference Information (RT 506)

Unit ID	Part 75 Monitoring Location ID	EIA Boiler ID	EIA Flue ID	EIA Reporting Year	EIA 767 Reporting Indicator	EIA Facility/ORISPL Number
1	54658	1	1	2001	N	
6	6	6	6	2001		54658

FUEL USAGE QUALIFICATION INFORMATION (RT 507)

Capacity or Gas Usage												Type of Qualification	Method of Qualifying
Unit ID	Year of Qualification	Year1 Year1	Year1 Type	Year1 Year1%	Year2 Year2	Year2 Type	Year2 Year2%	Year3 Year3	Year3 Type	Year3 Year3%	Average%		
1	2000	1997	A	100%	1998	A	91.1%	1999	A	100%	97.0%	GF	3HD

FUEL USAGE QUALIFICATION INFORMATION (RT 507)

Capacity or Gas Usage												
Unit	Year of	Year1			Year2			Year3			Average%	Type of
ID	Qualification	Year1	Type	Year1%	Year2	Type	Year2%	Year3	Type	Year3%		Qualification
												Method of
												Qualifying
6	2002	2002	P	90.0%	2003	P	90.0%	2004	P	90.0%	90.0%	GF
												3PR

Gas Qualifying Codes: 3HD - Three years of historical data, 3PR - Three years projected cap. factor or fuel use

Type of Qualification Codes: GF - Gas-Fired Qualification

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FACILITY NAME: AUBURNDALE ORIS CODE: 54658

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UNIT/STACK/PIPE ID: 1

MONITORING SYSTEMS/ANALYTICAL COMPONENTS (RT 510)

SYSTEM						ANALYTICAL COMPONENTS AND DAHS SOFTWARE						
Status	System ID	Para-meter	P/B	First Reporting Date	Last Reporting Date	Com-ponent ID	Status	Com-ponent Type	Sample Method (SAM)	Manufacturer	Model or Version	Serial #
U	101	GAS	P	06/30/1994	/ /	011	U	PLC		GE	FANUC 90	
						051	U	DAHS		HONEYWELL PAI	CIRRUS	30536766
						061	U	GFFM	ORF	TRI-FLO	PT10	1FGA-F
U	102	OILV	P	06/30/1994	/ /	011	U	PLC		GE	FANUC 90	
						051	U	DAHS		HONEYWELL PAI	CIRRUS	30536766
						071	U	OFFM	TUR	ITT BARTON	8003	8003-1
U	103	NOX	P	06/30/1994	/ /	011	U	PLC		GE	FANUC 90	
						031	U	NOXA	EXT	THERMO ENVIRONMENTAL	42H	42H-48
						041	U	O2D	EXT	ROSEMOUNT	755R	100029
						051	U	DAHS		HONEYWELL PAI	CIRRUS	30536766

Parameter Monitored Codes: GAS - Gas fuel flow, NOX - NOx emission rate, OILV - Volumetric oil flow

Primary/Backup Codes: P - Primary

Component Type Codes: DAHS - Data acquisition & handling system, GFFM - Gas fuel flowmeter, NOXA - Dual-Range NOx analyzer, O2D - Dry O2 analyzer, OFFM - Oil fuel flow meter, PLC - Programmable logic controller

SAM codes: ORF - Orifice, TUR - Turbine, EXT - Dry Extractive

Status Codes: U - Unchanged

MONITORING DATA CHECKING SOFTWARE 4.0
FACILITY NAME: AUBURNDALE ORIS CODE: 54658

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UNIT/STACK/PIPE ID: 6

MONITORING SYSTEMS/ANALYTICAL COMPONENTS (RT 510)

SYSTEM							ANALYTICAL COMPONENTS AND DAHS SOFTWARE						
Status	System ID	Para-meter	P/B	First Reporting Date	Last Reporting Date		Com-ponent ID	Status	Com-ponent Type	Sample Method (SAM)	Manufacturer	Model or Version	Serial #
C	601	GAS	P	06/11/2002	/ /		DAS	A	DAHS		HONEYWELL PAI	PAI DAHS	30536766
							GAS	A	GFFM	ORF	DANIEL FLOW PRODUCTS	2031 D	003800720
C	602	NOX	P	06/11/2002	/ /		DAS	A	DAHS		HONEYWELL PAI	PAI DAHS	30536766
							NOX	A	NOXA	EXT	ROSEMOUNT ANALYTICAL	195005	U1006368
							O2D	A	O2D	EXT	FISHER ROSEMOUNT	NGA2000	30121567354
C	603	O2	P	06/11/2002	/ /		DAS	A	DAHS		HONEYWELL PAI	PAI DAHS	30536766
							O2D	A	O2D	EXT	FISHER ROSEMOUNT	NGA2000	30121567354
C	604	OILV	P	06/11/2002	/ /		DAS	A	DAHS		HONEYWELL PAI	PAI DAHS	30536766
							OIL	A	OFFM	O	ABB	611EDC2H3A0G111	9

Parameter Monitored Codes: GAS - Gas fuel flow, NOX - NOx emission rate, O2 - Oxygen, OILV - Volumetric oil flow

Primary/Backup Codes: P - Primary

Component Type Codes: DAHS - Data acquisition & handling system, GFFM - Gas fuel flowmeter, NOXA - Dual-Range NOx analyzer, O2D - Dry O2 analyzer, OFFM - Oil fuel flow meter

SAM codes: ORF - Orifice, EXT - Dry Extractive, O - Other

Status Codes: A - Add

Unit/Stack/Pipe ID: 1

EMISSIONS FORMULAS (RT 520)

Status	Formula ID#	Parameter	Formula Code	Formulas
U	101	HI	F-20	S#(011-101) TIMES GCV_gas
U	102	SO2	D-5	F#(101) TIMES 0.0006
U	103	OILM	D-3	S#(021-102) TIMES Density_oil
U	104	SO2	D-2	2.0 TIMES F#(103) TIMES GCV_oil TIMES %S_oil TIMES (10 [^] (-2))
U	105	HI	F-19	F#(103) TIMES GCV_oil TIMES (10 [^] (-6))
U	106	NOX	F-5	91.194 TIMES 10 [^] (-7)) TIMES S#(031-103) TIMES 8710 TIMES (20.9 TIMES (20.9 MINUS S#(041-103)) [^] (-1))
U	107	NOX	F-5	(1.194 TIMES 10 [^] (-7)) TIMES S#(031-103) TIMES 9190 TIMES (20.9 TIMES (20.9 MINUS S#(041-103)) [^] (-1))
U	108	CO2	G-1	(44 TIMES Weight_oil) TIMES (24000 [^] (-1))

Status Codes: U - Unchanged

Parameter Codes: CO2 - CO2 mass emissions, HI - Heat input, NOX - NOx emission rate, OILM - Mass of oil, SO2 - SO2 mass emissions

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Unit/Stack/Pipe ID: 6

EMISSIONS FORMULAS (RT 520)

