Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

May 29, 2007

(Sent by Electronic Mail – Return Receipt Requested)

Ms. Penny M. Manuel
Vice President, Power Generation
Gulf Power Company
One Energy Place
Pensacola, Florida 32520

Re: Title V Air Operation Permit Revision
PROPOSED Permit Revision No.: 0330045-016-AV
Crist Electric Generating Station

Dear Ms. Manuel:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Crist Electric Generating Station located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Jonathan Holtom, P.E., at 850/921-9531.

Sincerely,

Trina L. Vielhauer
Chief
Bureau of Air Regulation

TV/jh

Enclosures

Copies sent by electronic mail (return receipt requested) to the following:
Ms. Penny M. Manuel, Gulf Power Company (pmmanuel@southernco.com)
Mr. G. Dwain Waters, Gulf Power Company (gdwaters@southernco.com)
Mr. Gregory Terry, Gulf Power Company (gnterry@southernco.com)
Mr. Rick Bradburn, NWD (rick.bradburn@dep.state.fl.us)
Mr. Jim Little, EPA Region 4 (little.james@epa.gov)
Ms Katy Forney, EPA Region 4 (forney.kathleen@epa.gov)

PROPOSED PERMIT DETERMINATION

Proposed Permit No.: 0330045-016-AV

I. Public Notice.

An "INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V AIR OPERATION PERMIT REVISION" to Gulf Power Company for the Crist Electric Generating Station located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County, was clerked on April 23, 2007. The "PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V AIR OPERATION PERMIT REVISION" was published in The Pensacola News Journal on April 25, 2007. The DRAFT Title V Air Operation Permit was available for public inspection at the permitting authority's office in Tallahassee and the Department's Northwest District office in Pensacola. Proof of publication of the "PUBLIC NOTICE OF INTENT TO CONCURRENTLY ISSUE AN AIR CONSTRUCTION PERMIT & TITLE V AIR OPERATION PERMIT REVISION" was received on May 2, 2007.

II. Public Comment(s).

No Public Comments were received during the 30 (thirty)-day public comment period, however, comments were received from the Permittee. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice, therefore, the DRAFT Title V Operation Permit was changed. Those comments are addressed below.

Email from Mr. G. Dwain Waters dated May 7, 2007.

Comment 1. Statement of Basis; Facility Description. Page 1 of 13. Please revise the sentence: "Fuel oil is used as supplemental fuel in all four of the units" to: Natural gas, fuel oil and on-specification used oil are used as supplemental fuels in all four of the units." The revised description more actually reflects the availability of supplemental fuels permitted for the Crist units.

Response 1. The requested correction to the descriptions of allowable fuels has been made as necessary in the Statement of Basis and in the permit.

Comment 2. Section III. Emissions Unit and Conditions. Page 5 of 13. Please revise the actual volumetric flow rate = 802,500 acfm to 596,012 acfm to reflect the retirement of Units 1, 2 and 3 from the total.

Response 2. The requested revision has been made.

Comment 3. B.3. Methods of Operation. Page 6 of 13. Please delete the sentence: "Fuel oil is only used for periods of start-up and as needed for flame stabilization." These units are permitted at 100% of its heat input capacity and thus the sentence is misleading. We believe the sentence was copied in error from Section C.3 from which the condition is correct, i.e. Units 6 & 7.

Response 3. For consistency with Specific Condition B.1., the requested correction has been made.

Comment 4. Subsection C Unit Descriptions. Page 9 of 13. Please revise the actual volumetric flow rate = 2,462,700 to 2,975,540 acfm to reflect changes due to the installation of the Unit 7 SCR.

Response 4. The requested revision has been made.

III. Conclusion.

The enclosed PROPOSED Title V Air Operation Permit includes the aforementioned changes to the DRAFT Title V Air Operation Permit.

The permitting authority will issue the PROPOSED Permit Number 0330045-016-AV, with the changes noted above.

STATEMENT OF BASIS

Gulf Power Company
Crist Electric Generating Plant
Facility ID No.: 0330045
Escambia County

Title V Air Operation Permit Revision
PROPOSED Permit No.: 0330045-016-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, and 62-213. 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.

Facility Description

This existing facility consists of four active fossil fuel fired steam generators (boilers) and two fly ash silos. Boilers 4 and 5 are substitution Acid Rain Phase I Units. Boilers 6 and 7 are Acid Rain Phase I Units. All four boilers are subject to the Acid Rain Phase II requirements. Pulverized coal is the primary fuel for boilers 4, 5, 6 and 7. Natural gas, ~~F~~fuel oil and on-specification used oil are ~~is~~ used as supplemental fuels in all four of the units. (Boilers 2 and 3 were removed from service prior to May 1, 2006.) Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Emissions unit number -004 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 4". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back up fuel)~~, No. 2 fuel oil, or on-specification used oil. Emissions unit number -005 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 5". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back up fuel)~~, No. 2 fuel oil, or on-specification used oil. Units -004 and -005 can burn biomass up to 40.2 MMBtu/hr. Both units are Phase I Substitution and Phase II Acid Rain Units. These emissions units pre-date PSD regulations, but are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. PM emissions from units -004 and -005 are controlled by hot side (Buell Model # Bal. 2x34n333-4-3p) and cold side (Buell Model # 1.1x48k33-1p) electrostatic precipitators.

Emissions unit number -006 is a Foster Wheeler front wall fired, dry bottom boiler designated as "Boiler Number 6". It is rated at a maximum heat input of 3,704.8 million Btu per hour (MMBtu/hour) when firing pulverized coal ~~, natural gas or distillate fuel oil (used as back up fuel)~~ or natural gas, and 714.8 MMBtu/hr when firing No. 2 fuel oil or on-specification used oil. Emissions unit number -007 is a Foster Wheeler front and rear wall fired, dry bottom boiler designated as "Boiler Number 7". It is rated at a maximum heat input of 6,406.4 million Btu per hour (MMBtu/hour) when firing pulverized coal ~~, natural gas or distillate fuel oil (used as back up fuel)~~ or natural gas, and 1,282 MMBtu/hr when firing No. 2 fuel oil or on-specification used oil. These emissions units are regulated under Acid Rain, Phase I. These emissions units pre-date PSD regulations, but are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. PM emissions from unit -006 are controlled by a cold side electrostatic precipitator (Wheelabrator Model

HaRDE). PM emissions from unit -007 are controlled by cold side Alstom Power electrostatic precipitators. NO_X emissions from units -006 and -007 are controlled by Foster Wheeler Low NO_X Burners.

Boilers 4, 5, 6 and 7 are utilizing CEMS for compliance purposes for NO_X, SO_2 and opacity.

Boilers 4, 5, 6 and 7 are subject to CAM for controlled emissions of particulate matter.

Compliance with the heat input limitations is through the use of on-site composite fuel sampling and analysis. The permittee may use vendor supplied data to determine the heat content of the natural gas.

Emissions unit number 8 consists of two Fly Ash Storage Silos. Fly ash collection systems from precipitators on boilers numbers 4, 5, 6 & 7, which deliver fly ash to three transfer tanks, are totally enclosed with no emission points. Three blowers pneumatically convey dry fly ash to 2 silos at a maximum solids rate of 150 tons per hour to either silo or to both. The majority of the solids (99.4%) settle by gravity upon entering the silo, the residual particulates are controlled by a baghouse on each silo. Each baghouse is a Pulse Jet Fabric Filter - model #100 - WMWC - 420 (IIG) manufactured by Flex-Kleen. Dry fly ash will be transported in closed tanker trucks away from the site (approximately 20% sold annually) or conditioned (12-15% water added) fly ash will be transported to an approved landfill area on the site. This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. There is one baghouse on each silo. Historical test data presented by Gulf Power shows less than 2.2% opacity from these units for the past 5 years. Based on these results, the Department does not feel that additional periodic monitoring is necessary.

Based on the Title V permit renewal application received June 22, 2004, this facility is a major source of hazardous air pollutants (HAPs).

Project Description

This Permit Revision is being processed in response to the following requests:

- Gulf Power is requesting that the applicable requirements of the Selective Non-catalytic Reduction (SNCR) construction permits (Permit Nos. 0330045-012-AC and 0330045-013-AC) for Unit 4, 5, & 6 be incorporated into the existing Title V permit.

- Gulf Power is requesting that the requirements for the Crist Unit 5 Mercury Research Center from Air Construction Permit No. 0330045-011-AC be incorporated into the existing Title V permit.

- Gulf Power is requesting to revise the Title V Permit to reduce the semi-annual CAM testing on Unit 7 to annual, based on 18 months of additional data. The requirement to conduct semiannual particulate matter testing was placed in the current Title V renewal permit in response to a comment from EPA regarding the proposed Compliance Assurance Monitoring (CAM) plan. EPA wanted Gulf Power to provide additional test data to better justify the opacity range proposed for use as an excursion indicator in the CAM plan issued with renewal Permit No. 0330045-009-AV. The results of the additional testing for Unit 7 imply that, for this unit, there is a reasonable correlation between opacity and particulate matter emissions to justify the continued use of the established excursion indicator range without the need for additional semiannual testing. A return to the rule-required frequency of annual compliance testing is acceptable.

- Gulf Power is requesting to clarify that annual testing of the Unit 7 SCR shall report both inlet and outlet data for the system. However, there is no specific emission NO_X limitation on Unit 7. Compliance is based on a facility wide NO_X rate.

- Gulf Power is requesting to clarify that the Unit 7 Selective Catalytic Reduction (SCR) test, tune, maintain and operate requirement to meet an 85% reduction criteria was based on the baseline NO_X inlet rate (0.70 lb/MMBtu) as noted in the design specification and outlined in the FDEP Technical Evaluation. In addition, Gulf would like to clarify that the requirement to meet the 85% reduction provision was an initial test only to demonstrate that equipment met the design specification outlined in the construction application.

- Gulf Power is requesting to add language to allow additional SCR bypass operations upon approval by the agency. This provision is requested for special emergency, repair and research situations which may arise and to alleviate lengthy permit variance processing delays. It was determined that the requests to clarify the SCR testing requirements and to alter the SCR bypass condition for Unit 7 would require a change to the air construction Permit No. 0330045-005-AC that established the testing and bypass requirements. The Draft Air Construction Permit revision is being issued concurrently with the Draft Title V permit revision as project No. 0330045-017-AC.

Permit Revisions

The following changes are being made as a result of this permit revision (deleted language is denoted by a ~~strikethrough~~, added language is denoted by a double underline):

1. To reflect the retirement of Units 2 and 3, Section III., Subsection A has been mostly deleted and listed as "Reserved", as shown below:

Section III. Emissions Units and Conditions.
Subsection A. RESERVED. This section previously addressesd the following emissions units.

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 420 MMBtu/hr (Retired March 31, 2003)
-002	Boiler Number 2 - 420 MMBtu/hr **(~~to be r~~Retired ~~by~~prior to May 1, 2006)**
-003	Boiler Number 3 - 550 MMBtu/hr **(~~to be r~~Retired ~~by~~ prior to May 1, 2006)**

Emissions unit number -001 was permanently retired on March 31, 2003. ~~Emissions unit number -002 was permanently retired on March 31, 2003 is a Riley front wall fired, dry bottom boiler designated as "Boiler Number 2". It is rated at a maximum heat input of 420 million Btu per hour (MMBtu/hour) when firing natural gas and 320 MMBtu/hour when firing fuel oil. Natural gas is the primary fuel. Emissions unit number -003 is a Riley front wall fired, dry bottom boiler designated as "Boiler Number 3". It is rated at a maximum heat input of 550 million Btu per hour (MMBtu/hour) when firing natural gas and/or fuel oil. Natural gas is the primary fuel. Units -002 and -003 are regulated under Acid Rain, Phase II.~~ Units -002 and -003 ~~will be~~were permanently retired by May 1, 2006.

(The remainder of Subsection A has been deleted.)

2. To incorporate the applicable requirements of the air construction permit for the Mercury Research Center (Permit No. 0330045-011-AC) and the SNCR and Biomass projects for Units 4 & 5 (Permit No. 0330045-013-AC), the following portions of the permit have been added and/or changed:

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-46, TITLE V CONDITIONS):

a) Ash leaving the facility will be hauled in closed container trucks. Ash being disposed of on plant property will be mixed with water as it is being loaded into the trucks for transport to the landfill.

b) The plant ash haul roads will be watered as necessary.

c) Grassing over each section of the ash landfill as it reaches its capacity.

d) Regular packing of the coal pile to reduce blowing dust and aid in the prevention of coal fires.

e) Application of a dust suppressant to the coal on the conveyor belts as necessary.

f) Biomass Fugitive Dust Emissions: The permittee shall minimize unconfined particulate matter emissions from the storage and handling of carbonaceous fuels by using dust suppressing techniques such as covering, confining, or applying water to the affected areas, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; Permit No. 0330045-013-AC; and, Proposed by applicant in Title V permit renewal application received June 22, 2004.]

Section III. Emissions Units and Conditions.

Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-004	Boiler Number 4 (Substitution Phase I Acid Rain Unit)
-005	Boiler Number 5 (Substitution Phase I Acid Rain Unit)

Emissions unit number -004 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 4". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back-up fuel)~~, No. 2 fuel oil, or on-specification used oil. Emissions unit number -005 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 5". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back-up fuel)~~, No. 2 fuel oil, or on-specification used oil. Units -004 and -005 can burn biomass up to 40.2 MMBtu/hr. Both units are Phase I Substitution and Phase II Acid Rain Units.

Gulf Power operates a temporary mercury research center using a slip stream of flu gas from unit -005 (Permit No. 0330045-011-AC) for evaluating mercury (Hg) emission reduction techniques.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase I and Phase II. These emissions units pre-date PSD regulations and are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. PM emissions from units -004 and -005 are controlled by hot side (Buell Model # Bal. 2x34n333-4-3p) and cold side (Buell Model # 1.1x48k33-1p) electrostatic precipitators. NO_X emissions from units -004 and -005 are controlled by low-NO_X burner tips and selective non-catalytic reduction (SNCR). The SNCR system is designed for a target NO_X reduction of 25% as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv corrected to 3% O_2 based on a 24-hour average. Unit -004 began commercial operation on July 1, 1959. Unit -005 began commercial operation on June 1, 1961. The generator nameplate rating for unit -004 is 93 MW. The generator nameplate rating for unit -005 is 93 MW. Units -004 and -005 share a common stack with units -002 and -003. Stack height = 450 feet, exit diameter = 18.0 feet, exit temperature = 290 °F, actual volumetric flow rate = 596,012 acfm.}

{Permitting Note: Fuel Tech, Inc. designed the new SNCR system. Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 45,000 gallon tank. This will provide approximately 7 days operating inventory. The solution will be maintained at a temperature of approximately 40 °F by circulating through the SNCR system piping loop heating module. Using plant service water or other dilution water source, the metering module dilutes the reagent to a predetermined concentration (approximately 30%) and precisely controls the flow of the diluted reagent to distribution modules located near the boiler injection point. The distribution modules provide the final control of diluted reagent and atomizing/cooling (plant) air being delivered to each injector. The diluted reagent is injected into the boiler via wall-mounted air atomizing lances, which will be installed across the face of the boiler at an elevation of 159'-0" for each unit. At peak load for Unit 4, with 0.36 lb/MMBtu inlet NO_X and 25% reduction, urea injection would be 233 lb/hr on a dry basis. This translates to an ammonia flow of 132 lb/hr. At peak load for Unit 5, with 0.36 lb/MMBtu inlet NO_X and 25% reduction, urea injection would be 238 lb/hr on a dry basis. This translates to an ammonia flow of 135 lb/hr. The SNCR is designed with a maximum ammonia slip concentration of 5 ppmvd corrected to 3% O_2 (24 hour basis) in the duct cross-sectional area for all boiler loads. There are no provisions for continuously monitoring ammonia concentration in the flue gas. When ammonia measurements in the flue gas are required, EPA Method CTM-027 or other methods approved by EPA (such as Method 320, which incorporates FTIR) will be used.}

B.1. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	1,096.7	Coal
	1,096.7	Natural Gas
	1,096.7	No. 2 Fuel Oil
	1,096.7	On-Specification Used Oil
	40.2	Biomass
-005	1,096.7	Coal
	1,096.7	Natural Gas
	1,096.7	No. 2 Fuel Oil
	1,096.7	On-Specification Used Oil
	40.2	Biomass

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 & 62-296.405, F.A.C.; and, Permit Nos. AC17-2126, AC17-2127, 0330045-010-AC & 0330045-013-AC.]

