



CALPINE

- file -

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NOV 14 2002

November 6, 2002

BUREAU OF AIR REGULATION

Mr. Scott Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
(850) 488-0114

Re: Draft Title V Renewal Permit Comments
Auburndale Energy Center
Permit Number: 1050221-007-AV and 1050221-008-AC
Federal Express Tracking Number: 790625258580

As published in the Public Notice on October 7, 2002, the Draft Title V Permit and Modified Prevention of Significant Destruction Permit for the Auburndale Energy Center is currently in comment period. On behalf of the Auburndale Energy Center, we have attached a revised (redlined) draft permit and associated documents. As discussed with your office earlier this month, Section III Subsection C has not been redlined and has been rearranged to match the Subsection A. The following summarizes the proposed changes and identifies additional concerns:

EU-001-Combined Cycle Combustion Turbine

- Due the addition of the SCR in 2001, the introduction has been revised to include this control feature;
- Due to completion of installation of the wet compression system, language in regards to its installation has been deleted.
- Per the EU-006 construction permit, additional emission limits and associated calculations for EU-001 have been added to Section III Subsection A and have been removed from Section III Subsection C;
- Language has been added to clarify the use of a NOx CEMS in lieu of water-to-fuel monitoring; and
- For consistency, general permit layout and language has been changed for consistency.

EU-002-Fuel Oil Storage Tanks (2)

- References to the oil storage tank emission unit has been changed to EU-002; and
- References to the vessel identification numbers have been changed to STR-001 and STR-002.

Mr. Scott Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
November 6, 2002

EU-006-Simple Cycle Combustion Turbine

- The general arrangement of Section III Subsection C has been arranged to match the Section III Subsection A;
- Due to completion of initial performance testing, language in regards to requirements prior to and during the initial performance testing has been removed;
- Per the requested modification, all references to SAM have been deleted; and
- The requirement for the submittal of the rolling 12-month NOx and CO calculations with the AOR has been moved from Section III Subsection C to Section II (14).
- ASTM natural gas sampling methods have been added to Section III Subsection C to match Section III Subsection A.

Acid Rain

The EPA ID for EU-006 is 6.


Attachments

- **Figure 2** **The "W501D5 ECONOPAC system performance graph labeled "Power"-Figure 2" attachment was not included in the draft permit. Please provide a copy of this attachment for review.**
- H-1 The Owner of the Osprey Energy Center is Calpine Construction Finance Company.
- Table 1-1 This table has been updated to include EU-006.
- Table 2-1 This table has been updated to include EU-006.

We would be happy to discuss any of these changes at your convenience, or to supply any additional information you may require. Please feel free to contact me by telephone at (813) 637-7305 or via email at bborsch@calpine.com. You may also speak to Heidi Whidden at (813) 637-7316.

Sincerely,

Calpine Eastern Corporation


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

Enclosure

CC: Bob Callery—APP/APEC Operations
Jeffrey Shaske—APP/APEC Operations

STATEMENT OF BASIS

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

Auburndale Energy Center
Facility ID No.: 1050221
Polk County

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

As a part of this permitting action, Auburndale Peaker Energy Center, LLC and Auburndale Power Partners, L.P., requested the following:

- Renewal of the Title V permit for the combined cycle unit;
- Incorporate the new simple cycle unit; and
- Deletion of the sulfuric acid mist requirements included in the previous permit, consistent with current practice.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

E.U.

ID No. Brief Description

-001 Combined Cycle Combustion Turbine

This unit is 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/or Selective Catalytic Reduction, and good combustion practices are used to control air pollutant emissions. This unit may operate up to 8,760 hours per year and has historically operated at a capacity factor above 90%.

{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).}

E.U.

ID No. **Brief Description**

~~-007002~~ Fuel oil storage tanks (2)

The facility operates two 623,280 gallons distillate (No. 2) fuel oil storage tanks referred to as “STR-001” and “STR-~~007002~~”. Each tank has a fixed cone roof and is equipped with pressure/vacuum conservation vents.

{Permitting note: These emissions units are ‘unregulated emissions units.’ The tanks are subject to a recordkeeping requirement under NSPS - 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels; adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

E.U.

Brief Description

ID No.

-006 Simple Cycle Combustion Turbine

This unit is a Siemens Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation. Water injection technology is 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. The combustion turbine has an electric generation capacity of approximately 104 MW. The simple cycle unit operates in peaking service and is expected to operate near its permitted operating capacity, between 20 and 25% of available hours.

{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.}

Because the units demonstrate continuous compliance with the NO_x standards using CEMs, CAM does not apply.

Based on the Title V permit application received June 28, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

Auburndale Energy Center
Facility ID No.: 1050221
Polk County

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-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: 850/488-0144
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

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-AV

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Permittee:

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

DRAFT Permit No.: 1050221-007-AV

Facility ID No.: 1050221

SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Renewal

This permit is for the renewed operation of existing units and for the inclusion of a new unit at the Auburndale Energy Center. This facility is located at 1501 Derby Avenue, Auburndale, Polk County; UTM Coordinates: Zone 17, 420.8 km East and 3103.3 km North; Latitude: 28° 83' 15" North and Longitude: 81° 48' 21" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

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

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

APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/12/02)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE (version dated 7/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

Phase II Acid Rain Application/Compliance Plan

W501D5 ECONOPAC SYSTEM PERFORMANCE GRAPH CURVE LABELED
"POWER" - FIGURE 2

Effective Date: January 1, 2003

Renewal Application Due Date: July 5, 2002

Expiration Date: December 31, 2007

Howard L. Rhodes, Director
Division of Air Resource
Management

HLR/sms

Section I. Facility Information.

Subsection A. Facility Description.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

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

Based on the Title V permit application received June 28, 2002, 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	Combined Cycle Combustion Turbine
-0072	Fuel Oil Storage Tanks (2)
-003	Emergency Generators
-004	Heating Units and Engines
-005	Surface Coating Operations
-006	Simple Cycle Combustion Turbine

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

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit. However, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History / ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Renewal Title V Permit Application received June 28, 2002
Additional Information Request dated July 30, 2002
Additional Information Response received August 12 & 14, 2002
DRAFT Title V Permit issued xx/xx/xx
PROPOSED PERMIT DETERMINATION with PROPOSED Title V Permit
dated xx/xx/xx

Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes only and are not permit conditions.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-4, 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).

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

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 renewal Title V permit application received June 28, 2002]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C., condition 57. of APPENDIX TV-4, 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)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS.)}

11. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

12. 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

13. 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 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

14. Annual Operating Report: This report shall include the sulfur content and lower heating value of the fuel fired, fuel usage, and hours of operation for the combined cycle unit (EU-001). This report shall also include a summary report of the rolling 12-month NOx and CO calculations for EU-006. This report shall also 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.
[PSD-FL-185, Condition number 27. and 1050221-004-AC]

Section III. Emissions Unit(s).

Subsection A. This section addresses the following emissions unit.

E.U.

ID No. Brief Description

-001 Combined Cycle Combustion Turbine

This unit is 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/or Selective Catalytic Reduction, and good combustion practices are used to control air pollutant emissions. This unit may operate up to 8,760 hours per year and has historically operated at a capacity factor above 90%.

{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.3.1 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)]

A.3.2 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.
[1050221-005-AC]

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.}

{Permitting note: The averaging time for conditions A.4. - A.10. are based on the run time of the specified test method, unless otherwise specified in 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:
15 ppmvd @15% O2, 24-hour block average (see note #1);
78.6 lbs./hour (see note #2);
177 TPY; combined total of natural gas and distillate fuel oil firing (see note #2 and #4);
9ppmvd @ 15% O2, 12-month rolling average.
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)
177 TPY; combined total of natural gas and distillate fuel oil firing (see note #2 and #4).

