Memorandum

Florida Department of
Environmental Protection

8/22/05 FP

TO: Michael G. Cooke

THRU: Trina Vielhauer
Jeff Koerner JK

FROM: Jonathan Holtom JH

DATE: August 15, 2005

SUBJECT: Final Construction Permit for Gulf Power Crist Electric Generating Plant

Attached for approval and signature is a Final construction permit for Gulf Power Company's Crist Electric Generating plant. This permitting project authorizes the installation of an SNCR system for Unit 6 in order to help the facility comply with the plant-wide NO_X emissions limit of 0.2 lb/MMBtu no later than May 1, 2006.

The Public Notice requirements were met on July 29, 2005, by publishing in The Pensacola News Journal. No comments have been received from the public in response to this Public Notice, and no petitions were filed for an Administrative Hearing. Gulf Power provided a few minor comments that are detailed in the Final Permit Determination.

I recommend your approval and signature.

Attachments

/jh

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. G. Dwain Waters, Q.E.P.
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0100

DEP File No. 0330045-012-AC
Crist Electric Generating Plant
Escambia County

Enclosed is Final Permit Number 0330045-012-AC. This permit authorizes Gulf Power Company to construct a selective non-catalytic reduction (SNCR) system on Unit 6 for the purpose of reducing nitrogen oxide (NO_X) emissions in order to comply with the requirements of the Agreement For The Purpose Of Ensuring Compliance with Ozone Ambient Air Quality Standards, dated August 28, 2002. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit determination and the Final permit) was sent by certified mail (*) and copies were electronically mailed by Internet e-mail before the close of business on 8/22/05 to the person(s) listed:

Mr. G. Dwain Waters, QEP, Gulf Power Company (GDWATERS@southernco.com) *
Gregory N. Terry, P.E., Gulf Power Company. (GNTERRY@southernco.com)
Mr. Kevin White, P.E., DEP-NWD (kevin.white@dep.state.fl.us)

Clerk Stamp

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

(Clerk) 8/22/05 (Date)

FINAL DETERMINATION

Gulf Power Company
Crist Electric Generating Plant
DEP File No. 0330045-012-AC

The Department distributed a public notice package on July 19, 2005, to authorize the installation of an SNCR system on unit 6 at the Gulf Power Crist Electric Generating Plant, which is located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County. The Public Notice of Intent to Issue was published in The Pensacola News Journal on July 29, 2005.

COMMENTS/CHANGES

No Public Comments were received during the 14 (fourteen)-day public comment period, however, comments were received from the Permittee. The comments were not considered significant enough to reissue the DRAFT Air Construction Permit and require another Public Notice; therefore, the DRAFT Air Construction Permit was changed. Those comments, and minor changes, are addressed below.

A. Email from Mr. G. Dwain Waters dated July 22, 2005.

Comment 1. Regarding the basic design specification noting the 20% guarantee removal efficiency; we have concerns that this is stated as a permit condition which must be demonstrated annually. Several factors are involved here. 1) As you are aware, inlet NO_X can be affected by several means including Low NO_X Burners and the amount of Nitrogen in the fuel. It may not be possible in all times to meet a 20% reduction limit as stated in the permit. We are ok with stating that the system is designed to meet a 20% guarantee at 0.35 lb/MMBtu inlet and we are ok with initial demonstration of the system but not annual certification of a 20% reduction. The bottom line is that the facility must meet an overall average of 0.20 lb/MMBtu. If less than 20% is needed to do so with the SNCR Unit 6 system, we should be allowed to do so. Annual inlet and outlet demonstration of 20% should be removed.

Response 1. In order to clarify that performance of an annual test would be used to demonstrate compliance with the facility-wide limit, and not with a 20% reduction design, condition 7 has been changed,

FROM:

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall concurrently test the SNCR inlet and SNCR 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 SNCR outlet. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

TO:

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall concurrently test the SNCR inlet and SNCR 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 SNCR outlet. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th) in order to demonstrate compliance with the facility-wide NO_X limit. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

See also **Comment 8**, below.

Comment 2. Regarding the ammonia slip testing. The Design Specification section (page 5) states wet chemistry must be used to determine the slip. We are utilizing the FTIR monitor in our test trailer to demonstrate annual compliance with Unit 7 and at Stanton A. The Department has no issues with this test method since it is approved by EPA. We would like it clearly stated that we are allowed to utilize FTIR if possible. If other approved methods as stated in Specific Condition 2 by EPA does this then OK. Also, what purpose does correction to 3% O2 accomplish? Unit 7 and other ammonia slip standards we have are not O_2 corrected. We would like to keep it consistent at Crist with no correction for 0_2.

Response 2. In condition 2, the description of the measurement method for ammonia slip, when required, has been changed to reflect the use of FTIR instead of a wet chemical method. The correction to 3% O_2 has been left because that was one of the manufacturer's design parameters specified in the application for this permit. However, the Department has determined that annual testing for ammonia slip is not required because the permit does not contain an ammonia slip limit. The permittee will be required by this permit to perform an initial ammonia slip test in order to demonstrate that the SNCR system was installed and functions according to the design specifications. Subsequent ammonia slip tests will only be required upon request by the Department after a determination of good reason pursuant to Rule 62-297.310(7)(b), F.A.C. As a result of this comment, condition 8 has been changed,

FROM:

8. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA. Subsequent tests shall be conducted during each federal fiscal year. If tests show ammonia slip emissions are greater than the design target level specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, addition of urea injectors for better mixing, addition of mixing vanes in the duct, etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

TO:

8. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA (such as Method 320, which incorporates FTIR). If tests show ammonia slip emissions are greater than the design target level specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, addition of urea injectors for better mixing, addition of mixing vanes in the duct, etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

Comment 3. Quarterly reporting as outlined in the permit should start in 2nd quarter of 2006 (1st quarter after May, 2006 startup deadline).

Response 3. Any monitoring and/or excess emissions related to the operation of the SNCR system on unit 6 needs to be included in any required reports that reflect any period in which the SNCR system was operational. As a result of this comment, no changes have been made.

B. Letter from Mr. G. Dwain Waters dated August 3, 2005.

Section 3 Emissions Unit Specific Condition Comments:
Comment 4. (Page 5): Replace Ammonia with Urea at the top of the page.
Response 4. The requested correction has been made.

Comment 5. (Page 5): Urea Injection System: Replace 450,000 with 45,000 gallon tank.
Response 5. The requested correction has been made.

Comment 6. (Page 5): Item 4. Project Completion: Replace May 1, 2005 with May 1, 2006.
Response 6. The requested correction has been made.

Comment 7. (Page 6): Gulf Power has concerns regarding the effective date for the plant-wide NO_X emission standard as the startup of the SNCR. Gulf requests the effective date be established as "May 1, 2006" in order to include options to operate Crist 2 and 3 until May 1, 2006 and to grant extra time for SNCR installation if and as needed for Crist 4 & 5 as outlined in our control strategy. The objective of the FDEP-Gulf Ozone Agreement is to reduce emissions by the beginning of the Ozone season (May 1).
Response 7. In response to this comment, the ending of condition 5 has been changed,

FROM:
The effective date for the plant-wide NO_X emission standard is the startup date of the SNCR system on Unit 6, but no later than May 1, 2006.

For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of this air construction permit. [Paragraphs 2, 3 and Exhibit B of the Agreement]

TO:
The facility shall be in compliance with the plant-wide NO_X emission standard of 0.2 lb/MMBtu no later than May 1, 2006. [Paragraphs 2, 3 and Exhibit B of the Agreement]

Comment 8. (Page 6): Item 6: Nitrogen Oxide, Compliance Tests: Current design plans do not have inlet ports for concurrent testing of the inlet and outlet. Gulf Power does not plan on monitoring inlet NO_X emissions. Gulf requests the test conditions be revised to utilize the standard stack test location comparing a baseline test to SNCR operation (i.e. SNCR off to on) to demonstrate the 20% reduction specification as an initial test only.

Response 8. For purposes of this construction permit, the Department agrees that a requirement for concurrent testing of the inlet and outlet is not necessary. It has also been determined that annual testing does not need to be addressed in condition 7 of this construction permit. Initial compliance with the design specifications must be demonstrated, and then continuous compliance with the facility-wide limit will be demonstrated using the NO_X CEMS. It should be noted, however, that the Title V permit contains the applicable requirement (Rule 62-297.310(7), F.A.C.) to perform an annual NO_X test because the unit

is subject to a NO_X standard and has the potential to emit greater than 100 tons of NO_X per year. This issue may be addressed during the processing of the upcoming Title V permit revision. As a result of this comment, condition 7 has been further changed in addition to the changes made as a result of Comment 1, above,

FROM:

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall concurrently test the SNCR inlet and SNCR 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 SNCR outlet. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th) in order to demonstrate compliance with the facility-wide NO_X limit. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

TO:

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall conduct one test with the SNCR system operating and compare the results to a baseline test with the SNCR system turned off. Both tests shall be conducted at the same operational and ambient conditions, and shall be performed in accordance with EPA Method 7E as adopted by reference in Rule 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

Technical Evaluation and Preliminary Determination

Comment 9. (Page 5): Selective Non-Catalytic Reduction (SNCR): Replace Ammonia with Urea in the first sentence.

Response 9. The requested correction has been made.

Comment 10. (Page 5): Urea Injection System: Replace 450,000 with 45,000 gallon tank.

Response 10. The requested correction has been made.

CONCLUSION

The final action of the Department is to issue the final permit with the changes noted above.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328
Authorized Representative:
G. Dwain Waters, Q.E.P., Air Quality Programs Supervisor

Crist Electric Generating Plant
Unit 6 SNCR Project
Facility ID No. 0330045
SIC No. 4911
Air Permit No. 0330045-012-AC
Permit Expires: September 1, 2006

PROJECT AND LOCATION

This permit authorizes the construction of a new selective non-catalytic reduction system for Unit 6 at the existing Crist Electric Generating Station, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. The map coordinates are: Zone 16; 478.50 km East; and 3381.30 km North.

STATEMENT OF BASIS

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

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

8/19/05
(Date)

FACILITY AND PROJECT DESCRIPTION

The existing plant consists of six fossil fuel fired steam generators and two fly ash silos. Natural gas is the primary fuel for Units 2 and 3. Pulverized coal is the primary fuel for Units 4, 5, 6 and 7. Fuel oil is used as supplemental fuel in all six of the units. The following units are affected by this air construction permit.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

RELEVANT DOCUMENTS

Agreement For The Purpose Of Ensuring Compliance With Ozone Ambient Air Quality Standards, dated August 28, 2002. (Attached and made part of this permit as Appendix NA – NO_X Agreement.)

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794.

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); Appendix GC (General Conditions); Appendix NA (NO_X Agreement); and, Appendix SC (Standard Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-4, 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Construction Approval: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Rule 62-210.200(76), F.A.C. defines *construction* as, "The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities." Such permits shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit (revision) at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

Emissions Units 002 - 007

This section of the permit addresses the following existing emissions units, with an emphasis on Unit 006.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

Emissions Unit No. 006

Description: Unit 6 is a Foster Wheeler front wall-fired, dry bottom boiler that began commercial operation on May 1, 1970.

Fuels: coal, natural gas, new No. 2 fuel oil and/or on-specification used oil, and occasional on-site generated "oil contaminated soil".

Capacity: 3,704.8 MMBtu/hour when firing pulverized coal and/or natural gas.

PM Controls: Cold side electrostatic precipitator.

NO_X Controls: Low NO_X burners and selective non-catalytic reduction (SNCR).

Continuous Monitors: CO_2, NO_X, SO_2, opacity, stack gas flow, and urea injection rate.

Stack Parameters: Units 6 shares a common stack with Unit 7 that is 450 feet tall with a diameter of 23.2 feet. The volumetric flow rate of Unit 6 & 7 combined, at permitted capacity, is approximately 2,462,700 acfm.

{Permitting Notes: Based on the current Title V air operation permit, Unit 6: is regulated under Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input); predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review); and is regulated under Phase I of the federal Acid Rain Program (40 CFR 75).}

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

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND CONSTRUCTION

2. Selective Non-Catalytic Reduction (SNCR) System: The permittee shall construct, tune, operate, and maintain a new SNCR system for Unit 6 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 corrected to 3% O_2 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.

{Permitting Note: Fuel Tech, Inc. designed the new SNCR system, which will generally consist of the following:

- ***UREA Injection 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 a minimum of 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 (somewhat less than 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 171'-3". At peak load for Unit 6, with 0.35 lb/MMBtu inlet NO_X and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.
- ***Ammonia Slip:*** The SNCR is designed and guaranteed to have 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, FTIR will be utilized. More frequent tracking of ammonia slip will be monitored by measuring the amount of residual ammonia adsorbed by the fly ash. Fly ash samples will be measured periodically using an ion-specific electrode.

[Design; Paragraph 2 of the Agreement; Rule 62-204.800, F.A.C.; 40 CFR 68]

3. Updated Designs: The permittee shall update the Department with final design specifications and any substantial changes made to the final design specifications during the actual construction phase. [Rule 62-4.070(3), F.A.C.]

4. Project Completion: The permittee shall complete construction and commence operation of the new SNCR system by May 1, 2006. [Applicant Request; Design; Paragraph 2 of the Agreement]

PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any specifications or limitations included in previous permits that define permitted capacities such as heat input rates, fuel consumption, or hours of operation. It does not authorize any additional fuels or such other methods of operation.}

EMISSIONS STANDARDS

5. Plant-Wide NO_X Limit: Emissions of nitrogen oxides (NO_X) from the combined operation of Units 4, 5, 6, and 7 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit 7 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 7. The plant-wide 30-day rolling NO_X 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 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 Condition No. 9 of Subsection 3A of permit 0330045-005-AC, 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 7 and the SNCR system for Unit 6. The facility shall be in compliance with the plant-wide NO_X emission standard of 0.2 lb/MMBtu no later than May 1, 2006. [Paragraphs 2, 3 and Exhibit B of the Agreement]

EMISSIONS PERFORMANCE TESTING

6. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification shall include: the scheduled date, approximate start time, test team, contact name and phone number, description of unit to be tested, and the tests to be performed. [Rule 62-297.310(7)(a)9, F.A.C.]

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall conduct one test with the SNCR system operating and compare the results to a baseline test with the SNCR system turned off. Both tests shall be conducted at the same operational and ambient conditions, and shall be performed in accordance with EPA Method 7E as adopted by reference in Rule 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

8. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA (such as Method 320, which incorporates FTIR). If tests show ammonia slip emissions are greater than the design target level specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, addition of urea injectors for better mixing, addition of mixing vanes in the duct, etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

{Permitting Note: EPA Methods 1 (Traverse Points), 2 (Velocity and Flow Rate), 3 (Gas Analysis), 4 (Moisture Content), and 19 (Calculating Emission Rates, Use of F-Factors) may also be used to supplement the required test methods.}

CONTINUOUS MONITORING REQUIREMENTS

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

9. 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 6 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.* [Rule 62-4.070(3), F.A.C.]

10. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, 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. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

RECORDS AND REPORTS

11. 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, and the urea injection rate (lb/hour). The report shall also include copies of the continuous monitoring records for the NO_X emissions. [Rule 62-297.310(8), F.A.C.]

    a. Quarterly Report: For each calendar day during the reporting quarter, the permittee shall report the following information related to the operation of Units 4, 5, 6 & 7:

    - Hours of operation for each Unit;
    - The Unit # daily MMBtu for each Unit (see Condition 5 of this Subsection);
    - The Unit # daily NO_X CEMS rate for each Unit, lb/MMBtu (see Condition 5 of this Subsection);
    - The Plant-Wide Daily MMBtu-Weighted NO_X Emission Rate (see Condition 5 of this Subsection);
    - The 30-day plant-wide average NO_X emission rate, lb/MMBtu;
    - Identify whether Unit 7 operated less than 18 hours;
    - Identify the occurrence of a Unit 7 startup or shutdown;
    - Whether or not the day included a startup, shutdown, or malfunction of the SNCR or SCR systems; and,
    - Identify operation of Unit 7 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 6 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.

    Each quarterly report is due within 30 days of the calendar quarter being reported.

    [Rule 62-4.070(3), F.A.C.; NO_X Agreement, Exhibit "B"]

C. Appendix SC – Standard Conditions

Appendix CF - Citation Format;

Appendix GC - General Conditions;

Appendix NA - NO_X Agreement; and,

Appendix SC - Standard Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001"identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

Agreement

On August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titled, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards". Throughout the permit, this is cited as the "Agreement".

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable to project);
    b. Determination of Prevention of Significant Deterioration (not applicable to project); and
    c. Compliance with New Source Performance Standards (not applicable to project).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

August 29, 2002

Ms. Blanca S. Bayo, Director
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

020943-EI

Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Petition for Approval of FDEP/Gulf Power Company Agreement Pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for Purposes of Cost Recovery of the Related Expenditures and Expenses through the Environmental Cost Recovery Clause.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Petition in Microsoft Word format as prepared on a Windows NT based computer.

Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

cc: Beggs and Lane
Jeffrey A. Stone, Esquire

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	Docket No. 02_____-EI Date Filed: August 30, 2002

PETITION FOR APPROVAL OF FDEP/GULF POWER AGREEMENT PURSUANT TO SECTION 366.8255(1)(d)7 OF THE FLORIDA STATUTES FOR PURPOSES OF COST RECOVERY OF THE RELATED EXPENDITURES AND EXPENSES THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE

GULF POWER COMPANY ("Gulf Power", "Gulf", or "the Company"), by and through its undersigned counsel, and pursuant to Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session and Florida Public Service Commission ("Commission") Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, hereby petitions this Commission for approval of the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" ("Ozone Agreement") entered into on August 28, 2002 between the Florida Department of Environmental Protection ("FDEP") and Gulf Power as a new program for cost recovery through the Environmental Cost Recovery Clause ("ECRC"). As grounds for the relief requested by this petition, the Company would respectfully show:

(1) Notices and communications with respect to this petition and docket should be addressed to:

Jeffrey A. Stone
Russell A. Badders
Beggs & Lane
P. O. Box 12950
Pensacola, FL 32591-2950

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780

(2) Gulf is a corporation with its headquarters located at 500 Bayfront Parkway, Pensacola, Florida 32501. The Company is an investor-owned electric utility operating under the jurisdiction of this Commission.

(3) Gulf owns and operates the Crist Plant generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuels. The combustion of fossil fuels produces nitrogen oxides ("NOx"), which are some of the precursor compounds that contribute to the formation of ozone in the ambient air. The Crist Plant currently satisfies all federal and state air emissions requirements, including those applicable to NOx.

(4) Under the authority of the Clean Air Act, the United States Environmental Protection Agency ("USEPA") promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period ("Ozone Standard"). Based upon the best available information, including ambient air quality monitoring data, FDEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area ("PFMPA").

(5) In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with FDEP or USEPA, for the purpose of ensuring compliance with ozone ambient air quality standards. The

legislation, which was sponsored in the Florida House by Representative Jerry Maygarden of Pensacola and in the Florida Senate by Senator Charlie Clary of Destin, and was supported during the legislative session by FDEP Secretary David Struhs and Florida Governor Jeb Bush, was signed into law by Governor Bush on May 23, 2002. In order to qualify for recovery through the ECRC, the agreement between the electric utility and the qualifying environmental agency for the purpose of ensuring compliance with ozone ambient air quality standards must be entered into on or after May 23, 2002 and prior to October 1, 2002.

(6) Representatives of FDEP and Gulf have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended by Chapter 2002-276 of the Laws of Florida. A copy of the resulting Ozone Agreement, which was signed by the parties on August 28, 2002, is attached to and made a part of this petition as Appendix A.

(7) The Ozone Agreement calls for Gulf Power to make changes in its equipment and/or operations at Plant Crist. Such changes are designed to reduce the overall NOx emission rate at the plant as part of a community wide effort to reduce ozone precursor compounds in the PFMPA. When fully implemented, the Ozone Agreement will limit the overall 30 day average NOx emission rate at Plant Crist to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit No. 7 ("Crist 7") is offline.[1] The predominant change envisioned by the agreement is the

[1] As the largest and most efficient of seven generating units at Plant Crist, Crist 7 is generally the economic choice to be operated. Whenever Crist 7 is offline, there is a greater reduction in NOx emissions than would otherwise result from operating Crist 7 with the new SCR. Since NOx reduction is the goal, the Ozone Agreement recognizes that the emission rate limit is not necessary when Crist 7 is not operating.

addition of Selective Catalytic Reduction ("SCR") technology to Crist 7 by May 1, 2005.[2] In addition to the NOx emission reductions that will occur as a result of the installation and operation of the Crist 7 SCR project, the Ozone Agreement also calls for further reductions in NOx emissions through the addition of NOx reduction technologies on one or more of the other coal-fired units at Plant Crist. The selection and installation of one or more additional NOx reduction technologies for one or more of the other units will follow engineering studies conducted as part of the Ozone Agreement.[3] The engineering studies contemplated by the Ozone Agreement are intended to produce unit specific cost and performance data that will allow Gulf to make a decision between various alternatives based on the relative cost-effectiveness of each technology. To augment the NOx reductions envisioned from the addition of the NOx reduction technologies discussed above, the Ozone Agreement also calls for the retirement of the three oldest Crist generating units (Crist 1, Crist 2 and Crist 3) by May 1, 2006.