B.3. Methods of Operation.

a. Fuels. The fuels that are allowed to be burned in these boilers are coal, natural gas, new No. 2 fuel oil, biomass, and/or on-specification used oil (see Specific Condition **B.38.**). ~~Fuel oil is only used for periods of start-up and as needed for flame stabilization.~~ Also, on-site generated "oil contaminated soil" is periodically combusted for energy recovery purposes.

b. Other.

i. Supplemental injection of "GAM 60" for purposes of maintaining boiler tube temperatures.

ii. Supplemental injection of sodium carbonate or sodium sulfate at a rate of 440 pounds per hour as necessary to enhance the operation of the particulate control devices on these units.

c. Mercury Research Center. The permittee is authorized to operate a temporary research center for evaluating mercury (Hg) emission reduction techniques. The research center uses a slip stream of flue gas from Unit 5. To avoid compromising test results from the research center, the SNCR may not be operated while research is being conducted by the facility. Unit 5 stack emissions shall not exceed any limit within existing permits and this permit. Testing shall cease as soon as possible if the boiler operations are not in accordance with conditions in this permit. Testing by the research center shall not resume until appropriate measures to correct the problem(s) have been implemented. See Specific Conditions B.41. – B.49.

d. Biomass Fuels: Subject to the conditions of this permit, each unit may also fire carbonaceous fuel consisting of the following untreated materials: wood chips, switch grass, sawdust, and sander dust in addition to the authorized fuels listed above. These materials shall be substantially free of plastics, metals, paint or other chemicals. Heat input rate from biomass fuels shall not exceed 40.2 MMBtu per hour for each unit. The maximum hourly firing rates of carbonaceous fuels for each unit are: 4.7 tons of wood chips per hour, 2.9 tons of switch grass per hour, 3.7 tons of sawdust per hour, and 3.7 tons of sander dust per hour. The above limits are not cumulative and only one carbonaceous fuel type may be fired at a time.

[Rule 62-213.410, F.A.C.; ~~and,~~ Applicant's request in Title V permit renewal application received June 22, 2004; and, Permit Nos. 0330045-011-AC & 0330045-013-AC.]

Permitting Note added before Specific Condition B.5.:
{Permitting Note: Units -004 and -005 are also subject to the facility-wide nitrogen oxides limitations contained in Subsection E. (See Specific Condition B.40.)}

B.15. Continuous Monitors.

a. For these emissions units, the permittee shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) for monitoring opacity, NO_X, SO_2 and CO_2.

b. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall have installed, shall keep calibrated, and shall operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition.

[Rule 62-296.405(1)(f)1., F.A.C.; and, Permit Nos. AO17-211303 & 0330045-013-AC.]

Mercury Research Center Conditions.

B.41. Scope of Work. For the duration of the project, once the permittee has established any test program (or granted a 3rd party the rights to do such test program) a Scope of Work shall be sent by fax to the DEP Northwest District Office as soon as possible and in advance of the planned commencement of the test program. This Scope of Work will give *general* descriptions of processes, work planned, dates of the tests and general objectives of the tests. Proprietary or confidential data, documents or information submitted or disclosed to FDEP shall be identified as such by the Permittee and shall be maintained as such pursuant to applicable Florida law.
[Permit No. 0330045-011-AC]

B.42. Semi-annual summary reports. Beginning June 30, 2006, the permittee shall be responsible for submitting semi-annual summary reports. These reports will outline each test program conducted and outline each test program results. Proprietary or confidential data, documents or information submitted or disclosed to FDEP shall be identified as such by the Permittee and shall be maintained as such pursuant to applicable Florida law. The semi-annual summary reports will be sent to the DEP Northwest District Office and the Bureau of Air Regulation. The first summary will be due June 30, 2006 and will cover all tests and the results from such tests conducted between July 1, 2005 and December 31, 2005. In a like manner, a similar summary shall be submitted for each 180 day period thereafter.
[Permit No. 0330045-011-AC]

B.43. Annual Report. At the end of each calendar year, the permittee shall include on the Annual Operating Report (AOR) a calculation of Crist Unit 5 emission increases/decreases as a result of the slipstream. Any deviation from the permittee's original estimates (that no PSD Significant Emission Rate thresholds will be crossed) shall be brought to the Department's attention immediately.
[Permit No. 0330045-011-AC]

B.44. Stack Emissions. Stack emissions shall not exceed any limit within existing permits.
[Permit No. 0330045-011-AC]

B.45. Stack Tests. All stack performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C. [NOTE: this permit condition is only applicable to any stack testing conducted on Crist Unit 5 pursuant to and during the test programs.]
[Permit No. 0330045-011-AC]

B.46. Daily records. Daily records of the slipstream operation (i.e. insertion of and/or removal of equipment from service as well as records of tests performed) shall be maintained on site and available for Department inspection.
[Permit No. 0330045-011-AC]

B.47. Objectionable Odors. The project shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2). F.A.C.
[Permit No. 0330045-011-AC]

B.48. Cessation of Testing. Performance testing shall cease as soon as possible if the boiler operations are not in accordance with the conditions within existing permits, or this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
[Permit No. 0330045-011-AC]

B.49. Final Notification and Removal. Notification shall occur within 45 days, in writing, upon completion of the final test. Prior to December 31, 2009 the permittee shall provide the DEP Northwest District Office and the Bureau of Air Regulation with its plans to disassemble and remove all slipstream components, returning the unit back to its original condition. Such plans shall be completely executed by April 1, 2010.
[Permit No. 0330045-011-AC]

E.3. NO_X CEMS. To demonstrate compliance with the plant-wide NO_X emissions standard, the permittee shall install, calibrate, operate and maintain continuous emissions monitoring systems (CEMS) to continuously monitor and record the emissions of nitrogen oxides and an appropriate diluent gas (carbon dioxide or oxygen) from Units -004, -005, -006, and -007. The CEMS shall monitor and record data during all periods of Units -004, -005, -006 and -007 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments. For each calendar quarter, monitor availability shall be 95% or greater. If unable to achieve this level, the permittee shall submit a report identifying the problems in achieving 95% monitor availability and a plan of corrective actions. The permittee shall implement the reported corrective actions within the next calendar quarter.
[Exhibit B of the Agreement; and, Permit Nos. 0330045-005-AC, 0330045-012-AC & 0330045-013-AC]

{Permitting Note: The existing NO_X CEMS required by the Acid Rain program satisfy this requirement.}

3. To incorporate the applicable requirements of the SNCR construction permit for Unit 6 (Permit No. 0330045-012-AC), the following portions of the permit have been added and/or changed:

Subsection C Unit Descriptions:
{Permitting notes: These emissions units are regulated under Acid Rain, Phase I and Phase II. These emissions units pre-date PSD regulations and are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. Particulate matter emissions from unit -006 are controlled by a cold side electrostatic precipitator (Wheelabrator Model # HaRDE). Particulate matter emissions from unit -007 are controlled by cold side electrostatic precipitators designed by Alstom Power Inc. NO_X emissions from units -006 are controlled by Foster Wheeler Low NO_X Burners and by a Selective Non-catalytic Reduction (SNCR) system designed to achieve no less than a 20% reduction in NO_X emissions as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv corrected to 3% O_2 based on a 24-hour average. NO_X emissions from unit -007 are controlled by Foster Wheeler Low NO_X Burners and by a Selective Catalytic Reduction (SCR) system designed to achieve no less than an 85% reduction in NO_X emissions as measured across the SCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. Unit -006 began commercial operation on May 1, 1970. Unit -007 began commercial operation on August 1, 1973. Units -006 and -007 share a common stack. Stack height =

450 feet, exit diameter = 23.2 feet, exit temperature = 320 °F, actual volumetric flow rate = 2,975,540 acfm.}

C.12. Nitrogen Oxides. Emissions units 006 and 007 shall comply with the facility-wide NO_X emissions limit specified in Specific Condition E.2.

~~a. (Interim). Prior to implementing the required NO_x control strategy for Units -004, -005 and -006, the NO_x emissions from Unit -007 shall not exceed 0.15 lb/MMBtu of heat input based on a 30-day rolling average when the SCR system is operational with a catalyst temperature of at least 600° F. The permittee shall demonstrate compliance with data collected from the certified CEMS.~~

~~b. Permanent. After the required NO_x control strategy is implemented for Units -004, -005, and -006, the plant-wide NO_x standard specified in Subsection E. shall supersede this interim standard.~~

[Permit Nos. 0330045-005-AC & 0330045-012-AC]

SCR and SNCR Operation

C.16. Operation of NO_X Control Devices.

a. SNCR System. The permittee shall operate and maintain an SNCR system for Unit -006 to reduce emissions of nitrogen oxides (NO_X) as described in the application, approved drawings, plans, and other documents on file with the Department. The SNCR system shall be designed to achieve no less than a 20% reduction in NO_X emissions as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. The storage of urea shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.

b. SCR System. The permittee shall operate and maintain an SCR system for Unit -007 to reduce emissions of nitrogen oxides (NO_X) as described in the application, approved drawings, plans, and other documents on file with the Department. The SCR system shall be designed to achieve no less than an 85% reduction in NO_X emissions as measured across the SCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. The storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.

[Permit Nos. 0330045-005-AC & 0330045-012-AC]

C.21. Monitoring for NO_X.

a. NO_X CEMS: To demonstrate compliance with the emissions standards, the permittee shall install, calibrate, operate and maintain a continuous emissions monitoring system (CEMS) to continuously monitor and record the emissions of nitrogen oxides and an appropriate diluent gas (carbon dioxide or oxygen). The CEMS shall monitor and record data during all periods of Unit -006 & -007 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments. For each calendar quarter, monitor availability shall be 95% or greater. If unable to achieve this level, the permittee shall submit a report identifying the problems in achieving 95% monitor availability and a plan of corrective actions. The permittee shall implement the reported corrective actions within the next calendar quarter.

{Permitting Note: The existing NO_X CEMS required by the Acid Rain program satisfies this requirement.}

b. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall have installed and calibrated, and shall operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system on Unit -006. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load

conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition.

[Permit Nos. 0330045-005-AC & 0330045-012-AC]

4. Regarding the request to relax the particulate matter testing frequency that had previously been increased to gather more CAM data, Specific Condition C.23. is changed as follows:

C.23. Tests Required.

a. Annual Tests Required. Units -006 and -007 shall be tested annually for NO_X, SO_2, and PM in accordance with the requirements listed below. In addition, Unit -007 shall be tested annually for ammonia slip emissions in accordance with the requirements listed below.

~~b. Semi-annual Tests required. Unit -007 shall be tested semi-annually for PM emissions in accordance with the requirements listed below.~~

[Rule 62-297.310(7)(a)4., F.A.C.; Permit No. 0330045-005-AC; and, Applicant Request.]

~~{Permitting Note: After 18 months, the permittee may petition for removal of the semi-annual test requirement.}~~

In addition, the Indicator Range language in the CAM Monitoring Approach table for Unit 7 is changed:

1. Indicator Range	An excursion is defined as any 1-hour opacity average greater than 15% (other than periods of start up, shut down or malfunction). Excursions trigger an inspection, any corrective action necessary to lower the opacity, and a documentation of the event. ~~Note: Particulate matter compliance testing shall be conducted on a semi-annual basis in order to provide additional assurance that this excursion level remains protective of the PM limit. (See Specific Condition **C.23.b.**)~~ ~~{Permitting Note: After 18 months, the permittee may petition for removal of the semi-annual test requirement.}~~

5. To incorporate the conditions of Permit No. 0330045-017-AC to change the NO_X testing requirements and SCR bypass conditions for unit -007, the following conditions have been changed:

C.18. SCR Bypass, Catalyst Maintenance and Repair. The permittee may bypass the SCR system to perform ~~catalyst~~ maintenance and repair for up to ~~15 days~~ 360 hours per ~~year~~consecutive 12 months during ~~the~~ non-ozone ~~season~~events. During such allowable bypass periods, the uncontrolled NO_X emissions from Unit -007 shall not exceed 0.35 lb/MMBtu based on a 24-hour average. The daily NO_X emission rates for these periods may be excluded from the plant-wide 30-day NO_X standard specified in Specific Condition **E.2.** The permittee shall notify the Compliance Authority in advance of the purpose of the SCR bypass, the expected dates of SCR bypass, and the expected duration of SCR bypass. To the extent practical, the permittee shall schedule regular maintenance of the SCR system for the non-ozone season.

[Rules 62-210.700 & 62-4.070(3), F.A.C.; and, Permit Nos. 0330045-005-AC & 0330045-017-AC.]

{Permitting Note: The ozone season is defined as May 1st through September 15th. An Ozone event is defined as any level on the Air Quality Index for Ozone greater than good or moderate (green or yellow).}

C.30. Nitrogen Oxides, Compliance Tests. During each federal fiscal year (October 1st to September 30th), the permittee shall conduct tests ~~to demonstrate compliance with the emission limits contained in Specific Condition C.12. and with the design specification to achieve no less than an 85% reduction in the nitrogen oxide emission rate~~ on Unit -007 in order to demonstrate that the SCR system continues to operate at the designed level of operation (i.e., 85% reduction from the baseline emissions rate of 0.70 lb/MMBtu). The permittee shall concurrently test the SCR inlet and SCR outlet in accordance with EPA Method 7E as adopted by reference in Rule 62-204.800, F.A.C. Data collected during the annual NO_X RATA testing may be used to represent NO_X emissions at the SCR outlet. Alternatively, the permittee may submit data collected from the NO_X rate process monitors at the SCR inlet and SCR outlet, which are part of the ammonia injection system. The data shall be collected for at least three consecutive hours. [Rules 62-4.070(3) & 62-297.310(7), F.A.C.; and, Permit Nos. 0330045-005-AC & 0330045-017-AC.]