- 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.
- d. For the 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.
- e. For the 9-ppmvd annual equivalent emissions limit 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 gas firing 24-hour block average (as determined above) from valid operating days 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.

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

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185; #4 - 1050221-004-AC]

[Notes: #1 - BACT Determination dated December 14, 1992; #2 - PSD-FL-185; #4 - 1050221-004-AC]

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. <reserved>

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

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. In lieu of the above mentioned NOx emissions calculations based on nitrogen content, a NOx CEMS will be installed.

[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. In lieu of the above mentioned water/fuel monitoring system, a NO_x CEMS will be installed.
[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 continuous compliance with the NO_x emission limit (24-hour block average concentration limit) specified in Condition A.8.

c. For purposes of demonstrating compliance with the annual (TPY) NO_x limit see Condition -A.8.

[40 CFR 60.335(c)(3); PSD-FL-185 and 1050221-004-AC]

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. <reserved>

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.]

A.29. Operating Rate During Testing.

a. This emissions unit shall operate between 90% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature (compressor inlet temperature) (See attached W501D5 ECONOPAC SYSTEM PERFORMANCE GRAPH, CURVE LABELED "POWER" - FIGURE 2.)

b. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[PSD-FL-185; and, Rule 62-297.310(2), F.A.C.]

A.30. Calculation of Emission Rate. 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.]

A.31. Applicable Test Procedures.

a. Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - i. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - ii. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - iii. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- b. **Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. **Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- d. **Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in TABLE 297.310-1, 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.**
 1. 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:

- ii. Did not operate; or
 - ii. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
2. 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:
 - ii. Visible emissions (VE);
 - iii. Carbon monoxide (CO); and
 3. 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.
 4. 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.
 5. 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.* Any period during which the NO_x emissions exceed the limits listed in Condition A.8. 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:

- a. 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.
- b. 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.
- c. 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.
- d. 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.

- a. 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.

- b. 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.

- a. 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:
 - 1. 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;
 - 2. 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
 - 3. The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- b. 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.
- c. 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. <reserved>

Subsection B. This section addresses the emissions unit(s).

E.U.

ID No. Brief Description

-007002 Fuel oil storage tanks (2)

The facility operates two 623,280 gallons distillate (No. 2) fuel oil storage tanks referred to as “STR-001” and “STR-007002”. Each tank has a fixed cone roof and is equipped with pressure/vacuum conservation vents.

{Permitting note: These emissions units are ‘unregulated emissions units.’ The tanks are subject to a recordkeeping requirement under NSPS - 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels; adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Recordkeeping Requirements

B.2. The permittee shall maintain records on site for storage vessels identification numbers STR-001 and STR-007-002 to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels.

[40 CFR 60.116b(b)]

Subsection C. This section addresses the following emissions unit.

E.U. ID Brief Description
No.

-006 Simple Cycle Combustion Turbine

This unit is a Siemens Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation. Water injection technology is 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. The combustion turbine has an electric generation capacity of a nominal 104 MW. The simple cycle unit operates in peaking service and is expected to operate near its permitted operating capacity, between 20 and 25% of available hours.

{Permitting note: This emissions unit is regulated and shall comply with Acid Rain, Phase II; NSPS – 40 CFR 60 Subpart A (60.7, 60.8, 60.11, 60.12, 60.13, 60.19), and Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Subpart GG provisions include a requirement to correct test data to ISO conditions; however, such corrections are not used for compliance determination with the BACT standard.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum 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 maximum 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. Heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics.

[Design, Rule 62-210.200, F.A.C., Definitions - (PTE)]

C.2. Methods of Operation - Fuels.

- a. Only pipeline-quality natural gas containing no more than 2 grains of sulfur per 100 dry standard feet of gas, monthly average, or distillate (No. 2) fuel oil having a maximum sulfur content of 0.05 percent by weight.
[Applicant Request, Rules 62-210.200, F.A.C. Definition - (PTE)]
- b. The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. The total hours of operation of the combustion turbine while firing distillate fuel oil shall not exceed 400 hours per 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 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

C.3.1 Allowable Operation.

- a. 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 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.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

- b. The permittee is authorized to, tune, operate and maintain one new combustion turbine with electrical generator set (Siemens/Westinghouse Model 501D5A). The system shall be maintained and tuned in accordance with the manufacturer's recommendations to minimize permitted pollutant emissions. The unit is designed to produce a maximum 135 MW of electrical power.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

- c. The permittee shall 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.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

C.3.2 Wet Compression System. A wet compression system may be installed on Unit 6. 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.

[1050221-006-AC]

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.}

C.4. Visible emissions (VE) shall not be equal to or greater than 20% opacity.

[Notes: Rule 62.296.320(4)(b)1, F.A.C. and Permit 1050221-004-AC]

C.5. <reserved>

C.6. Particulate matter ten (PM10) emissions shall not exceed

- a. while firing natural gas:
2.9 lbs./hour; and
- b. while firing distillate fuel oil:
58.5lbs./hour.

[Notes: Rule 60-212.400, F.A.C (PSD Avoidance) and Permit 1050221-004-AC]

C.7. Sulfur dioxide (SO2) emissions shall not exceed

- a. while firing natural gas:
2 grains / 100 scf, monthly average; and
- b. while firing distillate fuel oil:
0.05 % sulfur content by weight, and
74.9 lbs./hour.

[Notes: Rule 62-4.070(3), F.A.C and Permit 1050221-004-AC]

C.8. Nitrogen oxides (NOx) emissions shall not exceed

- a. while firing natural gas:
25 ppmvd @15% O2, 24-hour block average;
- b. while firing distillate fuel oil:
42 ppmvd @15% O2, 24-hour block average;
- c. Unit Total:
115 TPY;
- d. 24-hour block averages: 24-hour block averages are calculated as follows: starting at midnight of each operating day, a 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. 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; and

- e. Annual (TPY) emissions limits: Annual (TPY) emissions limits of NO_x and CO, 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.

[Notes: Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit 1050221-004-AC]

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

- a. while firing natural gas: 4.0 ppmvd @15% O₂; and
- b. while firing distillate fuel oil: 5.0 ppmvd @ 15% O₂.

[Notes: Rule 62-4.070(3), F.A.C and Permit 1050221-004-AC]

C.10. Carbon monoxide (CO) emissions shall not exceed 10 ppmvd @ 15% O₂ @ base load; and 99-TPY, based on a 12-month rolling average, while burning all fuels.

[Notes: Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit 1050221-004-AC]

C.11. <reserved>

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.12. 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 may exceed 20% opacity for up to 2 hours in any 24-hour period.
- 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. CEMS data exclusion and replacement methods shall be in accordance with EPA's Acid Rain requirements. However, missing data shall not be substituted. Additionally, the permittee's record-keeping for the EU-001 and EU-006 NO_x emissions caps (TPY) shall be in full agreement with data submitted for inclusion on EPA's Acid Rain website.
- c. 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.]

C.13. 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.]

Monitoring of Operations

C.14. 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 maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

C.15. Continuous Monitoring Systems (CMS)

- a. 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. In lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in 40 CFR 60.334, a NO_x CEMS will be installed.
- b. The owner or operator shall 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.
- c. 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.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

- d. 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.

[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.]

- e. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance. 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. 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.

[1050221-004-AC]

C.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.

- a. 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:
1. 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
 2. 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.
- a. 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.

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

C.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)(a), F.A.C. and 62-297.310(5)(b), 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.}

C.18. Visible Emissions (VE). The test method for annual compliance testing 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 62-204.800, F.A.C. and Rule 62.297.620, F.A.C.]