Status	Formula ID#	Parameter	Formula Code	Formulas
A	611	HI	D-6	$H_{ig} = S(GAS) * GCV_{gas} / 1e6$ Where H_{ig} =heatinput pf PNG in mmBtu/hr; $S(GAS)$ =measured PNG volumetric flow in HSCF/hr; GCV_{gas} =heat content of PNG at 106000 BTU/HSCF; 1e6 is conversion to mmBtu
A	612	OILM	D-3	$OIL_{rate} = S(OIL) * Doil$ Where OIL_{rate} =DSL mas rate in lb/hr; $S(OIL)$ =volume DSL measured in gal/hr; $Doil$ =DSL density in lb/gal
A	613	HI	F-19	$H_{io} = F(612) * GCV_{oil} / 1e6$ Where: H_{id} =heat input of DSL in mmBtu/hr; $F(612)$ =DSL mass rate in lb/hr; GCV_{oil} =heat content of DSL in Btu/lb; 1e6=conversion to mmBtu
A	614	HI	D-15A	$H_{it} = F(611) + F(613)$ Where: H_{it} =total heat input from PNG and DSL; $F(611)$ H_{ig} from PNG in mmBtu/hr; $F(613)$ = H_{io} from oil in mmBtu/hr
A	621	FD	F-8	$F_d = ((F(611) * 8710) + F(613) * 9190) / F(614)$ Where F_d =dry combined fuel factor in scf/mmBtu; $F(611)$ = H_{ig} ; 8710= F_d for PNG; $F(613)$ = H_{id} fro DSL; $F(614)$ =total HI for the hour
A	631	SO2	D-5	$SO2g = F(611) * 0.0006$ Where: $SO2g$ =SO2 mass emissions from PLG in lb/hr; $F(611)$ =HI of PNG in mmBtu/hr; 0.0006 is default SO2 emission factorfor PNG in lb/mmBtu
A	632	SO2	D-2	$SO2o = 2.0 * F(612) * \%Soil / 100$ Where: $SO2o$ =SO2 from DSL; 2.0=conversion constant from S to SO2; $F(612)$ =DSL mass rate in lb/hr; $\%Soil$ = $\%S$ by weight in DSL; 100=conversion from %
A	633	SO2	D-12	$SO2t = F(631) + F(632)$ Where: $SO2t$ =total SO2 mass emissions from combined fuels in lb/hr; $F(631)$ = $SO2g$ from PNG; $F(632)$ = $SO2o$ from DSL
A	641	NOX	19-1	$NOx = K * Cd * S(602) * 20.9 / (20.9 - S(603))$ Where: NOx =NOx emission rate in lb/mmBtu; K =calculation constant=1.194e-7; $S(602)$ =NOx concentration in ppmvd; 20.9=ambient %O2; $S(603)$ =Actual %O2 concentration
A	651	CO2	G-4	$CO2g = [F_c * F(611) * 1/385 * 44] / 2000$ Where: $CO2g$ =CO2 mass emissions from PNG in tons/hr; F_c =PNG Carbon F factor; $F(611)$ HI of PNG in mmBtu/hr; 1/385=1/molar volume; 44=molecular weight; 2000=lbs/ton
A	652	CO2	G-4	$CO2o = [F_c * F(613) * 1/385 * 44] / 2000$ Where: $CO2o$ =CO2 mass emissions from DSL in tons/hr; F_c =carbon F factor for DSL=1420 scf/mmBtu; $F(613)$ =HI of DSL in mmBtu; 1/385=1/molar volume; 44=molecular weight

Unit/Stack/Pipe ID: 6

EMISSIONS FORMULAS (RT 520)

Formula		Formula		
Status	ID#	Parameter	Code	Formulas
A	653	CO2	G-4A	CO2t=F(651)+F(652) Where: CO2t=total CO2 emissions for unit in tons/hr; F(651)=CO2 emissions from PNG; F(652)=CO2 emissions from DSL

Status Codes: A - Add

Parameter Codes: CO2 - CO2 mass emissions, FD - Dry f-factor, HI - Heat input, NOX - NOx emission rate, OILM - Mass of oil,
SO2 - SO2 mass emissions

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SPAN VALUES (RT 530)

Unit/	Para-	Meth-	MPC/	Max.						Inactive	Dual	Def.
Stk ID	meter	Scale	MEC/	NOx		Full-Scale	Units of	Eff. Date		Date &	Spans	High
		od	MPF	Rate	Span Value	Range	Measure	and Hour		Hour	Req.	Range Value
1	NOX	H	HD	160.000	0.560	200	200	PPM	01/01/1996 00	/ /	D	
	NOX	L	HD	40.000	0.564	50	50	PPM	09/15/1996 00	/ /	D	
	O2	H			25.0	25.0	%	01/01/1996 00	/ /			
6	NOX	H	TB	100.000	0.387	100	100	PPM	06/11/2002 00	/ /		
	NOX	L	OL	30.000	0.163	30	30	PPM	06/11/2002 00	/ /		
	O2	H		21.000		25.0	25.0	%	06/11/2002 00	/ /		

Parameter Codes: NOX - NOx concentration, O2 - Oxygen
Scale Codes: H - High, L - Low
Method Codes: HD - Historical data, TB - Table of Constants, OL - Other limit
Units of Measure Codes: % - Percent, PPM - Parts per million
Dual Span Req. Codes: D - D Two CEMS ranges installed

MAXIMUMS, MINIMUMS, DEFAULTS, AND CONSTANTS (RT 531)

Unit/Stack/ Pipe ID	Parameter	Value	Units of Measure	Purpose	Fuel Type	Source of Value	Controlled/ Uncontrolled Indicator	Begin Use of Value Date	Hr	Value No Longer Used Date	Hr
1	NOXG	0.700	LBMMBTU	LM	PNG	LME	U	12/31/1998	00	/ /	

MAXIMUMS, MINIMUMS, DEFAULTS, AND CONSTANTS (RT 531)

Unit/Stack/ Pipe ID	Parameter	Value	Units of		Fuel Type	Source of Value	Controlled/ Uncontrolled	Begin Use of		Value No Longer Used	
			Measure	Purpose			Indicator	Value Date	Hr	Date	Hr

1	SO2G	0.0006	LBMMBTU	LM	PNG	LME	U	06/30/1994	00	/	/
---	------	--------	---------	----	-----	-----	---	------------	----	---	---

Parameter Codes: NOXG - Generic NOx default emission rate, SO2G - SO2 default emission factor
 Units of Measure Codes: LBMMBTU - Pounds per million BTU
 Purpose Codes: LM - Low mass emission unit default
 Source of Value Codes: LME - Low mass emission default
 Fuel Type Codes: PNG - Pipeline natural gas

UNIT AND STACK LOAD RANGE AND OPERATING LOAD (RT 535)

Unit/Stack/ Pipe ID	Units of Measure	Maximum Hourly Load	Single Load RATA Testing Only
------------------------	---------------------	------------------------	-------------------------------------

1	MW	135	
6	MW	104	

RANGE OF OPERATION, NORMAL LOAD AND LOAD USAGE (RT 536)

Unit/ Stack ID	Upper Bound of Range Of Operation	Lower Bound of Range Of Operation	Two Most Frequently-used Load Levels	Designated Normal Load	Second Designated Normal Load	Activation Date	Deactivation Date
1	135	60	M,H	H		01/01/1996	/ /
6	104	78	H,M	H		03/20/2002	/ /

FUEL FLOWMETER DATA (RT 540)

Unit/ Pipe ID	System ID	Parameter	Fuel Type	Maximum Fuel Flow Rate	Units of Measure	Source of Maximum	Initial Accuracy Test Method	Sub Status
1	101	GAS	PNG	17300	HSCF	URV	AGA3	U
	102	OILV	DSL	9500	GALHR	URV	AGA3	U
6	601	GAS	PNG	15910	HSCF	URV	AGA3	A
	604	OILV	DSL	11770	GALHR	URV	AGA3	A

Parameter Codes: GAS - Gas fuel flow, OILV - Volumetric oil flow

Fuel Type Codes: DSL - Diesel oil, PNG - Pipeline natural gas

Units of Measure Codes: GALHR - Gallons per hour, HSCF - 100 standard cubic feet per hour

Source of Maximum Codes: URV - Upper Range Value

Submission Status Codes: A - Add, U - Unchanged

MONITORING METHODOLOGIES (RT 585)

Unit ID	Parameter	Methodology	Fuel Type	Primary/		Missing Data Approach	Begin Date	End Date
				Secondary				
1	CO2	GFF	PNG	P	NA		07/24/1994	/ /
	HI	GFF	PNG	P	NA		07/24/1994	/ /
	NOXR	CEM	NFS	P	NA		07/24/1994	/ /
	OP	EXP	PNG	P	NA		07/24/1994	/ /
	SO2	GFF	PNG	P	NA		07/24/1994	/ /
6	CO2	GFF	PNG	P	SPTS		06/11/2002	/ /
	CO2	OFF	DSL	P	SPTS		06/11/2002	/ /
	HI	GFF	PNG	P	SPTS		06/11/2002	/ /
	HI	OFF	DSL	P	SPTS		06/11/2002	/ /
	NOXR	CEM	NFS	P	SPTS		06/11/2002	/ /
	OP	EXP	DSL	P	SPTS		06/11/2002	/ /
	OP	EXP	PNG	P	SPTS		06/11/2002	/ /
	SO2	GFF	PNG	P	SPTS		06/11/2002	/ /
	SO2	OFF	DSL	P	SPTS		06/11/2002	/ /