{Permitting Note: There is not a unit specific emissions limit for NO_X for Unit -007. However, it is subject to the facility-wide emissions limit contained in Specific Condition E.2.}

E.2. Plant-Wide NO_X Limit. Emissions of nitrogen oxides (NO_X) from the combined operation of Units -004, -005, -006, and -007 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit -007 is shutdown. The plant-wide daily NO_X emission rate shall be determined by the following equation:

$$\text{Plant-Wide Daily MMBtu-Weighted } NO_X \text{ Emission Rate} = \frac{\sum_{\text{Units 4, 5, 6, 7}} [(\text{Unit \# daily MMBtu}) \times (\text{Unit \# daily } NO_X \text{ CEMS Rate})]}{\sum_{\text{Units 4, 5, 6, 7}} (\text{Unit \# daily MMBtu})}$$

The "Unit # daily MMBtu" shall be determined by the daily as-burned fuel analysis and the fuel fired for each unit. The "Unit # daily NOx CEMS Rate" shall be determined by the daily average of NOx CEMS data for each unit and reported in terms of "lb/MMBtu heat input". The plant-wide daily NOx emissions rate shall be determined each day regardless of the operating status for Unit 7. The plant-wide 30-day rolling NOx average shall be determined for each 30 sequential Unit 7 operating days, which need not be consecutive. A Unit 7 operating day means any calendar day that Unit 7 operates a minimum of 18 hours. The Unit 7 daily NOx CEMS rate may consist of less than 18 hours of data if this is due to: CEMS malfunction; ~~or~~ invalid CEMS data; or exempted data due to start up, shut down or SCR bypass, described below. When the catalyst temperature is below 600° F during a startup or shutdown, NOx emissions data collected during such periods may be excluded from the daily NOx ~~average~~ CEMS Rate. In accordance with Specific Condition **C.18.**, limited NOx emissions data collected during SCR bypass during ~~the~~ non-ozone ~~season~~ events may be excluded from the daily NOx ~~average~~ CEMS Rate. The plant-wide NOx emission standard shall be achieved by utilizing the SCR system for Unit 7 and implementing the selected NOx control strategy for Units 4, 5, and 6. The effective date for the plant-wide NOx emission standard is:

a. The startup date of the selected additional NO_X reduction project, (excluding an SCR project for

Unit -006), but no later than May 1, 2006; or

b. The startup date of the SCR project for Unit -006, but no later than December 31, 2007.

For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of the required air construction permit (or other Department approval) that authorized implementation of the additional NO_X reduction project. [Paragraphs 2, 3 and Exhibit B of the Agreement]
[Permit No. 0330045-005-AC]

6. To make minor administrative corrections and remove obsolete requirements, the following conditions are changed:

B.5. Visible Emissions. Visible emissions shall not exceed 40 percent opacity. Because units -004 and -005 share a common stack ~~with units -002 and -003~~, visible emissions violations from the stack will be attributed to ~~all five~~both units unless opacity meter results show the specific unit causing the violation. [Rule 62-296.405(1)(a), F.A.C.; Secretarial ORDER(s) signed October 18, 1985 & January 3, 1986; and, Permit No. AO17-211303, Specific Condition 10.]

B.9. Sulfur Dioxide - Solid Fuel. When burning solid fuel, sulfur dioxide emissions shall not exceed ~~5.90~~ 2.4 pounds per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(c)2.c., F.A.C.; Permit No. 0330045-008-AC]

All references to Appendix TV-4, Title V Conditions (version dated 2/12/02) have been changed to Appendix TV-6, Title V Conditions (version dated 6/23/06).

E.2. Plant-Wide NO_X Limit. Emissions of nitrogen oxides (NO_X) from the combined operation of Units -004, -005, -006, and -007 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit -007 is shutdown. The plant-wide daily NO_X emission rate shall be determined by the following equation:

$$\text{Plant-Wide Daily MMBtu-Weighted } NO_X \text{ Emission Rate} = \frac{\sum_{\text{Units 4, 5, 6, 7}} [(\text{Unit \# daily MMBtu}) \times (\text{Unit \# daily } NO_X \text{ CEMS Rate})]}{\sum_{\text{Units 4, 5, 6, 7}} (\text{Unit \# daily MMBtu})}$$

The "Unit # daily MMBtu" shall be determined by the daily as-burned fuel analysis and the fuel fired for each unit. The "Unit # daily NOx CEMS Rate" shall be determined by the daily average of NOx CEMS data for each unit and reported in terms of "lb/MMBtu heat input". The plant-wide daily NOx emissions rate shall be determined each day regardless of the operating status for Unit 7. The plant-wide 30-day rolling NOx average shall be determined for each 30 sequential Unit 7 operating days, which need not be consecutive. A Unit 7 operating day means any calendar day that Unit 7 operates a minimum of 18 hours. The Unit 7 daily NOx CEMS rate may consist of less than 18 hours of data if this is due to: CEMS malfunction; ~~or~~ invalid CEMS data; or exempted data due to start up, shut down or SCR bypass, described below. When the catalyst temperature is below 600° F during a

startup or shutdown, NOx emissions data collected during such periods may be excluded from the daily NOx ~~average~~ CEMS Rate. In accordance with Specific Condition **C.18.**, limited NOx emissions data collected during SCR bypass during ~~the~~ non-ozone ~~season~~ events may be excluded from the daily NOx ~~average~~ CEMS Rate. The plant-wide NOx emission standard shall be achieved by utilizing the SCR system for Unit 7 and ~~implementing the selected NOx control strategy~~ the SNCR systems for Units 4, 5, and 6. ~~The effective date for the plant-wide NOx emission standard is:~~

~~a. The startup date of the selected additional NO_x reduction project, (excluding an SCR project for Unit -006), but no later than May 1, 2006; or~~

~~b. The startup date of the SCR project for Unit -006, but no later than December 31, 2007.~~

~~For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of the required air construction permit (or other Department approval) that authorized implementation of the additional NO_x reduction project. [Paragraphs 2, 3 and Exhibit B of the Agreement]~~

[Permit No. 0330045-005-AC]

~~**E.6.** Additional NO_x Reduction Projects. The Agreement requires Gulf Power Company to conduct a variety of engineering studies to determine the feasibility of NO_x reduction technologies for one or more of the three remaining coal-fired units (Units -004, -005, and -006). The studies and related unit-specific demonstration projects may include (but are not limited to) SCR, selective non-catalytic reduction (SNCR) technology, over-fired air (OFA) technology, natural gas re-burn technology, selective use of biomass fuel, etc. The studies must be complete by May 1, 2005. Before implementing any NO_x reduction technology or combination of technologies, Gulf Power Company must obtain written concurrence from the Department that the use thereof is reasonable and necessary to achieve the overall plant-wide NO_x emission standard. If a NO_x reduction technology or a combination of technologies other than an SCR project for Unit 6 is identified as appropriate, Gulf Power Company will implement the technology or combination of technologies on one or more of the three remaining coal-fired units by May 1, 2006. If an SCR project for Unit -006 is identified as the appropriate NO_x reduction technology, Gulf Power Company will implement, begin and continue operating the SCR system by December 31, 2007.~~
~~[Paragraph 2 of the Agreement]]~~

Appendix H-1, Permit History/ID Number Changes, has been updated to include recent projects.

Gulf Power Company
Crist Electric Generating Plant
Facility ID No.: 0330045
Escambia County

Title V Air Operation Permit

PROPOSED Permit No.: 0330045-016-AV
(1st Revision of Renewed Title V Air Operation Permit No.: 0330045-009-AV)

Permitting Authority
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0144
Fax: 850/921-9533

Title V Air Operation Permit

PROPOSED Permit No.: 0330045-016-AV

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PROPOSED PERMIT

Permittee:
Gulf Power Company
500 Bay Front Parkway
Pensacola, Florida 32520-0100

PROPOSED Permit No.: 0330045-016-AV
Facility ID No.: 0330045
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Renewal

This permit is for the operation of the Crist Electric Generating Plant. This facility is located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County, North of Pensacola.

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
Phase II Acid Rain Permit Application/Compliance Plan Signed 06/01/04
Phase II Acid Rain NO_X Compliance Plan Signed 06/01/04
Revised Phase II Acid Rain NO_X Averaging Plan Signed 11/18/03
Appendix SO-1, Secretarial ORDER(s)
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)
Appendix TV-6, Title V Conditions (version dated 6/23/06)
ASP Number 97-B-01
Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)
Appendix CAM, Compliance Assurance Monitoring Plan

Effective Date: January 1, 2005
Revision Effective Date: *(Day 55)*
Renewal Application Due Date: July 5, 2009
Expiration Date: December 31, 2009

PROPOSED

Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/jk/jh

Section I. Facility Information.

Subsection A. Facility Description.

This existing facility consists of four active fossil fuel fired steam generators (boilers) and two fly ash silos. Boilers 4 and 5 are substitution Acid Rain Phase I Units. Boilers 6 and 7 are Acid Rain Phase I Units. All four boilers are subject to the Acid Rain Phase II requirements. Pulverized coal is the primary fuel for boilers 4, 5, 6 and 7. Natural gas, ~~F~~fuel oil and on-specification used oil are ~~is~~ used as supplemental fuels in all four of the units. (Boilers 2 and 3 were removed from service prior to May 1, 2006.) Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V permit renewal application received June 22, 2004, this facility is a major source of hazardous air pollutants (HAPs).

The existing facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

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

Subsection B. Summary of Emissions Unit ID Numbers and Brief Descriptions.

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 420 MMBtu/hour (retired March 31, 2003)
-002	Boiler Number 2 - 420 MMBtu/hour (retired prior to May 1, 2006)
-003	Boiler Number 3 - 550 MMBtu/hour (retired prior to May 1, 2006)
-004	Boiler Number 4 - 1,096.7 MMBtu/hour
-005	Boiler Number 5 - 1,096.7 MMBtu/hour
-006	Boiler Number 6 - 3,704.8 MMBtu/hour
-007	Boiler Number 7 - 6,406.4 MMBtu/hour
-008	Fly Ash Silos (2)
-009	Material Handling of Coal and Ash (See Appendix U-1)
-010	Fugitive PM Sources - On-site Vehicles (See Appendix U-1)
-011	General Purpose Internal Combustion Engines (See Appendix U-1)
-012	Cooling Towers (3) (See Appendix U-1)
-013	Fugitive PM Sources - sandblasting operations (See Appendix U-1)

Please reference the Permit Number, the Facility Identification Number, and the appropriate Emissions Unit(s) ID Number(s) on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The following documents are 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
Phase II Acid Rain Permit Application/Compliance Plan Signed 6/1/04
Phase II Acid Rain NO_X Compliance Plan Signed 6/1/04
Revised Phase II Acid Rain NO_X Averaging Plan Signed 11/18/03
Appendix SO-1, Secretarial ORDER(s)
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)
Appendix TV-6, Title V Conditions (version dated 6/23/06)
ASP Number 97-B-01
Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)
Appendix CAM, Compliance Assurance Monitoring Plan

{Permitting Note: 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 informational purposes only:
Appendix H-1, Permit History / ID Number Transfers
Phase I Acid Rain Permits Issued December 27, 1994
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:
Title V Permit Renewal Application Received June 22, 2004
Title V Permit Revision Application Received October 30, 2006

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-6, Title V Conditions, is a part of this permit.

{Permitting note: Appendix TV-6, 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. If desired, a copy of Appendix TV-6, Title V Conditions can be downloaded from the Division of Air Resources Management's Internet Web site located at the following address:
http://www.dep.state.fl.us/air/permitting/writertools/t5/TV-6.doc.

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 1515
Lanham-Seabrook, MD 20703-1515
Telephone: 301/429-5018

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 Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by

the Department as of the issuance date of this permit.}
[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.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-6, TITLE V CONDITIONS):

a) Ash leaving the facility will be hauled in closed container trucks. Ash being disposed of on plant property will be mixed with water as it is being loaded into the trucks for transport to the landfill.

b) The plant ash haul roads will be watered as necessary.

c) Grassing over each section of the ash landfill as it reaches its capacity.

d) Regular packing of the coal pile to reduce blowing dust and aid in the prevention of coal fires.

e) Application of a dust suppressant to the coal on the conveyor belts as necessary.

f) Biomass Fugitive Dust Emissions: The permittee shall minimize unconfined particulate matter emissions from the storage and handling of carbonaceous fuels by using dust suppressing techniques such as covering, confining, or applying water to the affected areas, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; Permit No. 0330045-013-AC; and, Proposed by applicant in Title V permit renewal application received June 22, 2004.]

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-6, TITLE V CONDITIONS)}

11. The Department's Northwest District Office (Pensacola) telephone number for reporting problems, malfunctions or exceedances under this permit is 850/595-8364, day or night, and for emergencies involving a significant threat to human health or the environment is 850/413-9911. The Department's

Northwest District Office (Pensacola) telephone number for routine business, including compliance test notifications, is 850/595-8364 during normal working hours.

12. The permittee shall submit all compliance related notifications and reports required of this permit (other than Acid Rain Program Information) to the Department's Northwest District office:

Department of Environmental Protection
Northwest District Office
160 Governmental Center
Pensacola, Florida 32501-5794
Telephone: 850/595-8364
Fax: 850/595-8417

Acid Rain Program Information shall be submitted, as necessary, to:

Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5510
Tallahassee, Florida 32399-2400
Telephone: 850/488-6140
Fax: 850/922-6979

13. Any reports, data, notifications, certifications, and requests (other than Acid Rain Program Information) 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
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163 or 404/562-9164

14. 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.]

15. In lieu of Condition 52. of APPENDIX TV-6, TITLE V CONDITIONS, the following condition applies:

Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an

owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.
[Rule 62-213.460, F.A.C.]

In addition, this permit shield does not currently encompass major or minor source construction permit requirements that are deemed applicable to the source by a court of competent jurisdiction. The source shall not be shielded from any such requirements found, after the exhaustion of appeals, to be applicable by such court, and in the event that such a finding is made and the appeals therefrom are exhausted, this will provide a basis for reopening the permit to establish a schedule for complying with these requirements. Until such time as a final decision is reached after the exhaustion of appeals, no compliance schedule shall be necessary or required. Furthermore, the annual compliance certification shall not be required to address such matters until a final decision is reached. It is specifically recognized that this exception to the permit shield applies to a determination by such court, after exhaustion of appeals, that major or minor new source construction permit requirements apply to the source. Nothing in the permit has made any specific finding of non-applicability of any PSD, NSPS, or SIP minor source review requirements for any modifications to which these requirements should have applied.

Section III. Emissions Units and Conditions.

Subsection A. RESERVED. This section previously addressesd the following emissions units.

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 420 MMBtu/hr (Retired March 31, 2003)
-002	Boiler Number 2 - 420 MMBtu/hr (~~to be r~~Retired ~~by~~ prior to May 1, 2006)
-003	Boiler Number 3 - 550 MMBtu/hr (~~to be r~~Retired ~~by~~ prior to May 1, 2006)

Emissions unit number -001 was permanently retired on March 31, 2003. ~~Emissions unit number -002 was permanently retired on March 31, 2003 is a Riley front wall fired, dry bottom boiler designated as "Boiler Number 2". It is rated at a maximum heat input of 420 million Btu per hour (MMBtu/hour) when firing natural gas and 320 MMBtu/hour when firing fuel oil. Natural gas is the primary fuel. Emissions unit number -003 is a Riley front wall fired, dry bottom boiler designated as "Boiler Number 3". It is rated at a maximum heat input of 550 million Btu per hour (MMBtu/hour) when firing natural gas and/or fuel oil. Natural gas is the primary fuel. Units -002 and -003 are regulated under Acid Rain, Phase II.~~ Units -002 and -003 ~~will be~~were permanently retired prior to May 1, 2006.