C.19. Particulate Matter/Particulate Matter Ten (PM/PM₁₀). Continuous emissions of PM/PM₁₀ 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.

[Rule 62-212.400, F.A.C.]

C.20. <reserved>

C.21. <reserved>

C.22. NO_x Compliance Demonstration

- b. For purposes of demonstrating annual compliance with the NO_x emission limits, specified in Condition C.8, either EPA Method 20 or the annual RATA testing at 100% output. The NO_x CEMS shall be used for the purpose of demonstrating continuous compliance with the NO_x emission limit (24-hour block average concentration limit) specified in Condition C.8.
- c. For purposes of demonstrating compliance with the annual (TPY) NO_x limit see Condition C.8.

[40 CFR 60.335(c)(3) and 1050221-004-AC]

C.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. 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.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.1050221-004-AC]

C.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)]

C.25 Volatile organic compound (VOC). 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.

[Rule 62-204.800, F.A.C, and Rule 62-297.620, F.A.C.]

C.26. Carbon monoxide (CO). The permittee shall demonstrate compliance with this standard by conducting annual performance tests and emissions monitoring in accordance with EPA Method 10 or the annual RATA, and the CEMS requirement of this permit.

[Rule 62-204.800, F.A.C, and Rule 62-297.620, F.A.C.]

C.27. <reserved>

C.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.]

C.29. Operating Rate During Testing.

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.]

C.30. Calculation of Emission Rate. 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.]

C.31. 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.]

d. **Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
[Rule 62-297.310(4)(d), F.A.C.]

C.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.]

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

a. **Compliance Testing.**

1. 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. Compliance testing is only required during the combustion of natural gas fuel. 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:
 - i. Did not operate; or
 - ii. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

[Rule 62-297.310(7)(a)3., F.A.C.]

2. 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:
 - i. Visible emissions (VE);
 - ii. Carbon monoxide (CO); and
 - iii. Nitrogen Oxide (NO_x).
3. 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.]

- 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.

[Rule 62-297.310(7)(b), F.A.C.]

- 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]
- d. 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)]
- e. 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.]

C.34. 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.].

Record Keeping and Reporting Requirements

C.35. 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.

C.36. 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. and 1050221-004-AC]

C.37. Following the NSPS format in 40 CFR 60.7, Subpart A, FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached), 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

C.38. <reserved>

C.39. <reserved>

C.40. Malfunction Reporting. 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.

Miscellaneous Requirements

C.41. <reserved>

C.42. <reserved>

C.43. <reserved>

Section IV. This section is the Acid Rain Part.

Operated by: Auburndale Cogeneration Facility

ORIS code: 54658

The emissions unit(s) listed below is regulated under Acid Rain Part, Phase II.

E.U.

ID No. Brief Description

-001 Combined Cycle Combustion Turbine

-006 Simple Cycle Combustion Turbine

A.1. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of this Phase II acid rain unit must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), effective 04/16/01, received August 15, 2002.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit is as follows:

<u>E.U.</u> <u>ID No.</u>	<u>EPA ID</u>	<u>Year</u>	2003	2004	2005	2006	2007
-001	1	SO ₂ allowance s, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-006	62	SO ₂ allowance s, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.

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

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Comments, notes, and justifications:

The designated representative was changed by letter dated March 28, 2002, with a revised Certificate of Authorization.

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

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-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 Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-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.

ID No.

Brief Description of Emissions Units and/or Activity

- | | |
|------|--|
| -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. |

Table 1-1, Summary of Air Pollutant Standards and Terms

Auburndale Peaker Energy Center, LLC	DRAFT Permit No.: 1050221-007-AV
Auburndale Power Partners, L.P.	Facility ID No.: 1050221
Auburndale Energy Center	

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-001 Combined Cycle Combustion Turbine

			Allowable Emissions						Equivalent Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	Regulatory Citation(s)	lbs./hour	Regulatory Citation(s)	TPY	Regulatory Citation(s)	lbs./hour	TPY	See permit condition(s)
VE	Gas/Oil		<10% opacity at full load	see note #3							III.A.4.
			<20% opacity otherwise	see note #2							III.A.5.
PM10	Oil	400	0.0472 lb/mmBtu	see note #2	36.8	see note #1	7.4	see note #2			III.A.6.
PM10	Gas	8760	0.0134 lb/mmBtu	see note #2	10.5	see note #1	46.0	see note #2			III.A.6.
SO2	Oil	400	0.05 % sulfur content by weight	see note #1	70.0	see note #1	14.0	see note #2			III.A.7.
SO2	Gas	8760			40.0	see note #1	175.2	see note #2			III.A.7.
NOx	Oil	400	42 ppmvd @15% O2, 24 hour block average	see note #1	230.0	see note #2	46.0	see note #2			III.A.8.
NOx	Gas	8760	15 ppmvd @15% O2, 24 hour block average	see note #1	78.6	see note #2	177.0	see note #2, 4, and 5			III.A.8.
VOC	Oil	400			10.0	see note #1	2.0	see note #2			III.A.9.
VOC	Gas	8760			6.0	see note #1	26.3	see note #2			III.A.9.
CO	Oil	400	25 ppmvd	see note #2	73.0	see note #1	14.6	see note #2			III.A.10.
CO	Gas	8760	21 ppmvd (min. load)	see note #2	43.5	see note #1	190.5	see note #2 and 5			III.A.10.
CO	Gas	8760	15 ppmvd (base load)	see note #2	43.5	see note #1	190.5	see note #2 and 5			III.A.10.

Notes:

* The "Equivalent Emissions" listed are for informational purposes only.

#1 - from BACT Determination

#2 - from PSD-FL-185

#3 - from Rule 62-296.320(4)(b), F.A.C.

#4 - 1050221-004-AC

#5 - dual fuel total

Table 1-1, Summary of Air Pollutant Standards and Terms											
Auburndale Peaker Energy Center, LLC				DRAFT Permit No.: 1050221-007-AV							
Auburndale Power Partners, L.P.				Facility ID No.: 1050221							
Auburndale Energy Center											
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.											
E.U. ID No.		Brief Description									
-006		Simple Cycle Combustion Turbine									
		Allowable Emissions								Equivalent Emissions*	
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	Regulatory Citation(s)	lbs./hour	Regulatory Citation(s)	TPY	Regulatory Citation(s)	lbs./hour	TPY	See permit condition(s)
VE	Gas/Oil	see note A	<20% opacity	see note B							III.C.4.
PM10	Oil	400			58.5	see note D					III.C.6.
PM10	Gas	see note A			2.9	see note D					III.C.6.
SO2	Oil	400	0.05 % sulfur content by weight	see note C	74.9	see note C					III.C.7.
SO2	Gas	see note A	2 grains of sulfur per 100 dsf of gas	see note C							III.C.7.
NOx	Oil	400	42 ppmvd @15% O2, 24 hour block average	see note D			115.0	see note D and E			III.C.8.
NOx	Gas	see note A	25 ppmvd @15% O2, 24 hour block average	see note D			115.0	see note D and E			III.C.8.
VOC	Oil	400	5 ppmvd	see note C							III.C.9.
VOC	Gas	see note A	4 ppmvd	see note C							III.C.9.
CO	Gas/Oil	see note A	10 ppmvd (base load)	see note D			99.0	see note D			III.C.10.
Notes:											
* The "Equivalent Emissions" listed are for informational purposes only.											
A - Natural Gas limited to 2,227,400 MMBtu per consecutive 12-month period											
B - from Rule 62-296.320(4)(b)1, F.A.C.											
C - from Rule 62-4.070(3), F.A.C.											
D - from Rule 62-212.400, F.A.C (PSD Avoidance)											
E - dual fuel total											