Parameter Codes: CO2 - Carbon Dioxide, HI - Heat Input, NOXR - NOx Emission Rate, OP - Opacity, SO2 - Sulfur Dioxide

Fuel Type Codes: DSL - Diesel oil, NFS - Non-fuel specific, PNG - Pipeline natural gas

Methodology Codes: CEM - Continuous emission monitoring, EXP - Exempted, GFF - Hourly gas flow, OFF - Hourly oil flow

Missing Data Approach Codes: NA - Not applicable, SPTS - Standard Part 75

CONTROL INFORMATION (RT 586)

Unit ID	Parameter	Type of Controls	Primary/Secondary	Original Installation?	Controls Installation Date	Controls Optimization Date	Controls Retirement Date	Ozone Season Only?
1	NOX	H2O	P	O	12/28/1994	/ /	/ /	
6	NOX	H2O	P	O	06/11/2002	/ /	/ /	

Parameter Codes: NOX - Nitrogen Oxides

Type of Controls Codes: H2O - Water injection

FUEL TYPE INFORMATION (RT 587)

Unit ID	Fuel Classification	Primary/Secondary Fuel	Start Date	End Date	Ozone Season Flag	Method to Qualify for Monthly GCV	Method to Qualify for Daily % Sulfur
1	DSL	S	12/28/1994	/ /			
	PNG	P	12/28/1994	/ /			
6	DSL	S	06/11/2002	/ /			
	PNG	P	06/11/2002	/ /			

Fuel Classification Codes: DSL - Diesel oil, PNG - Pipeline natural gas

APPENDIX K

ACID RAIN PHASE II DOCUMENTATION



CALPINE

APP-1D

AUBURNDALE POWER PARTNERS
LIMITED PARTNERSHIP

1501 WEST DERBY AVENUE
AUBURNDALE, FLORIDA 33823

863.965.1561 (MAIN)
863.965.1924 (FAX)

March 25, 2002

Robert Miller
US EPA Acid Rain Program
633 3rd Street, NW
Washington, DC 20001

RE: Revised Acid Rain Certificate of Representation
Auburndale Power Partners L.P./Auburndale Peaker Energy Center, L.L.C.
Auburndale Cogeneration Facility/Auburndale Peaker Energy Center
ORIS Number: 54658
FedEx Number: 8311 6887 0708

Dear Mr. Miller:

Please find the revised Acid Rain Certificate of Representation for the Auburndale Cogeneration Facility (Units 1 and 6) located in Polk County, Florida. Auburndale Power Partners L.P. owns Unit 1 and Unit 6 is owned by Auburndale Peaker Energy Center, L.L.C. Calpine Eastern Corporation is responsible for operation of both Units. This revised Acid Rain Certificate of Representation changes the Designated Representative to Mr. Bob Callery, Plant Manager. Mr. Benjamin M. H. Borsch will remain the Alternate Designated Representative. Public notice of this change was printed in the March 23, 2002 Lakeland Ledger.

This certificate is submitted in accordance with the provisions of Title 40, Parts 72.30 and 72.31 of the Code of Federal Regulations applicable to facilities regulated by the Acid Rain Program. If you have any questions concerning the attached information, please call myself at (863) 965-1561 or Benjamin Borsch at (813) 637-7300.

Sincerely,

Calpine Construction Finance Company, L.P.

Bob Callery
Plant Manager

CC: Joe Kahn, FDEP; FedEx Number 8311 6887 0719

Mr. Robert Miller
US EPA

March 25, 2002

BCC: Benjamin Borsch, Calpine-Tampa

Mr. Robert Miller
US EPA

March 25, 2002

CC: Addresses

Joe Kahn

Bureau of Air Monitoring and Mobile Sources

Division of Air Resource Management

Florida Department of Environmental Protection

2600 Blair Stone Road MS 5500

Tallahassee, Florida 32399-2400

(850) 488-0114



Certificate of Representation

Page 1

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

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

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

STEP 1
Identify the source by
plant name, State, and
ORIS code

Auburndale Cogeneration Facility/ Auburndale Peaker Energy Center	FL	54658
Plant Name	State	ORIS Code

STEP 2
Enter requested
information for the
designated
representative.

Mr. Bob Callery Name	
1501 West Derby Avenue; Auburndale, FL 33823 Address	
(863) 965-1561 Phone Number	(863) 965-1924 Fax Number
bcallery@calpine.com E-mail Address (if available)	

STEP 3
Enter requested
information for the
alternate designated
representative, if
applicable.

Mr. Benjamin M. H. Borsch, P.E. Name	
(813)637-7300 Phone Number	(813)637-7399 Fax Number
bborsch@calpine.com E-mail address (if available)	

STEP 4
Complete Step 5, read
the certifications, and
sign and date. For a
designated
representative of a
combustion or process
source under 40
CFR part 74, the
references in the
certifications to "affected
unit" or affected units"
also apply to the
combustion or process
source under 40 CFR
part 74 and the
references to affected
source" also apply to the
source at which the
combustion or process
source is located.

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

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

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

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

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

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

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

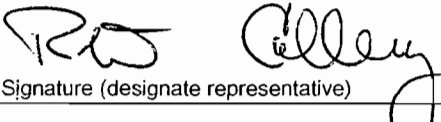

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances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

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

Plant Name (from Step 1)

Page ☐ of ☐

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

 Signature (designate representative)	3/25/02 Date
 Signature (alternate designated representative)	3/18/02 Date

STEP 5

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

Auburndale Power Partners, L.P.					<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator	
Name						
1						
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Auburndale Peaker Energy Center, L.L.C.					<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator	
Name						
6						
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Calpine Eastern Corporation					<input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator	
Name						
1	6					
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

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

AFFIDAVIT OF PUBLICATION

THE LEDGER

Lakeland, Polk County, Florida

Case No

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Ken Holtzinger, who on oath says that he is the Classified Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

..... Notice for Certificate of Representation

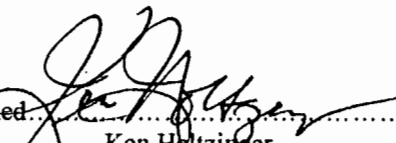
in the matter of..... ACT/APEC EPA Acid Rain Program

in the.....

Court, was published in said newspaper in the issues of.....

..... 3-23; 2002

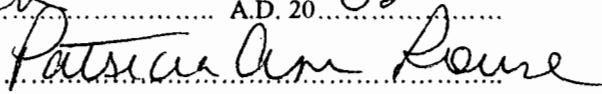
Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed 
Ken Holtzinger
Classified Manager
Who is personally known to me.

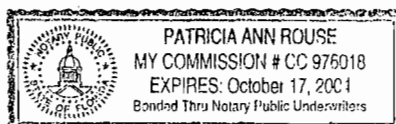
Sworn to and subscribed before me this 25TH

day of March

A.D. 20 02



Notary Public
PATRICIA ANN ROUSE



(Seal)

My Commission Expires.....

Attach Notice Here

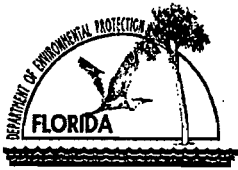
**ACE/APEC NOTICE FOR
CERTIFICATE OF
REPRESENTATION
EPA ACID RAIN PROGRAM**

Auburndale Power Partners, L.P. (owner of Unit 1), Auburndale Peaker Energy Center, L.P. (owner of Unit 6), and Calpine Eastern Corporation (operator of Unit 1 and 6), gives notice of Mr. Bob Callery, Plant Manager, being selected as the designated representative for the Auburndale Cogeneration Facility and the Auburndale Peaker Energy Center (ORIS Code 54658). The Facilities are located in Polk County, Florida. Mr. Bob Callery may be contacted at 1501 West Derby Avenue, Auburndale, Florida or by phone at (863) 965-1561. This public notice is required pursuant to US EPA's Acid Rain Program 40 CFR Part 72. A revised certificate of representation has been filed with the US EPA: Acid Rain Program (6204J); Attention: Designated Representative; 401 M St., SW; Washington, DC 20460. Any questions for the agency may be directed to (202) 564-9620 (EPA Acid Rain Hotline).