~~{Permitting notes: These emissions units pre date PSD regulations and are regulated under Rule 62 296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. Emissions from these boilers are uncontrolled. Unit -002 began commercial operation on June 1, 1949. Unit -003 began commercial operation on September 1, 1952. The generator nameplate rating for unit -002 is 28 megawatts (MW). The generator nameplate rating for unit -003 is 39 MW. Units -002 and -003 share a common stack with units -004 and -005. Stack height = 450 feet, exit diameter = 18.0 feet, exit temperature = 290 °F, actual volumetric flow rate = 802,500 acfm.}~~

~~{Permitting Note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}~~

~~**The following specific conditions apply to the emissions units listed above:**~~

~~**Essential Potential to Emit (PTE) Parameters**~~

~~**A.1.** Permitted Capacity. The maximum operation heat input rate is as follows:~~

~~Unit No.~~	~~MMBtu/hr Heat Input~~	~~Fuel Type~~
~~-002~~	~~420~~	~~Natural Gas~~
	~~320~~	~~No. 2 Fuel Oil~~
	~~320~~	~~No. 6 Fuel Oil~~
	~~320~~	~~On Specification Used Oil~~
~~-003~~	~~550~~	~~Natural Gas~~
	~~550~~	~~No. 2 Fuel Oil~~
	~~550~~	~~No. 6 Fuel Oil~~
	~~550~~	~~On Specification Used Oil~~

~~Note: When a blend of fuel oils and natural gas are fired, the heat input shall be prorated based on the percent heat input of each fuel.~~

~~[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; and, 0330045-010-AC.]~~

~~**A.2.** Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.25.**~~
~~[Rule 62-297.310(2), F.A.C.]~~

~~**A.3.** Methods of Operation - Fuels. The fuels that are allowed to be burned in these boilers, in any combination with respect to the proration of heat contents, are natural gas, No. 2 fuel oil, No. 6 fuel oil and on-specification used oil (see Specific Condition **A.35.**).~~
~~[Rule 62-213.410, F.A.C.; and, Applicant's requests in Title V permit renewal application received June 22, 2004.]~~

~~**A.4.** Hours of Operation. These emissions units may operate continuously, i.e. 8760 hours/year. For each emissions unit, the permittee shall maintain a daily operations log available for Department inspection that documents the total hours of annual operation, including an account of the hours operated on each of the allowable fuels.~~
~~[Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, Applicant's requests in Title V permit renewal application received June 22, 2004.]~~

~~**Emission Limitations and Standards**~~

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

~~**A.5.** Visible Emissions. Visible emissions shall not exceed 20 percent opacity except for one two-minute period per hour during which opacity shall not exceed 40 percent. Because units 002 and 003 share a common stack with units 004 and 005, visible emissions violations from the stack will be attributed to all five units unless opacity meter results show the specific unit causing the violation.~~
~~[Rule 62-296.405(1)(a), F.A.C.; and, AO17-249656, Specific Condition 8.]~~

~~**A.6.** Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3 hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.~~
~~A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.~~
~~[Rule 62-210.700(3), F.A.C.]~~

~~{Permitting Note: Load changes may be demonstrated by monitoring megawatt output.}~~

~~**A.7.** Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.~~
~~[Rule 62-296.405(1)(b), F.A.C.]~~

~~{Permitting Note: The averaging time shall correspond to the cumulative sample time, as specified in the reference test method (see Specific Condition **A.18.**).}~~

~~**A.8.** Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3 hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.~~
~~[Rule 62-210.700(3), F.A.C.]~~

~~**A.9.** Sulfur Dioxide - Liquid Fuel. When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.98 pounds per million Btu heat input , as measured by applicable compliance methods.~~
~~[Rule 62-296.405(1)(e)1.e., F.A.C.]~~

~~**A.10.** Sulfur Dioxide - Sulfur Content. In order to ensure continuous compliance with the liquid fuel sulfur limit specified in Specific Condition **A.9.**, the liquid fuel sulfur content shall not exceed 1.8 percent, by weight, as measured by applicable test methods.~~
~~[Rule 62-213.440, F.A.C.; and, Applicant's Request.]~~

~~Excess Emissions~~

~~**A.11.** Excess emissions resulting from 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.12.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.~~
~~[Rule 62-210.700(2), 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.** Sulfur Dioxide. Those emissions units not having an operating flue gas desulfurization device may monitor sulfur dioxide emissions by fuel sampling and analysis according to methods approved by the EPA. **Compliance with the liquid fuel sulfur limit will be verified by performing a daily, as-fired, fuel analysis.** This protocol is allowed because these emissions units do not have operating flue gas desulfurization devices. See Specific Conditions **A.10. and A.20.** of this permit.~~
~~[Rule 62-296.405(1)(f)1.b., F.A.C.; and, applicant request.]~~

~~Required Tests, Test Methods and Procedures~~

~~{Permitting Note: The attached 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.15.** Annual Tests Required. Except as provided in Specific Conditions **A.28. 30.**, units 002 and 003 shall conduct annual testing for particulate matter and visible emissions in accordance with the requirements listed below.~~
~~[Rule 62-297.310(7)(a)4., F.A.C.]~~

~~**A.16.** Visible Emissions. The test method for visible emissions shall be DEP Method 9 (see Specific Condition **A.17.**), incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C.~~
~~[Rules 62-213.440 and 62-296.405(1)(e)1., F.A.C.]~~

~~**A.17.** DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:~~

~~1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.~~

~~2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six minute average for the set of observations taken. For multiple valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:~~

~~a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single valued opacity standard.~~

~~b. For the short term average part of the standard, opacity shall be the highest valid short term average (i.e., two minute, three minute average) for the set of observations taken.~~

~~In order to be valid, any required average (i.e., a six minute or two minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.~~
~~[Rules 62-297.310 and 62-297.401, F.A.C.]~~

~~**A.18.** Particulate Matter. The test methods for particulate matter emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.~~
~~[Rules 62-213.440, 62-296.405(1)(e)2., 62-297.310, and 62-297.401, F.A.C.]~~

~~**A.19.** Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-~~

~~297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards.~~ **~~The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by this permit, the permittee elected to demonstrate compliance by performing a daily, as-fired, fuel analysis.~~** ~~See Specific Conditions~~ **~~A.10. and A.20.~~**
~~[Rules 62-213.440, 62-296.405(1)(e)3., 62-297.310 and 62-297.401, F.A.C.]~~

~~A.20.~~ ~~The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.~~
~~[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]~~

~~A.21.~~ ~~Heat Input. Compliance with the heat input limitations specified in Specific Condition~~ **~~A.1.~~** ~~shall be demonstrated solely through the use of the composite fuel samples taken by on-site personnel (following the testing requirements contained in Specific Condition~~ **~~B.25.c. & d.~~**~~) (see Specific Condition~~ **~~A.31.~~**~~). The permittee may use vendor supplied data to determine the heat content of the natural gas. Records of the composite samples (typically taken daily as-fired for solid fuel and per shipment (after blending) for liquid fuel) and the natural gas vendor's information shall be maintained on site for a period of five years and shall be made available for Department inspection upon request.~~
~~[0330045-010-AC]~~

~~{Permitting Note: The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The Acid Rain monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification.}~~

~~A.22.~~ ~~Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.~~
~~(a) General Compliance Testing.~~

~~2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.~~

~~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. 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, if there is an applicable standard (see Specific Condition **A.28.**);
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
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.
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 bag house 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.; and SIP Approved]

Compliance Test Requirements

A.23. 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.]

A.24. Required Stack Sampling Facilities. When a mass emissions stack test is required, 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.25. 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.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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 emissions 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.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.27. 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.

{Permitting Note: Specific Condition A.18. specifies a minimum sample volume of 30 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.

(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.]

~~TABLE 297.310-1~~
~~CALIBRATION SCHEDULE~~

~~ITEM~~	~~MINIMUM CALIBRATION FREQUENCY~~	~~REFERENCE INSTRUMENT~~	~~TOLERANCE~~
~~Liquid in glass thermometer~~	~~Annually~~	~~ASTM Hg in glass ref. thermometer or equivalent, or thermometric points~~	~~+/- 2%~~
~~Bimetallic thermometer~~	~~Quarterly~~	~~Calib. liq. in glass thermometer~~	~~5 degrees F~~
~~Thermocouple~~	~~Annually~~	~~ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer~~	~~5 degrees F~~
~~Barometer~~	~~Monthly~~	~~Hg barometer or NOAA station~~	~~+/- 1% scale~~
~~Pitot Tube~~	~~When required or when damaged~~	~~By construction or measurements in wind tunnel D greater than 16" and standard pitot tube~~	~~See EPA Method 2, Fig. 2-2 & 2-3~~
~~Probe Nozzles~~	~~Before each test or when nicked, dented, or corroded~~	~~Micrometer~~	~~+/- 0.001" mean of at least three readings~~
		~~Max. deviation between readings~~	~~.004"~~
~~Dry Gas Meter and Orifice Meter~~	~~1. Full Scale: When received, When 5% change observed, Annually~~	~~Spirometer or calibrated wet test or dry gas test meter~~	~~2%~~
	~~2. One Point: Semiannually~~		
	~~3. Check after each test series~~	~~Comparison check~~	~~5%~~

A.28. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
a. only gaseous fuel(s); or,
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or,
c. only liquid fuel(s) for less than 400 hours per year.
[Rule 62-297.310(7)(a)4., F.A.C.]

A.29. Particulate Matter Testing - Annual. Annual compliance testing for particulate matter emissions is not required for these emissions units while burning:
a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s), other than during startup, for no more than 400 hours per year,; or,
c. only liquid fuel(s), other than during startup, for no more than 400 hours per year.
[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

A.30. Particulate Matter Testing - Permit Renewal. Permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:
a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for no more than 400 hours per year; or,
c. only liquid fuel(s) for no more than 400 hours per year.
[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Recordkeeping and Reporting Requirements

A.31. The owner or operator shall maintain daily records of fuel consumption and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the conditions of this permit.
[Rules 62-213.440 and 62-4.070(3), F.A.C.]

{Permitting Note: Daily records of fuel consumption are maintained on a 24-hour block (midnight to midnight) basis. Gulf Power will meet greater than a 95% daily sampling rate.}

A.32. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.]

A.33. Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

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.~~

~~[Rules 62-213.440 and 62-297.310(8), F.A.C.]~~

~~**Miscellaneous Conditions**~~.

~~**A.35.** Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:~~

~~a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.~~

~~CONSTITUENT/PROPERTY~~	~~ALLOWABLE LEVEL~~
~~Arsenic~~	~~5 ppm maximum~~
~~Cadmium~~	~~2 ppm maximum~~
~~Chromium~~	~~10 ppm maximum~~
~~Lead~~	~~100 ppm maximum~~
~~Total Halogens~~	~~1000 ppm maximum~~
~~Flash point~~	~~100 degrees F minimum~~

~~b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by Gulf Power, not to exceed 10,000 gallons per calendar year in each boiler (units - 002 & -003).~~

~~c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.~~

~~d. Operational Requirements: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.~~

~~e. Testing Requirements: For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.~~

~~The requirements of this demonstration are governed by the following federal regulations:~~

~~Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.~~
~~[40 CFR 279.72(a)]~~

~~Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.~~
~~(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.~~

~~(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.~~

~~(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.~~

~~[40 CFR 761.20(e)(2)]~~

~~When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:~~

~~Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.~~

~~Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).~~

~~Additionally, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with applicable test methods (see Specific Condition **A.20.**).~~

~~f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:~~

~~(1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month, and~~

~~(2) For each deposit of used oil, results of the analyses as required by the above conditions, or~~

~~(3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.~~

~~[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]~~

~~g. Reporting Requirements: The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above, the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.~~

~~[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, 40 CFR 279 and 40 CFR 761, unless otherwise noted.]~~

~~**A.36.** Common Conditions. These emissions units are also subject to the conditions in Subsection E. [0330045-005-AC]~~

Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-004	Boiler Number 4 (Substitution Phase I Acid Rain Unit)
-005	Boiler Number 5 (Substitution Phase I Acid Rain Unit)

Emissions unit number -004 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 4". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back-up fuel)~~, No. 2 fuel oil, or on-specification used oil. Emissions unit number -005 is a Combustion Engineering tangentially fired, dry bottom boiler designated as "Boiler Number 5". It is rated at a maximum heat input of 1,096.7 million Btu per hour (MMBtu/hour) when firing pulverized coal, natural gas ~~or distillate No. 2 fuel oil (used as back-up fuel)~~, No. 2 fuel oil, or on-specification used oil. Units -004 and -005 can burn biomass up to 40.2 MMBtu/hr. Both units are Phase I Substitution and Phase II Acid Rain Units.

Gulf Power operates a temporary mercury research center using a slip stream of flu gas from unit -005 (Permit No. 0330045-011-AC) for evaluating mercury (Hg) emission reduction techniques.

{Permitting Note: These emissions units are regulated under Acid Rain, Phase I and Phase II. These emissions units pre-date PSD regulations and are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. PM emissions from units -004 and -005 are controlled by hot side (Buell Model # Bal. 2x34n333-4-3p) and cold side (Buell Model # 1.1x48k33-1p) electrostatic precipitators. NO_X emissions from units -004 and -005 are controlled by low-NO_X burner tips and selective non-catalytic reduction (SNCR). The SNCR system is designed for a target NO_X reduction of 25% as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv corrected to 3% O_2 based on a 24-hour average. Unit -004 began commercial operation on July 1, 1959. Unit -005 began commercial operation on June 1, 1961. The generator nameplate rating for unit -004 is 93 MW. The generator nameplate rating for unit -005 is 93 MW. Units -004 and -005 share a common stack with units -002 and -003. Stack height = 450 feet, exit diameter = 18.0 feet, exit temperature = 290 °F, actual volumetric flow rate = 596,012 acfm.}

{Permitting Note: Fuel Tech, Inc. designed the new SNCR system. Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 45,000 gallon tank. This will provide approximately 7 days operating inventory. The solution will be maintained at a temperature of approximately 40 °F by circulating through the SNCR system piping loop heating module. Using plant service water or other dilution water source, the metering module dilutes the reagent to a predetermined concentration (approximately 30%) and precisely controls the flow of the diluted reagent to distribution modules located near the boiler injection point. The distribution modules provide the final control of diluted reagent and atomizing/cooling (plant) air being delivered to each injector. The diluted reagent is injected into the boiler via wall-mounted air atomizing lances, which will be installed across the face of the boiler at an elevation of 159'-0" for each unit. At peak load for Unit 4, with 0.36 lb/MMBtu inlet NO_X and 25% reduction, urea injection would be 233 lb/hr on a dry basis. This translates to an ammonia flow of 132 lb/hr. At peak load for Unit 5, with 0.36 lb/MMBtu inlet NO_X and 25% reduction, urea injection would be 238 lb/hr on a dry basis. This translates to an ammonia flow of 135 lb/hr. The SNCR is designed with a maximum ammonia slip concentration of 5 ppmvd corrected to 3% O_2 (24 hour basis) in the duct cross-sectional area for all boiler loads. There are no provisions for continuously monitoring ammonia concentration in the flue gas. When ammonia measurements in the flue gas are required, EPA

Method CTM-027 or other methods approved by EPA (such as Method 320, which incorporates FTIR) will be used.}

{Permitting Note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	1,096.7	Coal
	1,096.7	Natural Gas
	1,096.7	No. 2 Fuel Oil
	1,096.7	On-Specification Used Oil
	40.2	Biomass
-005	1,096.7	Coal
	1,096.7	Natural Gas
	1,096.7	No. 2 Fuel Oil
	1,096.7	On-Specification Used Oil
	40.2	Biomass

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 & 62-296.405, F.A.C.; and, Permit Nos. AC17-2126, AC17-2127 & 0330045-010-AC & 0330045-013-AC.]