Table 2-1, Summary of Compliance Requirements							
Auburndale Peaker Energy Center, LLC			DRAFT Permit No.: 1050221-007-AV				
Auburndale Power Partners, L.P.			Facility ID No.: 1050221				
Auburndale Energy Center							
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.							
E.U. ID No.	Brief Description						
-001	Combined Combustion Turbine						
			Testing	Frequency	Min. Compliance		
Pollutant Name or parameter		Compliance	Time	Base	Test		
	Fuel(s)	Method	Frequency	Date *	Duration	CMS **	See permit condition(s)
VE	Gas	EPA Method 9	annual	June 4	1 hour		III.A.18., 33.
SO2	Oil	(see note 2)	upon receipt of each oil shipment				III.A.22., 23.
SO2	Gas	(see note 3)	bi-monthly				III.A.22., 23.
NOx	Gas	EPA Method 20	permit renewal (5 year)	June 4	3 hour	Yes	III.A.22., 33.
VOC	Gas	EPA Method 25A	permit renewal (5 year)	June 4	3 hour		III.A.25., 33.
CO	Gas	EPA Method 10	permit renewal (5 year)	June 4	3 hour		III.A.26., 33.
O2	Oil/Gas	EPA Method 3A	permit renewal (5 year)	June 4	3 hour	Yes	III.A.22., 33.
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							
(2) Sulfur dioxide is indirectly determined by fuel sulfur analysis by ASTM D129-91; D1552-90; D2280-71; D2880-96; D2622-92; D4292; D4294-90; or the latest edition(s) methods specified or any other method approved in writing by the Department pursuant to Rule 62-297.620, F.A.C. or 40 CFR 75, Appendix D.							
(3) Sulfur dioxide is indirectly determined by fuel sulfur analysis by ASTM methods ASTM D1072-80, 90, 94; D3031-81, 86; D3246-81, 92; D4084-82, 94; D4468-85; D5504-94, or any other method approved in writing by the Department pursuant to Rule 62-297.620, F.A.C. or 40 CFR 75, Appendix D.							

Table 2-1, Summary of Compliance Requirements							
Auburndale Peaker Energy Center, LLC			DRAFT Permit No.: 1050221-007-AV				
Auburndale Power Partners, L.P.			Facility ID No.: 1050221				
Auburndale Energy Center							
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.							
E.U. ID No.	Brief Description						
-006	Simple Cycle Combustion Turbine						
Pollutant Name or parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS **	See permit condition(s)
VE	Gas/Oil	EPA Method 9	annual	June 4	1 hour		III.A.18., 33.
SO2	Oil	see note (2)	upon receipt of each oil shipment				III.A.22., 23.
SO2	Gas	see note (3)	bi-monthly				
NOx	Gas/Oil	EPA Method 20 or Annual RATA at 100% output	annual	June 4	3 hour	Yes	III.A.22., 33.
VOC	Gas/Oil	EPA Method 25A	permit renewal (5 year)	June 4	3 hour		III.A.25., 33.
CO	Gas/Oil	EPA Method 20 or Annual RATA at 100% output	annual	June 4	3 hour		III.A.26., 33.
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							
(2) Sulfur dioxide is indirectly determined by fuel sulfur analysis by ASTM D129-91; D1552-90; D2280-71; D2880-96; D2622-92; D4292; D4294-90; or the latest edition(s) methods specified or any other method approved in writing by the Department pursuant to Rule 62-297.620, F.A.C. or 40 CFR 75, Appendix D.							
(3) Sulfur dioxide is indirectly determined by fuel sulfur analysis by ASTM methods D4084-82, D3246-81, or any other method approved in writing by the Department pursuant to Rule 62-297.620, F.A.C. or 40 CFR 75, Appendix D.							
[electronic file name: 1050221-007_table2.xls]							

Appendix H-1, Permit History/ID Number Changes

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-AV
Facility ID No.: 1050221

Permit History (for tracking purposes):

E.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 1050221-004-AC	12/14/92	10/30/95	11/1/96	6/20/94, 3/18/96, 5/22/97 2/26/02, xx/xx/xx
-002	Fuel oil storage tanks (2)					
-003	Emergency generators					
-004	Heating units and engines					
-005	Surface coating operations					
-006	Simple Cycle Combustion Turbine	1050221-004-AC		4/1/03		4/29/02

Permit No. 1050221-002-AV

Initial Title V permit.

ID Number Changes (for tracking purposes):

NOTE: Calpine Energy Construction and Finance Company, L.P., Osprey Energy Center (Facility ID No.: 1050334) will need to be merged in the future with this Facility ID No.: 1050221.

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}

DRAFT

Certified Mail - Return Receipt Requested

Mr. Bob Callery
General Manager
Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

Re: DEP File No. **1050221-008-AC, PSD-FL-185**
Auburndale Energy Center

The applicant, Auburndale Power Partners, L.P./Auburndale Power Energy Center, LLC, applied on June 28, 2002, to the Department for an air construction permit for the Auburndale Energy Center, located at 1501 Derby Avenue, Auburndale, Polk County. This permitting action will modify PSD-FL-185. The modification is to: Delete the sulfuric acid mist requirements included in the previous permit, consistent with current practice. The Department has reviewed the applicant's request. Certain specific conditions of permit PSD-FL-185 are hereby modified as follows.

{NOTE: The changes below are shown as they currently appear in the Title V Permit No. 1050221-002-AV; which reflects the SAM requirements from PSD-FL-185 and BACT.}

From:

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]

To:

A.11. <reserved>

From:

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]

To:

A.27. <reserved>

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 filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate

Page 2 of 2

District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resource
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 _____ to the person(s) listed:

Mr. Bob Callery*
Mr. Benjamin M.H. Borsch, P.E.
Mr. Jeffrey Shaske
Mr. Jerry Kissel, P.E., SWD
U.S. EPA, Region 4
John Bunyak, NPS

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)

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Auburndale Power Partners, L.P.
Auburndale Power Energy Center, LLC
Auburndale Energy Center
Polk County

DEP File No. **1050221-008-AC**
PSD-FL-185

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1.0. GENERAL INFORMATION

1.1. APPLICANT NAME AND ADDRESS

Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

Responsible Official: Mr. Bob Callery, General Manager

1.2. REVIEW AND PROCESS SCHEDULE

June 28, 2002	Permit application received.
July 30, 2002	Application deemed incomplete.
August 12&14, 2002	Supplemental information received.
August 14, 2002	Application deemed complete.

2.0. FACILITY INFORMATION

The facility is located at 1501 Derby Avenue, Auburndale, Polk County. UTM Coordinates are: Zone 17, 418.7 km East, and 3083.0 km North; Latitude: 27° 52' 15" North, and Longitude: 81° 49' 31" West.

SIC codes are:

Industry Group No.	49	Electric, Gas and Sanitary Services
Industry No.	4911	Electric Generation

The modification request is to delete the sulfuric acid mist requirements included in the previous permit, consistent with current DEP practice.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

The facility was issued a previous PSD permit, PSD-FL-185.

This facility *is not* a major source of hazardous air pollutants (HAPs).

3.0. PROJECT DESCRIPTION

The applicant proposes no equipment changes to the configuration of the facility. The requested permit changes are noted above in section 2.0.

4.0. PROJECT EMISSIONS & RULE APPLICABILITY

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

There are no pollutant emission changes associated with this project.

The sulfuric acid mist (SAM) emission limitations were established by the BACT determination dated December 14, 1992. In that determination the department claimed to have accepted the applicant's BACT proposal for SAM, which was the use of low sulfur fuel oil with limited hours.