G462 - 3-23; 2002

APPENDIX L

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.

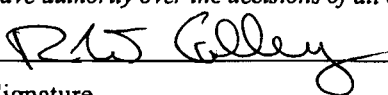
Identification of Facility

1. Facility Owner/Company Name: Auburndale Power Partners, LP and Auburndale Peaker Energy Center, LLC	
2. Site Name: Auburndale Energy Campus	3. County: Polk
4. Title V Air Operation Permit/Project No. (leave blank for initial Title V applications): Title V Permit No.: 1050221-002AV; Facility ID No.: 1050221	

Notification Type (Check one or more)

<input type="checkbox"/> INITIAL:	Notification of responsible officials for an initial Title V application.
<input checked="" type="checkbox"/> RENEWAL:	Notification of responsible officials for a renewal Title V application.
<input checked="" type="checkbox"/> CHANGE:	Notification of change in responsible official(s). Effective date of change in responsible official(s) _____

Primary Responsible Official

1. Name and Position Title of Responsible Official: Bob Callery; General Manager	
2. Responsible Official Mailing Address: Organization/Firm: Calpine Eastern Corporation Street Address: 1501 West Derby Avenue City: Auburndale State: Florida Zip Code: 33823	
3. Responsible Official Telephone Numbers: Telephone: (863) 965-1561 Fax: (863) 965-1924	
4. Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source.	
5. Responsible Official Statement: <p><i>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.</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  Signature </div> <div style="width: 45%;"> 6-26-02 Date </div> </div>	

Additional Responsible Official

1. Name and Position Title of Responsible Official: Bob Alff; Senior Vice President
2. Responsible Official Mailing Address: Organization/Firm: Calpine Eastern Corporation Street Address: The Pilot House, 2nd Floor, Lewis Wharf City: Boston State: MA Zip Code: 02110
3. Responsible Official Telephone Numbers: Telephone: (617) 723-7200 Fax: (617) 723-7635
4. Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.

Additional Responsible Official

1. Name and Position Title of Responsible Official: Benjamin Borsch; Environmental Manager
2. Responsible Official Mailing Address: Organization/Firm: Calpine Eastern Corporation Street Address: 2701 N. Rocky Point Drive, Suite 1200 City: Tampa State: Florida Zip Code: 33607
3. Responsible Official Telephone Numbers: Telephone: (813) 637-7305 Fax: (813) 637-7395
4. Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source. (Alternate)

APPENDIX M

CURRENT PERMITS

Auburndale Power Partners, Limited Partnership
Auburndale Cogeneration Facility
Facility ID No.: 1050221
Polk County

Initial Title V Air Operation Permit
FINAL Permit No.: 1050221-002-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-1344
Fax: 850/922-6979

Compliance Authority:
State of Florida
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

December 30, 1997

Initial Title V Air Operation Permit
FINAL Permit No.: 1050221-002-AV

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Section I. Facility Information.

Subsection A. Facility Description.

This facility is a cogeneration plant consisting of a combined cycle combustion turbine cogeneration system rated at 156 total megawatts (MW) output. The combined cycle system consists of one combustion turbine (CT), one unfired heat recovery steam generator (HRSG), and one steam turbine-generator. The facility utilizes pipeline natural gas as its primary fuel source and low sulfur (0.05 % by weight) distillate fuel oil as a backup fuel source.

Also located at this facility are two distillate fuel oil storage tanks, and miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received October 26, 1995, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-001	Combustion Turbine System
-002	Fuel oil storage tanks (2)
-003	Emergency generators
-004	Heating units and engines
-005	Surface coating operations

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
2. **Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.** The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]
3. **Prevention of Accidental Releases (Section 112(r) of CAA).** If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
4. **Insignificant Emissions Units and/or Activities.** Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
5. **Unregulated Emissions Units and/or Activities.** Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]
6. **General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
7. **General Particulate Emission Limiting Standards. General Visible Emissions Standard.** Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1., F.A.C.]

8. Not federally enforceable. The permittee shall take reasonable precautions, on an as needed basis, to prevent emissions of unconfined particulate matter at this facility to include:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and
- e. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received October 26, 1995]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C., condition 58. of APPENDIX TV-1, TITLE V CONDITIONS.}

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.

{See condition 52., APPENDIX TV-1, TITLE V CONDITIONS}

[Rule 62-214.420(11), F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office:

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

Section III. Emissions Unit(s).

Subsection A. This section addresses the following emissions unit.

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-001	Combustion Turbine System

This facility operates a combined cycle combustion turbine (CT) cogeneration system with a combined total output of 156 MW. The combined cycle system consists of one 104 MW Westinghouse 501D5 combustion turbine (CT), one 52 MW steam turbine-generator, and one HRSG. The HRSG is not fuel fired. Water injection (all phases) and good combustion practices are used to control air pollutant emissions.

{Permitting note: This emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT).}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input to the combustion turbine (CT) shall not exceed 1214 MMBtu/hr as determined using a lower heating value (LHV) at International Standards Organization (ISO) conditions while firing natural gas and 1170 MMBtu/hr as determined using a LHV at ISO conditions while firing No. 2 distillate fuel oil.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

A.2. Methods of Operation - Fuels. Only natural gas or distillate (No. 2) fuel oil having a maximum sulfur content of 0.05 percent by weight shall be fired in the combustion turbine.
[Rules 62-4.160(2), F.A.C. and 62-213.410, F.A.C.]

A.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. The total hours of operation of the combustion turbine while firing distillate fuel oil shall not exceed 400 hours/year.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.4. Visible emissions (VE) at full load (i.e., 156 MW) shall not exceed 10% opacity.
[Best Available Control Technology (BACT) Determination dated December 14, 1992.]

A.5. Visible emissions (VE) at other than full load shall not be equal to or greater than 20% opacity.
[PSD-FL-185]

A.6. Particulate matter ten (PM10) emissions shall not exceed
a. while firing natural gas:
0.0134 lb/mmBtu (see note #2); 10.5 lbs./hour (see note #1); 46 TPY (see note #2);
and
b. while firing distillate fuel oil:
0.0472 lb/mmBtu (see note #2); 36.8 lbs./hour (see note #1); 7.4 TPY (see note #2).
[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

A.7. Sulfur dioxide (SO2) emissions shall not exceed
a. while firing natural gas:
40.0 lbs./hour (see note #1); 175.2 TPY (see note #2)
b. while firing distillate fuel oil:
0.05 % sulfur content by weight (see note #1); 70.0 lbs./hour (see note #1); 14 TPY
(see note #2).
[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

A.8. Nitrogen oxides (NOx) emissions shall not exceed
a. while firing natural gas:
up to 12/31/98: 25 ppmvd @15% O2, 24-hour block average (see note #1);
131.0 lbs./hour (see note #2); 573.8 TPY (see note #2);
by 12/31/98: 15 ppmvd @15% O2, 24-hour block average (see note #1);
78.6 lbs./hour (see note #2); 344.3 TPY (see note #2);
b. while firing distillate fuel oil:
42 ppmvd @15% O2, 24-hour block average (see note #1);
230.0 lbs./hour (see note #2); 46 TPY (see note #2).

c. 24-hour block averages: 24-hour block averages are calculated as follows:
At the same time each day, a 24-hour block average shall be calculated for the monitored operating hours in the previous 24 hour period. The 24-hour block average shall be determined by summing the hourly average NO_x concentrations for all valid monitored operating hours and dividing by the

number of hourly average NO_x

concentrations in the previous 24 hour period. A monitored operating hour is each hour in which fuel is fired in the combustion turbine and at least two continuous emissions monitoring systems (CEMS) emission measurements are recorded at least 15 minutes apart. CEMS data taken during periods of: startup, shutdown, or malfunction as defined in Rules 62-210.200 and 62-210.700 F.A.C., when fuel is not fired in the unit, or during CEMS quality assurance checks or when the CEMS is out of control shall be excluded from the 24-hour block average.