B.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **B.31.**
[Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation.

a. Fuels. The fuels that are allowed to be burned in these boilers are coal, natural gas, new No. 2 fuel oil, biomass, and/or on-specification used oil (see Specific Condition **B.38.**). ~~Fuel oil is only used for periods of start-up and as needed for flame stabilization.~~ Also, on-site generated "oil contaminated soil" is periodically combusted for energy recovery purposes.

b. Other.
   i. Supplemental injection of "GAM 60" for purposes of maintaining boiler tube temperatures.
   ii. Supplemental injection of sodium carbonate or sodium sulfate at a rate of 440 pounds per hour as necessary to enhance the operation of the particulate control devices on these units.

c. Mercury Research Center. The permittee is authorized to operate a temporary research center for evaluating mercury (Hg) emission reduction techniques. The research center uses a slip stream of flue gas from Unit 5. To avoid compromising test results from the research center, the SNCR may not be operated while research is being conducted by the facility. Unit 5 stack emissions shall not exceed any limit within this permit. Testing shall cease as soon as possible if the boiler operations are not in accordance with conditions in this permit. Testing by the research center shall not resume until appropriate measures to correct the problem(s) have been implemented. See Specific Conditions B.41. – B.49.

d. Biomass Fuels: Subject to the conditions of this permit, each unit may also fire carbonaceous fuel consisting of the following untreated materials: wood chips, switch grass, sawdust, and sander dust in addition to the authorized fuels listed above. These materials shall be substantially free of plastics, metals, paint or other chemicals. Heat input rate from biomass fuels shall not exceed 40.2 MMBtu per hour for each unit. The maximum hourly firing rates of carbonaceous fuels for each unit are: 4.7 tons of wood chips per hour, 2.9 tons of switch grass per hour, 3.7 tons of sawdust per hour, and 3.7 tons of sander dust per hour. The above limits are not cumulative and only one carbonaceous fuel type may be fired at a time.

[Rule 62-213.410, F.A.C.; ~~and,~~ Applicant's request in Title V permit renewal application received June 22, 2004; and, Permit Nos. 0330045-011-AC & 0330045-013-AC.]

B.4. Hours of Operation. These emissions units may operate continuously, i.e. 8760 hours/year. For each emissions unit, the permittee shall maintain a daily operations log available for Department inspection that documents the total hours of annual operation, including an account of the hours operated on each of the allowable fuels.
[Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, Applicant's request in Title V permit renewal application received June 22, 2004.]

Emission Limitations and Standards

{Permitting Note: The attached 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: Unless otherwise specified, the averaging times for Specific Conditions **B.5.-B.10.** are based on the specified averaging time of the applicable test method.}

{Permitting Note: Units -004 and -005 are also subject to the facility-wide nitrogen oxides limitations contained in Subsection E. (See Specific Condition B.40.)}

B.5. Visible Emissions. Visible emissions shall not exceed 40 percent opacity. Because units -004 and -005 share a common stack ~~with units -002 and -003~~, visible emissions violations from the stack will be attributed to ~~all five~~both units unless opacity meter results show the specific unit causing the violation.
[Rule 62-296.405(1)(a), F.A.C.; Secretarial ORDER(s) signed October 18, 1985 & January 3, 1986; and, Permit Nos. AO17-211303, Specific Condition 10.]

B.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed for boiler cleaning and load changes, at units which have installed continuous opacity monitors.
[Rule 62-210.700(3), F.A.C.]

{Permitting Note: Load changes may be demonstrated by monitoring megawatt output.}

B.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(b), F.A.C.]

B.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide - Solid Fuel. When burning solid fuel, sulfur dioxide emissions shall not exceed ~~5.90~~2.40 pounds per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(c)2.c., F.A.C.; Permit No. 0330045-008-AC]

B.10. Sulfur Dioxide - Liquid Fuel. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.40 pounds per million Btu heat input , as measured by applicable compliance methods.
[Permit No. 0330045-010-AC]

B.11. Sulfur Dioxide - Sulfur Content. In order to ensure continuous compliance with the liquid fuel sulfur limit specified in Specific Condition **B.10.**, the liquid fuel sulfur content shall not exceed 2.18 percent, by weight, as measured by applicable test methods.
[Rule 62-213.440, F.A.C.]

Excess Emissions

B.12. Excess emissions resulting from 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.]

B.13. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

B.14. 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

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on these units: SO_2, NO_X, CO_2 and stack gas flow.}

B.15. Continuous Monitors.

a. For these emissions units, the permittee shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) for monitoring opacity, NO_X, SO_2 and CO_2.

b. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall have installed, shall keep calibrated, and shall operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition.

[Rule 62-296.405(1)(f)1., F.A.C.; and, Permit Nos. AO17-211303 & 0330045-013-AC.]

B.16. Sulfur Dioxide. Those emissions units not having an operating flue gas desulfurization device may monitor sulfur dioxide emissions by fuel sampling and analysis according to methods approved by the EPA. **The permittee elected to satisfy the monitoring requirements using SO_2 continuous emissions monitors.**
[Rule 62-296.405(1)(f)1.b., F.A.C.; and, Applicant request.]

Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.}

B.17. Annual Tests Required. Units -004 and -005 shall be tested annually for SO_2 and PM emissions in accordance with the requirements listed below.
[Rule 62-297.310(7)(a)4., F.A.C.]

{Permitting Note: The annual SO_2 test that is required by Rule 62-297.310(7), F.A.C., can be done during the annual RATA as satisfaction of this requirement, provided all other testing requirements specified in the permit are met.}

B.18. Testing While Injecting Additives. The owner or operator shall conduct all emissions tests while injecting additives consistent with normal operating practices approved by the Department.
[Rule 62-213.440, F.A.C.]

B.19. Visible Emissions. The test method for visible emissions shall be DEP Method 9 (see Specific Condition **B.20.**), incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. **The permittee has elected to utilize a transmissometer (opacity meter) for demonstrating compliance with the visible emissions limit**. As long as the transmissometer is calibrated, maintained, and operated in accordance with Performance Specification 1 of 40 CFR 60, Appendix B (see Specific Condition **B.24.**), the annual test for visible emissions is not required.
[Rules 62-213.440 and 62-296.405(1)(e)1., F.A.C.; and, Applicant's request in Title V permit renewal application received June 22, 2004.]

{Permitting Note: A transmissometer used to demonstrate compliance should record sufficient data so as to be equivalent to a Method 9 test. Method 9 requires determining an average based on 24 readings at 15-second intervals, thus, a six-minute average. The transmissometers in use at this facility make a

permanent recording every six-minutes based on an average of readings taken every 15 seconds. After the 6-minute average is recorded, the individual readings are erased and a new 6-minute average is determined based on the next set of 24 individual readings. This 6-minute block recording is consistent with the requirements of Method 9.}

B.20. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
   a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
   b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rules 62-297.310 and 62-297.401, F.A.C.]

B.21. Particulate Matter. The test methods for particulate matter emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-213.440, 62-296.405(1)(e)2., 62-297.310, and 62-297.401, F.A.C.]

B.22. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-297.310, and 62-297.401, F.A.C.; and, AO17-211303.]

{Permitting Note: The permittee has elected to demonstrate compliance by means of a continuous emissions monitoring system (CEMS). In addition to any other requirements associated with the operation and maintenance of these CEMS (i.e., Acid Rain requirements), operation of the CEMS shall be in accordance with the requirements listed below. The annual calibration RATA associated with these CEMS may be used in lieu of the required annual EPA Reference Method 6, as long as all of the requirements of Rule 62-297.310, F.A.C., are met (i.e., prior test notification, proper test result submittal, etc.).}

B.23. Continuous SO_2 emission monitoring 24-hour averages are required to demonstrate compliance with the standards of the Department (see Specific Conditions **B.9. - B.11.**). A valid 24-hour average shall consists of no less than 18 hours of valid data capture per calendar day. In the event that valid data capture is interrupted, the permittee shall initiate as-fired fuel sampling to demonstrate compliance with the SO_2 emissions standard. The as-fired fuel sampling shall be initiated no later than 36 hours after the permittee has verified the problem or no later than 36 hours after the end of the affected calendar day. As-fired fuel sampling shall continue until such time as valid data capture is restored. In lieu of as-fired fuel sampling, the permittee may elect to demonstrate SO_2 emissions compliance by the temporary use of a spare SO_2 emissions monitor. The spare, previously calibrated, SO_2 emissions monitor must be installed and collecting data in the same time frame as required above for as-fired fuel sampling.

A quality control (QC) program must be maintained. At a minimum, the QC program must include written procedures which shall describe in detail complete, step-by-step procedures and operations for each of the following activities:

1. Calibration of CEMS.
2. Calibration Drift (CD) determination and adjustment of CEMS.
3. Preventative maintenance of CEMS (including spare parts inventory).
4. Data recording, calculations and reporting.
5. Accuracy audit procedures including sampling and analysis methods.
6. Program of corrective action for malfunctioning CEMS.

[Rules 62-213.440, 62-204.800(7)(e)5. and 62-296.405(1)(f)1.b., F.A.C.; and, AO17-211303.]

B.24. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or are elected by the permittee to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated, either:

(a) in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C.
   (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
   (2) Performance Specification 2--Specifications and Test Procedures for SO_2 and NO_X Continuous Emission Monitoring Systems in Stationary Sources.
   (3) Performance Specification 3--Specifications and Test Procedures for CO_2 Continuous Emission Monitoring Systems in Stationary Sources. Or,

(b) in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Excess

emissions pursuant to Rule 62-210.700, F.A.C., shall be determined using the 40 CFR part 75 CEMS.
[Rule 62-297.520, F.A.C.; 40 CFR 75; and, Applicant request.]

B.25. Fuel Sampling and Analysis. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard in the event that the SO_2 continuous emissions monitor is not able to capture valid data:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, to analyze a representative sample of the blended fuel following each fuel delivery.
b. Determine and record the as-fired fuel sulfur content, percent by weight, for coal using ASTM D2013-72 and either ASTM D3177-75 or ASTM D4239-85, or the latest edition, to analyze a representative sample of the blended as-fired pulverized coal.
c. Determine and record the density (using ASTM D 1298-80, or equivalent) and the calorific heat value in Btu per pound (using ASTM D 240-76, or the latest edition) of the fuel oil combusted.
d. Determine and record the calorific heat value in Btu per pound of the blended, as-fired pulverized coal using ASTM D2013-72 and either ASTM D2015-77 or D3286-(latest version), or the latest edition.
e. Record daily the amount of each fuel fired, the density of the fuel oil, the heating value of each fuel fired, and the percent sulfur content, by weight, of each fuel fired.
f. Utilize the information in a., b., c., d. and e., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

B.26. Heat Input. Compliance with the heat input limitations specified in Specific Condition **B.1.** shall be demonstrated solely through the use of the composite fuel samples taken by on-site personnel (following the testing requirements contained in Specific Condition **B.25.c. & d.**) (see Specific Condition **B.33.**). The permittee may use vendor supplied data to determine the heat content of the natural gas. Records of the composite samples (typically taken daily as-fired for solid fuel and per shipment (after blending) for liquid fuel) and the natural gas vendor's information shall be maintained on-site for a period of five years and shall be made available for Department inspection upon request.
[Permit No. 0330045-010-AC]

{Permitting Note: The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification.}

B.27. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
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. 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, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
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.
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 bag house 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.; and, SIP approved]

Compliance Test Requirements

B.28. 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.]

B.29. Required Stack Sampling Facilities. When a mass emissions stack test is required, 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.]

B.30. 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.]

B.31. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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 emissions 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.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.32. 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.

{Permitting Note: Specific Condition **B.21.** specifies a minimum sample volume of 30 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.

(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.]

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass	+/-2% ref. thermometer or equivalent, or thermometric points
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass	5 degrees F ref. thermometer, NBS calibrated reference and potentiometer
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

Recordkeeping and Reporting Requirements

B.33. The owner or operator shall maintain daily records of fuel consumption and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the conditions of this permit.
[Rules 62-213.440 and 62-4.070(3), F.A.C.]

{Permitting Note: Daily records of fuel consumption are maintained on a 24-hour block (midnight to midnight) basis. Gulf Power will meet greater than a 95% daily sampling rate.}

B.34. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.]

B.35. Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

B.36. A maintenance log of the continuous monitoring systems shall be kept showing the following:
a. Time out of service.
b. Calibration and adjustments.
[Rule 62-213.440, F.A.C.; and, AO17-211303, Specific Condition 8.]

B.37. 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Miscellaneous Conditions.

B.38. Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by Gulf Power Company, not to exceed 50,000 gallons per calendar year in each boiler (-004 & -005).

c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. Operational Requirements: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. Testing Requirements: For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.
[40 CFR 279.72(a)]

Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Additionally, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with applicable test methods (see Specific Condition **B.25.**).

f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:
(1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month, and
(2) For each deposit of used oil, results of the analyses as required by the above conditions, or
(3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.

[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. Reporting Requirements: The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

B.39. Compliance Assurance Monitoring. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

B.40. Common Conditions. These emissions units are also subject to the conditions in Subsection E.
[Permit No. 0330045-005-AC]

Mercury Research Center Conditions.

B.41. Scope of Work. For the duration of the project, once the permittee has established any test program (or granted a 3rd party the rights to do such test program) a Scope of Work shall be sent by fax to the DEP Northwest District Office as soon as possible and in advance of the planned commencement of the test program. This Scope of Work will give *general* descriptions of processes, work planned, dates of the tests and general objectives of the tests. Proprietary or confidential data, documents or information submitted or disclosed to FDEP shall be identified as such by the Permittee and shall be maintained as such pursuant to applicable Florida law.
[Permit No. 0330045-011-AC]

B.42. Semi-annual summary reports. Beginning June 30, 2006, the permittee shall be responsible for submitting semi-annual summary reports. These reports will outline each test program conducted and outline each test program results. Proprietary or confidential data, documents or information submitted or disclosed to FDEP shall be identified as such by the Permittee and shall be maintained as such pursuant to applicable Florida law. The semi-annual summary reports will be sent to the DEP Northwest District Office and the Bureau of Air Regulation. The first summary will be due June 30, 2006 and will cover all tests and the results from such tests conducted between July 1, 2005 and December 31, 2005. In a like manner, a similar summary shall be submitted for each 180 day period thereafter.
[Permit No. 0330045-011-AC]

B.43. Annual Report. At the end of each calendar year, the permittee shall include on the Annual Operating Report (AOR) a calculation of Crist Unit 5 emission increases/decreases as a result of the slipstream. Any deviation from the permittee's original estimates (that no PSD Significant Emission Rate thresholds will be crossed) shall be brought to the Department's attention immediately.
[Permit No. 0330045-011-AC]

B.44. Stack Emissions. Stack emissions shall not exceed any limit within existing permits.
[Permit No. [0330045-011-AC]

B.45. Stack Tests. All stack performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C. [NOTE: this permit condition is only applicable to any stack testing conducted on Crist Unit 5 pursuant to and during the test programs.]
[Permit No. 0330045-011-AC]

B.46. Daily records. Daily records of the slipstream operation (i.e. insertion of and/or removal of equipment from service as well as records of tests performed) shall be maintained on site and available for Department inspection.
[Permit No. 0330045-011-AC]

B.47. Objectionable Odors. The project shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2). F.A.C.
[Permit No. 0330045-011-AC]

B.48. Cessation of Testing. Performance testing shall cease as soon as possible if the boiler operations are not in accordance with the conditions within existing permits, or this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
[Permit No. 0330045-011-AC]

B.49. Final Notification and Removal. Notification shall occur within 45 days, in writing, upon completion of the final test. Prior to December 31, 2009 the permittee shall provide the DEP Northwest District Office and the Bureau of Air Regulation with its plans to disassemble and remove all slipstream components, returning the unit back to its original condition. Such plans shall be completely executed by April 1, 2010.
[Permit No. 0330045-011-AC]

Subsection C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-006	Boiler Number 6 (Phase I Acid Rain Unit)
-007	Boiler Number 7 (Phase I Acid Rain Unit)

Emissions unit number -006 is a Foster Wheeler front wall fired, dry bottom boiler designated as "Boiler Number 6". It is rated at a maximum heat input of 3,704.8 million Btu per hour (MMBtu/hour) when firing pulverized coal or natural gas, and 714.8 MMBtu/hr when firing No. 2 fuel oil or on-specification used oil. Emissions unit number -007 is a Foster Wheeler front and rear wall fired, dry bottom boiler designated as "Boiler Number 7". It is rated at a maximum heat input of 6,406.4 million Btu per hour (MMBtu/hour) when firing pulverized coal or natural gas, and 1,282 MMBtu/hr when firing No. 2 fuel oil or on-specification used oil. Fuel oil is used as a back-up fuel in both units and for periods of start-up and flame stabilization.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase I and Phase II. These emissions units pre-date PSD regulations and are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. Particulate matter emissions from unit -006 are controlled by a cold side electrostatic precipitator (Wheelabrator Model # HaRDE). Particulate matter emissions from unit -007 are controlled by cold side electrostatic precipitators designed by Alstom Power Inc. NO_X emissions from units -006 are controlled by Foster Wheeler Low NO_X Burners and by a Selective Non-catalytic Reduction (SNCR) system designed to achieve no less than a 20% reduction in NO_X emissions as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv corrected to 3% O_2 based on a 24-hour average. NO_X emissions from unit -007 are controlled by Foster Wheeler Low NO_X Burners and by a Selective Catalytic Reduction (SCR) system designed to achieve no less than an 85% reduction in NO_X emissions as measured across the SCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. Unit -006 began commercial operation on May 1, 1970. Unit -007 began commercial operation on August 1, 1973. Units -006 and -007 share a common stack. Stack height = 450 feet, exit diameter = 23.2 feet, exit temperature = 320 °F, actual volumetric flow rate = 2,975,540 acfm.}

{Permitting Note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
-006	3,704.8	Coal
	3,704.8	Natural Gas
	714.8	No. 2 Fuel Oil
	714.8	On-Specification Used Oil

Unit No.	MMBtu/hr Heat Input	Fuel Type
-007	6,406.4	Coal
	6,406.4	Natural Gas
	1,282	No. 2 Fuel Oil
	1,282	On-Specification Used Oil

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 & 62-296.405, F.A.C.; and, permits AC17-2126, AC17-2127 & 0330045-010-AC.]