The original BACT determination issued was based on 8760 hours of operation on fuel oil even though the PSD permit restricted the operation of fuel oil to 400 hours/year. The maximum SAM emissions calculated based on 400 hours/year is 1.5 TPY, which does not exceed the PSD significant emission rate of 7 TPY. In conclusion, the original BACT determination was incorrect, i.e., SAM emissions did not exceed the PSD significant emission rate. This permitting action corrects the original BACT by deleting the SAM requirements.

This change constitutes a minor modification of PSD permit number PSD-FL-185. Therefore, the modification is not subject to review under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), so neither a revised Best Available Control Technology (BACT) determination nor an analysis of the air quality impact is required. However, because this project requires a modification of a PSD permit, the public notice requirements for PSD permits are applicable.

The proposed project is otherwise subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

The facility is located in an area (Polk County) designated "unclassifiable" for PM₁₀, and "attainment" for all the other criteria pollutants (Rule 62-204.340, F.A.C.).

The emission unit affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein).

5.0. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department will issue a draft PSD permit modification to the applicant that provides for the above change.



CALPINE

AUBURNDALE POWER PARTNERS
LIMITED PARTNERSHIP

1501 WEST DERBY AVENUE
AUBURNDALE, FLORIDA 33823

863.965.1561 (MAIN)
863.965.1924 (FAX)

October 11, 2002

Mr. A. A. Linero
New Source Review Section
Division of Air Resource Management
Florida Department of Environmental Protection
111 South Magnolia
Suite 4
Tallahassee, FL 32399
(850) 921-9519

RECEIVED

OCT 14 2002

BUREAU OF AIR REGULATION

**Re: Affidavit of Public Notice of Intent to Issue Air Construction Permit
Auburndale Peaker at the
Auburndale Cogeneration Facility
Auburndale Peaker Energy Center, L.L.C.
Facility Number: 1050221
ORIS Code: 54658
Federal Express Tracking Number: 815433886645**

Enclosed is a notarized copy of the affidavit for the publication of "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND TITLE V AIR OPERATION PERMIT RENEWAL". The notice ran in the Monday, October 7th East Polk section of the Lakeland Ledger.

If you have any questions or concerns, please feel free to call Jeff Shaske at (863) 965-1561.

Sincerely,

Bob Callery
Plant Manager
Designated Representative
Auburndale Peaker Energy Center LLC

Cc: Bob Soich - FDEP Southwest District Office; Federal Express No.: 815433886656
Rich Donatelli - Auburndale Peaker Construction
Heidi Whidden - Calpine Tampa
Jeff Shaske - Calpine Auburndale

Enclosure

Notarial Certificate for an Attested Copy

State of Florida
County of Polk

On this 11th day of October, 2002, I attest that the preceding or attached document is a true, exact, complete, and unaltered photocopy made be me of an original document: Affidavit of Public Notice of Intent to Issue Air Construction Permit presented to me by the document's custodian, Jeffrey Shaske, and to the best of my knowledge, that the photocopied document is neither a vital record nor a public record, certified copies of which are available from an official source other than a notary public.



Kathleen Whigham
Notary Public, State of Florida

Kathleen Whigham

RECEIVED
OCT 14 2002
BUREAU OF AIR REGULATION

AFFIDAVIT OF PUBLICATION
THE LEDGER
Lakeland, Polk County, Florida

Case No

STATE OF FLORIDA)
COUNTY OF POLK)

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

Notice of Intent

in the matter of.....
To Issue Air Construction Permit

in the.....

Court, was published in said newspaper in the issues of.....
10-7; 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.....

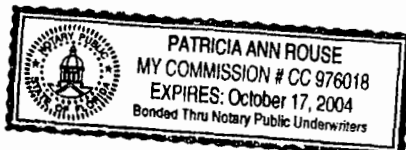
Sandra Heath
Sandra Heath
Assistant Classified Manager
Who is personally known to me.

Sworn to and subscribed before me this.....

day of *Oct*..... A.D. 20*02*

Notary Public

PATRICIA ANN ROUSE



(Seal)

My Commission Expires.....

Attach Notice Here

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT RENEWAL**

Department of Environmental Protection

Draft Air Construction Permit No. 1050221-008-AC
DRAFT Title V Air Operation Permit Renewal Project No. 1050221-007-AV
Aubundale Energy Center
Polk County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal to Aubundale Energy Center, for the Aubundale Energy Center located at 1501 Derby Avenue, Aubundale, Polk County. This is a renewal of Title V Air Operation Permit No. 1050231-001-AV. The applicant's name and address are: Mr. Bob Caffery, General Manager, Capline Eastern Corporation, 1501 Derby Avenue, Aubundale, Florida 33823.

The applicant, Aubundale Power Partners, L.P./Aubundale Power Energy Center, LLC, applied on June 28, 2002, to the permitting authority for (1) Renewal of the Title V permit for the combined cycle unit; (2) Initial Title V permit for the simple cycle unit; and, (3) Deletion of the sulfuric acid mist requirements included in the previous permit, consistent with current practice. This source is located at 1501 Derby Avenue, Aubundale, Polk County.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit Renewal and subsequent FINAL Title V Air Operation Permit Renewal, in accordance with the conditions of the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal unless a response received in accordance with the following procedures results in a different decision of significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #33, Tallahassee, Florida 32399-3000 (telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address and telephone number of the petitioner; name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petitioner must so state;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petitioner that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 422 U.S.C. Section 7661d(b)(1), to object to issuance of any permit renewal. Any petition shall be based only on objections to the permit renewal that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of the EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:
Department of Environmental
Protection
Bureau of Air Regulation
1111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922/6979

Affected District/Local Program:
Department of Environmental
Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619
Telephone: 813/744-6100
Fax: 813/744-6458

The complete project file includes the Technical Evaluation and Preliminary Determination and associated Draft Air Construction Permit and DRAFT Title V Air Operation Permit Renewal, the application(s), and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F. Interested persons may contact Scott M. Sheplek, P.E., at the above address, or call 850/921-9532, for additional information.

H159 - 10-7; 2002



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

P.E. Certification Statement

Permittee:

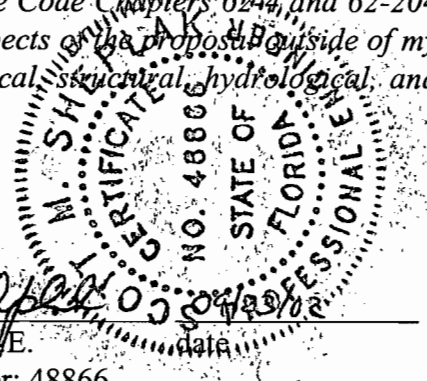
Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-AV

Permit No.: 1050221-008-AV

Project type: PSD Modification/Title V Air Operation Permit Renewal

***I HEREBY CERTIFY** that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapter 62-4, and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).*



Scott M. Sheplak, P.E.
Registration Number: 48866

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0144
Fax: 850/922-6979

U.S. Postal Service CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Mr. Bob Callery

Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees \$

Postmark
Here

Name (Please Print Clearly) (to be completed by mailer)

Mr. Bob Callery

Street, Apt. No., or PO Box No.