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

A.9. Volatile organic compound (VOC) emissions shall not exceed

a. while firing natural gas: 6.0 lbs./hour (see note #1); 26.3 TPY (see note #2); and

b. while firing distillate fuel oil: 10.0 lbs./hour (see note #1); 2.0 TPY (see note #2).

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

A.10. Carbon monoxide (CO) emissions shall not exceed

a. while firing natural gas: 21 ppmvd @ minimum load (see note #2); 15 ppmvd @ base load (see note #2); 43.5 lbs./hour (see note #1); 190.5 TPY (see note #2). and

b. while firing distillate fuel oil: 25 ppmvd (see note #2); 73.0 lbs./hour (see note #1); 14.6 TPY (see note #2).

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

A.11. Sulfuric acid mist emissions shall not exceed

a. while firing natural gas: 7.5 lbs./hour (see note #1); 32.9 TPY (see note #2); and

b. while firing distillate fuel oil: 14.0 lbs./hour (see note #1); 2.8 TPY (see note #2).

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185]

Excess Emissions

A.12. Excess emissions from this emissions unit resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

A.14. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for

minimizing emissions. Determination of whether acceptable operating and maintenance

procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

A.15. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator. The NO_x CEMS will be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in 40 CFR 60.334.

[40 CFR 60.334(a); PSD-FL-185]

A.16. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. Pursuant to the custom monitoring schedule provisions of 40 CFR 60.334(b)(2), the frequency of determination of these values shall be as follows:

- (a) Monitoring of the nitrogen content of distillate fuel oil is not required. Sulfur content of distillate fuel oil shall be determined for each shipment of distillate fuel oil received; and
- (b) Monitoring of the nitrogen content of pipeline natural gas is not required. Sulfur content of pipeline natural gas will be based on twice-monthly analyses provided by the natural gas supplier.

[40 CFR 60.334(b)(1) and (2)]

A.17. Determination of Process Variables.

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.18. Visible Emissions (VE). The test method for VE shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and, PSD-FL-185, revised March 18, 1996]

A.19. Particulate Matter Ten (PM10). The test methods for PM10 emissions, for distillate fuel oil-firing only, shall be Methods 5, 17, 201, or 201A, incorporated by reference in Chapter 62-297, F.A.C.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and, PSD-FL-185, revised March 18, 1996]

A.20. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

[40 CFR 60.335(a)]

A.21. For purposes of demonstrating compliance with NSPS - 40 CFR 60, Subpart GG, the monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_x standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

A.22. a. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows: U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

b. For purposes of demonstrating compliance with the NO_x emission limits (in lbs/hr and tons/yr) specified in Condition A.8, either EPA Method 20 (at 90 - 100% of permitted maximum capacity load only) or the relative accuracy (RA) test data pursuant to 40 CFR 60 Appendix B Performance Specification 2 Section 7 shall be used. The NO_x CEMS shall be used for the purpose of demonstrating compliance with the NO_x emission limit (24-hour block average concentration limit) specified in Condition A.8.

[40 CFR 60.335(c)(3); PSD-FL-185]

A.23. The owner or operator shall determine compliance with the sulfur content standard of 0.05 percent, by weight, as follows: ASTM D129-91; D1552-90; D2280-71; D2880-96; D2622-92; D4292; D4294-90; or the latest edition(s) shall be used to determine the sulfur content of liquid fuels and ASTM D1072-80, 90, 94; D3031-81, 86; D3246-81, 92; D4084-82, 94; D4468-85; D5504-94; or the latest edition(s) shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods

mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

[40 CFR 60.335(d); PSD-FL-185]

A.24. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 or the latest edition(s) to determine the sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 CFR 60.335(e); PSD-FL-185]

A.25 Volatile organic compound (VOC). Compliance with the VOC standard shall be demonstrated using EPA Method 25A.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and, PSD-FL-185, revised March 18, 1996]

A.26. Carbon monoxide (CO). Compliance with the CO standard shall be demonstrated using EPA Method 10.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and, PSD-FL-185, revised March 18, 1996]

A.27. Sulfuric Acid Mist. Compliance with the sulfuric acid mist standard shall be demonstrated using EPA Method 8.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and, PSD-FL-185, revised March 18, 1996]

A.28. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle

and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in TABLE 297.310-1, CALIBRATION SCHEDULE (attached).

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

A.32. The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]

A.33. Frequency of Compliance Tests. The following provisions apply only to the combustion turbine system and only for the pollutants listed in Conditions A.4 through A.11 for which compliance testing is required.

(a) Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. A compliance test shall be conducted for nitrogen oxides/oxygen, volatile organic compounds, carbon monoxide, and sulfuric acid mist prior to obtaining a renewed operation permit. Compliance testing is only required during the combustion of natural gas fuel. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions (VE);

b. Carbon monoxide (CO); and

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

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a baghouse or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; PSD-FL-185]

A.34. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends

or other flow disturbances.

8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
[Rule 62-297.310(8), F.A.C.]

Record Keeping and Reporting Requirements

A.35. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

- a. *Nitrogen Oxides.* The NO_x CEMS will be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in 40 CFR 60.334. The NO_x CEMS shall be used to report excess emissions during periods of startup, shutdown, and malfunction in lieu of FBN monitoring and the water/fuel monitoring system described in 40 CFR 60.334(c)(1).
- b. *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent.

[40 CFR 60.334(c); PSD-FL-185]

A.36. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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

A.37. The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

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

A.38. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

A.39. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

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

A.40. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

Miscellaneous Requirements

A.41. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

A.42. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

A.43. In order to comply with the lower NO_x limit by December 31, 1998, the permittee shall make appropriate combustion technology improvements or install a selective catalytic reduction (SCR) system.
[Revised BACT Determination dated June 20, 1994; PSD-FL-185]

A.44. The following information shall be submitted with the AOR: the sulfur content and lower heating value of the fuel fired, fuel usage, and hours of operation.
[PSD-FL-185, Condition number 27.]

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Auburndale Power Partners,
Limited Partnership
Auburndale Cogeneration Facility

FINAL Permit No.: 1050221-002-AV

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62-210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

Emissions Units and/or Activities Description

1. Comfort heating with a gross maximum heat input of less than one million Btu per hour.
2. Vacuum pumps in laboratory operations.
3. 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 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.

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Auburndale Power Partners,
Limited Partnership
Auburndale Cogeneration Facility

FINAL Permit No.: 1050221-002-AV

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U.

<u>ID No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-003	One or more emergency generators which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
-004	One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
-005	Surface coating operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOCs, by volume.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

(Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.)

Chapter 62-4, F.A.C.

I. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

2. Not federally enforceable. Procedure to Obtain Permits: Application.

(1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.

(2) All applications and supporting documents shall be filed in quadruplicate with the Department.

(3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which maybe a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where

professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

(4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.

(5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be

paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.

(c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876,

F.S., shall begin.

(d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.

(e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections

120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.

(6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.

(7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.

[Rule 62-4.050, F.A.C.]

3. Standards for Issuing or Denying Permit. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.

[Rule 62-4.070(7), F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

4. Modification of Permit Conditions.

(1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:

(a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

(b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.

(c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.

(e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.

(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 624.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. **Renewals.** Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

6. Suspension and Revocation.

(1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.

(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.

(3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department

may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:

(a) Submitted false or inaccurate information in application or operational reports.

(b) Has violated law, Department orders, rules or permit conditions.

(c) Has failed to submit operational reports or other information required by Department rules.

(d) Has refused lawful inspection under Section 403.09 1, F.S.

[Rule 62-4. 100, F.A.C.]

7. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules.

[Rule 62-4.110, F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

8. Transfer of Permits.

(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.

(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.

(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.

(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.

(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.

[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.

[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays. [40 CFR 70.6(a)(3)(iii)(B)]

11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed of final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing. [Rule 62-4.150, F.A.C.]