(8) As shown in the graph set forth in Appendix B to this petition, the annual NOx emission reductions envisioned by the Ozone Agreement, as compared to 1999 baseline data, are equivalent to a result that could otherwise be achieved by the installation of SCR technology on both Crist 7 and Crist 6. The flexibility to study other alternatives for achieving an overall plant

[2] Due to structural interference and performance concerns for the new SCR, the Ozone Agreement also calls for a new Crist 7 precipitator to be constructed at a new location in order to allow the new SCR to be built in the location of the old Crist 7 precipitator. The new SCR will be completed one year after construction of the new precipitator is completed.

[3] The deadline for installing other selected NOx reduction technologies is May 1, 2006 unless the cost effective choice is determined to be SCR technology for Crist 6. If SCR for Crist 6 is selected, the deadline for installation will be December 31, 2007. The Ozone Agreement calls for Gulf to obtain written concurrence from FDEP before implementing NOx reduction technology or technologies on one or more of the remaining coal-fired units at Plant Crist. The written concurrence from FDEP will specify that the use of the selected technology or technologies is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in the Ozone Agreement.

wide btu weighted average NOx emission rate of 0.2 lbs/mmbtu may allow Gulf to avoid the cost of installing SCR technology on Crist 6 for a net savings of as much as $50 million or more.

(9) Gulf seeks approval of the Ozone Agreement as an environmental compliance program/activity appropriate for recovery through the ECRC pursuant to the amendments to the Florida Statutes contained in Chapter 2002-276 of the Laws of Florida. This new program is appropriate for ECRC recovery based on the provisions of Section 366.8255(1)(d)7 of the Florida Statutes and the prior orders of the Commission implementing the ECRC.

(10) The Company's expenses and/or expenditures associated with the activities discussed in the Ozone Agreement are not recovered through any other cost recovery mechanism or through base rates. These new activities were not included in the Company's last test year forecast upon which its current base rates were established. As a result, the expenditures and/or expenses associated with these activities will be incurred separate and apart from the expenditures and/or expenses for activities that were approved in the Company's last test year forecast upon which rates are based.

(11) Gulf is not requesting a change in the ECRC factors as part of this petition. The projected expenditures and expenses will be reflected in subsequent true-up and/or projection filings submitted as part of the ongoing docket addressing the ECRC. The actual expenditures made and expenses incurred by the Company will be addressed in subsequent ECRC filings and will be subject to audit.

(12) The parties to the Ozone Agreement acknowledge that the NOx reduction activities identified therein are conditioned upon timely approval by this Commission for cost recovery through the ECRC. Given that substantial expenditures must be undertaken early in 2003 in order to meet the deadlines set forth in the Ozone Agreement, it is imperative that Gulf obtain an order from this Commission authorizing Gulf to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause that is rendered final within 90 days of the execution of the agreement.[4] If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules set forth in the Ozone Agreement are subject to revision solely by mutual agreement of the parties in order to allow Gulf to move forward with the activities described therein above pending a final order by the FPSC. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement automatically becomes null and void unless extended by mutual written agreement of the parties within 30 days thereafter. The net effect of these provisions is that delay in final rendition of an order approving the request made by this petition beyond the end of this year will either result in delay of the NOx emission reductions contemplated by the Ozone Agreement or cancellation of the agreement altogether. Either result will frustrate the intent underlying enactment of Chapter 2002-276 of the Laws of Florida which is to enable communities such as the PFMPA to avoid becoming classified as non-attainment areas for ozone ambient air quality standards with the consequential effects that may include imposition of emission caps that could limit expansion of business and industry, addition of required vehicle emission testing, and federal road funding cutbacks. As a result, Gulf respectfully requests that

[4] A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction.

the Commission take this petition up for consideration as Proposed Agency Action at the earliest opportunity. Towards that end, Gulf respectfully suggests that a Commission decision on this petition as Proposed Agency Action at the Commission Conference scheduled for October 1, 2002 followed by expedited entry of a PAA order would allow the traditional 21 day period for substantially affected parties to request a hearing to run in time for the Commission to hold a hearing, if requested, on November 20-22, 2002 as part of the proceedings in Docket No. 020007-EI related to the ECRC. Absent a request for hearing, such a PAA order will become final and begin the time for a substantially affected party to file a notice of appeal. If no such notice is filed, the resulting order will be rendered final and no longer subject to review or appeal within the deadlines specified by the Ozone Agreement. If a request for hearing is filed by an appropriate party, a Commission decision could still be issued and made final in the absence of an appeal before the Ozone Agreement would be rendered null and void by its own terms.

WHEREFORE, Gulf Power Company respectfully requests the Commission to approve the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" entered into on August 28, 2002 between the Florida Department of Environmental Protection and Gulf Power Company and the costs associated therewith for recovery through the

Environmental Cost Recovery Clause consistent with this petition, and that such approval and authorization be set forth in a Proposed Agency Action order issued by the Commission at the earliest practical opportunity or grant such other relief as is just and reasonable.

Respectfully submitted the 29th day of August, 2002.

JEFFREY A. STONE
Florida Bar No. 325953
RUSSELL A. BADDERS
Florida Bar No. 7455
Beggs & Lane
501 Commendencia Street
P. O. Box 12950
Pensacola, Florida 32591-2950
(850) 432-2451
Attorneys for Gulf Power Company

Appendix A

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

This agreement is entered into by the Florida Department of Environmental Protection (DEP) and Gulf Power Company (GULF), for the exclusive purposes as follows: (a) ensuring that GULF's electrical generating facility located within the Pensacola, Florida Metropolitan Planning Area (PFMPA) supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

WHEREAS:

I. GULF owns and operates the Crist Plant electrical generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuel. The combustion of fossil fuels produces some of the precursor compounds that contribute to the formation of ozone in the ambient air.

II. Under the authority of the Clean Air Act, the U. S. Environmental Protection Agency (EPA) promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period (Ozone Standard).

III. Based upon the best available information, including ambient air quality monitoring data, DEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area.

IV. In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with DEP or EPA, for the purpose of ensuring compliance with ozone ambient air quality standards.

V. Representatives of DEP and GULF have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session.

VI. DEP and GULF concur that installation of Selective Catalytic Reduction (SCR) controls at Crist Unit #7 as well as the implementation of other NOx reduction

technologies on one or more of the other three coal-fired generating units at Plant Crist will be needed as part of a community wide effort to reduce ozone precursor compounds in the Pensacola Metropolitan Planning Area. Due to structural interference and performance concerns for the new SCR, a new Unit #7 precipitator will also be constructed at a new location and the SCR will be completed one year later in the location of the old Unit #7 precipitator.

VII. It is anticipated that the implementation of this agreement will result in an approximately 61% reduction [9,188 tons] in annual NOx emissions from the GULF Crist Plant based upon 1999 baseline data.

NOW THEREFORE, in consideration of the premises and the mutual agreements contained herein, and intending to be legally bound, the DEP and GULF hereby agree as follows:

1. By May 1, 2005, GULF, after obtaining necessary permits and approvals, will install and begin and continue operating an SCR system at Crist Unit #7 whenever the Crist Unit #7 is online. The SCR system is designed to achieve no less than an 85% reduction in the quantity of nitrogen oxides as measured at the SCR unit inlet (SCR Project). The SCR Project includes the installation of a new precipitator necessary to structurally accommodate installation of the SCR. See Exhibit "A" for proposed project schedule.

2. In addition to the Crist Unit #7 SCR Project, and in order to achieve an overall plant wide Btu weighted average of 0.2 lbs/mmbtu NOx emission rate as further specified in paragraph 3 below, Gulf agrees to conduct engineering studies on the feasibility of other NOx reduction technologies on one or more of the remaining three coal-fired units at Plant Crist. Such 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 reburn technology, selective use of biomass fuel, etc. Gulf further agrees to complete these studies by May 1, 2005. In the event GULF identifies an SCR project for Crist Unit #6 as the NOx reduction technology, GULF will implement, begin and continue operating the SCR on Crist Unit #6 as described in paragraph 3 below by December 31, 2007. In the event GULF identifies a NOx reduction technology other than SCR on Crist Unit #6, GULF will select and implement one or more NOx reduction technologies on one or more of the three other Plant Crist coal-fired units by May 1, 2006. GULF will obtain written concurrence from DEP, before implementing such NOx reduction technology or technologies, that the use thereof is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in paragraph 3 below.

3. GULF will make necessary changes identified and within the timeframes set forth in paragraph 2 above, that will allow it to limit the overall 30 day average NOx emission rate at the Crist Plant to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit #7 is offline. The emission rate shall be calculated pursuant to the formula set forth in Exhibit "B" to this agreement. While Crist Unit #7 is online, this 0.2 lbs./mmbtu will be achieved by utilizing the SCR system on Crist Unit #7 [discussed in paragraph 1 above] and the controls identified pursuant to paragraph 2 above. During such time as Crist Unit #7 may be offline between May 1 and September 15, GULF agrees to operate any NOx reduction technology or technologies DEP may have determined to be reasonable and necessary at other Plant Crist coal-fired units, pursuant to paragraph 2 above, unless prevented from doing so by circumstances beyond its reasonable control.

4. In addition to the NOx emission rate reduction strategies implemented pursuant to paragraphs 1 through 3 above, as a further part of this agreement to support the PFMPA's compliance with the eight hour ozone ambient air quality standard, GULF agrees to retire Crist Unit #1 within 120 days of receiving a final order from the Florida Public Service Commission as provided in paragraph 8 below. In addition, GULF further agrees to retire Crist Unit #2 and Crist Unit #3 on or before May 1, 2006.

5. In the event state or federal law changes to require a change in NOx emissions or the PFMPA is declared non-attainment for ozone, any reduction requirements would be in accordance with all applicable state and federal requirements. In addition, although Florida currently has no state statute providing for NOx trading or credits, GULF shall be entitled to retain all NOx reduction credits and trading rights that may be authorized by Florida law in the future.

6. In the event the FPSC issues a final order authorizing GULF to recover costs incurred pursuant to this agreement, by July 5, 2004, GULF will submit a Title V renewal application to the Department's Bureau of Air Regulation, 2600 Blair Stone Rd, MS 5500, Tallahassee, FL 32399 to incorporate the control technologies contained in this agreement as well as the NOx emission rate as described in paragraphs 1 through 3 above. DEP concurs that the changes envisioned by this agreement will not constitute "modifications" that trigger New Source Review.

7. DEP concurs that the steps and changes described in paragraphs 1 through 4 above are prudent for purposes of (a) ensuring that GULF's electrical generating facility located within the PFMPA supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing

related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

8. This agreement is based upon the assumption that an order from the Florida Public Service Commission (FPSC) authorizing GULF to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause is rendered final (final order) within 90 days of the execution of the agreement. A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction. If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules herein are subject to revision solely by mutual agreement, in order to allow GULF to move forward with the activities described in paragraphs 1-4 above pending a final order by the FPSC. Gulf will exercise good faith in seeking approval of such cost recovery from the FPSC in a timely manner. DEP will support the efforts of GULF before the FPSC and in any subsequent review or appeal. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement shall automatically become null and void unless extended by mutual written agreement of the parties within 30 days thereafter.

9. This agreement shall bind the parties hereto and those whom they represent and may be modified only in writing with the consent of both parties.

10. This agreement is entered into and effective on the date of the last signature of the parties below.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: David B. Struhs

David B. Struhs
Secretary

Date: August 28, 2002

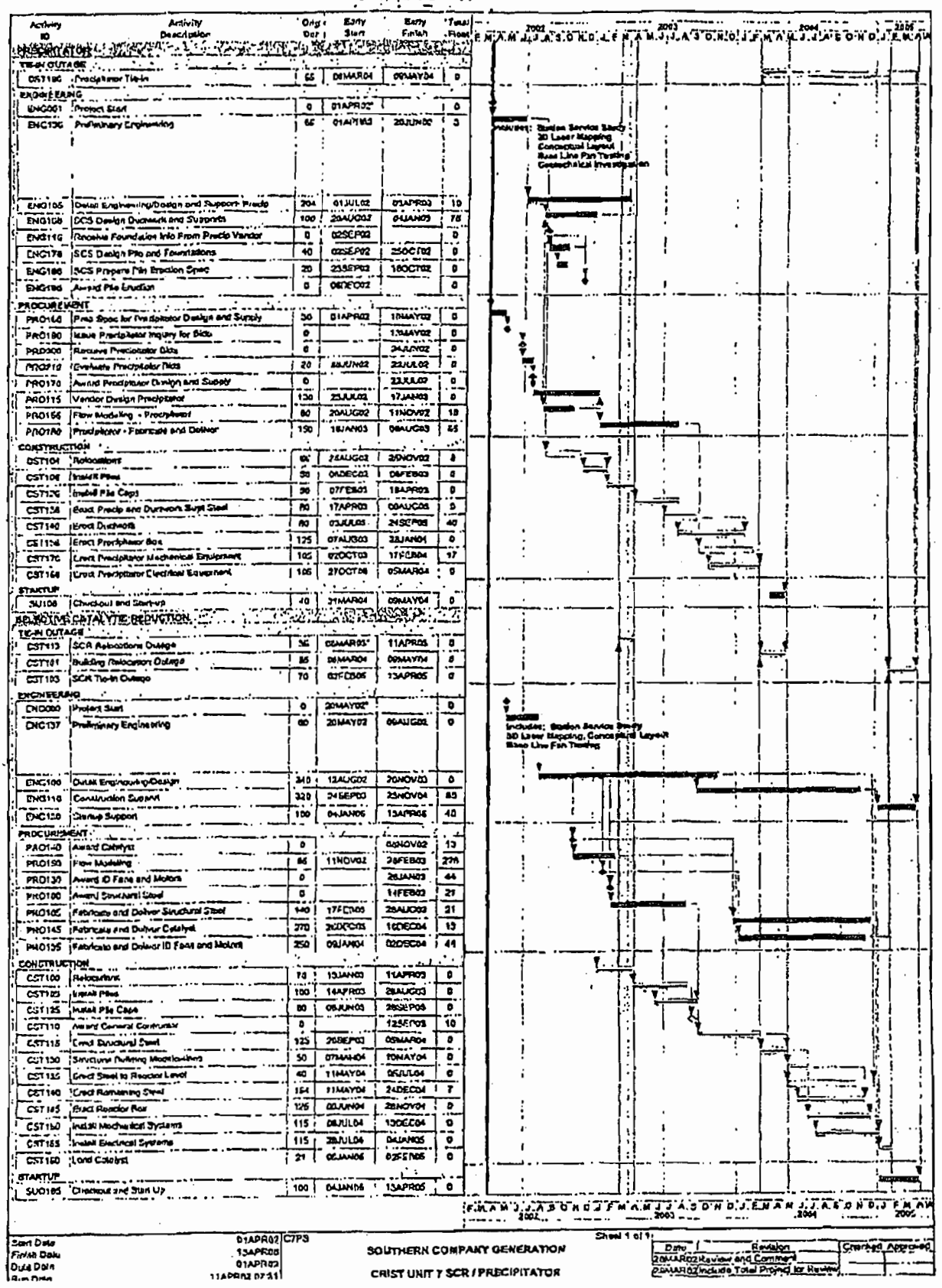
GULF POWER COMPANY

By: Thomas A. Fanning

Thomas A. Fanning
President and Chief Executive Officer

Date: August 28, 2002

EXHIBIT "A"



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float
TIE-IN OUTAGE					
CST100	Precipitator Tie-In	65	08MAR04	09MAY04	0
ENGINEERING					
ENG001	Project Start	0	01APR02*		0
ENG100	Preliminary Engineering	65	01APR03	25JUN03	3
ENG105	Detail Engineering/Design and Support Precip	204	01JUL02	01APR03	19
ENG106	DCS Design Ductwork and Supports	100	29AUG02	04JAN03	78
ENG110	Receive Foundation Info From Precip Vendor	0	02SEP02		0
ENG170	SCS Design Pile and Foundations	40	02SEP02	25OCT02	0
ENG180	SCS Prepare Pile Erection Spec	20	23SEP02	18OCT02	0
ENG190	Award Pile Erection	0	06DEC02		0
PROCUREMENT					
PRO140	Prep Spec for Precipitator Design and Supply	30	01APR02	10MAY02	0
PRO150	Issue Precipitator Inquiry for Bids	0		10MAY02	0
PRO900	Receive Precipitator Bids	0		24JUN02	0
PRO910	Evaluate Precipitator Bids	20	25JUN02	22JUL02	0
PRO170	Award Precipitator Design and Supply	0		22JUL02	0
PRO115	Vendor Design Precipitator	130	25JUL02	17JAN03	0
PRO155	Flow Modeling - Precipitator	80	20AUG02	11NOV02	19
PRO160	Precipitator - Fabricate and Deliver	150	16JAN03	08AUG03	65
CONSTRUCTION					
CST101	Relocations	60	29AUG02	25NOV02	0
CST105	Install Piles	50	04DEC02	06FEB03	0
CST125	Install Pile Caps	30	07FEB03	18APR03	0
CST130	Erect Precip and Ductwork Supt Steel	80	17APR03	08AUG03	5
CST140	Erect Ductwork	80	03JUL03	24SEP03	40
CST1104	Erect Precipitator Box	125	07AUG03	28JAN04	0
CST170	Erect Precipitator Mechanical Equipment	105	02OCT03	17FEB04	17
CST160	Erect Precipitator Electrical Equipment	105	27OCT03	05MAR04	0
STARTUP					
SU100	Checkout and Start-up	40	21MAR04	09MAY04	0
REMOVE CATALYTIC REDUCTION					
TIE-IN OUTAGE					
CST113	SCR Relocations Outage	35	02MAR05*	11APR05	0
CST101	Building Relocation Outage	65	08MAR04	09MAY04	0
CST103	SCR Tie-In Outage	70	03FEB05	13APR05	0
ENGINEERING					
ENG000	Project Start	0	20MAY02*		0
ENG137	Preliminary Engineering	60	20MAY02	09AUG02	0
ENG100	Detail Engineering/Design	340	12AUG02	20NOV03	0
ENG110	Construction Support	320	24SEP03	25NOV04	65
ENG120	Startup Support	100	04JAN05	13APR05	40
PROCUREMENT					
PRO140	Award Catalyst	0		08NOV02	13
PRO150	Flow Modeling	65	11NOV02	28FEB03	276
PRO130	Award ID Fans and Motors	0		28JAN03	44
PRO100	Award Structural Steel	0		14FEB03	21
PRO105	Fabricate and Deliver Structural Steel	140	17FEB03	28AUG03	21
PRO145	Fabricate and Deliver Catalyst	270	20DEC03	16DEC04	13
PRO135	Fabricate and Deliver ID Fans and Motors	250	09JAN04	02DEC04	44
CONSTRUCTION					
CST100	Relocations	70	15JAN03	11APR03	0
CST105	Install Piles	100	14APR03	28AUG03	0
CST125	Install Pile Caps	80	08JUN05	28SEP05	0
CST110	Award General Contractor	0		12SEP03	10
CST115	Erect Structural Steel	125	29SEP03	09MAR04	0
CST130	Structural Building Modifications	50	07MAR04	20MAY04	0
CST135	Erect Steel to Reactor Level	40	11MAY04	05JUL04	0
CST140	Erect Remaining Steel	104	11MAY04	24DEC04	7
CST145	Erect Reactor Box	125	02JUN04	26NOV04	0
CST150	Install Mechanical Systems	115	06JUL04	13DEC04	0
CST155	Install Electrical Systems	115	26JUL04	04JAN05	0
CST160	Load Catalyst	21	05JAN05	02FEB05	0
STARTUP					
SU0105	Checkout and Start Up	100	04JAN05	13APR05	0

Start Date 01APR02 | Finish Date 13APR05 | Data Date 01APR02 | Run Date 11APR02 07:11 | C7PS

SOUTHERN COMPANY GENERATION
CRIST UNIT 7 SCR / PRECIPITATOR

Sheet 1 of 1

Date	Revision	Checked	Approved
26MAR02	Review and Comment		
29MAR02	Include Total Project for Review		

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

Exhibit "B"

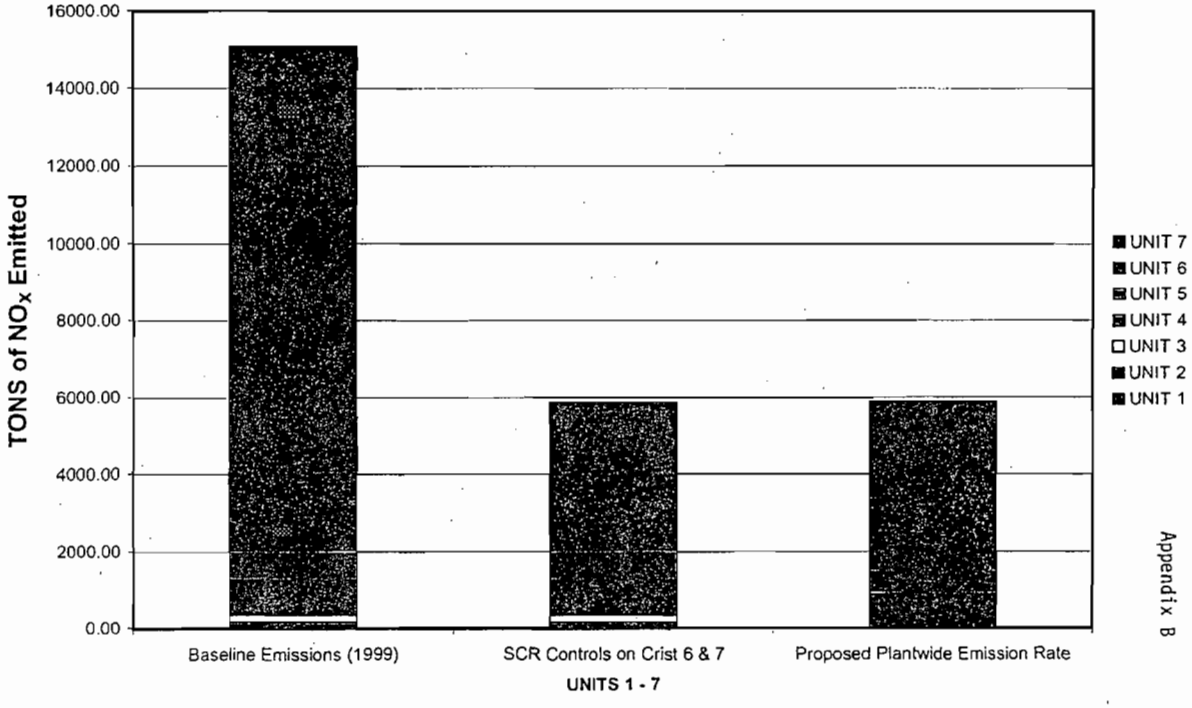
Gulf will measure its compliance with the emission rate limit set forth in paragraph 3 of this agreement by determining the Plant Crist NOx emission rate, when Crist Unit #7 has operated for 30 sequential days (which need not be consecutive) on a generating unit-specific btu weighted average basis pursuant to the following formula:

$$\text{plant wide daily mmbtu weighted NOx rate} = \frac{\sum_{\substack{\text{Units} \\ 4,5,6,7}} \left[\left(\text{Unit \# daily mmbtu}\right) \text{ X } \left(\text{24 hour avg unit \# NOx CEMs rate}\right)\right]}{\sum_{\substack{\text{Units} \\ 4,5,6,7}} \left(\text{Unit \# daily mmbtu}\right)}$$

For the purposes of this calculation, a Crist Unit #7 operating day means any calendar day that Crist Unit #7 is online a minimum of 18 hours.