1501 Derby Avenue

City, State, ZIP+4

Auburndale, Florida 33823

PS Form 3800, July 1999

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Mr. Bob Callery
General Manager
Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

2. Article Number (Copy from service label)

7000 0600 0021 6524 2991

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

Kathleen Whigham

9-27-02

C. Signature

Kathleen Whigham

Agent

Addresssee

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

☒ Certified Mail ☐ Express Mail

☐ Registered ☐ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

Domestic Return Receipt

32595-00-M-0952



Jeb Bush
Governor

Department of Environmental Protection

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

September 23, 2002

David B. Struhs
Secretary

Mr. Bob Callery
General Manager
Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

Re: Draft Air Construction Permit No. **1050221-008-AC**
DRAFT Title V Air Operation Permit Renewal Project No. **1050221-007-AV**
Auburndale Power Partners, L.P.
Auburndale Power Energy Center, LLC
Auburndale Energy Center

Dear Mr. Callery:

One copy of the Technical Evaluation and Preliminary Determination, the combined Public Notice, the Draft Air Construction Permit, and the DRAFT Title V Air Operation Permit Renewal for the Auburndale Energy Center, located at 1501 Derby Avenue, Auburndale, Polk County, is enclosed. The permitting authority's "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" and the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. Please expedite your review of this DRAFT permit, because of the requirement that all Title V permits with Acid Rain Parts must *have an effective date of January 1st*. To stay on this schedule, the Public Notice should be published as soon as practical.

Sincerely,

A. A. Linero, P.E.
Bureau of Air Regulation

Enclosures

U.S. EPA, Region 4 (INTERNET E-mail)

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an
Application for Permits by:

Auburndale Power Partners, L.P.
Auburndale Power Energy Center, LLC
Auburndale Energy Center

Draft Air Construction Permit No. 1050221-008-AC
DRAFT Title V Air Operation Permit Renewal
Project No. 1050221-007-AV

Polk County

**INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION
PERMIT RENEWAL**

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal (copies of the Draft Air Construction Permit and DRAFT Title V Air Operation Permit Renewal attached) for the Title V source detailed in the application(s) specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Auburndale Power Partners, L.P./Auburndale Power Energy Center, LLC, applied on June 28, 2002, to the permitting authority for (1) Renewal of the Title V permit for the combined cycle unit; (2) Incorporate the new simple cycle unit; and, (3) Deletion of the sulfuric acid mist requirements included in the previous permit, consistent with current practice. This source is located at 1501 Derby Avenue, Auburndale, Polk County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212, 62-213 and 62-214. This source is not exempt from construction and Title V permitting procedures. The permitting authority has determined that an Air Construction Permit and a Title V Air Operation Permit Renewal are required to construct and to commence or continue operations at the described facility.

The permitting authority intends to issue the Air Construction Permit and the Title V Air Operation Permit Renewal based on the belief that reasonable assurances have been provided to indicate that the construction activity and operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL**." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax: 850/922-6879, within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit Renewal and subsequent FINAL Title V Air Operation Permit Renewal, in accordance with the conditions of the attached Draft Air Construction Permit and the DRAFT Title V Air Operation

Permit Renewal unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed Title V Air Operation Permit Renewal issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Air Operation Permit Renewal, the permitting authority shall issue a Revised DRAFT Title V Air Operation Permit Renewal and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permits's (construction and renewal) applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when each petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

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

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit renewal. Any petition shall be based only on objections to the permit renewal that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

A handwritten signature in black ink, appearing to read "A. A. Linero", written over a horizontal line.

A. A. Linero, P.E.
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the combined PUBLIC NOTICE, the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal) and all copies were sent by certified mail before the close of business on 9/25/02 to the person(s) listed:

Mr. Bob Callery, General Manager

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the combined PUBLIC NOTICE, the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal) were sent by U.S. mail on the same date to the person(s) listed or as otherwise noted:

Mr. Benjamin M.H. Borsch, P.E.

Mr. Jeffrey Shaske

Mr. Jerry Kissel, P.E., SWD

Clerk Stamp

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

Patricia J. Endrey 9/25/02
(Clerk) (Date)

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR
OPERATION PERMIT RENEWAL**

Department of Environmental Protection

Draft Air Construction Permit No. 1050221-008-AC
DRAFT Title V Air Operation Permit Renewal Project No. 1050221-007-AV
Auburndale Energy Center
Polk County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal to Auburndale Energy Center, for the Auburndale Energy Center located at 1501 Derby Avenue, Auburndale, Polk County. This is a renewal of Title V Air Operation Permit No. 1050231-001-AV. The applicant's name and address are: Mr. Bob Callery, General Manager, Calpine Eastern Corporation, 1501 Derby Avenue, Auburndale, Florida 33823.

The applicant, Auburndale Power Partners, L.P./Auburndale Power Energy Center, LLC, applied on June 28, 2002, to the permitting authority for (1) Renewal of the Title V permit for the combined cycle unit; (2) Initial Title V permit for the simple cycle unit; and, (3) Deletion of the sulfuric acid mist requirements included in the previous permit, consistent with current practice. This source is located at 1501 Derby Avenue, Auburndale, Polk County.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit Renewal and subsequent FINAL Title V Air Operation Permit Renewal, in accordance with the conditions of the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit Renewal unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed DRAFT Title V Air Operation Permit Renewal issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Air Operation Permit Renewal, the permitting authority shall issue a Revised DRAFT Title V Air Operation Permit Renewal and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and

120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address and telephone number of the petitioner; name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so state;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;

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

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit renewal. Any petition shall be based only on objections to the permit renewal that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Affected District/Local Program:

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619
Telephone: 813/744-6100
Fax: 813/744-6458

The complete project file includes the Technical Evaluation and Preliminary Determination and associated Draft Air Construction Permit and DRAFT Title V Air Operation Permit Renewal, the application(s), and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E, at the above address, or call 850/921-9532, for additional information.

STATEMENT OF BASIS

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

Auburndale Energy Center
Facility ID No.: 1050221
Polk County

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

As a part of this permitting action, Auburndale Peaker Energy Center, LLC and Auburndale Power Partners, L.P., requested the following:

- Renewal of the Title V permit for the combined cycle unit;
- Incorporate the new simple cycle unit; and
- Deletion of the sulfuric acid mist requirements included in the previous permit, consistent with current practice.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

E.U.

ID No. Brief Description

-001 Combined Cycle Combustion Turbine

This unit is 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. This unit may operate up to 8,760 hours per year and has historically operated at a capacity factor above 90%.

{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).}

E.U.

ID No.

Brief Description

-007

Fuel oil storage tanks (2)

The facility operates two 623,280 gallons distillate (No. 2) fuel oil storage tanks referred to as "STR-001" and "STR-007". Each tank has a fixed cone roof and is equipped with pressure/vacuum conservation vents.

{Permitting note: These emissions units are 'unregulated emissions units.' The tanks are subject to a recordkeeping requirement under NSPS - 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels; adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

E.U.

ID No.

Brief Description

-006

Simple Cycle Combustion Turbine

This unit is a Siemens Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation. Water injection technology is 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. The combustion turbine has an electric generation capacity of approximately 104 MW. The simple cycle unit operates in peaking service and is expected to operate near its permitted operating capacity, between 20 and 25% of available hours.

{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.}

Because the units demonstrate continuous compliance with the NO_x standards using CEMs, CAM does not apply.

Based on the Title V permit application received June 28, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

Auburndale Energy Center
Facility ID No.: 1050221
Polk County

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-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: 850/488-0144
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

Title V Air Operation Permit Renewal
DRAFT Permit No.: 1050221-007-AV

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Permittee:

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.

DRAFT Permit No.: 1050221-007-AV**Facility ID No.:** 1050221**SIC Nos.:** 49, 4911**Project:** Title V Air Operation Permit Renewal

This permit is for the renewed operation of existing units and for the inclusion of a new unit at the Auburndale Energy Center. This facility is located at 1501 Derby Avenue, Auburndale, Polk County; UTM Coordinates: Zone 17, 420.8 km East and 3103.3 km North; Latitude: 28° 83' 15" North and Longitude: 81° 48' 21" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

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

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

APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/12/02)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE (version dated 7/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

Phase II Acid Rain Application/Compliance Plan

W501D5 ECONOPAC SYSTEM PERFORMANCE GRAPH CURVE LABELED

"POWER" - FIGURE 2

Effective Date: January 1, 2003**Renewal Application Due Date:** July 5, 2002**Expiration Date:** December 31, 2007

Howard L. Rhodes, Director
Division of Air Resource
Management

HLR/sms

Section I. Facility Information.