C.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **C.39.**
[Rule 62-297.310(2), F.A.C.]

C.3. Methods of Operation.

a. Fuels. The fuels that are allowed to be burned in these boilers are coal, natural gas, new No. 2 fuel oil and/or on-specification used oil (see Specific Condition **C.48.**). Fuel oil is only used for periods of start-up and as needed for flame stabilization. Also, on-site generated "oil contaminated soil" is periodically combusted for energy recovery purposes.

b. Other.
   1. Supplemental injection of ammonia at a rate of 25 to 40 pounds per hour.
   2. Supplemental injection of sulfur trioxide at a rate of 4 to 20 ppm.
   3. Supplemental injection of "GAM 60" for purposes of maintaining boiler tube temperatures.

[Rule 62-213.410, F.A.C.; and, Applicant's request in Title V permit renewal application received June 22, 2004.]

C.4. Hours of Operation. These emissions units may operate continuously, i.e. 8760 hours/year. For each emissions unit, the permittee shall maintain a daily operations log available for Department inspection that documents the total hours of annual operation, including an account of the hours operated on each of the allowable fuels.
[Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, Applicant's request in Title V permit renewal application received June 22, 2004.]

Emission Limitations and Standards

{Permitting Note: The attached 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: Unless otherwise specified, the averaging times for Specific Conditions **C.5.-C.12.** are based on the specified averaging time of the applicable test method.}

C.5. Visible Emissions. Visible emissions from unit -006 shall not exceed 40 percent opacity. Visible emissions from unit -007 shall not exceed 20% based on a 6-minute block average, except for one 6-minute block per hour that shall not exceed 27%. Because units -006 and -007 share a common stack, visible emissions violations from the stack will be attributed to both units unless opacity meter results show the specific unit causing the violation.
[Rule 62-296.405(1)(a), F.A.C.; and, Secretarial ORDER(s) signed May 12, 1988 & June 24, 1988; and, Permit Nos. AC17-2234016, Specific Condition 14, AO17- 171806, Specific Condition 23 & 0330045-005-AC.]

C.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed for boiler cleaning and load changes, at units which have installed continuous opacity monitors.
[Rule 62-210.700(3), F.A.C.]

{Permitting Note: Load changes may be demonstrated by monitoring megawatt output.}

C.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. Particulate matter emissions from unit 6 shall not exceed 1,475 tons per year.
[Rule 62-296.405(1)(b), F.A.C.; and, Permit No. AC17-234016.]

C.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

C.9. Sulfur Dioxide - Solid Fuel. When burning solid fuel, sulfur dioxide emissions shall not exceed 2.40 pounds per million Btu heat input, as measured by applicable compliance methods. When burning solid fuel, sulfur dioxide emissions from unit 6 shall not exceed 38,945 tons per year.
[Rule 62-296.405(1)(c)2.c., F.A.C.; and, Permit No. 0330045-008-AC.]

C.10. Sulfur Dioxide - Liquid Fuel. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.40 pounds per million Btu heat input , as measured by applicable compliance methods.
[Permit No. 0330045-010-AC]

C.11. Sulfur Dioxide - Sulfur Content. In order to ensure continuous compliance with the liquid fuel sulfur limit specified in Specific Condition **C.10.**, the liquid fuel sulfur content shall not exceed 2.18 percent, by weight, as measured by applicable test methods.
[Rule 62-213.440, F.A.C.]

C.12. Nitrogen Oxides. Emissions units 006 and 007 shall comply with the facility-wide NO_X emissions limit specified in Specific Condition E.2.

~~a. (Interim). Prior to implementing the required NO_X control strategy for Units 004, 005 and 006, the NO_X emissions from Unit 007 shall not exceed 0.15 lb/MMBtu of heat input based on a 30-day rolling average when the SCR system is operational with a catalyst temperature of at least 600° F. The permittee shall demonstrate compliance with data collected from the certified CEMS.~~

~~b. Permanent. After the required NO_X control strategy is implemented for Units 004, 005, and 006, the plant-wide NO_X standard specified in Subsection E. shall supersede this interim standard.~~
[Permit Nos. 0330045-005-AC & 0330045-012-AC]

Excess Emissions

C.13. Excess emissions resulting from 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.]

C.14. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

C.15. 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.]

SCR and SNCR Operation

C.16. Operation of NO_X Control Devices.
a. SNCR System. The permittee shall operate and maintain an SNCR system for Unit -006 to reduce emissions of nitrogen oxides (NO_X) as described in the application, approved drawings, plans, and other documents on file with the Department. The SNCR system shall be designed to achieve no less than a 20% reduction in NO_X emissions as measured across the SNCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. The storage of urea shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.
b. SCR System. The permittee shall operate and maintain an SCR system for Unit -007 to reduce emissions of nitrogen oxides (NO_X) as described in the application, approved drawings, plans, and other documents on file with the Department. The SCR system shall be designed to achieve no less than an 85% reduction in NO_X emissions as measured across the SCR unit inlet and outlet. The designed target ammonia slip level is 5 ppmv based on a 24-hour average. The storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.
[Permit Nos. 0330045-005-AC & 0330045-012-AC]

SCR Bypass Operation

C.17. SCR Bypass, Startup/Shutdown. During Unit -007 startup and shutdown, the SCR system may be bypassed in accordance with manufacturer's recommended procedures to allow for controlled catalyst heating and cooling. During startup, the SCR system shall be on line and functioning when the minimum operating temperature of the catalyst is achieved (≥ 600° F). During shutdown, the SCR system may be removed from service when the catalyst temperature drops below 600° F.
[Design; Rule 62-210.700, F.A.C. ; and, Permit No. 0330045-005-AC.]

C.18. SCR Bypass, Catalyst Maintenance and Repair. The permittee may bypass the SCR system to perform ~~catalyst~~ maintenance and repair for up to ~~15 days~~ 360 hours per ~~year~~ consecutive 12 months during ~~the~~ non-ozone ~~season~~events. During such allowable bypass periods, the uncontrolled NO_X emissions from Unit -007 shall not exceed 0.35 lb/MMBtu based on a 24-hour average. The daily NO_X

emission rates for these periods may be excluded from the plant-wide 30-day NO_X standard specified in Specific Condition **E.2.** The permittee shall notify the Compliance Authority in advance of the purpose of the SCR bypass, the expected dates of SCR bypass, and the expected duration of SCR bypass. To the extent practical, the permittee shall schedule regular maintenance of the SCR system for the non-ozone season.
[Rules 62-210.700 & 62-4.070(3), F.A.C.; and, Permit Nos. 0330045-005-AC & 0330045-017-AC.]

{Permitting Note: The ozone season is defined as May 1st through September 15th. An Ozone event is defined as any level on the Air Quality Index for Ozone greater than good or moderate (green or yellow).}

Monitoring of Operations

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on these units: SO_2, NO_X, CO_2 and stack gas flow.}

C.19. Continuous Monitors. For these emissions units, the permittee shall calibrate, operate and maintain continuous monitoring systems for monitoring opacity, SO_2, NO_X and CO_2.
[Rule 62-296.405(1)(f)1., F.A.C.; and, Permit Nos. AC17-234016, AO17-171806 & 0330045-005-AC.]

C.20. COMS. The permittee shall install, calibrate, operate and maintain a continuous opacity monitoring system (COMS) to demonstrate compliance with the stack opacity standard. The COMS shall monitor and record data during all periods of Unit -007 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, or calibration checks.
[Permit No. 0330045-005-AC]

{Permitting Note: The existing COMS required by the Acid Rain program satisfies this requirement.}

C.21. Monitoring for NO_X.

a. NO_X CEMS: To demonstrate compliance with the emissions standards, the permittee shall install, calibrate, operate and maintain a continuous emissions monitoring system (CEMS) to continuously monitor and record the emissions of nitrogen oxides and an appropriate diluent gas (carbon dioxide or oxygen). The CEMS shall monitor and record data during all periods of Unit -006 & -007 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments. For each calendar quarter, monitor availability shall be 95% or greater. If unable to achieve this level, the permittee shall submit a report identifying the problems in achieving 95% monitor availability and a plan of corrective actions. The permittee shall implement the reported corrective actions within the next calendar quarter.

{Permitting Note: The existing NO_X CEMS required by the Acid Rain program satisfies this requirement.}

b. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall have installed and calibrated, and shall operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system on Unit -006. The permittee shall document the general range of urea flow rates required to meet the NO_X standard over the range of load conditions by comparing NO_X emissions with urea flow rates. During NO_X monitor downtimes or malfunctions,

the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition.
[Permit Nos. 0330045-005-AC & 0330045-012-AC]

C.22. Sulfur Dioxide. Those emissions units not having an operating flue gas desulfurization device may monitor sulfur dioxide emissions by fuel sampling and analysis according to methods approved by the EPA. **The permittee elected to satisfy the monitoring requirements using SO_2 continuous emissions monitors.**
[Rule 62-296.405(1)(f)1.b., F.A.C.; Permits AC17-234016 & AO17-171806; and, Applicant request.]

Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.23. Tests Required.

a. Annual Tests Required. Units -006 and -007 shall be tested annually for NO_X, SO_2, and PM in accordance with the requirements listed below. In addition, Unit -007 shall be tested annually for ammonia slip emissions in accordance with the requirements listed below.

~~b. Semi-annual Tests required. Unit -007 shall be tested semi-annually for PM emissions in accordance with the requirements listed below.~~

[Rule 62-297.310(7)(a)4., F.A.C.; Permit No. 0330045-005-AC; and, Applicant Request.]

~~{Permitting Note: After 18 months, the permittee may petition for removal of the semi-annual test requirement.}~~

{Permitting Note: The annual SO_2 test that is required by Rule 62-297.310(7), F.A.C., can be done during the annual RATA as satisfaction of this requirement, provided all other testing requirements specified in the permit are met.}

C.24. Testing While Injecting Additives. The owner or operator shall conduct all emissions tests while injecting additives consistent with normal operating practices approved by the Department.
[Rule 62-213.440, F.A.C.]

C.25. Visible Emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. **The permittee has elected to utilize a transmissometer (opacity meter) for demonstrating compliance with the visible emissions limit**. As long as the transmissometer is calibrated, maintained, and operated in accordance with Performance Specification 1 of 40 CFR 60, Appendix B (see Specific Condition **C.32.**), the annual test for visible emissions is not required.
[Rules 62-213.440 and 62-296.405(1)(e)1., F.A.C.; and, Applicant's request in Title V permit renewal application received June 22, 2004.]

{Permitting Note: A transmissometer used to demonstrate compliance should record sufficient data so as to be equivalent to a Method 9 test. Method 9 requires determining an average based on 24 readings at 15-second intervals, thus, a six-minute average. The transmissometers in use at this facility make a permanent recording every six-minutes based on an average of readings taken every 15 seconds. After

the 6-minute average is recorded, the individual readings are erased and a new 6-minute average is determined based on the next set of 24 individual readings. This 6-minute block recording is consistent with the requirements of Method 9.}

C.26. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
   a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
   b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rules 62-297.310 and 62-297.401, F.A.C.]

C.27. Particulate Matter. The test methods for particulate matter emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-213.440, 62-296.405(1)(e)2., 62-297.310, and 62-297.401, F.A.C.]

C.28. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards.

[Rules 62-213.440, 62-296.405(1)(e)3. 62-297.310 and 62-297.401, F.A.C.; and, Permit Nos. AC17-234016 and AO17-171806.]

{Permitting Note: The permittee has elected to demonstrate compliance by means of a continuous emissions monitoring system (CEMS). In addition to any other requirements associated with the operation and maintenance of these CEMS (i.e., Acid Rain requirements), operation of the CEMS shall be in accordance with the requirements listed below. The annual calibration RATA associated with these CEMS may be used in lieu of the required annual EPA Reference Method 6, as long as all of the requirements of Rule 62-297.310, F.A.C., are met (i.e., prior test notification, proper test result submittal, etc.).}

C.29. Continuous SO_2 emission monitoring 24-hour averages are required to demonstrate compliance with the standards of the Department (see Specific Conditions **C.9. - C.11.**). A valid 24-hour average shall consist of no less than 18 hours of valid data capture per calendar day. In the event that valid data capture is not available, the permittee shall initiate as-fired fuel sampling to demonstrate compliance with the SO_2 emissions standard. The as-fired fuel sampling shall be initiated no later than 36 hours after the permittee has verified the problem or no later than 36 hours after the end of the affected calendar day. Fuel sampling shall continue until such time as the valid data capture is restored. In lieu of as-fired fuel sampling the permittee may elect to demonstrate SO_2 emissions compliance by the temporary use of a spare SO_2 emissions monitor. The spare SO_2 emissions monitor must be installed and collecting data in the same time frame as required above for as-fired fuel sampling.

Maintain a QC program. At a minimum, the QC program must include written procedures which shall describe in detail complete, step-by-step procedures and operations for each of the following activities:

1. Calibration of CEMS.
2. Calibration Drift (CD) determination and adjustment of CEMS.
3. Preventative maintenance of CEMS (including spare parts inventory).
4. Data recording, calculations and reporting.
5. Accuracy audit procedures including sampling-and analysis methods.
6. Program of corrective action for malfunctioning CEMS.

[Rules 62-213.440, 62-204.800(7)(e)5., and 62-296.405(1)(f)1.b., F.A.C.; and, Permit Nos. AC17-234016 and AO17-171806.]