Unit # daily mmbtu (heat input) in the foregoing formula is determined by Plant Crist's daily as-burned fuel analysis

Comparison of Crist Plant Emission Reduction Alternatives



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	)	Docket No. 02____-EI

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 29th day of August 2002 by U.S. Mail or hand delivery to the following:

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850 432-2451
Attorneys for Gulf Power Company

{Permitting Note: Unless otherwise specified by permit or rule, the following conditions apply to all emissions units and activities at this facility.}

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Unless otherwise specified in the permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

7. General Visible Emissions: Unless otherwise specified in the permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

8. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

9. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

10. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted

capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

11. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

12. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

    a. *Required Sampling Time.* 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

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

    c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    [Rule 62-297.310(4), F.A.C.]

13. 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.]

14. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

15. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
19. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328
Authorized Representative:
Penny Manuel

Crist Electric Generating Plant
Unit 6 SNCR Project
Facility ID No. 0330045
SIC No. 4911
Air Permit No. 0330045-012-AC
Permit Expires: September 1, 2006

PROJECT AND LOCATION

This permit authorizes the construction of a new new selective non-catalytic reduction system for Unit 6 at the existing Crist Electric Generating Station, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. The map coordinates are: Zone 16; 478.50 km East; and 3381.30 km North.

STATEMENT OF BASIS

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

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The existing plant consists of seven fossil fuel fired steam generators and two fly ash silos. Natural gas is the primary fuel for Units 2 and 3. Pulverized coal is the primary fuel for Units 4, 5, 6 and 7. Fuel oil is used as supplemental fuel in all seven of the units. The following units are affected by this air construction permit.

ID	Emission Unit Description
001	Boiler No. 1 (Phase II Acid Rain Unit) (retired March 31, 2003)
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794.

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); Appendix GC (General Conditions); and Appendix SC (Standard Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-4, 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Construction Approval: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Rule 62-210.200(76), F.A.C. defines *construction* as, "The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities." Such permits shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. EU 006 – Boiler No. 6

This section of the permit addresses the following existing emissions unit.

Emissions Unit No. 006

Description: Unit 6 is a Foster Wheeler front wall-fired, dry bottom boiler that began commercial operation on May 1, 1970.

Fuels: coal, natural gas, new No. 2 fuel oil and/or on-specification used oil, and occasional on-site generated "oil contaminated soil".

Capacity: 3,704.8 MMBtu/hour when firing pulverized coal and/or natural gas.

PM Controls: Cold side electrostatic precipitator.

NOx Controls: Low NOx burners and selective non-catalytic reduction.

Continuous Monitors: CO_2, NO_X, SO_2, opacity, stack gas flow, and ammonia injection rate

Stack Parameters: Units 6 and 7 share a common stack that is 450 ~~feet tall with a diameter~~ of 23.2 feet. The volumetric flow rate of Unit 6 at permitted at capacity is approximately 2,463,000 acfm.

{Permitting Notes: Based on the current Title V air operation permit, Unit 6: is regulated under Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input); predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review); and is regulated under Phase I of the federal Acid Rain Program (40 CFR 75).}

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

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND CONSTRUCTION

2. Selective Non-Catalytic Reduction (SNCR) System: The permittee shall construct, tune, operate, and maintain a new SNCR system for Unit 6 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 an 20% 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.

   {Permitting Note: Southern Company Services Inc. designed the new SNCR system, which will generally consist of the following:

   - ***Ammonia Injection System**: Anhydrous ammonia will be delivered by truck or rail and stored on site in two 20,500 gallons .tanks. Ammonia is distributed into the ~~SCR inlet duct through the ammonia injection grid (AIG), which is divided into about two dozen zones. Each zone is equipped with a flow indicator and manual control valve for tuning the AIG to match the inlet NOx profile. A static mixer installed upstream of the AIG creates flow resistance, flattens this profile, and makes gas flow uniform. A second static mixer is installed downstream of the AIG. The elements of this mixer are precisely oriented with the AIG injection points to impart a swirl to the diluted ammonia and promote good~~*

~~*mixing with the flue gas. A manual gas sampling grid (GSG) is installed downstream of the last catalyst layer, which allows a high-resolution traverse of the flue gas stream. Gas composition data collected from the GSG is used to precisely adjust and tune the AIG. The preliminary design is based on a 0.95 molar ratio of ammonia to NOx.*~~

- ***Ammonia Control System**: The ammonia control system consists of a control loop with a cascaded, feed-forward control scheme. Process monitors will provide NOx emission rate data collected at the inlet to and the outlet from the SCR system. The ammonia injection rate is set based on a variety of input data including the measured NOx rates at the SCR inlet/outlet, the outlet NOx set point, the heat input to the boiler, the actual NOx rate measured by the stack monitor, and a scaling factor based on the molecular weights of ammonia and NOx. The system is capable of continually adjusting flow control valves to fine-tune the ammonia injection rate based on changing gas stream conditions.*

- ~~***SCR Bypass**: The SCR design incorporates dampers and ductwork to provide the capability of bypassing the SCR system. The bypass is most commonly used to gradually heat or cool the catalyst structure to minimize thermal fatigue during startup and shutdown. During catalyst maintenance and repair, it would also allow access to the SCR reactor without requiring complete shutdown of the Unit 7 boiler.*~~

This information is based on the preliminary design and is subject to change. The permittee shall update this information as necessary during the process of final design and installation.} [Design; Paragraph 1 of the Agreement; Rule 62-204.800, F.A.C.; 40 CFR 68]

3. Updated Designs: The permittee shall update the Department with final design specifications and any substantial changes made to the final design specifications during the actual construction phase. [Rule 62-4.070(3), F.A.C.]

4. Project Completion: The permittee shall complete construction and commence operation of the new SNCR system by May 1, 2006 [Applicant Request; Design; Paragraph 1 of the Agreement]

PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any specifications or limitations included in previous permits that define permitted capacities such as heat input rates, fuel consumption, or hours of operation. It does not authorize any additional fuels or such other methods of operation.}

EMISSIONS STANDARDS

{Permitting Note: Particulate matter emissions continue to be regulated by Rules 62-296.405(1)(b) and 62-210.700(3), F.A.C. in accordance with current Title V Permit Nos. C.7 and C.8.}

5. Stack Opacity: The flue gas opacity from Unit 7 shall not exceed 20% based on a 6-minute block average, except for one 6-minute block per hour that shall not exceed 27%. Compliance shall be determined by data collected from the certified continuous opacity monitor or EPA Method 9, which is incorporated by reference in Chapter 62-297, F.A.C. This standard is effective on the date of the initial compliance test for particulate matter and thereafter. *{Permitting Note: Stack opacity during soot blowing and load change continues to be regulated by Rule 62-210.700(3), F.A.C. in accordance with current Title V Permit Condition C.6. Excess emissions due to startup, shutdown, and malfunction continue to be regulated by Rule 62-210.700(1), (2), and (4), F.A.C. in accordance with current Title V permit Condition Nos. C.12, C.13, and C.14.}* [Design; Rule 62-4.070(3), F.A.C.]

6. Nitrogen Oxides (Interim): Prior to implementing the required NOx control strategy for Units 4, 5, and 6, the NOx emissions from Unit 7 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. This standard is effective on the date the CEMS is re-certified in accordance with the acid rain provisions of 40 CFR 75. After the required NOx control strategy is implemented for Units 4, 5, and 6, the plant-wide NOx standard specified in Subsection 3B shall supersede this interim standard. [Design; Rules 62-4.070(3), F.A.C.]

~~**SCR BYPASS OPERATION**~~

~~7. SCR Bypass, Startup/Shutdown: During Unit 7 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.]~~

~~8. SCR Bypass, Catalyst Maintenance and Repair: The permittee may bypass the SCR system to perform catalyst maintenance and repair for up to 15 days per year during the non-ozone season. During such allowable bypass periods, the uncontrolled NOx emissions from Unit 7 shall not exceed 0.35 lb/MMBtu based on a 24 hour average. The daily NOx emission rates for these periods may be excluded from the plant-wide 30-day NOx standard specified in Subsection 3B. 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. *(Permitting Note: The ozone season is defined as May 1st through September 15th.)* [Rules 62-210.700 and 62-4.070(3), F.A.C.]~~

EMISSIONS PERFORMANCE TESTING

9. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification shall include: the scheduled date, approximate start time, test team, contact name and phone number, description of unit to be tested, and the tests to be performed. [Rule 62-297.310(7)(a)9, F.A.C.]

10. Particulate Matter, Compliance Tests: Within 60 days after completing construction of the ESP and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the emissions standards for particulate matter and opacity. Tests for particulate matter shall be conducted in accordance with the methods and procedures currently specified in the Title V air operation permit. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). The permittee shall demonstrate initial compliance with the opacity standard by submitting the data collected from the certified continuous opacity monitor for each particulate matter test run. [Rule 62-297.310(7), F.A.C.]

11. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SCR system and bringing Unit 7 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than an 85% reduction in the nitrogen oxide emission rate. 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 NOx RATA testing may be used to represent NOx emissions at the SCR outlet. Alternatively, the permittee may submit data collected from the NOx 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. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

12. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA. Subsequent tests shall be conducted during each federal fiscal year. If tests show ammonia slip emissions are greater than the design target level

specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, ~~addition of catalyst, replacement of catalyst,~~ etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]
additional more injection, mixing vanes etc.

{Permitting Note: EPA Methods 1 (Traverse Points), 2 (Velocity and Flow Rate), 3 (Gas Analysis), 4 (Moisture Content), and 19 (Calculating Emission Rates, Use of F-Factors) may also be used to supplement the required test methods.}

CONTINUOUS MONITORING REQUIREMENTS

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

13. 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 7 operation including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, or calibration checks. *{Permitting Note: The existing COMS required by the Acid Rain program satisfies this requirement.}* [Rule 62-4.070(3), F.A.C.]

14. NOx 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 7 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 NOx CEMS required by the Acid Rain program satisfies this requirement. Due to the substantial changes being made to the existing monitor as a result of this project, it will be necessary to re-certify the existing CEMS in accordance with the provisions of 40 CFR 75.}* [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

15. 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 NOx emission rate (lb/MMBtu) as recorded by the CEMS, and the ammonia injection rate (lb/hour). The report shall also include copies of the continuous monitoring records for opacity and NOx emissions. [Rule 62-297.310(8), F.A.C.]

16. Quarterly Report

    a. *NOx Summary*: For each calendar day during the reporting quarter, the permittee shall report the following information related to the NOx CEMS for Unit 7:

    - Hours of operation for Unit 7;
    - Daily average NOx emission rate, lb/MMBtu;
    - 30-day average NOx emission rate, lb/MMBtu; and
    - 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.

[Rule 62-4.070(3), F.A.C.]

B. EUs 001 to 007 – Combined Conditions

This section of the permit addresses the following emissions units.

EU No.	Title V Emissions Unit Description
001	Boiler No. 1 (Phase II Acid Rain Unit)
002	Boiler No. 2 (Phase II Acid Rain Unit)
003	Boiler No. 3 (Phase II Acid Rain Unit)
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

{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

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.]

2. Plant-Wide NOx Limit: Emissions of nitrogen oxides (NOx) from the combined operation of Units 4, 5, 6, and 7 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit 7 is shutdown. The plant-wide daily NOx emission rate shall be determined by the following equation:

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

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. 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. In accordance with Condition No. 8 of Subsection 3A, NOx emissions data collected during SCR bypass during the non-ozone season may be excluded from the daily NOx average. 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 NOx reduction project, (excluding an SCR project for Unit 6), but no later than May 1, 2006; or

   b. The startup date of the SCR project for Unit 6, 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 NOx reduction project. [Paragraphs 2, 3 and Exhibit B of the Agreement]

3. NOx CEMS: To demonstrate compliance with the plant-wide NOx 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 4, 5, 6, and 7. *{Permitting Note: The existing NOx CEMS required by the Acid Rain program satisfy this requirement.}* [Exhibit B of the Agreement]

4. Quarterly Report: For each calendar day during the reporting quarter, the permittee shall report the following information related to the NOx CEMS for Unit 7:

   - Daily NOx emission rate for each boiler, lb/MMBtu;
   - Daily heat input rate for each boiler, MMBtu/day;
   - 30-day plant-wide NOx emissions rate, lb/MMBtu;
   - Identify whether Unit 7 operated less than 18 hours;
   - Identify the occurrence of a Unit 7 startup or shutdown; and
   - Identify operation of Unit 7 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 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.

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

Unit Retirements: The Agreement requires the retirement of Unit 1 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. 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 2 and 3 on or before May 1, 2006. [Paragraph 4 of the Agreement]

Additional NOx Reduction Projects: The Agreement requires Gulf Power Company to conduct a variety of engineering studies to determine the feasibility of NOx reduction technologies for one or more of the three remaining coal-fired units (Units 4, 5, and 6). 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 NOx 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 NOx emission standard. If a NOx 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 6 is identified as the appropriate NOx reduction technology, Gulf Power Company will implement, begin and continue operating the SCR system by December 31, 2007. [Paragraph 2 of the Agreement]}

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

Certified Mail

August 3, 2005

RECEIVED
AUG 08 2005
BUREAU OF AIR REGULATION

Mr. Jonathan Holtom, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Mail Station # 5505
Tallahassee, Florida 32399-2400

Dear Mr.Holtom:

RE: CRIST ELECTRIC GENERATION FACILITY
DEP File No. 0330045-012-AC
Air Construction Permit for SCNR - Public Notice Affidavit

Thanks for the quick response to Gulf Power's request for an air construction permit to install SNCR on Unit 6 at Plant Crist. Enclosed is the proof of publication, i.e.,newspaper affidavit regarding the Public Notice of Intent to Issue An Air Construction Permit originally sent to to Gulf Power on July 19, 2005. The notice was published on July 29, 2005 in the Pensacola News Journal.

Please let me know if you have any questions regarding this matter and if you receive any public comments regarding our request.

Sincerely,

G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor

Cc: Jim Vick, Gulf Power Company
Terry Wright, Gulf Power Company
John Dominey, Gulf Power Company
Sandra Veazey, FDEP, Northwest District

PENSACOLA News Journal
Informed. In Tune. In Touch.

ublished Daily-Pensacola, Escambia County, FL

PROOF OF PUBLICATION

State of Florida

County of Escambia:

Before the undersigned authority personally appeared Kay Chastain, who on oath, says that she is a personal representative of the Pensacola News Journal, a daily newspaper published in Escambia County, Florida; that the attached copy of advertisement, being a Legal in the matter of :

NOTICE OF INTENT

Was published in said newspaper in the issue(s) of:

JULY 29, 2005

Affiant further says that the said Pensacola News Journal is a newspaper published in said Escambia County, Florida, and that the said newspaper has heretofore been published in said Escambia County, Florida, and has been entered as second class matter at the Post Office in said Ecambia County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says the she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before me this 01day of AUGUST, 2005, by Kay Chastain who is personally known to me.

Kay Chastain Affiant

Nikki E. Nichols Notary Public

NIKKI E. NICHOLS
Notary Public-State of FL
Comm. Exp. Aug. 01, 2009
Comm. No. DD 427341

PUBLIC NOTICE OF INTENT TO ISSUE

Bureau of Air Regulation
Draft Air Permit No. 0330045-012
Gulf Power Company - Crist Electric Gen
Escambia County

Applicant: The applicant for this project is Gulf Pov Place, Pensacola, Florida 322520. The applicant's auth Dwain Waters, Q.E.P., Air Quality Programs Supervisor.

Facility Location: The applicant proposes to cons catalytic reduction (SNCR) system on Unit 6 at the existi Plant, which is located on Pate Road, off of 10 Mile Rc Pensacola, Escambia County, Florida.

Project: The applicant proposes to install a select (SNCR) system on the existing Unit 6 for the purpose (NOX) emissions from the facilty. The project is not expe cant increases of collateral pollutants. The NOX reductic comply with the new facility-wide NOX emissions limit of quired by the Agreement For The Purpose Of Ensuring C bient Air Quality Standards, dated August 28, 2002.

Permitting Authority: Applications for air constructio view in accordance with the provisions of Chapter 403, Chapters 62-4, 62-210, and 62-212 of the Florida Admini proposed project is not exempt from air permitting requ Is required to perform the proposed work. The Bureau mitting Authority responsible for making a permit deterr ect. The Permitting Authority's physical address is: 111 S hassee, Florida 32301. The Permitting Authority's mail Stone Road, Mail Station 5505, Tallahassee, Florida 32 Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for p normal business hours of 8:00 a.m. to 5:00 p.m., Monda gal holidays), at address indicated above for the Permitti project file includes the Draft Permit, the Technical Evalua mination, the application, and the information submitted of confidential records under Section 403.111, F.S. Intere the Permitting Authority's project review engineer for a address and phone number listed above. A copy of the available at the Department of Environmental Protection at 160 Governmental Center, Pensacola, Florida 32501-5 8364).

Notice of Intent to Issue Air Permit: The Permitting intent to issue an air permit to the applicant for the proj applicant has provided reasonable assurance that ope ment will not adversely impact air quality and that the prc propriate provisions of Chapters 62-4, 62-204, 62-210, 6 F.A.C. The Permitting Authority will issue a Final Permit ir ditions of the proposed Draft Permit unless a timely pe hearing is filed under Sections 120.569 and 120.57, F.S. or ceived in accordance with this notice results in a differe change of terms or conditions.

Comments: The Permitting Authority will accept written proposed Draft Permit for a period of fourteen (14) days f of this Public Notice. Written comments must be provide ty at the above address. Any written comments filed will lic inspection. If written comments received result in a Draft Permit, the Permitting Authority shall revise the Dra plicable, another Public Notice.

Petitions: A person whose substantial interests are affe mitting decision may petition for an administrative hearin tions 120.569 and 120.57, F.S. The petition must contain t low and must be filed with (received by) the Departmen fice of General Counsel of the Department of Environ Commonwealth Boulevard, Mail Station #35, Tallahassee, tions filed by any persons other than those entitled to w 120.60(3), F.S. must be filed within fourteen (14) days of p tice or receipt of a written notice, whichever occurs first F.S., however, any person who asked the Permitting Aut action may file a petition within fourteen (14) days of rec less of the date of publication. A petitioner shall mail a co plicant at the address indicated above, at the time of filir son to file a petition within the appropriate time period s that person's right to request an administrative determin tions 120.569 and 120.57, F.S., or to intervene in this pro a party to it. Any subsequent intervention will be only at ing officer upon the filing of a motion in compliance with F

A petition that disputes the material facts on which the P is based must contain the following information: (a) The agency affected and each agency's file or identification name, address and telephone number of the petitioner; t phone number of the petitioner's representative, if any, for service purposes during the course of the proceedi how the petitioner's substantial rights will be affected by (c) A statement of how and when the petitioner received tion or proposed action; (d) A statement of all disputed there are none, the petition must so state; (e) A concise facts alleged, including the specific facts the petitioner co modification of the agency's proposed action; (f) A state or statutes the petitioner contends require reversal or m proposed action; and, (g) A statement of the relief sough precisely the action the petitioner wishes the agency to agency's proposed action. A petition that does not dispu which the Permitting Authority's action is based shall stat dispute and otherwise shall contain the same information quired by Rule 28-106.301, F.A.C.