Subsection A. Facility Description.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

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

Based on the Title V permit application received June 28, 2002, 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	Combined Cycle Combustion Turbine
-007	Fuel Oil Storage Tanks (2)
-003	Emergency Generators
-004	Heating Units and Engines
-005	Surface Coating Operations
-006	Simple Cycle Combustion Turbine

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

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit. However, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History / ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Renewal Title V Permit Application received June 28, 2002

Additional Information Request dated July 30, 2002

Additional Information Response received August 12 & 14, 2002

DRAFT Title V Permit issued xx/xx/xx

PROPOSED PERMIT DETERMINATION with PROPOSED Title V Permit
dated xx/xx/xx

Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes only and are not permit conditions.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-4, 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).**
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434
- and,
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]
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 renewal Title V permit application received June 28, 2002]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C., condition 57. of APPENDIX TV-4, 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)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS.)}

11. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

12. 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

13. 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 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

14. Annual Operating Report: This report shall include the sulfur content and lower heating value of the fuel fired, fuel usage, and hours of operation for the combined cycle unit (EU-001). This report shall also 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.
[PSD-FL-185, Condition number 27. and 1050221-004-AC]

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	Combined Cycle Combustion Turbine
------	-----------------------------------

This unit is 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. This unit may operate up to 8,760 hours per year and has historically operated at a capacity factor above 90%.

{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.3.1 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)]

A.3.2 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.
[1050221-005-AC]

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.}

{Permitting note: The averaging time for conditions A.4. - A.10. are based on the run time of the specified test method, unless otherwise specified in 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. 15 ppmvd @15% O2, 24-hour block average (see note #1);
78.6 lbs./hour (see note #2); 177 TPY (see note #2 and #4);
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; #4 - 1050221-004-AC]



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. <reserved>

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

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 continuous compliance with the NO_x emission limit (24-hour block average concentration limit) specified in Condition A.8.**

c. For purposes of demonstrating compliance with the annual (TPY) NO_x limit see **Condition C.31.**
[40 CFR 60.335(c)(3); PSD-FL-185 and 1050221-004-AC]

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. <reserved>

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.]

A.29. Operating Rate During Testing.

a. This emissions unit shall operate between 90% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature (compressor inlet temperature) (See attached W501D5 ECONOPAC SYSTEM PERFORMANCE GRAPH, CURVE LABELED "POWER" - FIGURE 2.)

b. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[PSD-FL-185; and, Rule 62-297.310(2), F.A.C.]

A.30. Calculation of Emission Rate. 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.]

A.31. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

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

Subsection B. This section addresses the emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-007	Fuel oil storage tanks (2)

The facility operates two 623,280 gallons distillate (No. 2) fuel oil storage tanks referred to as "STR-001" and "STR-007". Each tank has a fixed cone roof and is equipped with pressure/vacuum conservation vents.

{Permitting note: These emissions units are 'unregulated emissions units.' The tanks are subject to a recordkeeping requirement under NSPS - 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels; adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Recordkeeping Requirements

B.2. The permittee shall maintain records on site for storage vessels identification numbers STR-001 and STR-007 to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels.

[40 CFR 60.116b(b)]

Subsection C. This section addresses the following emissions unit.

<u>E.U.</u>	<u>Brief Description</u>
<u>ID No.</u>	

-006	Simple Cycle Combustion Turbine
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This unit is a Siemens Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation. Water injection technology is 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. The combustion turbine has an electric generation capacity of approximately 104 MW. The simple cycle unit operates in peaking service and is expected to operate near its permitted operating capacity, between 20 and 25% of available hours.

{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.}

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

C.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.

[Rule 62-204.800(7)(6), F.A.C]

Essential Potential to Emit (PTE) Parameters

C.2. Combustion Turbine: The permittee is authorized to, 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.
[1050221-004-AC]

C.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.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

C.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 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.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

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.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

C.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 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 1050221-004-AC]

C.7. <reserved>

C.8. <reserved>

C.9. Water Injection Technology: The permittee shall 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.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

C.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.
[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

C.11. <reserved>

Emissions Limitations and Standards

{Permitting note: The averaging time for conditions C.12. – C.16. are based on the run time of the specified test method, unless otherwise specified in this permit.}

C.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

[1050221-004-AC]

C.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);1050221-004-AC]

C.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 average 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. 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);1050221-004-AC]

C.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 and as a synthetic minor limit for SAM/SO₂ emissions.

(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 62-212.400, F.A.C. (PSD Avoidance); Rule 62-296.320(4)(b)1, F.A.C.; 1050221-004-AC]

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.

[Rule 62-212.400, F.A.C. (PSD Avoidance); 1050221-004-AC]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.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.]

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: During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 2 hours in any 24-hour period. 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. 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.

[Rules 62-210.700(1), (5), and 62-4.130, F.A.C.; Rule 62-212.400, F.A.C. (PSD Avoidance); 1050221-004-AC]

Emissions Performance Testing

C.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)]

C.20. Performance Test Methods: 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;

(b) EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources;

EPA Method 20 - Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines; and

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.

[Rule 62.204.800, F.A.C. and Rule 62.297.620, F.A.C.]

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.]

C.22. <reserved>

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.]

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.]

C.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.]

C.26. Combustion Turbine Testing Capacity: 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.]

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.]

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.]

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.

- (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.

[Rules 62-297.310(5)(a) and 62-297.310(5)(b), F.A.C.]

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

C.31. Continuous Emission Monitoring System: The owner or operator shall 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. **The NO_x CEMS shall be used for the purpose of demonstrating continuous compliance with the NO_x emission limit (24-hour block average concentration limit) specified in Condition C.14.**

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:

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

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

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.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

C.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.

[Rule 62-212.400, F.A.C. (PSD Avoidance);1050221-004-AC]

C.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 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 Demonstration

C.34. <reserved>

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.1050221-004-AC]

C.36. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance. 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. 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. 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.
[1050221-004-AC]

C.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. and 1050221-004-AC]

Reports

C.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.].

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, FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached), 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]

Section IV. This section is the Acid Rain Part.

Operated by: Auburndale Cogeneration Facility

ORIS code: 54658

The emissions unit(s) listed below is regulated under Acid Rain Part, Phase II.

E.U.

ID No. Brief Description

-001 Combined Cycle Combustion Turbine

-006 Simple Cycle Combustion Turbine

A.1. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of this Phase II acid rain unit must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), effective 04/16/01, received August 15, 2002.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit is as follows:

<u>E.U.</u> <u>ID No.</u>	<u>EPA ID</u>	<u>Year</u>	2003	2004	2005	2006	2007
-001	1	SO2 allowance s, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-006	?	SO2 allowance s, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.

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

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at

Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Comments, notes, and justifications:

The designated representative was changed by letter dated March 28, 2002, with a revised Certificate of Authorization.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Auburndale Power Partners, L.P.
Auburndale Power Energy Center, LLC
Auburndale Energy Center
Polk County

DEP File No. **1050221-008-AC**
PSD-FL-185

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1.0. GENERAL INFORMATION

1.1. APPLICANT NAME AND ADDRESS

Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

Responsible Official: Mr. Bob Callery, General Manager

1.2. REVIEW AND PROCESS SCHEDULE

June 28, 2002	Permit application received.
July 30, 2002	Application deemed incomplete.
August 12&14, 2002	Supplemental information received.
August 14, 2002	Application deemed complete.