12. Permit Conditions. All permits issued by the Department shall include the following general conditions:

(1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

(2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

(3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

(4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

(5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

(6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

(7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- (c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

(8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (a) A description of and cause of noncompliance and, (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

(9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

(10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

(12) This permit or a copy thereof shall be kept at the work site of the permitted activity.

(14) The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used; and,
 - 6. the results of such analyses.

(15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

13. Construction Permits.

(1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:

- (a) A completed application on forms furnished by the Department,
- (b) An engineering report covering:

- 1. plant description and operations,
- 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
- 3. proposed waste control facilities,
- 4. the treatment objectives,
- 5. the design criteria on which the control facilities are based, and,
- 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

(c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.

(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F. S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense. [Rule 62-4.210, F.A.C.]

14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate. [Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C. [Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C. [Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Chapter 62-2 10, F.A.C.

18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

(1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.

(2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.

(a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62212.500, F.A.C.; and,
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.

4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C. [Rules 62-210.300(1) & (2)~ F.A.C.]

19. **Not federally enforceable. Notification of Startup.** The owner or operator of any emissions unit of facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.

(a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), R.A.C.]

20. Emissions Unit Reclassification.

(a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C. shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

(1) Public Notice of Proposed Agency Action.

(a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:

1. An air construction permit;
2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

(b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.

(2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment Area Preconstruction Review.

(a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403. 111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
2. A 30-day period for submittal of public comments; and,

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing. (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit. (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices. (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C. (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit. (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available. (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:

1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.

2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.

(3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.

(a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
2. A 30-day period for submittal of public comments.

(b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) The notice shall identify:

1. The facility;
2. The name and address of the office at which processing of the permit occurs;
3. The activity or activities involved in the permit action;
4. The emissions change involved in any permit revision;
5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;
7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7 (f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

(1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:

- (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(1)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.
- [Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

40. Insignificant Emissions Units or Pollutant-Emitting Activities.

- (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
- (b) An emissions unit or activity shall be considered insignificant if:
 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s)~ and
 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

41. Permit Duration. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years.

[Rule 62-213.440(1)(a), F.A.C.]

42. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

[Rule 62-213.440(i)(b)2.a., F.A.C.]

Appendix H-1, Permit History/ID Number Changes

Auburndale Power Partners, Limited Partnership
Auburndale Cogeneration Facility

FINAL Permit No.: 1050221-002-AV
Facility ID No.: 1050221

Permit History (for tracking purposes):

<u>E.U.</u> <u>ID No.</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> ^{1,2}	<u>Revised Date(s)</u>
-001	Combined Cycle Combustion Turbine	AC53-208321/ PSD-FL-185	12/14/92	10/30/95	11/1/96	6/20/94, 3/18/96, 5/22/97

ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 40TPA530221

To: **Facility ID No.:** 1050221

Added:

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-002	Fuel oil storage tanks (2)
-003	Emergency generators
-004	Heating units and engines
-005	Surface coating operations

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

Calpine Eastern Corporation
Boston, MA 02110

Authorized Representative:

Mr. Robert K. Alff
Senior Vice President

ARMS Permit No. 1050221-004-AC

Facility ID No. 1050221

SIC No. 4911

Expires: April 1, 2003

PROJECT AND LOCATION

The proposed project authorizes the installation of one simple cycle, combustion turbine with an electrical generator set. The gas turbine is capable of producing a nominal 104 MW of electricity.

The project will be located in Polk County at 1501 West Derby Avenue, Auburndale. The UTM coordinates are Zone 17, 420.8 km E, 3103.2 km N and map coordinates are Latitude 28° 03' 06", Longitude 81° 48' 21".

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources Management

Date:

SECTION I. FACILITY INFORMATION

FACILITY DESCRIPTION

The existing facility is a cogeneration plant consisting of a combined cycle combustion turbine cogeneration system rated at 156 total megawatts (MW) output. The combined cycle system consists of one combustion turbine (CT), one unfired heat recovery steam generator (HRSG), and one steam turbine-generator. The facility utilizes pipeline natural gas as its primary fuel source and low sulfur (0.05 % by weight) distillate fuel oil as a backup fuel source. Also located at this facility are two distillate fuel oil storage tanks, and miscellaneous unregulated/insignificant emissions units and/or activities. Completion of this project will result in the installation of a new electric power generator capable of providing a nominal 104 MW of electrical power.

NEW EMISSIONS UNIT

The proposed project will result in the following new emissions unit, as well as additional limitations being placed upon existing Emission Unit 001.

ARMS ID No.	EMISSION UNIT DESCRIPTION
006	Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation, 1369 MMBtu/hr for natural gas and 1412 MMBtu/hr for number 2 fuel oil (0.05% S) at ISO conditions. Evaporative cooling is authorized.

REGULATORY CLASSIFICATION

HAPs: This facility will not be a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is subject to the acid rain provisions of the Clean Air Act (Title IV).

Title V Major Source: This facility is a Title V major source of air pollution.

PSD Major Source: Each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. For this project, emissions of no pollutant are significant or subject to BACT standards, provided that the Emission Unit is operated as specified in this permit. However, the existing facility is classified as a PSD Major Source.

NSPS Sources: The combustion turbines specified in this permit are subject to regulation under the New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60, Subpart GG.

RELEVANT DOCUMENTS

- Permit application received on 12/12/00
- Department's Request For Additional Information (RFI) distributed on 1/10/01
- Applicant's response to RFI received 1/19/01
- Department's 2nd RFI distributed on 2/6/01
- Application complete on 5/18/01
- Intent to Issue Permit package (including Technical Evaluation and Preliminary Determination) issued on 5/24/01

SECTION II. ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
2. Compliance Authority: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Air Resources Section of the Southwest District Office, Florida Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 3619-8218. The phone number is 813/744-6100 and the fax number is 813/744-6084.
3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.
4. General Conditions: The owner and operator are subject to, and shall operate under the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
8. Expiration: This air construction permit shall expire on April 1, 2003. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C.]
9. Title V Permit: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy sent to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and 62-213.420, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

This section of the permit addresses the following new emissions unit *and existing Emission Unit 001*.

EU ID No.	EMISSION UNIT DESCRIPTION
006	Siemens/Westinghouse Model W501D5A combustion turbine with electrical generator set: Westinghouse 501D5A combustion turbine (CT) Unit 2 configured for simple cycle operation. Water injection technology shall be utilized for NO _x control. Heat inputs are 1369 MMBtu/hr for natural gas and 1412 MMBtu/hr for number 2 fuel oil (0.05% S), both during ISO conditions. Exhaust gases exit a 50 feet tall stack that is 22 feet in diameter at approximately 1000°F with a volumetric flow rate of 1,887,143 acfm.

APPLICABLE STANDARDS AND REGULATIONS

1. **NSPS Requirements:** The combustion turbine shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
 - (a) **Subpart A, General Provisions, including:**
 - 40 CFR 60.7, Notification and Record Keeping
 - 40 CFR 60.8, Performance Tests
 - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
 - 40 CFR 60.12, Circumvention
 - 40 CFR 60.13, Monitoring Requirements
 - 40 CFR 60.19, General Notification and Reporting Requirements
 - (b) **Subpart GG, Standards of Performance for Stationary Gas Turbines** These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards.