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Bureau of Air Regulation
Draft Air Permit No. 0330045-012-AC
Gulf Power Company - Crist Electric Generating Plant
Escambia County

Applicant: The applicant for this project is Gulf Power Company, One Energy Place, Pensacola, Florida 322520. The applicant's authorized representative is G. Dwain Waters, Q.E.P., Air Quality Programs Supervisor.

Facility Location: The applicant proposes to construct a new selective non-catalytic reduction (SNCR) system on Unit 6 at the existing Crist Electric Generating Plant, which is located on Pate Road, off of 10 Mile Road on Governors Bayou in Pensacola, Escambia County, Florida.

Project: The applicant proposes to install a selective non-catalytic reduction (SNCR) system on the existing Unit 6 for the purpose of reducing nitrogen oxide (NOX) emissions from the facilty. The project is not expected to result in any significant increases of collateral pollutants. The NOX reduction is being made in order to comply with the new facility-wide NOX emissions limit of 0.2 lb/MMBtu that was required by the Agreement For The Purpose Of Ensuring Compliance With Ozone Ambient Air Quality Standards, dated August 28, 2002.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department of Environmental Protection's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794 (Telephone: 850/595-8364).

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

Certified Mail

August 3, 2005

RECEIVED
AUG 08 2005
BUREAU OF AIR REGULATION

Jonathan Holtom, P.E.
Florida Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Dear Mr. Holtom:

RE: CRIST ELECTRIC GENERATING PLANT
PROPOSED UNIT 6 SNCR CONSTRUCTION PERMIT
AIR PERMIT NO. 0330045-012-AC

Please find enclosed Gulf Power's response to FDEP's proposed construction permit of the installation and operation of the Crist Unit 6 SNCR.

We appreciate your efforts to work with us regarding the startup of the Crist emission control systems. Please call me regarding any additional questions or concerns.

Sincerely,

G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor

cc: w/att: Jim Vick, Gulf Power Company
Terry Wright, Gulf Power Company
John Dominey, Gulf Power Company
Greg Terry, Gulf Power Company
David Hollinger, Southern Company Services
Gary Perko, Hopping, Green & Sams
Sandra Veazey, FDEP Northwest District Office, Pensacola, Florida

GULF POWER COMPANY
Plant Crist Unit 6 SNCR Draft Permit Comments
Air Construction Permit: 0330045-012-AC
August 2, 2005

Section 3 Emissions Unit Specific Condition Comments:
1) (Page 5): Replace Ammonia with Urea at the top of the page.

2) (Page 5): Urea Injection System: Replace 450,000 with 45,000 gallon tank.

3) (Page 5): Item 4. Project Completion: Replace May 1, 2005 with May 1, 2006.

4) (Page 6): Gulf Power has concerns regarding the effective date for the plant-wide NOx emission standard as the startup of the SNCR. Gulf requests the effective date be established as "May 1, 2006" in order to include options to operate Crist 2 and 3 until May 1, 2006 and to grant extra time for SNCR installation if and as needed for Crist 4 & 5 as outlined in our control strategy. The objective of the FDEP-Gulf Ozone Agreement is to reduce emissions by the beginning of the Ozone season (May 1).

5) (Page 6): Item 6: Nitrogen Oxide, Compliance Tests: Current design plans do not have inlet ports for concurrent testing of the inlet and outlet. Gulf Power does not plan on monitoring inlet NOx emissions. Gulf requests the test conditions be revised to utilize the standard stack test location comparing a baseline test to SNCR operation (i.e. SNCR off to on) to demonstrate the 20% reduction specification as an initial test only.

Technical Evaluation and Preliminary Determination
1) (Page 5): Selective Non-Catalytic Reduction (SNCR): Replace Ammonia with Urea at in the first sentence.

2) (Page 5): Urea Injection System: Replace 450,000 with 45,000 gallon tank.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

July 18, 2005

Mr. G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor
Gulf Power Company
One Energy Place
Pensacola, Florida 32520

Re: Air Construction Permit No. 0330045-012-AC
Gulf Power Company- Crist Electric Generating Plant
Unit 6 SNCR Project

Dear Mr. Waters:

On January 25, you submitted an application for an air permit to construct a selective non-catalytic reduction (SNCR) system on Unit 6 for the purpose of reducing nitrogen oxide (NO_X) emissions in order to comply with the requirements of the Agreement For The Purpose Of Ensuring Compliance With Ozone Ambient Air Quality Standards, dated August 28, 2002. The equipment will be installed at the Crist Electric Generating Plant, which will is located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit".

The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a Draft Permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jonathan Holtom, P.E., at (850) 921-9531.

Sincerely,

Trina L. Vielhauer

Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jh

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

Mr. G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor
Gulf Power Company
One Energy Place
Pensacola, Florida 32520

Draft Air Permit No. 0330045-012-AC
Crist Electric Generating Plant
Unit 6 SNCR Project
Escambia County, Florida

Facility Location: The applicant proposes to construct a new selective non-catalytic reduction (SNCR) system on Unit 6 at the existing Crist Electric Generating Plant, which is located on Pate Road, off of 10 Mile Road on Governors Bayou in Pensacola, Escambia County, Florida.

Project: The applicant proposes to instal an SNCR system on Unit 6. Details of the project are provided in the in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Department of Environmental Protection is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 S. Magnolia Drive, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 7/19/05 to the persons listed below.

G. Dwain Waters, Q.E.P., Gulf Power Company*
Gregory N. Terry, P.E., Gulf Power Company
Kevin White, P.E., DEP-NWD
EPA Region 4 (if necessary)

Clerk Stamp

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

Mary F. Harvey 7/19/05
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Bureau of Air Regulation
Draft Air Permit No. 0330045-012-AC
Gulf Power Company – Crist Electric Generating Plant
Escambia County

Applicant: The applicant for this project is Gulf Power Company, One Energy Place, Pensacola, Florida 322520. The applicant's authorized representative is G. Dwain Waters, Q.E.P., Air Quality Programs Supervisor.

Facility Location: The applicant proposes to construct a new selective non-catalytic reduction (SNCR) system on Unit 6 at the existing Crist Electric Generating Plant, which is located on Pate Road, off of 10 Mile Road on Governors Bayou in Pensacola, Escambia County, Florida.

Project: The applicant proposes to install a selective non-catalytic reduction (SNCR) system on the existing Unit 6 for the purpose of reducing nitrogen oxide (NO_X) emissions from the facilty. The project is not expected to result in any significant increases of collateral pollutants. The NO_X reduction is being made in order to comply with the new facility-wide NO_X emissions limit of 0.2 lb/MMBtu that was required by the Agreement For The Purpose Of Ensuring Compliance With Ozone Ambient Air Quality Standards, dated August 28, 2002.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department of Environmental Protection's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794 (Telephone: 850/595-8364).

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

(Public Notice to be Published in the Newspaper)

Department of
Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

P.E. Certification Statement

Permittee:
Gulf Power Company
Crist Electric Generating Plant

DRAFT Construction Permit No.: 0330045-012-AC
Facility ID No.: 0330045

Project: Minor Air Construction Permit to Install SNCR on Unit 6.

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

Jonathan K. Holtom

7/15/05

Jonathan K. Holtom, P.E.
Registration Number: 0052664

Date

Permitting Authority:
Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114
Fax: 850/922-6979

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Draft Air Construction Permit No. 0330045-012-AC
Crist Unit 6 SNCR Project

COUNTY

Escambia County

APPLICANT

Gulf Power Company
Crist Electric Generating Plant
ARMS Facility ID No. 0330045

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

July 15, 2005

{Filename: Crist 6 SNCR TEPD}

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Gulf Power Company – Crist Electric Generating Plant
One Energy Place
Pensacola, FL 32520-0328

Authorized Representative:
Penny M. Manuel

Processing Schedule

01/25/05 Received the application for a pollution control project.

02/24/05 Department requested additional information.

06/02/05 Department received additional information.

Facility Description and Location

Gulf Power Company operates the existing Crist Power Plant, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. This site is in an area that is currently in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

Standard Industrial Classification Code (SIC)

SIC No. 4911 – Electrical Services

Regulatory Categories

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

Project Description

On August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titled, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards" (Agreement). The purpose of the agreement is to support continuing efforts to maintain compliance with the ambient air quality standard for ozone in the Escambia County area. In brief, Gulf Power Company agreed to:

- Construct and operate a new electrostatic precipitator (ESP) for Crist Unit 7;
- Construct and operate a new selective catalytic reduction (SCR) system for Crist Unit 7;
- Ultimately retire Crist coal-fired Units 1, 2, and 3; and
- Employ additional NO_X reduction techniques for one or more of the remaining coal-fired Units 4, 5, and 6.

The agreement was contingent on approval from the Public Service Commission to recover costs from the ratepayers related to the pollution control projects, which became final November 18, 2002. The approval was granted and Gulf Power Company submitted an application for an air permit to install the new ESP and SCR for Crist Unit 7. The Unit 7 project met its schedule and was completed in May 2005.

Emissions unit 1 was permanently retired on March, 31, 2003. Emissions units 2 and 3 will be retired by May, 2006.

The focus of this project is to initiate compliance with the last part of the Agreement. Gulf Power has proposed to install SNCR on Unit 6 in order to gain additional NO_X reductions. Depending on the resulting reductions achieved, further NO_X controls may still be required for Units 4 and/or 5 in order to fully comply with the Agreement.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). In general, this project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Testing, Continuous Monitoring, and Alternate Sampling Procedures

{Note: The project is not subject to Florida's Power Plant Siting Act because there will be no change in steam-generated electrical capacity.}

General PSD Applicability

The Department regulates major air pollution sources in accordance with the Prevention of Significant Deterioration (PSD) program, as delegated by the EPA for electric utilities. A PSD review is required only in areas currently in attainment with the National Ambient Air Quality Standard (NAAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories (Table 62-212.400-1, F.A.C.), or
- 5 tons per year of lead.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in Table 62-212.400-2, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant". The applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The Department's Rule 62-212.400(2)(a)2, F.A.C. exempts certain pollution control projects from the requirements of PSD review. Subparagraph "a" of this rule states that, "A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule." This federal rule defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. However, it also specifically states that a physical change or change in the method of operation shall not include the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless it is determined that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

1. There is reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and
2. It is determined that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.

The addition of the SNCR system is not considered a pollution control project because there are no expected significant increases of a collateral pollutant. This project is considered a minor modification that will result in a reduction of NO_X emissions. The project is not expected to result in, nor does it authorize, an increase in the capacity utilization of Unit 6; and, uncontrolled representative actual emissions are not expected to be any different than past actual emissions. Based on the information reported on the previous two annual operating reports, the average NO_X emissions rate has been approximately 0.47 lb/MMBtu, or 4,674 tons per year. However, following the replacement of the low-NO_X burners on Unit 6 (performed prior to this SNCR project), Gulf Power has stated that the NO_X emissions rate prior to the injection of urea has been reduced to 0.35 lb/MMBtu (which is equivalent to 3,481 tons per year at current levels of utilization). At the manufacturer's guaranteed 20% reduction, Gulf Power expects the resultant NO_X emissions rate to be as low as 0.28 lb/MMBtu. This will result in a reduction of approximately 697 tons per year of NO_X directly attributable to the addition of SNCR on Unit 6. It should be noted that this is the level of reduction that could be observed if the SNCR were to be utilized at all times that Unit 6 is in operation. However, the Agreement does not require that a particular control device must be used continuously; it only requires that a facility-wide NO_X emissions limit of 0.2 lb/MMBtu be met. The Department believes that the proposed NO_X reduction project will be environmentally beneficial and will not result in a significant net increase in representative actual annual emissions of any criteria pollutant. As such, this project is exempt from the requirements of PSD preconstruction review. Nevertheless, an air construction permit is required to conduct the proposed work.

3. APPLICATION REVIEW

Crist Unit 6 (ARMS Emissions Unit -006) is a 369 MW Foster Wheeler front wall-fired, dry bottom boiler. The maximum heat input rate is 3,704.8 MMBtu per hour while combusting the primary fuels of pulverized bituminous coal and/or natural gas. Distillate oil and on-specification used oil fuel are also combusted as a secondary fuels for periods of start-up and flame stabilization. Emissions of particulate matter are currently reduced by a Wheelabrator (model # HaRDE) cold side electrostatic precipitator. Nitrogen oxides are controlled with low NO_X burners. Unit 6 has continuous monitors for opacity, stack gas flow, carbon dioxide, nitrogen oxides, and sulfur dioxide. Units 6 and 7 share a common stack that is 23.2 feet in diameter and 450 feet high. Based on the current Title V air operation permit, Unit 6 is subject to Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input), predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review), and is regulated under Phase I of the federal Acid Rain Program.

The applicant proposes to perform the following work on Unit 6:

Boiler Parameters

As a direct result of the pollution control project, the following boiler components will be modified: 6 urea injectors will be installed spaced across the front of the boiler at an elevation of 171'-3". The proposed changes will not increase emissions nor add to the capacity of Unit 6. The materials of construction should be carefully selected to inhibit corrosion.

Selective Non-Catalytic Reduction (SNCR)

Unit 6 currently uses low NO_X burners to inhibit the formation of NO_X. Gulf Power Company proposes to add a new SNCR system manufactured by Fuel Tech, Inc. SNCR is an add-on control technology in which ammonia is injected into the exhaust gas stream in an area of the duct where the stack gas temperature is in the range of 1,600 – 2,100 °F. The ammonia combines with NO_X in the gas stream to form nitrogen and water. Ammonia that escapes the stack without reacting with NO_X is called "ammonia slip". If a fuel contains significant amounts of sulfur, high levels of ammonia slip can lead to the formation of bisulfates and other particulate matter. To avoid these problems, SNCR systems can be designed with very low levels of ammonia slip (< 5 ppmv) while still achieving control efficiencies in the range of up to 75%. SNCR is a commercially available, demonstrated control technology currently employed on numerous utility boilers and combined cycle gas turbine projects worldwide.

Design Specifications

The following specifications summarize the preliminary design of the proposed new SNCR system.

- *Basic Design Specifications*: The SNCR system is designed for a maximum NO_X conversion efficiency of 25% based on an inlet NO_X emissions rate of 0.35 lb/MMBtu, with a guaranteed removal efficiency of 20%.
- *Urea Storage and Mixing*: Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 450,000 gallon tank. This will provide a minimum of 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.
- *Ammonia Slip*: The SNCR is designed and guaranteed to have 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, a wet chemical method will be utilized. More frequent tracking of ammonia slip will be monitored by measuring the amount of residual ammonia adsorbed by the fly ash. Fly ash samples will be measured periodically using an ion-specific electrode.
- *Urea Injection and Control System:* Using plant service water or other dilution water source, the metering module dilutes the reagent to a predetermined concentration (somewhat less than 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 171'-3". At peak load for Unit 6, with 0.35 lb/MMBtu inlet NO_X and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.

SNCR Operation

The SNCR will operate as needed to meet the facility 0.20 lb/MMBtu NO_X plant-wide emissions limit. During these periods, the SNCR will operate whenever the Unit is operating at or above its normal low

load level. If the unit drops below this level, the SNCR system will automatically stop injection until the Unit returns to its low load level.

Conclusion

While the design specifications will result in NO_X conversion efficiency quite a bit lower than can typically be expected for similar SNCR projects, based on the application, the preliminary design appears capable of achieving a minimum guaranteed NO_X conversion efficiency of 20%. Gulf Power believes that this lower level of efficiency will be sufficient to comply with the facility-wide NO_X emissions cap of 0.20 lb/MMBtu, as required by the Agreement.

The draft permit requires continuous monitoring to demonstrate compliance with the standards for NO_X emissions. Annual performance testing is required for NO_X reduction efficiency, and ammonia slip. Quarterly reports are required to summarize compliance with the NO_X standards.

4. PRELIMINARY DETERMINATION

The NO_X reduction project is based on the design and operation of conventional SNCR air pollution control equipment. This type of air pollution control device is operating successfully on numerous coal-fired utility boilers throughout the world.

The Department makes a preliminary determination that the proposed project will comply with the terms of the Agreement and all existing applicable air pollution regulations. However, it is still possible that additional measures may need to be taken to reduce NO_X emissions from Units 004 and 005 if it turns out that the addition of the SNCR on Unit 006 is not quite sufficient to allow the facility to comply with the facility-wide limit. This determination is based on a technical review of the application, the preliminary design, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jonathan Holtom is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

REFERENCES

1. Data Compiled from the Department's ARMS Database
2. EPA's White Paper, "Selective Non-Catalytic Reduction (SNCR) For Controlling NO_X Emissions", Prepared By: SNCR Committee, Institute Of Clean Air Companies, Inc., May 2000.

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328

Authorized Representative:
G. Dwain Waters, Q.E.P., Air Quality Programs Supervisor

Crist Electric Generating Plant
Unit 6 SNCR Project
Facility ID No. 0330045
SIC No. 4911
Air Permit No. 0330045-012-AC
Permit Expires: September 1, 2006

PROJECT AND LOCATION

This permit authorizes the construction of a new new selective non-catalytic reduction system for Unit 6 at the existing Crist Electric Generating Station, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. The map coordinates are: Zone 16; 478.50 km East; and 3381.30 km North.

STATEMENT OF BASIS

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

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The existing plant consists of six fossil fuel fired steam generators and two fly ash silos. Natural gas is the primary fuel for Units 2 and 3. Pulverized coal is the primary fuel for Units 4, 5, 6 and 7. Fuel oil is used as supplemental fuel in all six of the units. The following units are affected by this air construction permit.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

RELEVANT DOCUMENTS

Agreement For The Purpose Of Ensuring Compliance With Ozone Ambient Air Quality Standards, dated August 28, 2002. (Attached and made part of this permit as Appendix NA – NO_X Agreement.)

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794.

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); Appendix GC (General Conditions); Appendix NA (NO_X Agreement); and, Appendix SC (Standard Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-4, 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Construction Approval: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Rule 62-210.200(76), F.A.C. defines *construction* as, "The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities." Such permits shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit (revision) at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

Emissions Units 002 - 007

This section of the permit addresses the following existing emissions units, with an emphasis on Unit 006.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit**) (to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit**)**

Emissions Unit No. 006

Description: Unit 6 is a Foster Wheeler front wall-fired, dry bottom boiler that began commercial operation on May 1, 1970.

Fuels: coal, natural gas, new No. 2 fuel oil and/or on-specification used oil, and occasional on-site generated "oil contaminated soil".

Capacity: 3,704.8 MMBtu/hour when firing pulverized coal and/or natural gas.

PM Controls: Cold side electrostatic precipitator.

NOx Controls: Low NO_X burners and selective non-catalytic reduction (SNCR).

Continuous Monitors: CO_2, NO_X, SO_2, opacity, stack gas flow, and urea injection rate.

Stack Parameters: Units 6 shares a common stack with Unit 7 that is 450 feet tall with a diameter of 23.2 feet. The volumetric flow rate of Unit 6 & 7 combined, at permitted capacity, is approximately 2,462,700 acfm.

{Permitting Notes: Based on the current Title V air operation permit, Unit 6: is regulated under Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input); predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review); and is regulated under Phase I of the federal Acid Rain Program (40 CFR 75).}

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

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND CONSTRUCTION

2. Selective Non-Catalytic Reduction (SNCR) System: The permittee shall construct, tune, operate, and maintain a new SNCR system for Unit 6 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 an 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 ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.

{Permitting Note: Fuel Tech, Inc. designed the new SNCR system, which will generally consist of the following:

- ***UREA Injection System:*** Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 450,000 gallon tank. This will provide a minimum of 7 days operating inventory. The solution will be maintained at a temperature of aproximately 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 concetration (somewhat less than 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 171'-3". At peak load for Unit 6, with 0.35 lb/MMBtu inlet NO_X and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.
- ***Ammonia Slip:*** The SNCR is designed and guaranteed to have 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, a wet chemical method will be utilized. More frequent tracking of ammonia slip will be monitored by measuring the amount of residual ammonia adsorbed by the fly ash. Fly ash samples will be measured periodically using an ion-specific electrode.

[Design; Paragraph 2 of the Agreement; Rule 62-204.800, F.A.C.; 40 CFR 68]

3. Updated Designs: The permittee shall update the Department with final design specifications and any substantial changes made to the final design specifications during the actual construction phase. [Rule 62-4.070(3), F.A.C.]

4. Project Completion: The permittee shall complete construction and commence operation of the new SNCR system by May 1, 2005. [Applicant Request; Design; Paragraph 2 of the Agreement]

PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any specifications or limitations included in previous permits that define permitted capacities such as heat input rates, fuel consumption, or hours of operation. It does not authorize any additional fuels or such other methods of operation.}

EMISSIONS STANDARDS

5. Plant-Wide NO_X Limit: Emissions of nitrogen oxides (NO_X) from the combined operation of Units 4, 5, 6, and 7 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit 7 is shutdown. The plant-wide daily NO_X emission rate shall be determined by the following equation:

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

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 7. The plant-wide 30-day rolling NO_X 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 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 Condition No. 9 of Subsection 3A of permit 0330045-005-AC, 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 7 and the SNCR system for Unit 6. The effective date for the plant-wide NO_X emission standard is the startup date of the SNCR system on Unit 6, but no later than May 1, 2006.