2.0. FACILITY INFORMATION

The facility is located at 1501 Derby Avenue, Auburndale, Polk County. UTM Coordinates are: Zone 17, 418.7 km East, and 3083.0 km North; Latitude: 27° 52' 15" North, and Longitude: 81° 49' 31" West.

SIC codes are:

Industry Group No.	49	Electric, Gas and Sanitary Services
Industry No.	4911	Electric Generation

The modification request is to delete the sulfuric acid mist requirements included in the previous permit, consistent with current DEP practice.

The Auburndale Energy Center 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. Calpine Eastern Corporation operates both of these units.

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

The facility was issued a previous PSD permit, PSD-FL-185.

This facility *is not* a major source of hazardous air pollutants (HAPs).

3.0. PROJECT DESCRIPTION

The applicant proposes no equipment changes to the configuration of the facility. The requested permit changes are noted above in section 2.0.

4.0. PROJECT EMISSIONS & RULE APPLICABILITY

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

There are no pollutant emission changes associated with this project.

The sulfuric acid mist (SAM) emission limitations were established by the BACT determination dated December 14, 1992. In that determination the department claimed to have accepted the applicant's BACT proposal for SAM, which was the use of low sulfur fuel oil with limited hours.

The original BACT determination issued was based on 8760 hours of operation on fuel oil even though the PSD permit restricted the operation of fuel oil to 400 hours/year. The maximum SAM emissions calculated based on 400 hours/year is 1.5 TPY, which does not exceed the PSD significant emission rate of 7 TPY. In conclusion, the original BACT determination was incorrect, i.e., SAM emissions did not exceed the PSD significant emission rate. This permitting action corrects the original BACT by deleting the SAM requirements.

This change constitutes a minor modification of PSD permit number PSD-FL-185. Therefore, the modification is not subject to review under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), so neither a revised Best Available Control Technology (BACT) determination nor an analysis of the air quality impact is required. However, because this project requires a modification of a PSD permit, the public notice requirements for PSD permits are applicable.

The proposed project is otherwise subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

The facility is located in an area (Polk County) designated "unclassifiable" for PM₁₀, and "attainment" for all the other criteria pollutants (Rule 62-204.340, F.A.C.).

The emission unit affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein).

5.0. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department will issue a draft PSD permit modification to the applicant that provides for the above change.

DRAFT

Certified Mail - Return Receipt Requested

Mr. Bob Callery
General Manager
Calpine Eastern Corporation
1501 Derby Avenue
Auburndale, Florida 33823

Re: DEP File No. 1050221-008-AC, PSD-FL-185
Auburndale Energy Center

The applicant, Auburndale Power Partners, L.P./Auburndale Power Energy Center, LLC, applied on June 28, 2002, to the Department for an air construction permit for the Auburndale Energy Center, located at 1501 Derby Avenue, Auburndale, Polk County. This permitting action will modify PSD-FL-185. The modification is to: Delete the sulfuric acid mist requirements included in the previous permit, consistent with current practice. The Department has reviewed the applicant's request. Certain specific conditions of permit PSD-FL-185 are hereby modified as follows.

{NOTE: The changes below are shown as they currently appear in the Title V Permit No. 1050221-002-AV; which reflects the SAM requirements from PSD-FL-185 and BACT.}

From:

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]

To:

A.11. <reserved>

From:

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]

To:

A.27. <reserved>

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 filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate

District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resource
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 _____ to the person(s) listed:

Mr. Bob Callery*
Mr. Benjamin M.H. Borsch, P.E.
Mr. Jeffrey Shaske
Mr. Jerry Kissel, P.E., SWD
U.S. EPA, Region 4
John Bunyak, NPS

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)

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

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-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.

ID No.

Brief Description of Emissions Units and/or Activity

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

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-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.

Table 1-1, Summary of Air Pollutant Standards and Terms										
Auburndale Peaker Energy Center, LLC				DRAFT Permit No.: 1050221-007-AV						
Auburndale Power Partners, L.P.				Facility ID No.: 1050221						
Auburndale Energy Center										
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.										
E.U. ID No.		Brief Description								
-001		Combined Cycle Combustion Turbine								

Table 2-1, Summary of Compliance Requirements							
Auburndale Peaker Energy Center, LLC			DRAFT Permit No.: 1050221-007-AV				
Auburndale Power Partners, L.P.			Facility ID No.: 1050221				
Auburndale Energy Center							
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.							
E.U. ID No.	Brief Description						
-001	Combined Combustion Turbine						
			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS **	See permit condition(s)
VE	Gas	EPA Method 9	annual	June 4	1 hour		III.A.18., 33.
SO2	Oil	(see note 2)	upon receipt of each oil shipment				III.A.22., 23.
SO2	Gas	(see note 2)					III.A.22., 23.
NOx	Gas	EPA Method 20	permit renewal (5 year)	June 4	3 hour	Yes	III.A.22., 33.
VOC	Gas	EPA Method 25A	permit renewal (5 year)	June 4	3 hour		III.A.25., 33.
CO	Gas	EPA Method 10	permit renewal (5 year)	June 4	3 hour		III.A.26., 33.
O2	Oil/Gas	EPA Method 3A	permit renewal (5 year)	June 4	3 hour	Yes	III.A.22., 33.
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.							
**CMS [=] continuous monitoring system							
(2) Sulfur dioxide is indirectly determined by fuel sulfur analysis by methods specified or any other method approved in writing by the Department pursuant to Rule 62-297.620, F.A.C. or 40 CFR 75, Appendix D.							
[electronic file name: 1050221-007_table2.xls]							

Appendix H-1, Permit History/ID Number Changes

Auburndale Peaker Energy Center, LLC
Auburndale Power Partners, L.P.
Auburndale Energy Center

DRAFT Permit No.: 1050221-007-AV
Facility ID No.: 1050221

Permit History (for tracking purposes):

E.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 1050221-004-AC	12/14/92	10/30/95	11/1/96	6/20/94, 3/18/96, 5/22/97 2/26/02, xx/xx/xx
-002	Fuel oil storage tanks (2)					
-003	Emergency generators					
-004	Heating units and engines					
-005	Surface coating operations					
-006	Simple Cycle Combustion Turbine	1050221-004-AC		4/1/03		4/29/02

Permit No. 1050221-002-AV

Initial Title V permit.

ID Number Changes (for tracking purposes):

NOTE: Calpine Energy and Finance Company, L.P., Osprey Energy Center (Facility ID No.: 1050334) will need to be merged in the future with this Facility ID No.: 1050221.

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}

Phase II Acid Rain Part Application

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

This submission is: ☐ New ☒ Revised

STEP 1

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

Plant Name Auburndale Cogeneration Facility
Auburndale Peaker Energy Center

State FL

ORIS Code **54658**

STEP 2 Enter the unit ID# for each affected unit and indicate whether a unit is being repowered and the repowering plan being renewed by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

Compliance Plan				
a	b	c	d	e
Unit ID#	Unit will hold allowances in accordance with 40 CFR 72.9©(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes			January 1, 1996
6	Yes			July 29, 2002
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3

Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ For each unit that is being repowered, the Repowering Extension Plan form is included.

STEP 4

Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Plant Name (from Step 1) **Auburndale Cogeneration Facility/Auburndale Peaker Energy Center**

Standard Requirements**Acid Rain Part Requirements.**

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1) **Auburndale Cogeneration Facility/Auburndale Peaker Energy Center**

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

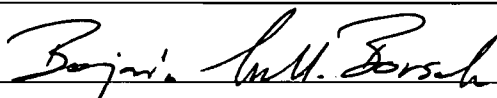
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

Name **Mr. Benjamin M. H. Borsch, Environmental Manager (Alternate Designated Representative)**

Signature



Date

8/14/02

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AUG 15 2002

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