PERFORMANCE RESTRICTIONS

2. **Combustion Turbines:** The permittee is authorized to install, tune, operate and maintain one new combustion turbine with electrical generator set (Siemens/Westinghouse Model 501D5A). The unit is designed to produce a maximum 135 MW of electrical power. [Applicant Request]
3. **Permitted Capacity:** The heat input to the combustion turbine from firing natural gas shall not exceed 1591 MMBtu per hour based on the following: 100% base load, a higher heating value (HHV) for natural gas and a compressor inlet air temperature of 32° F. The heat input to the combustion turbine from firing No. 2 fuel oil shall not exceed 1546 MMBtu per hour based on the following: 100% base load and a compressor inlet air temperature of 32° F. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing subsequent to both Phases. Heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. [Design, Rule 62-210.200, F.A.C. (Definition - PTE)]
4. **Simple Cycle, Intermittent Operation Only:** The combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation, nor the permitted short and long-term emission limits allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD non-applicability determination and resulted in the emission standards specified in this permit. Specifically, these restrictions eliminated several control alternatives based on technical as well as regulatory considerations. For any request to modify this emission unit in any way (whether a physical or operational modification, including a change in the allowable hours of operation or heat input, or to alter

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

any short or long-term emission) the permittee shall submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built. Alternately, the permittee shall submit a determination of PSD applicability for proposed permit changes, which the Department shall consider in making its determination. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]

5. Allowable Fuels: The combustion turbine shall be fired with pipeline-quality natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas, monthly average. It is noted that this limitation is much more stringent than the sulfur dioxide limitation in 40 CFR 60, NSPS Subpart GG and assures compliance with regulations 40 CFR 60.333 and 60.334 of this Subpart. The permittee shall demonstrate compliance with the fuel sulfur limits by keeping the records specified in this permit. The use of fuel oil containing no more than 0.05% sulfur by weight shall not exceed 400 hours during any consecutive 12-month period. [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]
6. Allowable Operation: The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount and heat inputs of natural gas as well as fuel oil fired and the hours of operation. [Rule 62-210.200, F.A.C. (Definitions - PTE), PSD Avoidance]
7. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

EMISSIONS CONTROLS

8. Unconfined Emissions of Particulate Matter: [Rule 62-296.320(4)(c), F.A.C.]
 - (a) No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
 - (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
 - (c) Reasonable precautions include the following:
 - Paving and maintenance of roads, parking areas and yards.
 - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - Landscaping or planting of vegetation.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

(d) In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

9. Water Injection Technology: The permittee shall install, calibrate, tune, operate, and maintain a water injection system for the unit. The system shall be designed and operated so as to ensure that NO_x emissions do not exceed 25 ppmvd @15% O₂. [Applicant request; PSD avoidance]
10. Tuning: Prior to the initial emissions performance tests for the gas turbine, the water injection system shall be tuned to optimize the reduction of NO_x emissions (within the other limitations of this permit). Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations to minimize permitted pollutant emissions. [Design, PSD avoidance]
11. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

EMISSIONS STANDARDS

12. Summary: The following table summarizes the emissions standards specified in this permit. Although these limits were not determined by BACT, they (along with other limitations described herein) form the basis for the Department's determination that PSD does not apply.

Pollutant	Gas Emission limit	Oil Emission limit
NO _x	25 ppmvd @ 15% O ₂	42 ppmvd @ 15% O ₂
CO	10 ppmvd @ 15% O ₂	10 ppmvd @ 15% O ₂
VOC	4 ppmvd @ 15% O ₂	5 ppmvd @ 15% O ₂
SO ₂	2 grains / 100 SCF	74.9 lb/hr (0.05% S)
PM ₁₀	2.9 lb/hr	58.5 lb/hr

13. Carbon Monoxide (CO):

CO emissions from the combustion turbine shall not exceed 10.0 ppmvd (at full output of the emissions unit) corrected to 15% oxygen. Additionally, annual emissions of CO from this emission unit shall not exceed 99 TPY, based upon a 12-month rolling total.

The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the CEMS requirement of this permit. [Rule 62-212.400, F.A.C. (PSD avoidance)]

14. Nitrogen Oxides (NO_x):

NO_x emissions from the combustion turbine shall not exceed 25.0 ppmvd nor 42.0 ppmvd (gas and oil respectively) corrected to 15% oxygen. Additionally, annual emissions of NO_x from this emission unit shall not exceed 115 TPY, based upon a 12-month rolling total. *In this regard, existing EU-001 shall be required to comply with an annual NO_x emission limit of 177 TPY, as well as an equivalent annual NO_x limit of 9 ppmvd corrected to 15% oxygen, based upon a 12-month rolling total and natural gas firing.* These emission limits are *in addition to* all existing limits on EU-001, and are unit specific limits imposed as a result of the applicant's desire to net out of a PSD review for NO_x for EU-006.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

The permittee shall demonstrate compliance with this standard as described in Specific Condition 31 and by conducting performance tests and emissions monitoring in accordance with EPA Method 20 and the CEMS requirement of this permit. Short-term (ppmvd) NO_x emissions from the new emissions unit shall not exceed the specified limitations based on a 24-hour block average for data collected from the continuous emissions monitor. [Rule 62-212.400, F.A.C. (PSD avoidance)]

15. Particulate Matter (PM/PM₁₀), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO₂)

- (a) Fuel Specifications. Emissions of PM, PM₁₀, SAM, and SO₂ shall be limited by the use of pipeline-quality natural gas containing no more than 2 grain per standard cubic feet, the use of 0.05% sulfur oil and good combustion techniques as specified in this permit. The permittee shall demonstrate compliance with the oil and gas fuel sulfur limits by maintaining the records specified by this permit as well as fulfilling the requirements specified in PSD-FL-185. The fuel specification is a work practice standard established as a means of determining the applicability of PSD [Rule 62-212.400, F.A.C. (PSD Applicability)] and as a synthetic minor limit for SAM/SO₂ emissions [Rule 62-4.070(3), F.A.C.].
- (b) General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]

16. Volatile Organic Compounds (VOC):

VOC emissions from the combustion turbine shall exceed neither 4.0 ppmvd nor 5.0 ppmvd (gas and oil respectively) corrected to 15% oxygen. The permittee shall demonstrate compliance with these standards by conducting tests in accordance with EPA Method 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions, if specifically requested. [Application, Design, Rule 62-4.070(3), F.A.C.]

EXCESS EMISSIONS

- 17. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. These emissions shall be included in the calculation of the 12-month rolling and 24-hour averages to demonstrate compliance with the continuous emissions standards. [Rule 62-210.700(4), F.A.C.]
- 18. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:
 - (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 2 hours in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]
 - (b) During all startups, shutdowns, and malfunctions, the continuous emissions monitor (CEM) shall monitor and record emissions. However, up to 2 hours of monitoring data during any 24-hour period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report. [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

- (c) CEMS data exclusion and replacement methods shall be in accordance with EPA's Acid Rain requirements. Additionally, the permittee's record-keeping for the EU-001 and EU-006 NO_x emissions caps (TPY) shall be in full agreement with publicly available data on EPA's Acid Rain website.

EMISSIONS PERFORMANCE TESTING

19. Sampling Facilities: The permittee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]
20. Performance Test Methods: Initial (I) and Annual (A) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
- (a) EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources (I, A);
 - (b) EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources (I, A);
 - (d) EPA Method 20 - Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines (I, A); and
 - (e) EPA Method 25A - Determination of Volatile Organic Concentrations (I). (EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions.)
- Annual RATA testing at 100% output may be utilized to satisfy the above annual requirements for CO and NO_x tests. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C.
21. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial NSPS performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8 and Rule 62-297.310(7)(a)9., F.A.C.]
22. Initial Tests Required: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for CO, NO_x, VOC, and visible emissions from the combustion turbine. Initial NO_x performance tests shall be conducted in accordance with the requirements of NSPS Subpart GG including testing at four separate load conditions. NO_x emissions data shall also be converted into units of the NSPS emissions standard. CO performance tests shall be conducted concurrently with all NO_x performance tests required at the four load conditions. [Rule 62-297.310(7)(a)1., F.A.C.]
23. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for CO, NO_x and visible emissions from the combustion turbine. If conducted at permitted capacity, CO and NO_x emissions data collected during the annual CO and NO_x continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)4., F.A.C.]
24. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NO_x, VOC, and visible emissions from the combustion turbine. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants that are required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]

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25. Tests After Substantial Modifications: All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shakedown period of air pollution control equipment. Shakedown periods shall not exceed 100 days after re-starting the combustion turbine. [Rule 62-297.310(7)(a)4., F.A.C.]
26. Combustion Turbine Testing Capacity: Initial performance tests shall be conducted in accordance with 40 CFR 60.8 and 40 CFR 60.335 for pollutants subject to a New Source Performance Standard (NSPS) in Subpart GG for stationary gas turbines. Other required performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]
27. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
28. Applicable Test Procedures
- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. [Rule 62-297.310(4)(a)1., F.A.C.]
 - 2. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]
 - (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
 - (c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]
29. Determination of Process Variables
- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
 - (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]

30. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

31. Continuous Emission Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the exhaust stack of this emissions unit to measure and record the emissions of NO_x and CO from the emissions units, and the oxygen (O₂) content of the flue gas at the location where NO_x and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_x and CO within this permit.