For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of this air construction permit. [Paragraphs 2, 3 and Exhibit B of the Agreement]

EMISSIONS PERFORMANCE TESTING

6. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification shall include: the scheduled date, approximate start time, test team, contact name and phone number, description of unit to be tested, and the tests to be performed. [Rule 62-297.310(7)(a)9, F.A.C.]

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall concurrently test the SNCR inlet and SNCR 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 SNCR outlet. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

8. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA. Subsequent tests shall be conducted during each federal fiscal year. If tests show ammonia slip emissions are greater than the design target level specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, addition of urea injectors for better mixing, addition of mixing vanes in the duct, etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

{Permitting Note: EPA Methods 1 (Traverse Points), 2 (Velocity and Flow Rate), 3 (Gas Analysis), 4 (Moisture Content), and 19 (Calculating Emission Rates, Use of F-Factors) may also be used to supplement the required test methods.}

CONTINUOUS MONITORING REQUIREMENTS

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

9. 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 6 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.* [Rule 62-4.070(3), F.A.C.]

10. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, 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. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

RECORDS AND REPORTS

11. 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, and the urea injection rate (lb/hour). The report shall also include copies of the continuous monitoring records for the NO_X emissions. [Rule 62-297.310(8), F.A.C.]

    a. Quarterly Report: For each calendar day during the reporting quarter, the permittee shall report the following information related to the operation of Units 4, 5, 6 & 7:

    - Hours of operation for each Unit;
    - The Unit # daily MMBtu for each Unit (see Condition 5 of this Subsection);
    - The Unit # daily NO_X CEMS rate for each Unit, lb/MMBtu (see Condition 5 of this Subsection);
    - The Plant-Wide Daily MMBtu-Weighted NO_X Emission Rate (see Condition 5 of this Subsection);
    - The 30-day plant-wide average NO_X emission rate, lb/MMBtu;
    - Identify whether Unit 7 operated less than 18 hours;
    - Identify the occurrence of a Unit 7 startup or shutdown;
    - Whether or not the day included a startup, shutdown, or malfunction of the SNCR or SCR systems; and,
    - Identify operation of Unit 7 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 6 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.

    Each quarterly report is due within 30 days of the calendar quarter being reported.

    [Rule 62-4.070(3), F.A.C.; NO_X Agreement, Exhibit "B"]

C. Appendix SC – Standard Conditions

Appendix CF - Citation Format;

Appendix GC - General Conditions;

Appendix NA - NO_X Agreement; and,

Appendix SC - Standard Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001"identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

Agreement

On August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titled, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards". Throughout the permit, this is cited as the "Agreement".

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable to project);
    b. Determination of Prevention of Significant Deterioration (not applicable to project); and
    c. Compliance with New Source Performance Standards (not applicable to project).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

August 29, 2002

Ms. Blanca S. Bayo, Director
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

020943-EI

Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Petition for Approval of FDEP/Gulf Power Company Agreement Pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for Purposes of Cost Recovery of the Related Expenditures and Expenses through the Environmental Cost Recovery Clause.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Petition in Microsoft Word format as prepared on a Windows NT based computer.

Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

cc: Beggs and Lane
Jeffrey A. Stone, Esquire

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	Docket No. 02_____-EI Date Filed: August 30, 2002

PETITION FOR APPROVAL OF FDEP/GULF POWER AGREEMENT PURSUANT TO SECTION 366.8255(1)(d)7 OF THE FLORIDA STATUTES FOR PURPOSES OF COST RECOVERY OF THE RELATED EXPENDITURES AND EXPENSES THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE

GULF POWER COMPANY ("Gulf Power", "Gulf", or "the Company"), by and through its undersigned counsel, and pursuant to Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session and Florida Public Service Commission ("Commission") Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, hereby petitions this Commission for approval of the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" ("Ozone Agreement") entered into on August 28, 2002 between the Florida Department of Environmental Protection ("FDEP") and Gulf Power as a new program for cost recovery through the Environmental Cost Recovery Clause ("ECRC"). As grounds for the relief requested by this petition, the Company would respectfully show:

(1) Notices and communications with respect to this petition and docket should be addressed to:

Jeffrey A. Stone
Russell A. Badders
Beggs & Lane
P. O. Box 12950
Pensacola, FL 32591-2950

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780

(2) Gulf is a corporation with its headquarters located at 500 Bayfront Parkway, Pensacola, Florida 32501. The Company is an investor-owned electric utility operating under the jurisdiction of this Commission.

(3) Gulf owns and operates the Crist Plant generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuels. The combustion of fossil fuels produces nitrogen oxides ("NOx"), which are some of the precursor compounds that contribute to the formation of ozone in the ambient air. The Crist Plant currently satisfies all federal and state air emissions requirements, including those applicable to NOx.

(4) Under the authority of the Clean Air Act, the United States Environmental Protection Agency ("USEPA") promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period ("Ozone Standard"). Based upon the best available information, including ambient air quality monitoring data, FDEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area ("PFMPA").

(5) In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with FDEP or USEPA, for the purpose of ensuring compliance with ozone ambient air quality standards. The

legislation, which was sponsored in the Florida House by Representative Jerry Maygarden of Pensacola and in the Florida Senate by Senator Charlie Clary of Destin, and was supported during the legislative session by FDEP Secretary David Struhs and Florida Governor Jeb Bush, was signed into law by Governor Bush on May 23, 2002. In order to qualify for recovery through the ECRC, the agreement between the electric utility and the qualifying environmental agency for the purpose of ensuring compliance with ozone ambient air quality standards must be entered into on or after May 23, 2002 and prior to October 1, 2002.

(6) Representatives of FDEP and Gulf have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended by Chapter 2002-276 of the Laws of Florida. A copy of the resulting Ozone Agreement, which was signed by the parties on August 28, 2002, is attached to and made a part of this petition as Appendix A.

(7) The Ozone Agreement calls for Gulf Power to make changes in its equipment and/or operations at Plant Crist. Such changes are designed to reduce the overall NOx emission rate at the plant as part of a community wide effort to reduce ozone precursor compounds in the PFMPA. When fully implemented, the Ozone Agreement will limit the overall 30 day average NOx emission rate at Plant Crist to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit No. 7 ("Crist 7") is offline.[1] The predominant change envisioned by the agreement is the

[1] As the largest and most efficient of seven generating units at Plant Crist, Crist 7 is generally the economic choice to be operated. Whenever Crist 7 is offline, there is a greater reduction in NOx emissions than would otherwise result from operating Crist 7 with the new SCR. Since NOx reduction is the goal, the Ozone Agreement recognizes that the emission rate limit is not necessary when Crist 7 is not operating.

addition of Selective Catalytic Reduction ("SCR") technology to Crist 7 by May 1, 2005.[2] In addition to the NOx emission reductions that will occur as a result of the installation and operation of the Crist 7 SCR project, the Ozone Agreement also calls for further reductions in NOx emissions through the addition of NOx reduction technologies on one or more of the other coal-fired units at Plant Crist. The selection and installation of one or more additional NOx reduction technologies for one or more of the other units will follow engineering studies conducted as part of the Ozone Agreement.[3] The engineering studies contemplated by the Ozone Agreement are intended to produce unit specific cost and performance data that will allow Gulf to make a decision between various alternatives based on the relative cost-effectiveness of each technology. To augment the NOx reductions envisioned from the addition of the NOx reduction technologies discussed above, the Ozone Agreement also calls for the retirement of the three oldest Crist generating units (Crist 1, Crist 2 and Crist 3) by May 1, 2006.

(8) As shown in the graph set forth in Appendix B to this petition, the annual NOx emission reductions envisioned by the Ozone Agreement, as compared to 1999 baseline data, are equivalent to a result that could otherwise be achieved by the installation of SCR technology on both Crist 7 and Crist 6. The flexibility to study other alternatives for achieving an overall plant

[2] Due to structural interference and performance concerns for the new SCR, the Ozone Agreement also calls for a new Crist 7 precipitator to be constructed at a new location in order to allow the new SCR to be built in the location of the old Crist 7 precipitator. The new SCR will be completed one year after construction of the new precipitator is completed.

[3] The deadline for installing other selected NOx reduction technologies is May 1, 2006 unless the cost effective choice is determined to be SCR technology for Crist 6. If SCR for Crist 6 is selected, the deadline for installation will be December 31, 2007. The Ozone Agreement calls for Gulf to obtain written concurrence from FDEP before implementing NOx reduction technology or technologies on one or more of the remaining coal-fired units at Plant Crist. The written concurrence from FDEP will specify that the use of the selected technology or technologies is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in the Ozone Agreement.

wide btu weighted average NOx emission rate of 0.2 lbs/mmbtu may allow Gulf to avoid the cost of installing SCR technology on Crist 6 for a net savings of as much as $50 million or more.

(9) Gulf seeks approval of the Ozone Agreement as an environmental compliance program/activity appropriate for recovery through the ECRC pursuant to the amendments to the Florida Statutes contained in Chapter 2002-276 of the Laws of Florida. This new program is appropriate for ECRC recovery based on the provisions of Section 366.8255(1)(d)7 of the Florida Statutes and the prior orders of the Commission implementing the ECRC.

(10) The Company's expenses and/or expenditures associated with the activities discussed in the Ozone Agreement are not recovered through any other cost recovery mechanism or through base rates. These new activities were not included in the Company's last test year forecast upon which its current base rates were established. As a result, the expenditures and/or expenses associated with these activities will be incurred separate and apart from the expenditures and/or expenses for activities that were approved in the Company's last test year forecast upon which rates are based.

(11) Gulf is not requesting a change in the ECRC factors as part of this petition. The projected expenditures and expenses will be reflected in subsequent true-up and/or projection filings submitted as part of the ongoing docket addressing the ECRC. The actual expenditures made and expenses incurred by the Company will be addressed in subsequent ECRC filings and will be subject to audit.

(12) The parties to the Ozone Agreement acknowledge that the NOx reduction activities identified therein are conditioned upon timely approval by this Commission for cost recovery through the ECRC. Given that substantial expenditures must be undertaken early in 2003 in order to meet the deadlines set forth in the Ozone Agreement, it is imperative that Gulf obtain an order from this Commission authorizing Gulf to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause that is rendered final within 90 days of the execution of the agreement.[4] If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules set forth in the Ozone Agreement are subject to revision solely by mutual agreement of the parties in order to allow Gulf to move forward with the activities described therein above pending a final order by the FPSC. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement automatically becomes null and void unless extended by mutual written agreement of the parties within 30 days thereafter. The net effect of these provisions is that delay in final rendition of an order approving the request made by this petition beyond the end of this year will either result in delay of the NOx emission reductions contemplated by the Ozone Agreement or cancellation of the agreement altogether. Either result will frustrate the intent underlying enactment of Chapter 2002-276 of the Laws of Florida which is to enable communities such as the PFMPA to avoid becoming classified as non-attainment areas for ozone ambient air quality standards with the consequential effects that may include imposition of emission caps that could limit expansion of business and industry, addition of required vehicle emission testing, and federal road funding cutbacks. As a result, Gulf respectfully requests that

[4] A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction.

the Commission take this petition up for consideration as Proposed Agency Action at the earliest opportunity. Towards that end, Gulf respectfully suggests that a Commission decision on this petition as Proposed Agency Action at the Commission Conference scheduled for October 1, 2002 followed by expedited entry of a PAA order would allow the traditional 21 day period for substantially affected parties to request a hearing to run in time for the Commission to hold a hearing, if requested, on November 20-22, 2002 as part of the proceedings in Docket No. 020007-EI related to the ECRC. Absent a request for hearing, such a PAA order will become final and begin the time for a substantially affected party to file a notice of appeal. If no such notice is filed, the resulting order will be rendered final and no longer subject to review or appeal within the deadlines specified by the Ozone Agreement. If a request for hearing is filed by an appropriate party, a Commission decision could still be issued and made final in the absence of an appeal before the Ozone Agreement would be rendered null and void by its own terms.

WHEREFORE, Gulf Power Company respectfully requests the Commission to approve the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" entered into on August 28, 2002 between the Florida Department of Environmental Protection and Gulf Power Company and the costs associated therewith for recovery through the

Environmental Cost Recovery Clause consistent with this petition, and that such approval and authorization be set forth in a Proposed Agency Action order issued by the Commission at the earliest practical opportunity or grant such other relief as is just and reasonable.

Respectfully submitted the 29th day of August, 2002.

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Appendix A

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

This agreement is entered into by the Florida Department of Environmental Protection (DEP) and Gulf Power Company (GULF), for the exclusive purposes as follows: (a) ensuring that GULF's electrical generating facility located within the Pensacola, Florida Metropolitan Planning Area (PFMPA) supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

WHEREAS:

I. GULF owns and operates the Crist Plant electrical generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuel. The combustion of fossil fuels produces some of the precursor compounds that contribute to the formation of ozone in the ambient air.

II. Under the authority of the Clean Air Act, the U. S. Environmental Protection Agency (EPA) promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period (Ozone Standard).

III. Based upon the best available information, including ambient air quality monitoring data, DEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area.

IV. In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with DEP or EPA, for the purpose of ensuring compliance with ozone ambient air quality standards.

V. Representatives of DEP and GULF have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session.

VI. DEP and GULF concur that installation of Selective Catalytic Reduction (SCR) controls at Crist Unit #7 as well as the implementation of other NOx reduction

technologies on one or more of the other three coal-fired generating units at Plant Crist will be needed as part of a community wide effort to reduce ozone precursor compounds in the Pensacola Metropolitan Planning Area. Due to structural interference and performance concerns for the new SCR, a new Unit #7 precipitator will also be constructed at a new location and the SCR will be completed one year later in the location of the old Unit #7 precipitator.

VII. It is anticipated that the implementation of this agreement will result in an approximately 61% reduction [9,188 tons] in annual NOx emissions from the GULF Crist Plant based upon 1999 baseline data.

NOW THEREFORE, in consideration of the premises and the mutual agreements contained herein, and intending to be legally bound, the DEP and GULF hereby agree as follows:

1. By May 1, 2005, GULF, after obtaining necessary permits and approvals, will install and begin and continue operating an SCR system at Crist Unit #7 whenever the Crist Unit #7 is online. The SCR system is designed to achieve no less than an 85% reduction in the quantity of nitrogen oxides as measured at the SCR unit inlet (SCR Project). The SCR Project includes the installation of a new precipitator necessary to structurally accommodate installation of the SCR. See Exhibit "A" for proposed project schedule.

2. In addition to the Crist Unit #7 SCR Project, and in order to achieve an overall plant wide Btu weighted average of 0.2 lbs/mmbtu NOx emission rate as further specified in paragraph 3 below, Gulf agrees to conduct engineering studies on the feasibility of other NOx reduction technologies on one or more of the remaining three coal-fired units at Plant Crist. Such 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 reburn technology, selective use of biomass fuel, etc. Gulf further agrees to complete these studies by May 1, 2005. In the event GULF identifies an SCR project for Crist Unit #6 as the NOx reduction technology, GULF will implement, begin and continue operating the SCR on Crist Unit #6 as described in paragraph 3 below by December 31, 2007. In the event GULF identifies a NOx reduction technology other than SCR on Crist Unit #6, GULF will select and implement one or more NOx reduction technologies on one or more of the three other Plant Crist coal-fired units by May 1, 2006. GULF will obtain written concurrence from DEP, before implementing such NOx reduction technology or technologies, that the use thereof is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in paragraph 3 below.

3. GULF will make necessary changes identified and within the timeframes set forth in paragraph 2 above, that will allow it to limit the overall 30 day average NOx emission rate at the Crist Plant to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit #7 is offline. The emission rate shall be calculated pursuant to the formula set forth in Exhibit "B" to this agreement. While Crist Unit #7 is online, this 0.2 lbs./mmbtu will be achieved by utilizing the SCR system on Crist Unit #7 [discussed in paragraph 1 above] and the controls identified pursuant to paragraph 2 above. During such time as Crist Unit #7 may be offline between May 1 and September 15, GULF agrees to operate any NOx reduction technology or technologies DEP may have determined to be reasonable and necessary at other Plant Crist coal-fired units, pursuant to paragraph 2 above, unless prevented from doing so by circumstances beyond its reasonable control.

4. In addition to the NOx emission rate reduction strategies implemented pursuant to paragraphs 1 through 3 above, as a further part of this agreement to support the PFMPA's compliance with the eight hour ozone ambient air quality standard, GULF agrees to retire Crist Unit #1 within 120 days of receiving a final order from the Florida Public Service Commission as provided in paragraph 8 below. In addition, GULF further agrees to retire Crist Unit #2 and Crist Unit #3 on or before May 1, 2006.

5. In the event state or federal law changes to require a change in NOx emissions or the PFMPA is declared non-attainment for ozone, any reduction requirements would be in accordance with all applicable state and federal requirements. In addition, although Florida currently has no state statute providing for NOx trading or credits, GULF shall be entitled to retain all NOx reduction credits and trading rights that may be authorized by Florida law in the future.

6. In the event the FPSC issues a final order authorizing GULF to recover costs incurred pursuant to this agreement, by July 5, 2004, GULF will submit a Title V renewal application to the Department's Bureau of Air Regulation, 2600 Blair Stone Rd, MS 5500, Tallahassee, FL 32399 to incorporate the control technologies contained in this agreement as well as the NOx emission rate as described in paragraphs 1 through 3 above. DEP concurs that the changes envisioned by this agreement will not constitute "modifications" that trigger New Source Review.

7. DEP concurs that the steps and changes described in paragraphs 1 through 4 above are prudent for purposes of (a) ensuring that GULF's electrical generating facility located within the PFMPA supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing

related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

8. This agreement is based upon the assumption that an order from the Florida Public Service Commission (FPSC) authorizing GULF to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause is rendered final (final order) within 90 days of the execution of the agreement. A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction. If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules herein are subject to revision solely by mutual agreement, in order to allow GULF to move forward with the activities described in paragraphs 1-4 above pending a final order by the FPSC. Gulf will exercise good faith in seeking approval of such cost recovery from the FPSC in a timely manner. DEP will support the efforts of GULF before the FPSC and in any subsequent review or appeal. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement shall automatically become null and void unless extended by mutual written agreement of the parties within 30 days thereafter.

9. This agreement shall bind the parties hereto and those whom they represent and may be modified only in writing with the consent of both parties.