C.30. Nitrogen Oxides, Compliance Tests. During each federal fiscal year (October 1st to September 30th), the permittee shall conduct tests ~~to demonstrate compliance with the emission limits contained in Specific Condition C.12. and with the design specification to achieve no less than an 85% reduction in the nitrogen oxide emission rate~~ on Unit -007 in order to demonstrate that the SCR system continues to operate at the designed level of operation (i.e., 85% reduction from the baseline emissions rate of 0.70 lb/MMBtu). The permittee shall concurrently test the SCR inlet and SCR outlet in accordance with EPA Method 7E as adopted by reference in Rule 62-204.800, F.A.C. Data collected during the annual NO_X RATA testing may be used to represent NO_X emissions at the SCR outlet. Alternatively, the permittee may submit data collected from the NO_X rate process monitors at the SCR inlet and SCR outlet, which are part of the ammonia injection system. The data shall be collected for at least three consecutive hours. [Rules 62-4.070(3) & 62-297.310(7), F.A.C.; and, Permit Nos. 0330045-005-AC & 0330045-015-AC.]

{Permitting Note: There is not a unit specific emissions limit for NO_X for Unit -007. However, it is subject to the facility-wide emissions limit contained in Specific Condition E.2.}

C.31. Ammonia Slip, Performance Tests. During each federal fiscal year, the permittee shall conduct tests to determine the ammonia slip rate (from Unit -007) in accordance with EPA Method CTM-027 or other methods approved by EPA. If tests show ammonia slip emissions are greater than the design target level specified in Specific Condition **C.16.** of this subsection, the permittee shall take corrective actions such as repair, addition of catalyst, replacement of catalyst, etc.
[Rules 62-4.070(3) & 62-297.310(7), F.A.C.; and, Permit No. 0330045-005-AC.]

C.32. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or are elected by the permittee to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated, either:

(a) in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C.
  (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
  (2) Performance Specification 2--Specifications and Test Procedures for SO_2 and NO_X Continuous Emission Monitoring Systems in Stationary Sources.
  (3) Performance Specification 3--Specifications and Test Procedures for CO_2 Continuous Emission Monitoring Systems in Stationary Sources. Or,

(b) in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Excess emissions pursuant to Rule 62-210.700, F.A.C., shall be determined using the 40 CFR part 75 CEMS.

[Rule 62-297.520, F.A.C.; 40 CFR 75; and, Applicant request.]

C.33. Fuel Sampling and Analysis. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard in the event that the SO_2 continuous emissions monitor is not able to capture valid data:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, to analyze a representative sample of the blended fuel following each fuel delivery.
b. Determine and record the as-fired fuel sulfur content, percent by weight, for coal using ASTM D2013-72 and either ASTM D3177-75 or ASTM D4239-85, or the latest edition, to analyze a representative sample of the blended as-fired pulverized coal.
c. Determine and record the density (using ASTM D 1298-80, or equivalent) and the calorific heat value in Btu per pound (using ASTM D 240-76, or the latest edition) of the fuel oil combusted.
d. Determine and record the calorific heat value in Btu per pound of the blended, as-fired pulverized coal using ASTM D2013-72 and either ASTM D2015-77 or D3286-(latest version), or the latest edition.
e. Record daily the amount of each fuel fired, the density of the fuel oil, the heating value of each fuel fired, and the percent sulfur content, by weight, of each fuel fired.
f. Utilize the information in a., b., c., d. and e., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

C.34. Heat Input. Compliance with the heat input limitations specified in Specific Condition **C.1.** shall be demonstrated solely through the use of the composite fuel samples taken by on-site personnel (following the testing requirements contained in Specific Condition **C.33.c. & d.**) (see Specific Condition **C.41.**). The permittee may use vendor supplied data to determine the heat content of the

natural gas. Records of the composite samples (typically taken daily as-fired for solid fuel and per shipment (after blending) for liquid fuel) and the natural gas vendor's information shall be maintained on-site for a period of five years and shall be made available for Department inspection upon request. [Permit No. 0330045-010-AC]

{Permitting Note: The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification.}

C.35. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
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. 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, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
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.
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 bag house 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.; and, SIP approved.]

Compliance Test Requirements

C.36. 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.]

C.37. Required Stack Sampling Facilities. When a mass emissions stack test is required, 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.38. 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.39. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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 emissions 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.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.40. 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.

{Permitting Note: Specific Condition C.21. specifies a minimum sample volume of 30 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.

(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.]

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass	+/-2% ref. thermometer or equivalent, or thermometric points
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass	5 degrees F ref. thermometer, NBS calibrated reference and potentiometer
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

Recordkeeping and Reporting Requirements

C.41. The owner or operator shall maintain daily records of fuel consumption and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the conditions of this permit.
[Rules 62-213.440 and 62-4.070(3), F.A.C.]

{Permitting Note: Daily records of fuel consumption are maintained on a 24-hour block (midnight to midnight) basis. Gulf Power will meet greater than a 95% daily sampling rate.}

C.42. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.]

C.43. Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

C.44. A maintenance log of the continuous monitoring systems shall be kept showing the following:
a. Time out of service.
b. Calibration and adjustments.
[Rule 62-213.440, F.A.C.; and, Permit Nos. AC17-234016 & AO17-171806.]

C.45. 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

C.46. Test Reports. The permittee shall prepare and submit reports for all required tests in accordance with the provisions of Rule 62-297.310(8), F.A.C. For each required test run, the report shall indicate the actual heat input rate (MMBtu/hour), the NO_X emission rate (lb/MMBtu) as recorded by the CEMS, the ammonia injection rate (lb/hour), and the ammonia slip rate. The report shall also include copies of the continuous monitoring records for opacity and NO_X emissions.
[Rule 62-297.310(8), F.A.C.; and, Permit No. 0330045-005-AC.]

C.47. Quarterly Report.

a. NO_X Summary. For each calendar day during the reporting quarter, the permittee shall report the following information related to the NO_X CEMS for Unit -007:
   1. Hours of operation for Unit -007;
   2. Daily average NO_X emission rate, lb/MMBtu;
   3. 30-day average NO_X emission rate, lb/MMBtu; and
   4. Whether or not the day included a startup, shutdown, malfunction or bypass of the SCR.

   Identify the "F" factor used for any calculations, the method of determination, and type of fuel combusted. For each day that CEMS data was not obtained for at least 18 hours of Unit 7 operation, provide a justification for not obtaining sufficient data and describe the corrective actions taken to prevent this in the future. Identify any emissions data excluded from the calculation of emission rates due to startup, shutdown, or malfunction.

b. Opacity Summary. For each calendar day during the reporting quarter, the permittee shall report each 6-minute period in excess of the opacity standard.
c. Gas Sampling Grid (GSG). The permittee shall summarize any tests using the GSG that were conducted during the calendar quarter.

Each quarterly report is due within 30 days of the calendar quarter being reported.
[Permit No. 0330045-005-AC]

Miscellaneous Conditions.

C.48. Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by Gulf Power Company, not to exceed 50,000 gallons per calendar year in each boiler (-006 & -007).

c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. Operational Requirements: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. Testing Requirements: For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

Analysis of used oil fuel. A generator, transporter, processor/ re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of

Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.
[40 CFR 279.72(a)]

Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Additionally, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with applicable test methods (see Specific Condition **C.25.**).

f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:

(1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month, and

(2) For each deposit of used oil, results of the analyses as required by the above conditions, or

(3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.

[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. Reporting Requirements: The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

C.49. Compliance Assurance Monitoring. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

C.50. Common Conditions. These emissions units are also subject to the conditions in Subsection E.
[Permit No. 0330045-005-AC]

Subsection D. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-008	Fly Ash Storage Silos (2)

This emissions unit consists of two Fly Ash Storage Silos. The fly ash collection systems from the precipitators on boilers numbers 4, 5, 6 & 7, which deliver fly ash to the three transfer tanks, are totally enclosed (i.e. no emission points). Three blowers pneumatically convey dry fly ash to 2 silos at a maximum solids rate of 150 tons per hour to either silo or to both. The majority of the solids (99.4%) settles by gravity upon entering the silo and the residual particulates are controlled by a baghouse on each silo. Each baghouse is a Pulse Jet Fabric Filter - model #100 - WMWC - 420 (IIG) manufactured by Flex-Kleen. Dry fly ash will be transported off-site in closed tanker trucks (approximately 20% sold annually) or conditioned fly ash (12-15% water added) will be transported to an approved landfill area on-site.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required, and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. There is one baghouse on each silo. Each silo has two vents. Stack height = 124.5 feet, exit dimensions = 18" x 24" rectangle, exit temperature = 100 °F, actual volumetric flow rate = 5,452 acfm per vent, velocity = 30 feet per second. The two silos were built between October 27, 1981 and June 1, 1983.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operating rate is as follows:

Unit No.	Operating Rate
-008	150 Tons Per Hour of Fly Ash Transported to Either or Both Silos

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Permit No. AC17-47675.]

D.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **D.8.**
[Rule 62-297.310(2), F.A.C.]

D.3. Hours of Operation. Each fly ash storage silo may operate continuously, i.e. 8,760 hours per year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

D.4. Visible Emissions. Visible emissions from each baghouse vent (2 on each baghouse) shall be less than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.; and, Permit No. AC17-47675.]

Excess Emissions

D.5. 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.]

D.6. 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.]

Required Tests, Test Methods and Procedures

{Permitting Note: The attached 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.}

D.7. Annual Tests Required. Unit -008 must be tested annually for visible emissions in accordance with the requirements listed below.

D.8. Visible emissions. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

D.9. Not federally enforceable. Operating Rate During Testing. Compliance shall be demonstrated at an operating rate which typifies normal operation of the fly ash system. This operating rate may be lower than the maximum allowable operating rate. Should the Department feel that test results do not provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate, the Department may request that a visible emissions test be conducted at a higher operating rate up to the maximum allowable operating rate.
[January 16, 1984 letter modifying Permit No. AO17-70422, Specific Condition 15.]

D.10. Applicable Test Procedures.
(a) Required Sampling Time.
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:
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.
[Rule 62-297.310(4)(a)2., F.A.C.]

D.11. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General 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. 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 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, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
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.

[Rule 62-297.310(7), F.A.C.; and, SIP Approved.]

Recordkeeping and Reporting Requirements

D.12. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.]

D.13. 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.

[Rule 62-297.310(8), F.A.C.]

Subsection E. Common Conditions. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 420 MMBtu/hour (retired March 31, 2003)
-002	Boiler Number 2 - 420 MMBtu/hour (~~to be~~ retired by May 1, 2006)
-003	Boiler Number 3 - 550 MMBtu/hour (~~to be~~ retired by May 1, 2006)
-004	Boiler Number 4 - 1,096.7 MMBtu/hour
-005	Boiler Number 5 - 1,096.7 MMBtu/hour
-006	Boiler Number 6 - 3,704.8 MMBtu/hour
-007	Boiler Number 7 - 6,406.4 MMBtu/hour

{Permitting Note: August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titles, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards". This agreement is the basis for the following permit conditions.}

REQUIREMENTS OF THE AGREEMENT

E.1. Supplemental Conditions. The conditions of this section supplement all other valid air construction and operation permits for these units. These conditions are in addition to all other applicable permit conditions and regulations.
[Rule 62-4.070(3), F.A.C.; and, 0330045-005-AC]

E.2. Plant-Wide NO_X Limit. Emissions of nitrogen oxides (NO_X) from the combined operation of Units -004, -005, -006, and -007 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit -007 is shutdown. The plant-wide daily NO_X emission rate shall be determined by the following equation:

$$\text{Plant-Wide Daily MMBtu-Weighted } NO_X \text{ Emission Rate} = \frac{\sum_{\text{Units 4, 5, 6, 7}} [(\text{Unit \# daily MMBtu}) \times (\text{Unit \# daily } NO_X \text{ CEMS Rate})]}{\sum_{\text{Units 4, 5, 6, 7}} (\text{Unit \# daily MMBtu})}$$

The "Unit # daily MMBtu" shall be determined by the daily as-burned fuel analysis and the fuel fired for each unit. The "Unit # daily NO_X CEMS Rate" shall be determined by the daily average of NO_X CEMS data for each unit and reported in terms of "lb/MMBtu heat input". The plant-wide daily NO_X emissions rate shall be determined each day regardless of the operating status for Unit -007. The plant-wide 30-day rolling NO_X average shall be determined for each 30 sequential Unit -007 operating days, which need not be consecutive. A Unit -007 operating day means any calendar day that Unit -007 operates a minimum of 18 hours. The Unit -007 daily NO_X CEMS rate may consist of less than 18 hours of data if this is due to CEMS malfunction or invalid CEMS data. When the catalyst temperature is below 600° F during a startup or shutdown, NO_X emissions data collected during such periods may be excluded from the daily NO_X average. In accordance with Specific Condition **C.18.**, limited NO_X emissions data collected during SCR bypass during the non-ozone season may be excluded from the daily NO_X average. The plant-wide NO_X emission standard shall be achieved by utilizing the SCR system for Unit -007 and ~~implementing the selected NO_X control~~

~~strategy~~ the SNCR systems for Units -004, -005, and -006. ~~The effective date for the plant-wide NO_x emission standard is:~~

~~a. The startup date of the selected additional NO_x reduction project, (excluding an SCR project for Unit -006), but no later than May 1, 2006; or~~

~~b. The startup date of the SCR project for Unit -006, but no later than December 31, 2007.~~

~~For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of the required air construction permit (or other Department approval) that authorized implementation of the additional NO_x reduction project. [Paragraphs 2, 3 and Exhibit B of the Agreement]~~

[Permit No. 0330045-005-AC]

E.3. NO_X CEMS. To demonstrate compliance with the plant-wide NO_X emissions standard, the permittee shall install, calibrate, operate and maintain continuous emissions monitoring systems (CEMS) to continuously monitor and record the emissions of nitrogen oxides and an appropriate diluent gas (carbon dioxide or oxygen) from Units -004, -005, -006, and -007. The CEMS shall monitor and record data during all periods of Units -004, -005, -006 and -007 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments. For each calendar quarter, monitor availability shall be 95% or greater. If unable to achieve this level, the permittee shall submit a report identifying the problems in achieving 95% monitor availability and a plan of corrective actions. The permittee shall implement the reported corrective actions within the next calendar quarter.

[Exhibit B of the Agreement; and, Permit Nos. 0330045-005-AC, 0330045-012-AC & 0330045-013-AC]

{Permitting Note: The existing NO_X CEMS required by the Acid Rain program satisfy this requirement.}

E.4. Quarterly Report. For each calendar day during the reporting quarter, the permittee shall report the following information related to the NO_X CEMS for Unit -007:

- Daily NO_X emission rate for each boiler, lb/MMBtu;
- Daily heat input rate for each boiler, MMBtu/day;
- 30-day plant-wide NO_X emissions rate, lb/MMBtu;
- Identify whether Unit -007 operated less than 18 hours;
- Identify the occurrence of a Unit -007 startup or shutdown; and
- Identify operation of Unit -007 with SCR bypass for catalyst maintenance or repair and the duration of bypass (hours).