Compliance with the emission limits for NO_x shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 valid hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.

For the EU-001 and EU-006 annual (TPY) emissions limits of NO_x, measurements shall be in pounds (converted to tons) and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid 24-hour block average (as determined above) from valid operating days (all fuels) within the calendar month. This monthly total shall be combined with the emissions from the previous valid 11 calendar months and shall comprise a 12-month rolling total.

For the 9-ppmvd annual equivalent emissions limit, which is being placed upon EU-001, measurements shall be in ppmvd and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid (daily) 24-hour gas firing block averages (as determined above) from valid operating days within the calendar month. This monthly total shall be combined with the previous valid 11 calendar months and shall comprise a 12-month rolling total. In order to convert each 12-month rolling total to an annual equivalent limit, the following formula shall be utilized:

$\text{ppmvd}_e = \text{ppmvd}_a * [\text{hours}_g / 8760]$ where:

ppmvd_e = the equivalent annual short-term emissions for nitrogen oxides (ppmvd corrected to 15% O₂)

ppmvd_a = the measured (CEMS) 12-month rolling short-term emissions for NO_x (ppmvd corr. to 15% O₂)

hours_g = 12-month rolling total valid hours of operation combusting natural gas

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For the EU-006 annual CO emissions limit, measurements shall be in pounds (converted to tons) and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid 24-hour block average (as determined above) from valid operating days within the calendar month. This monthly total shall be combined with the previous valid 11 calendar months and shall comprise a 12-month rolling total.

Annual (12-month rolling total) NO_x and CO limits shall be recalculated monthly and available on site for inspection purposes. Additionally, each year the facility shall submit all 12 months worth of calculations as part of the AOR submission.

32. Certification: The NO_x monitor shall be certified and operated in accordance with the following requirements. The NO_x 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, Subparts B and C. For purposes of determining compliance with the emission limits of this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E, of Appendix A of 40 CFR 60. The NO_x monitor shall be a dual range monitor. The span for the lower range shall not be greater than 30 ppm, and the span for the upper range shall not be greater than 100 ppm, as corrected to 15% O₂.

The CO monitor and O₂ monitor shall be certified and operated in accordance with the following requirements. 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 requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to the Department's Southwest District Office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A of 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The span for the CO monitor shall not be greater than 100 ppm, as corrected to 15% O₂. The RATA tests required for the O₂ 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 percent.

33. NO_x/CO CEMS Data Requirements: NO_x, CO and O₂ emissions data shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO_x and CO emissions data recorded during these episodes may be excluded from the block average calculated to demonstrate compliance with the emission limits of this permit as provided in this paragraph. Periods of data excluded for startup and shutdown shall not exceed two hours in any block 24-hour period. Periods of data excluded for malfunctions shall not exceed two hours in any 24-hour block period. All periods of data excluded for any startup, 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 in any 24-hour block period. The owner or operator shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction events shall not be excluded if the startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.

Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to the Department's Southwest District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.

Upon request from the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.

[Rules 62-4.070(3) and 62-212.400., F.A.C., and PSD avoidance]

[Note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures.]

COMPLIANCE DEMONSTRATIONS

34. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
35. Fuel Records: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO₂ standard. Fuel oil sampling for this emissions unit shall be conducted as per the requirements established in PSD-FL-185. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]
36. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.
 - (a) When requested by the Department, the CEMS emission rates for NO_x on this unit shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
 - (b) Data collected from the NO_x CEM shall be used to report excess emissions in accordance with 40 CFR 60.334(c)(1) of NSPS, Subpart GG.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

(c) A *custom fuel monitoring schedule* pursuant to 40 CFR 75 Appendix D may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) as provided for in PSD-FL-185.

37. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the hours of operation by fuel type, 12-month emission totals for NO_x and CO and amount of each fuel fired for the combustion turbine. Likewise, by the fifth calendar day of each month, the 12-month emission totals for the NO_x requirements that have been placed upon the existing EU-001 by this permit shall be recorded. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]

REPORTS

38. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].
39. Quarterly Excess Emissions Reports: If excess CO, NO_x or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7, Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar quarter, the permittee shall submit a report on any periods of excess emissions that occurred during the previous calendar quarter to the Compliance Authority. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]
40. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. This report shall include a summary of each of the prior year 12-month emission limitations, which are required for EU-001 and EU-006 by this permit. [Rule 62-210.370(2), F.A.C.]

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology ()
 - b) Determination of Prevention of Significant Deterioration (); and
 - c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 26, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Benjamin Borsch, P.E.
Environmental Manager, Calpine
Auburndale Power Partners L.P.
Island Center
2701 N. Rocky Point Drive, Suite 1200
Tampa, FL 33607

Re: DEP File No. 1050221-005-AC
Wet Compression Project
Auburndale Cogeneration Facility

Dear Mr. Borsch:

The Department reviewed your request to modify the PSD Permit to authorize the installation of a wet compression system on the combined cycle unit at the subject facility (EU-001). The request is acceptable as detailed in the Department's Technical Evaluation and PSD Applicability Determination.

PSD-FL-185 permit is hereby modified as follows:

Wet Compression System

A wet compression system may be installed on Unit 1. Operation of the wet compression system is approved for use on Unit 1 during any periods at which the ambient temperature is above 60 degrees F. Use of the wet compression system is limited to periods during the firing of natural gas only.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within (thirty) days after this Notice is filed with the Clerk of the Department.

"More Protection, Less Process"

Printed on recycled paper.

Mr. Benjamin Borch
DEP File No. 1050221-005-AC
February 26, 2002

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/26/02 to the person(s) listed:

Robert K. Alff, Senior VP, Calpine Eastern Corporation *

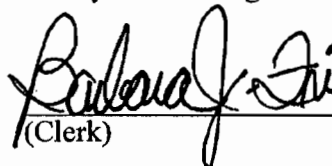
Mr. Benjamin Borsch, Environmental Manager, Calpine *

Mr. Bill Thomas, SWD-DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52,
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledged.


(Clerk)


(Date)

APP-1a



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

April 29, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Benjamin Borsch, P.E.
Environmental Manager, Calpine
Auburndale Power Partners L.P.
Island Center
2701 N. Rocky Point Drive, Suite 1200
Tampa, FL 33607

Re: DEP File No. 1050221-006-AC
Wet Compression Project
Auburndale Cogeneration Facility

Dear Mr. Borsch:

The Department reviewed your request to modify the PSD Permit to authorize the installation of a wet compression system on the simple cycle unit at the subject facility (EU-006). The request is acceptable as detailed in the Department's Technical Evaluation and PSD Applicability Determination.

Permit 1050221-004-AC (Specific Condition 6.) is hereby modified as follows:

6. Allowable Operation: The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. The use of wet compression as an alternate means of evaporative cooling is authorized for up to 7000 hours during natural gas firing (only) for any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount and heat inputs of natural gas as well as fuel oil fired and the hours of operation. [Rule 62-210.200, F.A.C. (Definitions - PTE), PSD Avoidance]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing

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Mr. Benjamin Borsch
DEP File No. 1050221-006-AC
April 29, 2002

fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within (thirty) days after this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management

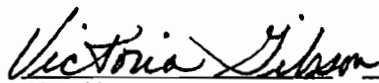
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4/29/02 to the person(s) listed:

Robert K. Alff, Senior VP, Calpine Eastern Corporation *
Mr. Benjamin Borsch, Environmental Manager, Calpine *
Mr. Gerald Kissel, SWD-DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52,
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledged.

 April 29, 2002
(Clerk) (Date)