10. This agreement is entered into and effective on the date of the last signature of the parties below.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: David B. Struhs

David B. Struhs
Secretary

Date: August 28, 2002

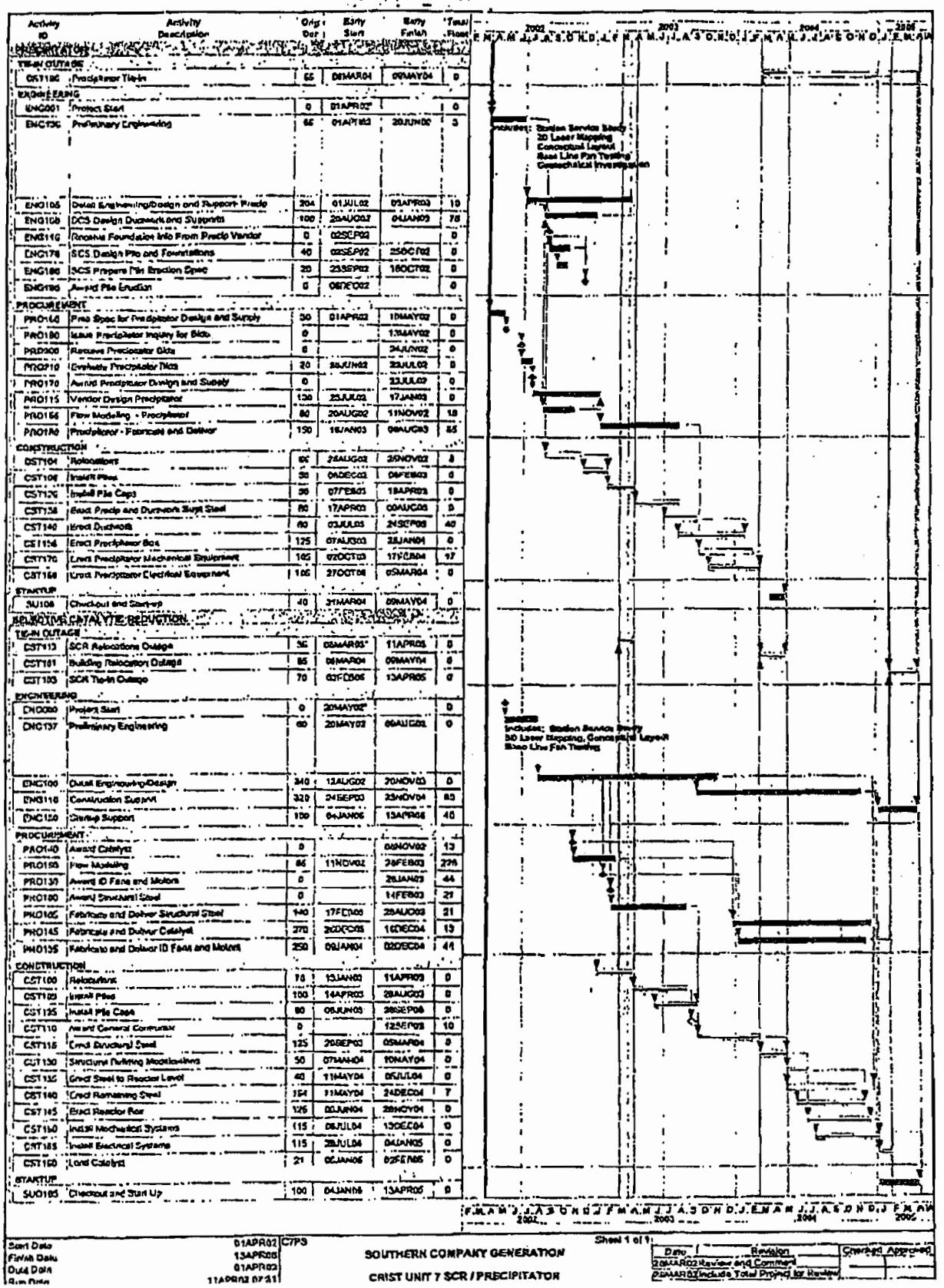
GULF POWER COMPANY

By: Thomas A. Fanning

Thomas A. Fanning
President and Chief Executive Officer

Date: August 28, 2002

EXHIBIT "A"



AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

Exhibit "B"

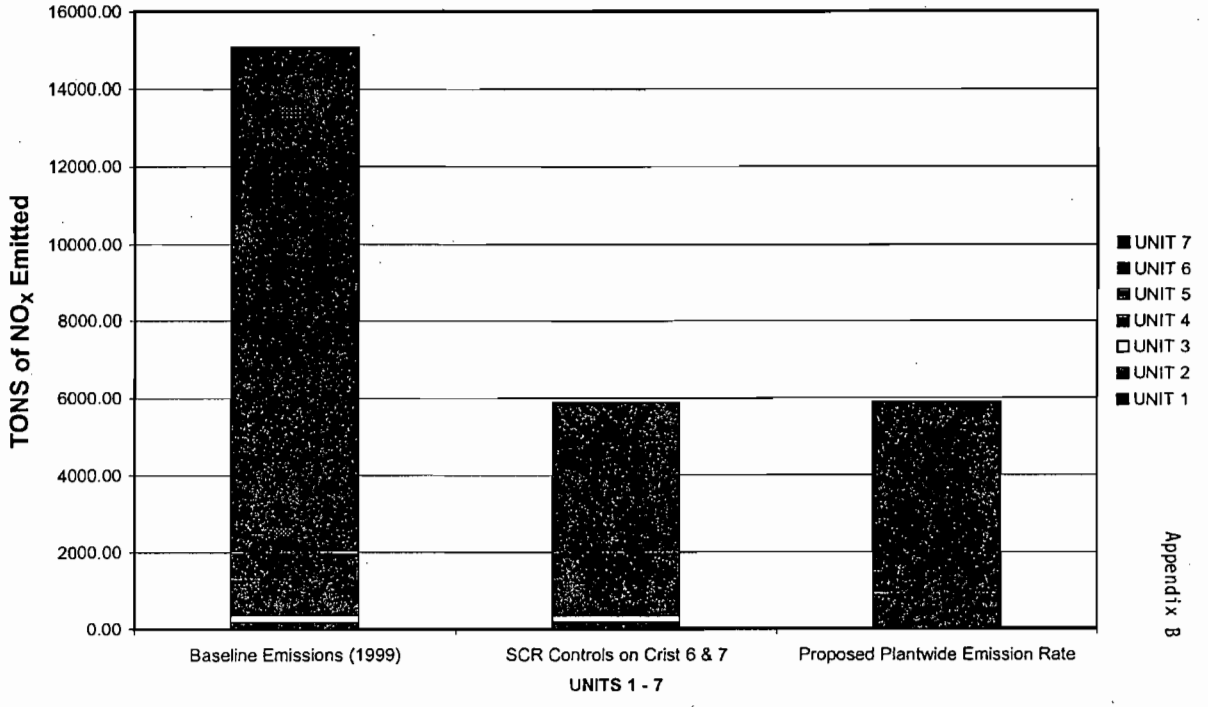
Gulf will measure its compliance with the emission rate limit set forth in paragraph 3 of this agreement by determining the Plant Crist NOx emission rate, when Crist Unit #7 has operated for 30 sequential days (which need not be consecutive) on a generating unit-specific btu weighted average basis pursuant to the following formula:

$$\text{plant wide daily mmbtu weighted NOx rate} = \frac{\sum_{\text{Units } 4,5,6,7} \left[\left(\text{Unit \# daily mmbtu}\right) \text{ X } \left(\text{24 hour avg unit \# NOx CEMs rate}\right)\right]}{\sum_{\text{Units } 4,5,6,7} \left(\text{Unit \# daily mmbtu}\right)}$$

For the purposes of this calculation, a Crist Unit #7 operating day means any calendar day that Crist Unit #7 is online a minimum of 18 hours.

Unit # daily mmbtu (heat input) in the foregoing formula is determined by Plant Crist's daily as-burned fuel analysis

Comparison of Crist Plant Emission Reduction Alternatives



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	)	Docket No. 02____-EI

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 29th day of August 2002 by U.S. Mail or hand delivery to the following:

Marlene Stern, Esquire
Staff Counsel
FL Public Service Commission
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Tallahassee FL 32399-0863

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Attorneys for Gulf Power Company

{Permitting Note: Unless otherwise specified by permit or rule, the following conditions apply to all emissions units and activities at this facility.}

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Unless otherwise specified in the permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

7. General Visible Emissions: Unless otherwise specified in the permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

8. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

9. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

10. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted

capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

11. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

12. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

    a. *Required Sampling Time.* 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

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

    c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    [Rule 62-297.310(4), F.A.C.]

13. 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.]

14. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

15. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

19. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

July 15, 2005
Preliminary
Tech. Evaluation
and
Preliminary
Determination

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Draft Air Construction Permit No. 0330045-012-AC
Crist Unit 6 SNCR Project

COUNTY

Escambia County

APPLICANT

Gulf Power Company
Crist Electric Generating Plant
ARMS Facility ID No. 0330045

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

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July 15, 2005

{Filename: Crist 6 SNCR TEPD}

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Gulf Power Company – Crist Electric Generating Plant
One Energy Place
Pensacola, FL 32520-0328

Authorized Representative:
Penny M. Manuel

Processing Schedule

01/25/05 Received the application for a pollution control project;

02/24/05 Department requested additional information;

06/02/05 Department received additional information; and

Facility Description and Location

Gulf Power Company operates the existing Crist Power Plant, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. This site is in an area that is currently in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

Standard Industrial Classification Code (SIC)

SIC No. 4911 – Electrical Services

Regulatory Categories

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

Project Description

On August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titled, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards" (Agreement). The purpose of the agreement is to support continuing efforts to maintain compliance with the ambient air quality standard for ozone in the Escambia County area. In brief, Gulf Power Company agreed to:

- Construct and operate a new electrostatic precipitator (ESP) for Crist Unit 7;
- Construct and operate a new selective catalytic reduction (SCR) system for Crist Unit 7;
- Ultimately retire Crist coal-fired Units 1, 2, and 3; and
- Employ additional NO_X reduction techniques for one or more of the remaining coal-fired Units 4, 5, and 6.

The agreement was contingent on approval from the Public Service Commission to recover costs from the ratepayers related to the pollution control projects, which became final November 18, 2002. The approval was granted and Gulf Power Company submitted an application for an air permit to install the new ESP and SCR for Crist Unit 7. The Unit 7 project met its schedule and was completed in May 2005.

Emissions unit 1 was permanently retired on March, 31, 2003. Emissions units 2 and 3 will be retired by May, 2006.

The focus of this project is to initiate compliance with the last part of the Agreement. Gulf Power has proposed to install SNCR on Unit 6 in order to gain additional NO_X reductions. Depending on the resulting reductions achieved, further NO_X controls may still be required for Units 4 and/or 5 in order to fully comply with the Agreement.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). In general, this project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Testing, Continuous Monitoring, and Alternate Sampling Procedures

{Note: The project is not subject to Florida's Power Plant Siting Act because there will be no change in steam-generated electrical capacity.}

General PSD Applicability

The Department regulates major air pollution sources in accordance with the Prevention of Significant Deterioration (PSD) program, as delegated by the EPA for electric utilities. A PSD review is required only in areas currently in attainment with the National Ambient Air Quality Standard (NAAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories (Table 62-212.400-1, F.A.C.), or
- 5 tons per year of lead.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in Table 62-212.400-2, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant". The applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The Department's Rule 62-212.400(2)(a)2, F.A.C. exempts certain pollution control projects from the requirements of PSD review. Subparagraph "a" of this rule states that, "A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule." This federal rule defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. However, it also specifically states that a physical change or change in the method of operation shall not include the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless it is determined that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

1. There is reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and
2. It is determined that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.

The addition of the SNCR system is not considered a pollution control project because there are no expected significant increases of a collateral pollutant. This project is considered a minor modification that will result in a reduction of NO_X emissions. The project is not expected to result in, nor does it authorize, an increase in the capacity utilization of Unit 6; and, uncontrolled representative actual emissions are not expected to be any different than past actual emissions. Based on the information reported on the previous two annual operating reports, the average NO_X emissions rate has been approximately 0.47 lb/MMBtu, or 4,674 tons per year. However, following the replacement of the low-NO_X burners on Unit 6 (performed ~~as a routine replacement and not as a portion~~ of this SNCR project), Gulf Power has stated that the NO_X emissions rate prior to the injection of urea has been reduced to 0.35 lb/MMBtu (which is equivalent to 3,481 tons per year at current levels of utilization). At the manufacturer's guaranteed 20% reduction, Gulf Power expects the resultant NO_X emissions rate to be as low as 0.28 lb/MMBtu. This will result in a reduction of approximately 697 tons per year of NO_X directly attributable to the addition of SNCR on Unit 6. It should be noted that this is the level of reduction that could be observed if the SNCR were to be utilized at all times that Unit 6 is in operation. However, the Agreement does not require that a particular control device must be used continuously; it only requires that a facility-wide NO_X emissions limit of 0.2 lb/MMBtu be met. The Department believes that the proposed NO_X reduction project will be environmentally beneficial and will not result in a significant net increase in representative actual annual emissions of any criteria pollutant. As such, this project is exempt from the requirements of PSD preconstruction review. Nevertheless, an air construction permit is required to conduct the proposed work.

3. APPLICATION REVIEW

Crist Unit 6 (ARMS Emissions Unit -006) is a 369 MW Foster Wheeler front wall-fired, dry bottom boiler. The maximum heat input rate is 3,704.8 MMBtu per hour while combusting the primary fuels of pulverized bituminous coal and/or natural gas. Distillate oil and on-specification used oil fuel are also combusted as a secondary fuels for periods of start-up and flame stabilization. Emissions of particulate matter are currently reduced by a Wheelabrator (model # HaRDE) cold side electrostatic precipitator. Nitrogen oxides are controlled with low NO_X burners. Unit 6 has continuous monitors for opacity, stack gas flow, carbon dioxide, nitrogen oxides, and sulfur dioxide. Units 6 and 7 share a common stack that is 23.2 feet in diameter and 450 feet high. Based on the current Title V air operation permit, Unit 6 is subject to Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input), predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review), and is regulated under Phase I of the federal Acid Rain Program.

The applicant proposes to perform the following work on Unit 6:

Boiler Parameters

As a direct result of the pollution control project, the following boiler components will be modified: 6 urea injectors will be installed spaced across the front of the boiler at an elevation of 171'-3". The proposed changes will not increase emissions nor add to the capacity of Unit 6. The materials of construction should be carefully selected to inhibit corrosion.

Selective Non-Catalytic Reduction (SNCR)

Unit 6 currently uses low NO_X burners to inhibit the formation of NO_X. Gulf Power Company proposes to add a new SNCR system manufactured by Fuel Tech, Inc. SNCR is an add-on control technology in which ammonia is injected into the exhaust gas stream in an area of the duct where the stack gas temperature is in the range of 1,600 – 2,100 °F. The ammonia combines with NO_X in the gas stream to form nitrogen and water. Ammonia that escapes the stack without reacting with NO_X is called "ammonia slip". If a fuel contains significant amounts of sulfur, high levels of ammonia slip can lead to the formation of bisulfates and other particulate matter. To avoid these problems, SNCR systems can be designed with very low levels of ammonia slip (< 5 ppmv) while still achieving control efficiencies in the range of ~~30~~ 75%. SNCR is a commercially available, demonstrated control technology currently employed on numerous utility boilers and combined cycle gas turbine projects worldwide.

Design Specifications

The following specifications summarize the preliminary design of the proposed new SNCR system.

- *Basic Design Specifications*: The SNCR system is designed for a maximum NO_X conversion efficiency of 25% based on an inlet NO_X emissions rate of 0.35 lb/MMBtu, with a guaranteed removal efficiency of 20%.
- *Urea Storage and Mixing*: Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 450,000 gallon tank. This will provide a minimum of 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.
- *Ammonia Slip*: The SNCR is designed and guaranteed to have 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, a wet chemical method will be utilized. More frequent tracking of ammonia slip will be monitored by measuring the amount of residual ammonia adsorbed by the fly ash. Fly ash samples will be measured periodically using an ion-specific electrode.
- *Urea Injection and Control System:* Using plant service water or other dilution water source, the metering module dilutes the reagent to a predetermined concentration (somewhat less than 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 171'-3". At peak load for Unit 6, with 0.35 lb/MMBtu inlet NO_X and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.

SNCR Operation

The SNCR will operate as needed to meet the facility 0.20 lb/MMBtu NO_X plant-wide emissions limit. During these periods, the SNCR will operate whenever the Unit is operating at or above its normal low

load level. If the unit drops below this level, the SNCR system will automatically stop injection until the Unit returns to its low load level.

Conclusion

While the design specifications will result in NO_X conversion efficiency quite a bit lower than can typically be expected for similar SNCR projects, based on the application, the preliminary design appears capable of achieving a minimum guaranteed NO_X conversion efficiency of 20%. Gulf Power believes that this lower level of efficiency will be sufficient to comply with the facility-wide NO_X emissions cap of 0.20 lb/MMBtu, as required by the Agreement.

The draft permit requires continuous monitoring to demonstrate compliance with the standards for NO_X emissions. Annual performance testing is required for NO_X reduction efficiency, and ammonia slip. Quarterly reports are required to summarize compliance with the NO_X standards.

4. PRELIMINARY DETERMINATION

The pollution control project is based on the design and operation of conventional SNCR air pollution control equipment. This type of air pollution control device is operating successfully on numerous coal-fired utility boilers throughout the world.

The Department makes a preliminary determination that the proposed project will comply with the terms of the Agreement and all existing applicable air pollution regulations. However, it is still possible that additional measures may need to be taken to reduce NO_X emissions from Units 004 and 005 if it turns out that the addition of the SNCR on Unit 006 is not quite sufficient to allow the facility to comply with the facility-wide limit. This determination is based on a technical review of the application, the preliminary design, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jonathan Holtom is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

REFERENCES

1. Data Compiled from the Department's ARMS Database
2. EPA's White Paper, "Selective Non-Catalytic Reduction (SNCR) For Controlling NO_X Emissions", Prepared By: SNCR Committee, Institute Of Clean Air Companies, Inc., May 2000.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328
Authorized Representative:
G. Dwain Waters, Q.E.P., Air Quality Programs Supervisor

Crist Electric Generating Plant
Unit 6 SNCR Project
Facility ID No. 0330045
SIC No. 4911
Air Permit No. 0330045-012-AC
Permit Expires: September 1, 2006

PROJECT AND LOCATION

This permit authorizes the construction of a new new selective non-catalytic reduction system for Unit 6 at the existing Crist Electric Generating Station, which is located on Governors Bayou off 10 Mile Road in Pensacola, Escambia County, Florida. The map coordinates are: Zone 16; 478.50 km East; and 3381.30 km North.

STATEMENT OF BASIS

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

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The existing plant consists of six fossil fuel fired steam generators and two fly ash silos. Natural gas is the primary fuel for Units 2 and 3. Pulverized coal is the primary fuel for Units 4, 5, 6 and 7. Fuel oil is used as supplemental fuel in all six of the units. The following units are affected by this air construction permit.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

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

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794.

3. Appendices: The following Appendices are attached as part of this permit: , Appendix CF (Citation Format); Appendix GC (General Conditions); Appendix NA (NO_X Agreement); and, Appendix SC (Standard Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-4, 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Construction Approval: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Rule 62-210.200(76), F.A.C. defines *construction* as, "The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities." Such permits shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit (revision) at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

Emissions Units 002 - 007

This section of the permit addresses the following existing emissions units, with an emphasis on Unit 006.

ID	Emission Unit Description
002	Boiler No. 2 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
003	Boiler No. 3 (Phase II Acid Rain Unit) **(to be retired by May 1, 2006)**
004	Boiler No. 4 (Phase I and II Acid Rain Unit)
005	Boiler No. 5 (Phase I and II Acid Rain Unit)
006	Boiler No. 6 (Phase I Acid Rain Unit)
007	Boiler No. 7 (Phase I Acid Rain Unit)

Emissions Unit No. 006

Description: Unit 6 is a Foster Wheeler front wall-fired, dry bottom boiler that began commercial operation on May 1, 1970.

Fuels: coal, natural gas, new No. 2 fuel oil and/or on-specification used oil, and occasional on-site generated "oil contaminated soil".

Capacity: 3,704.8 MMBtu/hour when firing pulverized coal and/or natural gas.

PM Controls: Cold side electrostatic precipitator.

NOx Controls: Low NO_X burners and selective non-catalytic reduction (SNCR).

Continuous Monitors: CO_2, NO_X, SO_2, opacity, stack gas flow, and urea injection rate.

Stack Parameters: Units 6 shares a common stack with Unit 7 that is 450 feet tall with a diameter of 23.2 feet. The volumetric flow rate of Unit 6 & 7 combined, at permitted capacity, is approximately 2,462,700 acfm.

{Permitting Notes: Based on the current Title V air operation permit, Unit 6: is regulated under Rule 62-296.405, F.A.C. (Fossil Fuel Fired Steam Generators > 250 MMBtu/Hour Heat Input); predates the requirements of Rule 62-212.400, F.A.C. (PSD Preconstruction Review); and is regulated under Phase I of the federal Acid Rain Program (40 CFR 75).}

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

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND CONSTRUCTION

2. Selective Non-Catalytic Reduction (SNCR) System: The permittee shall construct, tune, operate, and maintain a new SNCR system for Unit 6 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 an 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 ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.

{Permitting Note: Fuel Tech, Inc. designed the new SNCR system, which will generally consist of the following:

- ***UREA Injection System:*** Urea will be delivered by truck (or possibly rail) and stored on site as a 40% aqueous solution in one 450,000 gallon tank. This will provide a minimum of 7 days operating inventory. The solution will be maintained at a temperature of aproximately 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 concetration (somewhat less than 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 171'-3". At peak load for Unit 6, with 0.35 lb/MMBtu inlet NO_X and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.
- ***Ammonia Slip:*** The SNCR is designed and guaranteed to have 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, a wet chemical method will be utilized. More frequent tracking of ammonia slip will be monitored by measuring the amount of residual ammonia adsorbed by the fly ash. Fly ash samples will be measured periodically using an ion-specific electrode.

[Design; Paragraph 2 of the Agreement; Rule 62-204.800, F.A.C.; 40 CFR 68]

3. Updated Designs: The permittee shall update the Department with final design specifications and any substantial changes made to the final design specifications during the actual construction phase. [Rule 62-4.070(3), F.A.C.]

4. Project Completion: The permittee shall complete construction and commence operation of the new SNCR system by May 1, 2005. [Applicant Request; Design; Paragraph 2 of the Agreement]

PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any specifications or limitations included in previous permits that define permitted capacities such as heat input rates, fuel consumption, or hours of operation. It does not authorize any additional fuels or such other methods of operation.}

EMISSIONS STANDARDS

5. Plant-Wide NO_X Limit: Emissions of nitrogen oxides (NO_X) from the combined operation of Units 4, 5, 6, and 7 shall not exceed 0.2 lb/MMBtu heat input based on a 30-day rolling average except for periods when Unit 7 is shutdown. The plant-wide daily NO_X emission rate shall be determined by the following equation:

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

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 7. The plant-wide 30-day rolling NO_X 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 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 Condition No. 9 of Subsection 3A of permit 0330045-005-AC, 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 7 and the SNCR system for Unit 6. The effective date for the plant-wide NO_X emission standard is the startup date of the SNCR system on Unit 6, but no later than May 1, 2006.

For purposes of this condition, "startup date" shall mean the date that the permittee demonstrates initial compliance with the terms of this air construction permit. [Paragraphs 2, 3 and Exhibit B of the Agreement]

EMISSIONS PERFORMANCE TESTING

6. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification shall include: the scheduled date, approximate start time, test team, contact name and phone number, description of unit to be tested, and the tests to be performed. [Rule 62-297.310(7)(a)9, F.A.C.]

7. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than a 20% reduction in the nitrogen oxide emission rate. The permittee shall concurrently test the SNCR inlet and SNCR 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 SNCR outlet. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

8. Ammonia Slip, Performance Tests: Within 60 days after completing construction of the SNCR system and bringing Unit 6 on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA. Subsequent tests shall be conducted during each federal fiscal year. If tests show ammonia slip emissions are greater than the design target level specified in Condition No. 2 of this subsection, the permittee shall take corrective actions such as repair, addition of urea injectors for better mixing, addition of mixing vanes in the duct, etc. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

{Permitting Note: EPA Methods 1 (Traverse Points), 2 (Velocity and Flow Rate), 3 (Gas Analysis), 4 (Moisture Content), and 19 (Calculating Emission Rates, Use of F-Factors) may also be used to supplement the required test methods.}

CONTINUOUS MONITORING REQUIREMENTS

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

9. 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 6 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.* [Rule 62-4.070(3), F.A.C.]

10. SNCR Urea Injection: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, 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. [Rules 62-4.070(3) and 62-212.400(5)(c), F.A.C.]

RECORDS AND REPORTS

11. 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, and the urea injection rate (lb/hour). The report shall also include copies of the continuous monitoring records for the NO_X emissions. [Rule 62-297.310(8), F.A.C.]

    a. Quarterly Report: For each calendar day during the reporting quarter, the permittee shall report the following information related to the operation of Units 4, 5, 6 & 7:

    - Hours of operation for each Unit;
    - The Unit # daily MMBtu for each Unit (see Condition 5 of this Subsection);
    - The Unit # daily NO_X CEMS rate for each Unit, lb/MMBtu (see Condition 5 of this Subsection);
    - The Plant-Wide Daily MMBtu-Weighted NO_X Emission Rate (see Condition 5 of this Subsection);
    - The 30-day plant-wide average NO_X emission rate, lb/MMBtu;
    - Identify whether Unit 7 operated less than 18 hours;
    - Identify the occurrence of a Unit 7 startup or shutdown;
    - Whether or not the day included a startup, shutdown, or malfunction of the SNCR or SCR systems; and,
    - Identify operation of Unit 7 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 6 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.

    Each quarterly report is due within 30 days of the calendar quarter being reported.
    [Rule 62-4.070(3), F.A.C.] Agreed App B

SECTION 4. APPENDICES

Contents

Appendix CF - Citation Format;

Appendix GC - General Conditions;

Appendix NA - NO_X Agreement; and,

Appendix SC - Standard Conditions

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

Certified Mail

May 27, 2005

Jonathan Holtom
Florida Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Mail Station #5510
Tallahassee, Florida 32399-2400

Dear Mr. Holtom:

RE: CRIST ELECTRIC GENERATING PLANT
ADDITIONAL INFORMATION REQUEST
SNCR CONSTRUCTION PERMIT APPLICATION
Permit No: 0330045-012-AC

Please find enclosed Gulf Power's response to your February 24, 2005 request for additional information regarding the installation of the SNCR to Unit 6 at the Crist Electric Generating Plant located in Pensacola, Florida. Included in the response is the required certification by a Professional Engineer registered in Florida.

As you may be aware, Gulf Power's schedule to begin construction of this project is critical to meeting the May 1, 2006 FDEP-Gulf Ozone Agreement and thus activity will begin in September, 2005. Please advise Gulf Power as soon as possible any potential delay to the construction schedule due to permitting processes.

We appreciate your efforts to work with us regarding the startup of this emission control system. Please call me regarding any additional questions or concerns.

Sincerely,

G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor

cc: w/att: Trina Vielhauer, FDEP – Tallahassee Office
Jim Vick, Gulf Power Company
Wright, Terry, Gulf Power Company
John Dominey, Gulf Power Company
David Hollinger, Southern Company
Ms. Sandra Veazey, FDEP Northwest District Office, Pensacola, Florida
Mr. Richard Fancher, FDEP Northwest District Office, Pensacola, Florida

CRIST UNIT 6
FDEP – SNCR REQUEST FOR ADDITIONAL INFORMATION
CERTIFICATION BY PROFESSIONAL ENGINEER

"I, the undersigned, am a registered professional engineer in the State of Florida and hereby certify to the best of my knowledge that all information being submitted pursuant to FDEP's request for additional information regarding the construction of a SNCR emissions control system at Crist Unit 6 is true, accurate and complete. "

Professional Engineer Signature:

Gregory R Terry

Gregory N. Terry
Registration Number: 52786

5.27.2005

Date

GULF POWER RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING ADDITION OF SCNR TO UNIT 6
FILE No: 0330045-012-AC
May 25, 2005

1. **FDEP Comment:** Page 3 of the application, Purpose of Application: Only the box for Air Construction permit has been checked. However, in the comment box on the same page, Item 3 has requested that the long term use of biomass be incorporated into the Title V permit. The construction permit that temporarily authorized the burning of biomass to determine the feasibility of burning it in order to reduce NO_X emissions expired October 4, 2003. Pursuant to Rule 62-213.420(1)(a)4., F.A.C., for a Title V operation permit revision application to have been considered a timely request, it must have been submitted at least ninety days prior to expiration of the construction permit, but no later than 180 days after the emissions unit commenced operation as modified. As such, there is no currently valid authorization for burning biomass that can be incorporated into a Title V permit. If Gulf Power desires to establish the authority to burn biomass as a new fuel during the current construction permit revision, please submit a summary of the results of the testing that was performed during the test burns in 2002 and 2003. Based on the results of the tests, provide an analysis comparing past actual emissions (prior to the burning of biomass) to future actual emissions (while burning biomass), and a statement of how the burning of biomass will affect the total annual heat input over the next five years. Include a statement of request specifying which of the four biomass fuels you would like to establish the authority to burn as new fuels, and the requested amount(s) of these fuels that can be burned hourly and annually without causing unstable conditions in the boilers.

   Withdrew Biomass

   Gulf Power Response: Gulf Power hereby withdraws our request to utilize Biomass fuel at this time since there is no short term immediate plan to use the fuel. The fuel will be re-evaluated as part of the Company's strategy to meet the Clean Air Interstate Rule.

2. **FDEP Comment:** Page 10 of the application, List of Pollutants Emitted by Facility: List contains a statement of "no change from previous Title V permit". It is suspected that with the addition of biomass burning in Units 4 and 5, and with the addition of SNCR on Unit 6, the pollutants that will be emitted from these units after being modified could be different than those currently emitted. Provide a complete list of all pollutants that will be emitted as a result of the modifications.

   Gulf Power Response: Gulf Power anticipates no change of pollutants as a result of installation of the SNCR on Crist Unit 6. See item 6 in regards to ammonia slip.

3. **FDEP Comment:** Page 12 of the application, Additional Requirements for All Applications: Reference is made to the Title V application that was previously submitted 6/22/04. The ability to reference previously submitted information only applies to a Title V permit revision provided that the required information has been previously submitted within the past five years. Because this is a construction permit revision that will be allowing modifications to existing operations, the information required by this section of the application must be submitted in order to detail any changes as a result of the authorized modifications.

Gulf Power Comment: See Attachment 1 for Facility Plot Plan, Process Flow Diagram and Precautions to Prevent Emissions from Unconfined Particulate Matter.

4. **FDEP Comment:** Page 12 of the application, Additional Requirements for Air Construction Permit Applications: Box 3, Rule Applicability Analysis was not addressed. This information needs to be provided, especially as it relates to the requested modifications.

   Gulf Power Comment: The installation of SNCR on Crist Unit 6 is expected to result in lower NOx emissions and no increase in any other emissions other than the ammonia slip noted in item 6. The operation of the unit is not expected to increase as a result of the project, and therefore no associated increase in emissions. The addition of SNCR is not a "modification" and does not therefore trigger the need for a non-PSD or PSD construction permit. Please see Attachment 2 taken from the 06/22/04 previous Title V application for the rule applicability analysis. There are no changes in the rule applicability analysis previously submitted.

5. **FDEP Comment:** Regarding the Cooling Tower: The information submitted states that the new cooling tower will be a like kind replacement with the exception that the drift and evaluation percent of flow will be reduced from 2.4% to 2.1%. What is different about the new cooling tower that will provide the reduced drift? Explain the difference in design drift reduction (2.4% to 2.1%) and the estimated drift reduction (2% vs. 0.005%), and what effect these changes have on actual emissions from the cooling tower.

   Gulf Power Comment: The need for this item was resolved with FDEP, thus Gulf Power hereby withdraws our request for permitting the replacement of the Unit 6 Cooling Tower.

6. **FDEP Comment:** Regarding the SNCR: Provide a description of the location of the urea injection ports, the degree of mixing that can be expected at the injection locations, and how the controller will adjust the injection rates/number of injectors required based on load changes. How will the proposed 5ppm ammonia slip emission rate (24 hour average) be monitored? The application states that the SNCR system is designed to remove 25% of the NO_X from the exhaust stream with a guarantee of 20% reduction. Based on the design and the location of the injection ports, is 25% reduction the maximum that can ever be achieved, or could a greater reduction be achieved if needed in the future? The application also states that the SNCR system is designed for 25% removal "when operating". Does that imply that The SNCR system will be operated at will, or that it will always be operating when the proper temperature is reached in the boiler?

   Gulf Power Response: The urea injectors for the Crist 6 SNCR will be located at Elevation 171'-3". There will be a total of 6 injectors spaced across the front of the boiler. The system will be installed with a single level of injectors that will operate across the unit's load range. The concentration of the injected reagent will change as the load varies. The degree of mixing will depend on boiler load and the corresponding gas

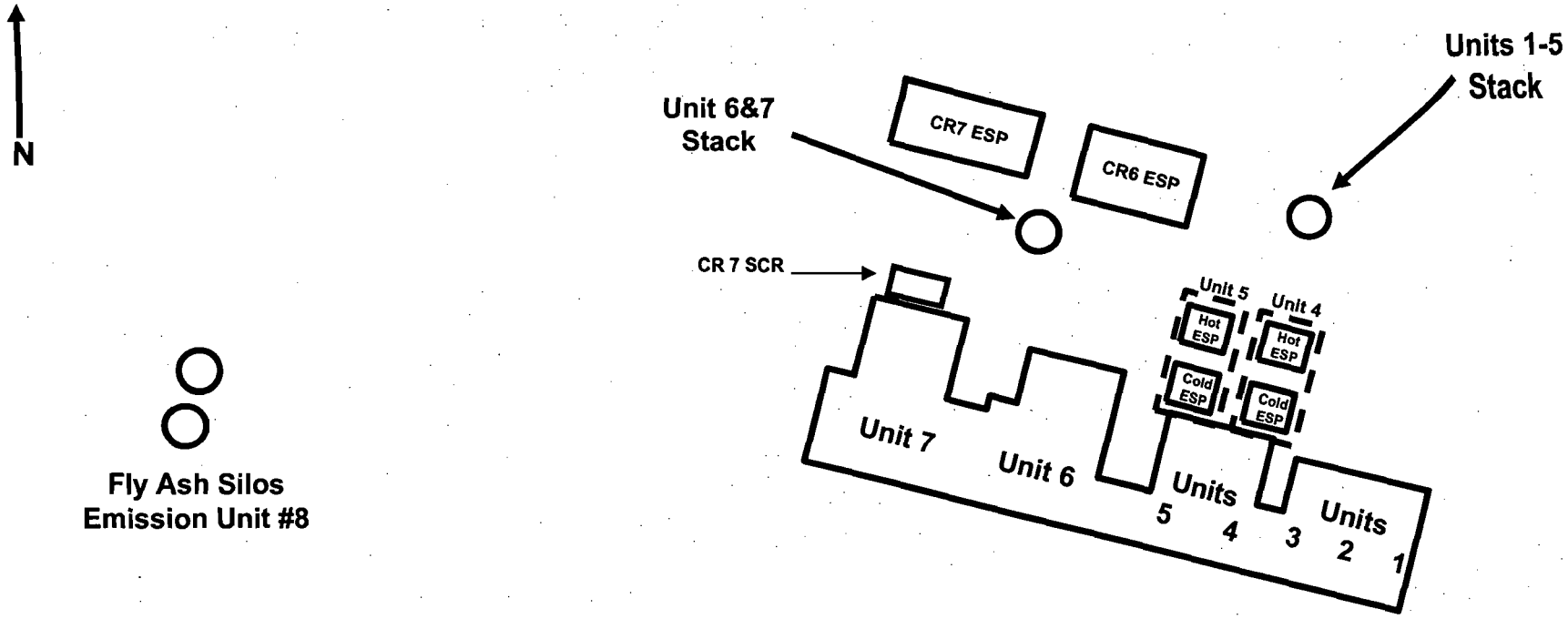
velocity profiles. The injector configuration will be designed to provide for maximum distribution and coverage over the load range and appropriate injection temperatures.

The ammonia slip average similar to Crist Unit 7 will not be continuously monitored. Currently, there is not a commercially-available instrument that provides a reliable and accurate NH3 measurement. Wet chemistry will be utilized during the initial tuning of the system to establish an injection scheme that limits NH3 slip to a 5 ppm 24 hour average. Additionally, Gulf Power Field Service's group will conduct initial and annual determinations utilizing FTIR (Fourier Transform Infra-Red) technology to demonstrate compliance to the 24 hour average ammonia slip.

The vendor guaranteed reduction of 20% is a conservative value based on the vendor's experience and modeling results. The vendor feels the design can accomplish 20% while complying with the 5 ppm NH3 slip limit. A 25% reduction is the maximum design rate that is expected based on vendor modeling and experience.

The SNCR will operate as needed to meet the facility 0.20 lb/Mmbtu NOx plant–wide emissions limit outlined in the FDEP-Gulf Ozone agreement. During these periods, the SNCR will operate whenever the Unit is operating at or above its normal low load level. If the Unit drops below this level, the SNCR system will automatically stop injection until the Unit returns to its low load level, thus the system will operate "at will" to comply to the facility limit.

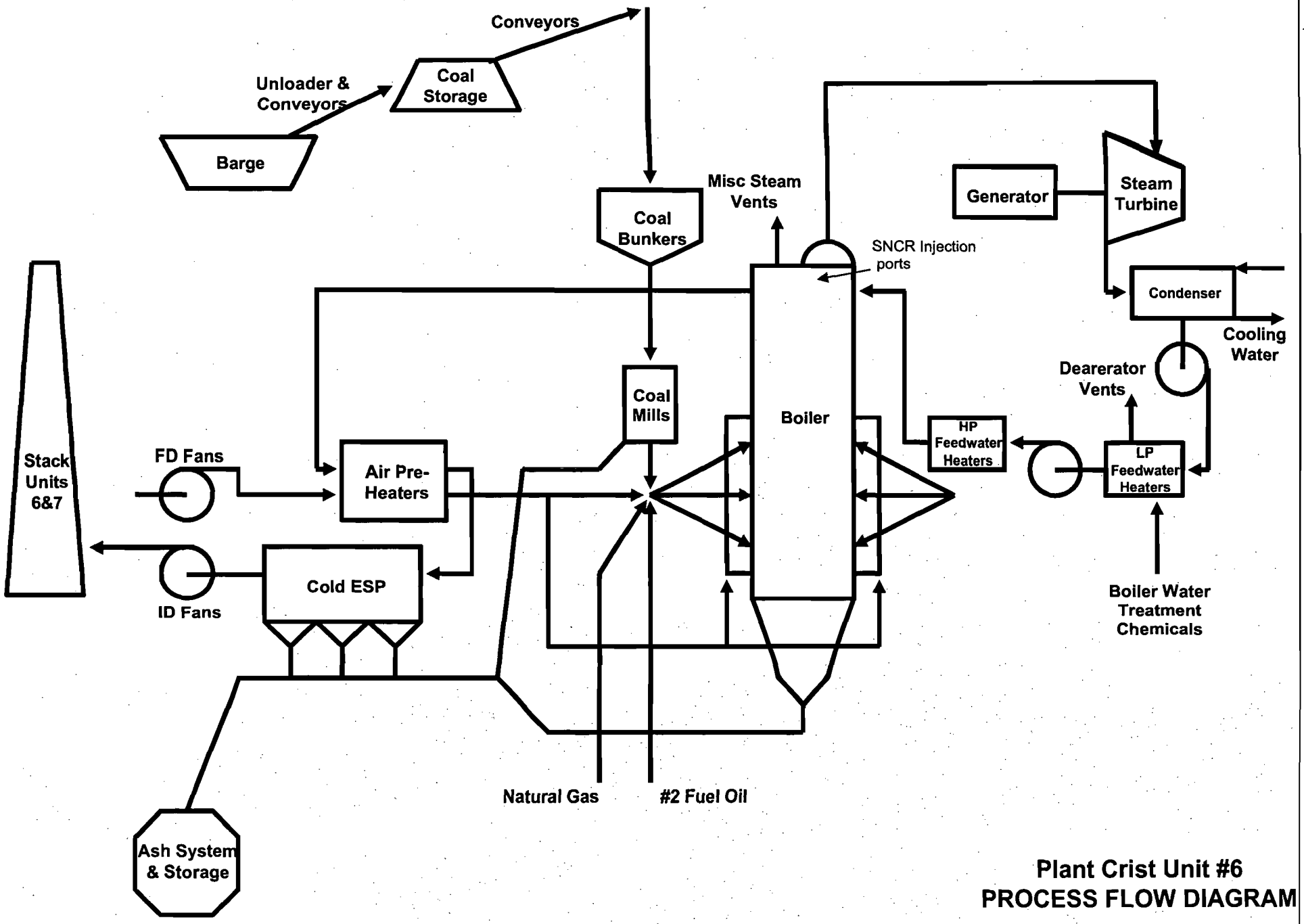
Attachment 1:



Notes:
ESP - Electrostatic Precipitators (Control Equipment)
SCR – Selective Catalytic Reduction (Control Equipment)

Not shown on this plan:
Emission Unit #9 - Material Handling of Coal and Ash and Roads (Fugitives)
Emission Unit #10 - Miscellaneous Emission Units (Tanks, Sandblasting, Cooling Towers, Trivial, Exempt, Presumptively Exempt, and Non-regulated)

PLANT CRIST
UNIT EMISSIONS
PLOT PLAN



Plant Crist Unit #6
PROCESS FLOW DIAGRAM

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

1) TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER WHILE UNLOADING FLY ASH, 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 LANDFILL.

2) THE PLANT ASH HAUL ROADS WILL BE WATERED AS NECESSARY TO CONTROL ANY UNCONFINED PARTICULATE MATTER THAT MAY BE ON THE ROADS.

3) AS SECTIONS OF THE ASH LANDFILL REACH THEIR CAPACITY THESE SECTIONS WILL BE GRASSED OVER TO PREVENT ANY PARTICULATE MATTER BEING LIFTED INTO THE WIND.

4) THE COAL PILE IS PACKED REGULARLY TO HELP IN THE PREVENTION OF COAL PILE FIRES AND LIMIT THE AMOUNT OF COAL DUST THAT MIGHT GET BLOWN OFF THE PILE IF IT WERE NOT PACKED.

5) A DUST SUPPRESSANT WILL BE APPLIED TO THE COAL ON THE CONVEYOR BELTS AS NECESSARY TO CONTROL DUST.