Identify the "F" factor used for any calculations, the method of determination, and type of fuel combusted. For each day that CEMS data was not obtained for at least 18 hours of Unit -007 operation, provide a justification for not obtaining sufficient data and describe the corrective actions taken to prevent this in the future. Identify any emissions data excluded from the calculation of emission rates due to startup, shutdown, or malfunction.
[Permit No. 0330045-005-AC]

{Permitting Note: To achieve the plant-wide NO_X standard for the Crist Plant, Gulf Power Company will take the following additional actions.}

E.5. Unit Retirements. The Agreement requires the retirement of Unit -001 within 120 days of receiving a final order from the Public Service Commission that authorizes the recovery of costs

associated with the pollution control equipment incurred pursuant to the Agreement though the Environmental Cost Recovery Clause. **(Unit -001 was retired on March 31, 2003.)** A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction. The Agreement also requires the retirement of Units -002 and -003 on or before May 1, 2006.
[Paragraph 4 of the Agreement]

~~**E.6.** Additional NO_x Reduction Projects. The Agreement requires Gulf Power Company to conduct a variety of engineering studies to determine the feasibility of NO_x reduction technologies for one or more of the three remaining coal-fired units (Units -004, -005, and -006). The studies and related unit-specific demonstration projects may include (but are not limited to) SCR, selective non-catalytic reduction (SNCR) technology, over-fired air (OFA) technology, natural gas re-burn technology, selective use of biomass fuel, etc. The studies must be complete by May 1, 2005. Before implementing any NO_x reduction technology or combination of technologies, Gulf Power Company must obtain written concurrence from the Department that the use thereof is reasonable and necessary to achieve the overall plant-wide NO_x emission standard. If a NO_x reduction technology or a combination of technologies other than an SCR project for Unit 6 is identified as appropriate, Gulf Power Company will implement the technology or combination of technologies on one or more of the three remaining coal-fired units by May 1, 2006. If an SCR project for Unit -006 is identified as the appropriate NO_x reduction technology, Gulf Power Company will implement, begin and continue operating the SCR system by December 31, 2007.
[Paragraph 2 of the Agreement]]~~

Section IV. Acid Rain Part.

Operated by: Gulf Power Company
ORIS Code: 641

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Brief Description
	(retired March 31, 2003)
-002	Boiler Number 2 - 420 MMBtu/hour (~~to be~~ **retired by May 1, 2006)**
-003	Boiler Number 3 - 550 MMBtu/hour (~~to be~~ **retired by May 1, 2006)**
-004	Boiler Number 4 - 1,096.7 MMBtu/hour
-005	Boiler Number 5 - 1,096.7 MMBtu/hour
-006	Boiler Number 6 - 3,704.8 MMBtu/hour
-007	Boiler Number 7 - 6,406.4 MMBtu/hour

A.1. The Phase II permit applications, the Phase II NO_X compliance plans and the Phase II NO_X averaging plans submitted for this facility, as approved by the Department, are a part of this permit (included as Attachments). The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the applications listed below:

a. DEP Form No. 62-210.900(1)(a), F.A.C., Signed 6/1/04.
b. DEP Form No. 62-210.900(1)(a)4., F.A.C., Signed 6/1/04.
c. DEP Form No. 62-210.900(1)(a)5., F.A.C., Signed 11/18/03.

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

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID #	EPA ID	Year	2004	2005	2006	2007	2008
-001	ID No. 01 1	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	35*	35*	35*	35*	35*
-002	ID No. 02 2	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	3*	3*	3*	3*	3*

E.U. ID #	EPA ID	Year	2004	2005	2006	2007	2008
-003	ID No. 033	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	4*	4*	4*	4*	4*
-004	ID No. 044	SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73	2467*	2467*	2467*	2467*	2467*
		NO_X limit	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2004, 2005, 2006, 2007 and 2008. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.52** lb/MMBtu. In addition, this unit shall not have an annual heat input **greater than 5,591,320** MMBtu. Also, see Additional Requirements 1, 2 and 3, below.				
-005	ID No. 055	SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73	2430*	2430*	2430*	2430*	2430*
		NO_X limit	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the 2004, 2005, 2006, 2007 and 2008. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.60** lb/MMBtu. In addition, this unit shall not have an annual heat input **greater than 5,479,586** MMBtu. Also, see Additional Requirements 1, 2 and 3, below.				
-006	ID No. 066	SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73	8396*	8396*	8396*	8396*	8396*

E.U. ID #	EPA ID	Year	2004	2005	2006	2007	2008
-006 (cont')		**NO_X limit**	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the 2004, 2005, 2006, 2007 and 2008. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.45** lb/MMBtu. In addition, this unit shall not have an annual heat input **less than 21,086,630** MMBtu. Also, see Additional Requirements 1, 2 and 3, below.				
-007	**ID No. 07 7**	**SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73**	12522*	12522*	12522*	12522*	12522*
		NO_X limit	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the 2004, 2005, 2006, 2007 and 2008. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.45** lb/MMBtu. In addition, this unit shall not have an annual heat input **less than 34,569,955** MMBtu. Also, see Additional Requirements 1, 2 and 3, below.				

* 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, 3, or 4 of 40 CFR 73.

Additional Requirements

1. Under the plan (NO_X Phase II averaging plan), the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

2. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only after the Alabama Department of Environmental Management, the Jefferson County (Alabama) Department

of Health, the Georgia Department of Natural Resources and the Mississippi Department of Environmental Quality, have also approved this averaging plan.

3. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

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)1., 2. & 3., 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, F.A.C.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

A.6. Comments, notes, and justifications: The Designated Representative has changed from Frederick Kuester to G. Edison Holland, Jr. to Robert G. Moore to Bill M. Guthrie to Charles D. McCrary to W. Paul Bowers.

The alternative designated representatives have been changed to include Gene L. Ussery, Jr. and James O. Vick.

Reporting Requirements

A.7. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-6, TITLE V CONDITIONS}
[Rule 62-214.420(11), F.A.C.]

A.8. Demonstration of Compliance With the Phase II NO_X Averaging Plan. The Designated Representative shall provide a copy of the demonstration of compliance, prepared in accordance with 40 CFR 76.11(d), to the Department within 60 (sixty) days after the end of the calendar year.
[Rule 62-213.440, F.A.C.]

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permits.}

The emissions unit(s) listed below are regulated under Acid Rain Part, Phase I

E.U. ID No.	Brief Description
-004	Boiler Number 4 – 1,096.7 MMBtu/hour (Substitution for Unit -007)
-005	Boiler Number 5 – 1,096.7 MMBtu/hour (Substitution for Unit -007)
-006	Boiler Number 6 – 3,704.8 MMBtu/hour
-007	Boiler Number 7 – 6,406.4 MMBtu/hour

B.1. The Phase I permits, issued by the U.S. EPA, are attached to this permit. The owners and operators of these Phase I acid rain units must comply with the standard requirements and special provisions set forth in the Phase I permits issued December 27, 1994.
[Chapter 62-213, F.A.C.]

B.2. Comments, notes, and justifications: None.

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

Gulf Power Company
Crist Electric Generating Plant

PROPOSED Permit No.: 0330045-016-AV
Facility ID No.: 0330045

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.

	State Registration Number	Contents	Size (Gallons)
1.	1	#2 Diesel – Tractor Fuel	20,000
2.	3	#2 Diesel – Lighter Oil	100,000
3.	4	#2 Diesel – Lighter Oil	100,000
4.	5	#6 Bunker "C"	1,387,000
5.	6	#6 Bunker "C"	1,387,000
6.	7	#6 Bunker "C"	1,387,000
7.	8	Used Oil	15,000
8.	9	Lube Oil	7,000
9.	10	Lube Oil	7,000
10.	11	Waste Oil	12,000
11.	12	Lube Oil	7,000
12.	13	Lube Oil	4,000
13.	14	Lube Oil	4,000
14.	15	Lube Oil	3,000
15.	16	Sulfuric Acid	4,000
16.	17	Sulfuric Acid	6,000
17.	2R1	Gasoline	2,000
18.	--	Used Oil	300

Miscellaneous

19. Fire Safety Equipment
20. Vacuum Pumps
21. Laboratory Equipment
22. Welding Equipment
23. Gulf Power Company Generated Non-hazardous Boiler Chemical Cleaning Wastes (Not to exceed 50 gallons per minute)

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

Gulf Power Company
Crist Electric Generating Plant

PROPOSED Permit No.: 0330045-016-AV
Facility ID No.: 0330045

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
-009	Material Handling of Coal and Ash
-010	Fugitive PM Sources – On-site Vehicles
-011	General Purpose Internal Combustion Engines
-012	Cooling Towers (3)
-013	Fugitive PM Sources – Sandblasting Operations

-009 Material Handling of Coal and Ash. Fugitive PM emissions generated from the transfer and handling of coal and ash. SCC: 3-05-101-03.

-010 Fugitive PM Sources. Fugitive PM emissions generated by haul trucks and other on-site vehicles. SCC: 3-05-101-50.

-011 General Purpose Internal Combustion Engines. Located for use at this source are miscellaneous internal combustion engines used to operate the following: welders, compressors, generators, water pumps, sweepers, and other auxiliary equipment.

-012 Cooling Towers. SCC: 3-90-900-04

-013 Fugitive PM Sources. Fugitive PM emissions generated by sandblasting operations. SCC: 3-05-101-99.

Appendix H-1, Permit History/ID Number Changes

(For Tracking Purposes Only)

Gulf Power Company
Crist Electric Generating Plant

PROPOSED Permit No.: 0330045-016-AV
Facility ID No.: 0330045

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Extended Date [2, 3]	Revised Date(s)
-001	Crist Unit #1	AO17-249656	5/19/94	1/15/96	8/14/96	
-002	Crist Unit #2	AO17-249656	5/19/94	1/15/96	8/14/96	
-003	Crist Unit #3	AO17-249656	5/19/94	1/15/96	8/14/96	
-004	Crist Unit #4	AO17-211303	4/17/92	4/1/97		
		Secretarial ORDER [1]	1/3/86			
		AC17-2126	10/15/75	3/1/77		
-005	Power Boiler No. 5	AO17-211303	4/17/92	4/1/97		
		Secretarial ORDER [1]	10/18/85			
		AC17-2127	10/15/75	3/1/77		
-006	Power Boiler No. 6	AC17-234016	10/7/93	12/1/94		
		AO17-171809	6/6/90	9/2/95	8/14/96	
		Secretarial ORDER [1]	5/12/88			
-007	Crist No. 7	AO17-171806	6/6/90	9/2/95	8/14/96	
		Secretarial ORDER [1]	6/24/88			
-008	Fly Ash Storage Silos (2)	AO17-234356	7/30/93	7/1/98		
		AC17-47675	10/27/81	2/1/83	6/1/83	
All	Initial Title V permit	0330045-001-AV	1/1/00	12/31/04		
-004, -005	Biomass project	0330045-004-AC	12/9/02	10/4/03		
-007	Addition of ESP and SCR	0330045-005-AC	3/3/03	12/1/05		
All	Ambient limit on SO_2	0330045-008-AC	5/18/04	-----		
All	Title V permit Renewal	0330045-009-AV	1/1/05	12/31/09		
All	Revision to SO_2 limit	0330045-010-AC	11/10/04	-----		
-005	Mercury Research Center	0330045-011-AC	3/25/05	4/1/10		
-006	SNCR Installation	0330045-012-AC	8/22/05	9/1/06		
-004, -005	SNCR Installation	0330045-013-AC	3/30/06	4/1/07		
All	Title V Revision	0330045-016-AV	*Day 55*	12/31/09		
-007	Revisions to 0330045-005-AC	0330045-017-AC	*With 016-AV Draft*	*???*		

1 Secretarial ORDER issued to relax semi-annual PM testing requirement to annual. Previous ORDERs had been issued to relax the Rule required quarterly testing requirement to semi-annual.

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

3 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., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

Referenced Attachments

Phase I Acid Rain Permits

Phase II Acid Rain Application/Compliance Plan

Phase II Acid Rain NO_X Compliance Plan

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

Appendix CAM, Compliance Assurance Monitoring Plan

Appendix SO-1, Secretarial ORDER(s)

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-6, Title V Conditions (version dated 2/12/02)

ASP Number 97-B-01
(With Scrivener's Order Dated July 9, 1997)

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

Table 2-1, Compliance Requirements

Emissions Unit -007

6,406.4 MMBtu/Hr Coal, Gas and Oil-Fired Boiler
Particulate Matter Emissions Controlled By An ESP

Monitoring Approach

TABLE 4. MONITORING APPROACH FOR UNIT -007

	Compliance Indicator
I. Indicator	Opacity of ESP exhaust.
Measurement Approach	COMS in ESP outlet duct.
1. Indicator Range	An excursion is defined as any 1-hour opacity average greater than 15% (other than periods of start up, shut down or malfunction). Excursions trigger an inspection, any corrective action necessary to lower the opacity, and a documentation of the event. ~~Note: Particulate matter compliance testing shall be conducted on a semi-annual basis in order to provide additional assurance that this excursion level remains protective of the PM limit. (See Specific Condition **C.23.b.**)~~ ~~{Permitting Note: After 18 months, the permittee may petition for removal of the semi-annual test requirement.}~~
II. Performance Criteria	
A. Data Representativeness	The COMS were installed at representative locations in the ESP exhaust per 40 CFR 60, Appendix B, PS-1.
B. Verification of Operational Status	Results of initial COMS performance evaluation conducted per PS-1.
C. QA/QC Practices and Criteria	The COMS were initially installed and evaluated per PS-1. Zero and span drift are checked daily and a quarterly filter audit is performed.
D. Monitoring Frequency	The opacity of the cold-side ESP outlet duct is monitored continuously.
H. Data Collection Procedures	The DAS retains all 6-minute average opacity data.
F. Averaging Period	The 6-minute opacity data is used to calculate 1-hour averages.

Friday, Barbara

To: pmmanuel@southernco.com; gdwaters@southernco.com; gnterry@southernco.com; Bradburn, Rick; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'

Cc: Holtom, Jonathan

Subject: PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station

Attachments: 0330045016ProposedCoverLetter.pdf; 0330045-016-AV PROPOSED determination.pdf; 0330045-016-AV PROPOSED permit.pdf; 0330045-016-AV-P APPENDIX CAM.pdf; 0330045-016-AV-P SOB.pdf

Dear Sir/Madam:

A copy of the "PROPOSED PERMIT DETERMINATION" and the related permit documents for the above referenced facility are attached. This e-mail is being provided as a courtesy to inform you that the DRAFT permit has become a PROPOSED permit, and that the PROPOSED permit has been transmitted to the USEPA for their review.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

The attached document(s) is(are) in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Friday, Barbara

From: Manuel, Penny Morris [PMManuel@southernco.com]
To: Friday, Barbara
Sent: Tuesday, May 29, 2007 1:37 PM
Subject: Read: PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station

Your message

To: PMManuel@southernco.com
Subject:

was read on 5/29/2007 1:37 PM.

Friday, Barbara

From: Terry, Greg N. [GNTERRY@southernco.com]
To: undisclosed-recipients
Sent: Tuesday, May 29, 2007 2:02 PM
Subject: Read: PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station

Your message

To: GNTERRY@southernco.com
Subject:

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Friday, Barbara

From: Waters, G. Dwain [GDWATERS@southernco.com]
To: undisclosed-recipients
Sent: Tuesday, May 29, 2007 3:46 PM
Subject: Read: PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station

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To: GDWATERS@southernco.com
Subject:

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Friday, Barbara

From: Bradburn, Rick
To: Friday, Barbara
Sent: Tuesday, May 29, 2007 8:46 PM
Subject: Read: PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station

Your message

To:	'pmmanuel@southernco.com'; 'gdwaters@southernco.com'; 'gnterry@southernco.com'; Bradburn, Rick; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Holtom, Jonathan
Subject:	PROPOSED Title V Permit Revision No.: 0330045-016-AV - Gulf Power Company - Crist Electric Generating Station
Sent:	5/29/2007 11:48 AM

was read on 5/29/2007 8:46 PM.