Attachment 2:

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
Chapter 62-4 Permits						
62-4.030	General Prohibition.	0330045	✓		State Only	Facility
62-4.04(1)	Exemptions.	0330045	✓		State Only	Facility
62-4.100	Suspension and Revocation.	0330045	✓		State Only	Facility
62-4.130	Plant Operation - Problems.	0330045	✓		State Only	Facility
Chapter 62-204 State Implementation Plan						
62-204.800	Standards of Performance for New Stationary Sources (NSPS) (see 40 CFR 60 list for subsections).					
	(7) Standards Adopted.	0330045		_	State only.	Unit 006
	(b) The following Standards of Performance for New Stationary Sources contained in 40 CFR 60, revised as of July 1, 1994, or later as specifically indicated.	0330045		_	State only.	Unit 006
	1. 40 CFR 60.40 Subpart D, Fossil-fuel-fired Steam Generators for which Construction is Commenced after August 17, 1971.	0330045		_	State only.	Unit 006
	2. 40 CFR 60.40a Subpart Da, Electric Utility Steam Generators for which Construction is Commenced after September 18, 1978.	0330045		_	State only.	Unit 006
	3. 40 CFR 60.40b Subpart Db, Industrial-Commercial-Institutional Steam Generating Units.	0330045		_	State only.	Unit 006
	4. 40 CFR 60.40c Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units.	0330045		_	State only.	Unit 006
	12. 40 CFR 60.110 Subpart K, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and prior to May 19, 1978.	0330045		_	State only.	Unit 006
	13. 40 CFR 60.110a Subpart Ka, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and prior to July 23, 1984.	0330045		_	State only.	Unit 006
62-204.800	14. 40 CFR 60.110b Subpart Kb, Volatile Organic Liquid Storage	0330045			State only.	Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.			–		
	29. 40 CFR 60.250 Subpart Y, Coal Preparation Plants.	0330045			State only.	Unit 006
	37. 40 CFR 60.330 Subpart GG, Stationary Gas Turbines.	0330045			State only.	Unit 006
	62. 40 CFR 60.670 Subpart OOO, Non-Metallic Mineral Processing Plants.	0330045		–	State only.	Unit 006
62-204.800(7)	(c) The Standards of Performance for New Stationary Sources adopted by reference in this section shall be controlling over other standards in this chapter except that any emissions limiting standard contained in or determined pursuant to this chapter which is more stringent than one contained in a Standard of Performance, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, shall apply.	0330045		–	State only.	Unit 006
	(7)(d) General Provisions Adopted.	0330045			State only.	Unit 006
	(7)(e) Appendices Adopted. The following appendices of 40 CFR Part 60, revised as of July 1, 1994 or later as specifically indicated, are adopted and incorporated by reference.	0330045		–	State only.	Unit 006
	1. 40 CFR 60 Appendix A, Test Methods, are adopted by reference.	0330045			State only.	Unit 006
	2. 40 CFR 60 Appendix B, Performance Specifications.	0330045			State only.	Unit 006
	3. 40 CFR 60 Appendix C, Determination of Emission Rate Change.	0330045		–	State only.	Unit 006
	5. 40 CFR 60 Appendix F, Quality Assurance Procedures.	0330045			State only.	Unit 006
62-204.800(8)	National Emission Standards for Hazardous Air Pollutants (NESHAPS).					
	(8) Standards Adopted.	0330045			State only.	Unit 006
	(b)8. 40 CFR Part 61 Subpart M Asbestos.	0330045	✓		State only.	Unit 006
62-204.800(8)	(d) General Provisions Adopted. The general provisions of 40 CFR Part 61 Subpart A, revised July 1, 1994, are adopted and incorporated by reference except 40 CFR 61.04, 40 CFR 61.08, 40 CFR 61.11, and 40	0330045	✓		State only.	Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	CFR 61.18.					
62-204.800(9)	National Emission Standards for Hazardous Air Pollutants (NESHAPS) - Part 63.					
	(9) Standards Adopted.	0330045		_	State only.	Unit 006
	(b) 40 CFR 63 Subpart Q Chromium Emissions from Industrial Process Cooling Towers*	0330045		_	State only. *This regulation was proposed for incorporation in the FAW on March 8, 1996; not yet "effective" on state level.	Unit 006
	(a) 40 CFR 63 Subpart T Halogenated Solvent Cleaning*	0330045		_	State only. *This regulation was proposed for incorporation in the FAW on March 8, 1996; not yet "effective" on state level.	Unit 006
	(d) General Subparts Adopted.	0330045		_	State only.	Unit 006
	1. 40 CFR 63 Subpart A, General Provisions	0330045			State only.	Unit 006
	2. 40 CFR 63 Subpart B, Equivalent Emission Limitation by Permit (112(j))	0330045		_	State only.	Unit 006
	4. 40 CFR 63 Subpart D, Compliance Extensions for Early Reductions	0330045		_	State only.	Unit 006
62-204.800 (11)	Adoption of 40 CFR 70, Federal Title V Rule	0330045	✓		State only.	Facility
62-204.800 (12)	Adoption of 40 CFR 72, Federal Acid Rain Program	0330045	✓		State only.	Unit 006
62-204.800 (13)	Adoption of 40 CFR 73, S02 Allowance System	0330045	✓		State only.	Unit 006
62-204.800 (14)	Adoption of 40 CFR 75, CEMS	0330045	✓		State only.	Unit 006
62-204.800 (15)	Adoption of 40 CFR 76, Acid Rain Nox Requirement	0330045	✓		State only.	Unit 006
62-204.800 (16)	Adoption of 40 CFR 77, Acid Rain Excess Emissions	0330045	✓		State only.	Unit 006
62-204.800 (19)	Adoption of 40 CFR 82, Stratospheric Ozone	0330045	✓		State only.	Unit 006/ Facility

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
Chapter 62-210 Stationary Sources - General Requirements						
62-210.300	Permits Required.					
	(2) Air Operation Permits. Except (b)	0330045	✓			Facility
	(3)(a) Exemptions - #1-29.	0330045	✓			Facility
	(3)(b) Temporary Exemptions.	0330045	✓			Facility
62-210.300	(5) Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.	0330045	✓		May apply in the future.	Facility
	(a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.	0330045	✓		May apply in the future.	Facility
	(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.	0330045	✓		May apply in the future.	Facility
62-210.370	Reports.					
	(1) Notification of Intent to Relocate Air Pollutant Emitting Facility.	0330045				Unit 006
	(3) Annual Operating Report for Air Pollutant Emitting Facility.	0330045	✓			Facility
62-210.650	Circumvention.	0330045				Unit 006
62-210.700	Excess Emissions.	0330045	✓			Unit 006
62-210.900	Forms and Instructions.	0330045	✓			Facility
	(5) Annual Operating Reports	0330045	✓			Facility
Chapter 62-213 Operation Permits for Major Sources of Air Pollution						
62-213.205	Annual Emissions Fee.	0330045	✓			Facility

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
62-213.400	Permits and Permit Revisions Required.	0330045	✓			Facility
62-213.410	Changes Without Permit Revision.	0330045	✓			Facility
62-213.415	Trading of Emissions Within a Source.	0330045	✓		May apply in the future.	Unit 006 /Facility
62-213.460	Permit Shield.	0330045	✓			Facility
Chapter 62-214 Requirements for Sources Subject to the Federal Acid Rain Program						
62-214.300	Applicability.	0330045	✓			Unit 006
62-214.340	Exemptions.					
	(5) The owners and operators of each unit . . .	0330045	✓			Unit 006
	(6) A new unit shall no longer be exempted . . .	0330045				Unit 006
	(7) A retired unit shall no longer be exempted . . .	0330045	✓			Unit 006
62-214.350	Certification.	0330045	✓			Unit 006
62-214.430	Implementation and Termination of Compliance Options. Procedures for activation and termination of compliance options.					
	(1) Activation.	0330045	✓			Unit 006
	(2) Termination.	0330045	✓			Unit 006
Chapter 62-252 Gasoline Vapor Control						
62-252.300	Gasoline Dispensing Facilities - Stage I Vapor Recovery.					
	(2) Prohibition.	0330045				Facility
	(3) Control Technology Requirements.	0330045				Facility
	(4) Compliance Schedule.	0330045			State Only	Facility
62-252.400	Gasoline Dispensing Facilities - Stage II Vapor Recovery.					
	(2) Prohibition.	0330045		_	State Only	Facility

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	(3) Control Technology Requirements.	0330045			State Only	Facility
	(4) Compliance Schedules.	0330045			State Only	Facility
	(5) Testing.	0330045			State Only	Facility
	(6) Recordkeeping.	0330045			State Only	Facility
	(7) System Maintenance.	0330045			State Only	Facility
62-252.400	(8) Training.	0330045			State Only	Facility
62-252.500	Gasoline Tanker Trucks.					
	(2) Prohibitions.	0330045			State Only	Facility
	(3) Leak Testing.	0330045			State Only	Facility
Chapter 62-256 Open Burning and Frost Protection Fires						
62-256.300	Prohibitions.	0330045	✓		State Only	Facility
62-256.450	Burning for Cold or Frost Protection.	0330045			State Only	Facility
62-256.500	Land Clearing.	0330045	✓		State Only	Facility
62-256.600	Industrial, Commercial, Municipal, and Research Open Burning.	0330045	✓		State Only	Facility
62-256.700	Open Burning Allowed.	0330045	✓		State Only	Facility
Chapter 62-257 Asbestos Removal						
62-257.301	Notification Procedure and Fee.	0330045	✓		State Only	Facility
62-257.400	Fee Schedule.	0330045	✓		State Only	Facility
62-257.900	Form.	0330045	✓		State Only	Facility
Chapter 62-281 Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling.						
62-281.300	Applicability.	0330045			State Only	Facility
62-281.400	Compliance Requirements.	0330045			State Only	Facility

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
62-281.500	Establishment Certification.					
62-281.500	(1) Initial Certification.	0330045			State Only	Facility
	(2) Renewal Certification.	0330045			State Only	Facility
	(3) Fees.	0330045			State Only	Facility
	(4) Certificate of Compliance.	0330045			State Only	Facility
62-281.600	Training Requirements.	0330045			State Only	Facility
62-281.700	Equipment Certification.	0330045			State Only	Facility
62-281.900	Forms.	0330045			State Only	Facility
Chapter 62-296 Stationary Sources -- Emission Standards						
62-296.320	General Pollutant Emission Limiting Standards.					
	(1) Volatile organic compounds emissions or organic solvents emissions.	0330045		_		Facility
	(2) Objectionable Odor Prohibited.	0330045	✓			Facility
	(3) Open Burning.	0330045	✓		State Only	Facility
	(4)(a) Process Weight Table.	0330045				Unit 006
	(4)(b) General Visible Emissions Standard.	0330045	✓			Facility
	(4)(c) Unconfined Emissions of Particulate Matter.	0330045	✓			Facility
62-296.405	Fossil Fuel Steam Generators with More than 250 Million Btu per Hour Heat Input.					
	(1) Existing Emissions Units.					
	(a) Visible emissions.	0330045	✓			Unit 006
	(b) Particulate Matter - 0.1 pound per million Btu heat input, as measured by applicable compliance methods.	0330045	✓			Unit 006
	(c) Sulfur Dioxide, as measured by applicable compliance methods.	0330045	✓			Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	1. (c) e. Sources burning liquid fuel.	0330045	✓		1.98 lbs/MBTU	Unit 006
	2. (c) Sources burning solid fuel.	0330045	✓		5.90 lbs/MBTU	Unit 006
	3. Owners of fossil fuel steam generators shall monitor their emissions and the effects of the emissions on ambient concentrations of sulfur dioxide, in a manner, frequency, and locations approved, and deemed reasonably necessary and ordered by the Department.	0330045	✓		Not currently listed in permit. No notice deemed necessary to plant.	Unit 006
	(d) Nitrogen Oxides (expressed as NO_x).	0330045				Unit 006
62-296.405	(e) Test Methods and Procedures.	0330045	✓		Presumably federally enforceable.	Unit 006
	(f) Continuous Emissions Monitoring Requirements.	0330045	✓			Unit 006
	(g) Quarterly Reporting Requirements.	0330045	✓			Unit 006
	(2) New Emissions Units.					
	(a) Visible Emissions - See Rule 62-204.800(7) and 40 CFR 60.42 and 60.42a	0330045		_		Unit 006
	(b) Particulate Matter - See Rule 62-204.800(7) and 40 CFR 60.42 and 60.42a	0330045		_		Unit 006
	(c) Sulfur Dioxide - See Rule 62-204.800(7) and 40 CFR 60.43 and 60.43a	0330045		_		Unit 006
	(d) Nitrogen Oxides - See Rule 62-204.800(7) and 40 CFR 60.44 and 60.44a	0330045		_		Unit 006
62-296.406	Fossil Fuel Steam Generators with Less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units.					
	(1) Visible Emissions	0330045		_		Unit 006
	(2) Particulate Matter - Best available control technology in accordance with Rule 62-210.200(40)	0330045		_		Unit 006
	(3) Sulfur Dioxide - Best available control technology in accordance with Rule 62-210.200(40)	0330045		_		Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
62-296.411	Sulfur Storage and Handling Facilities	0330045				Unit 006
62-296.500	Reasonably Available Control Technology (RACT) - Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x) Emitting Facilities.					
	(1) Applicability.	0330045				Unit 006
	(2) Permit, Recordkeeping, and Compliance Reporting Requirements.	0330045				Unit 006
	(a) Permits - Special Considerations.	0330045				Unit 006
	(b) Recordkeeping.	0330045				Unit 006
62-296.500	(c) Reporting.	0330045				Unit 006
	(3) Exceptions.	0330045				Unit 006
	(4) Consideration of Exempt Solvents	0330045				Unit 006
	(5) Compliance may be demonstrated for surface coating and graphic arts facilities on a 24-hour weighted average basis for a single source point with a single emission limit.	0330045		–		Unit 006
62-296.508	Petroleum Liquid Storage					
	(1) Applicability.	0330045				Unit 006
	(2) Control Technology.	0330045				Unit 006
	(3) Test Methods and Procedures.	0330045				Unit 006
62-296.511	Solvent Metal Cleaning.					
	(1) Applicability.	0330045				Unit 006
	(2) Cold Cleaning Control Technology.	0330045				Unit 006
	(3) Open Top Vapor Degreaser Control Technology.	0330045				Unit 006
	(4) Conveyorized Degreaser Control Technology.	0330045				Unit 006
	(5) Test Methods and Procedures.	0330045		–	* 8-hr test requirement not in SIP.	Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
62-296.516	Petroleum Liquid Storage Tanks with External Floating Roofs					
	(1) Applicability.	0330045				Unit 006
	(2) Control Technology.	0330045				Unit 006
	(3) Test Methods and Procedures.	0330045				Unit 006
62-296.570	Reasonably Available Control Technology (RACT) - Requirements for Major VOC- 0330045 and NO_x- Emitting Facilities.					
	(1) Applicability.	0330045			State Only	Unit 006
	(2) Compliance Requirements.	0330045			State Only	Unit 006
62-296.570	(3) Operation Permit Requirements.	0330045			State Only	Unit 006
	(4) RACT Emission Limiting Standards.	0330045			State Only	Unit 006
	(a) Compliance Dates and Monitoring.	0330045			State Only	Unit 006
	(b) Emission Limiting Standards.	0330045			State Only	Unit 006
	(c) Exception for Startup, Shutdown or Malfunction.	0330045			State Only	Unit 006
62-296.700	Reasonably Available Control Technology (RACT) Particulate Matter.					
	(1) Applicability.	0330045				Unit 006
	(2) Exemptions.	0330045				Unit 006
	(3) Specific RACT Emission Limiting Standards for Stationary Emissions Units.	0330045				Unit 006
	(4) Maximum Allowable Emission Rates.	0330045				Unit 006
	(a) Emissions Unit Data.	0330045				Unit 006
	(b) Maximum Emission Rates.	0330045				Unit 006
	(5) Circumvention.	0330045				Unit 006
	(6) Operation and Maintenance Plan.	0330045				Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	(a) Air Pollution Control Devices and Collection Systems.	0330045				Unit 006
	(b) Control Equipment Data.	0330045				Unit 006
	(c) Processing or Materials Handling Systems.	0330045				Unit 006
	(d) Fossil Fuel Steam Generators.	0330045				Unit 006
62-296.702	Fossil Fuel Steam Generators.					
	(1) Applicability.	0330045				Unit 006
	(2) Emission Limitations.	0330045				Unit 006
	(a) Particulate Matter - 0.10 lb/mmBtu	0330045				Unit 006
62-296.711	(b) Visible Emissions - 20% opacity.	0330045				Unit 006
	(3) Test Methods and Procedures.	0330045				Unit 006
	Materials Handling, Sizing, Screening, Crushing and Grinding Operations.					
	(1) Applicability	0330045				Unit 006
	(2) Emission Limitations.	0330045				Unit 006
	(3) Test Methods and Procedures.	0330045				Unit 006
Chapter 62-297 Stationary Sources – Emission Monitoring						
62-297.310	General Test Requirements.	0330045	✓			Unit 006
	(1) Required Number of Test Runs	0330045	✓			Unit 006
	(2) Operating Rate During Testing	0330045	✓			Unit 006
	(3) Calculation of Emission Rate	0330045	✓			Unit 006
	(4) Applicable Test Procedures.	0330045	✓			Unit 006
	(a) Required Sampling Time.	0330045	✓			Unit 006
	1. Unless otherwise specified in the applicable rule, the required	0330045	✓			Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	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.	0330045	✓			Unit 006
	(b) Minimum Sample Volume.	0330045	✓			Unit 006
	(c) Required Flow Rate Range.	0330045	✓			Unit 006
	(d) Calibration.	0330045	✓			Unit 006
	(e) EPA Method 5.	0330045	✓			Unit 006
	(5) Determination of Process Variables.	0330045	✓			Unit 006
	(6) Required Stack Sampling Facilities					
	(a) Permanent Test Facilities.	0330045	✓			Unit 006
	(b) Temporary Test Facilities.	0330045				Unit 006
	(c) Test Facilities.	0330045	✓			Unit 006
62-297.310	1. Sampling Ports.	0330045	✓			Unit 006
	(d) Work Platforms.	0330045	✓			Unit 006
	(e) Access.	0330045	✓			Unit 006
	(f) Electrical Power.	0330045	✓			Unit 006
	(g) Sampling Equipment Support.	0330045	✓			Unit 006
	(7) Frequency of Compliance Tests.					
	(a) General Compliance Testing.	0330045	✓			Unit 006
	1. Compliance test requirement prior to obtaining operating permit.	0330045				Unit 006
	2. Annual test requirement for excess PM emissions.	0330045	✓			Unit 006
	3. Annual test requirement prior to obtaining renewal permit.	0330045	✓			Unit 006

FDEP Rule	GULF POWER - CRIST UNIT 6 FDEP APPLICABLE REQUIREMENTS LIST FDEP Title	Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
	4.(a) Annual VE test,	0330045	✓			Unit 006
	(b) Annual test for lead, acrylonitide and other regulated pollutants,	0330045				Unit 006
	(c) Annual test for each NESHAP pollutant	0330045				Unit 006
	5. No annual PM test required if burn no liquid and/or solid fuel for greater than 400 hrs/year.	0330045		–		Unit 006
	6. Exemption from semi-annual PM test for steam generators.	0330045				Unit 006
	7. Exemption from quarterly PM test for units not utilizing liquid and/or solid fuel for more than 100 hrs.	0330045		–		Unit 006
	8. Five year VE test requirement for units that operate no more than 400 hrs/year.	0330045		–		Unit 006
	9. Fifteen day advance notification requirement prior to test.	0330045	✓			Unit 006
	10. Compliance test exemption for exempt units and units utilizing a general permit.	0330045		–		Unit 006
62-297.310	(b) Special Compliance Tests.	0330045	✓		Applicable upon any complaint.	Unit 006
	(c) Waiver of Compliance Test Requirement.	0330045	✓		SO2 24 hour CEM/ FS&A program in lieu of annual compliance test.	Unit 006
	(8) Test Reports.	0330045	✓			Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
a						
Part 60 - EPA Regulations on Standards of Performance for New Stationary Sources						
Subpart A — General Provisions						
60.7	Notification and record keeping.	0330045				Unit 006
60.8	Performance tests.	0330045				Unit 006
60.11	Compliance with standards and maintenance requirements.	0330045				Unit 006
60.12	Circumvention.	0330045				Unit 006
60.13	Monitoring requirements	0330045				Unit 006
60.19	General notifications and reporting requirements	0330045				Unit 006
Subpart D — Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971						
60.42	Standard for particulate matter.	0330045				Unit 006
60.43	Standard for sulfur dioxide.	0330045				Unit 006
60.44	Standard for nitrogen oxides.	0330045				Unit 006
60.45	Emission and fuel monitoring.	0330045				Unit 006
60.46	Test methods and procedures.	0330045				Unit 006
Subpart Da — Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978						
60.42a	Standard for particulate matter.	0330045				Unit 006
60.43a	Standard for sulfur dioxide.	0330045				Unit 006
60.44a	Standard for nitrogen oxides.	0330045				Unit 006
60.45a	Commercial demonstration permit.	0330045		X		Unit 006
60.46a	Compliance provisions.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
60.47a	Emission monitoring.	0330045				Unit 006
60.48a	Compliance determination procedures and methods.	0330045				Unit 006
60.49a	Reporting requirements.	0330045				Unit 006
Subpart Db — Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units						
60.42b	Standard for sulfur dioxide.	0330045				Unit 006
60.43b	Standard for particulate matter.	0330045				Unit 006
60.44b	Standard for nitrogen oxides.	0330045				Unit 006
60.45b	Compliance and performance test methods and procedures for sulfur dioxide.	0330045		_		Unit 006
60.46b	Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.	0330045		_		Unit 006
60.47b	Emission monitoring for sulfur dioxide.	0330045				Unit 006
60.48b	Emission monitoring for particulate matter and nitrogen oxides.	0330045				Unit 006
60.49b	Reporting and recordkeeping.	0330045				Unit 006
Subpart Dc — Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units						
60.42c	Standard for sulfur dioxide.	0330045				Unit 006
60.43c	Standard for particulate matter.	0330045				Unit 006
60.44c	Compliance and performance test methods and procedures for sulfur dioxide.	0330045		_		Unit 006
60.45c	Compliance and performance test methods and procedures for particulate matter.	0330045		_		Unit 006
60.46c	Emission monitoring for sulfur dioxide.	0330045				Unit 006
60.47c	Emission monitoring for particulate matter.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
60.48c	Reporting and recordkeeping.	0330045				Unit 006
Subpart K — Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978						
60.112	Standard for volatile organic compounds (VOC).	0330045				Unit 006
60.113	Monitoring of operations.	0330045				Unit 006
Subpart Ka — Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984						
60.112a	Standard for volatile organic compounds (VOC).	0330045				Unit 006
60.113a	Testing and procedures.	0330045				Unit 006
60.114a	Alternative means of emission limitations.	0330045				Unit 006
60.115a	Monitoring of operations.	0330045				Unit 006
Subpart Kb — Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984						
60.112b	Standard for volatile organic compounds (VOC).	0330045				Unit 006
60.113b	Testing and procedures.	0330045				Unit 006
60.114b	Alternative means of emission limitations.	0330045				Unit 006
60.115b	Recordkeeping and reporting requirements.	0330045				Unit 006
60.116b	Monitoring of operations.	0330045				Unit 006
Subpart Y — Standards of Performance for Coal Preparation Plants						
60.252	Standard for particulate matter.	0330045				Unit 006
60.253	Monitoring of operations.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
60.254	Test methods and procedures.	0330045				Unit 006
Subpart GG — Standards of Performance for Stationary Gas Turbines						
60.332	Standard for nitrogen oxides.	0330045				Unit 006
60.333	Standard for sulfur dioxide.	0330045				Unit 006
60.334	Monitoring of operations.	0330045				Unit 006
60.335	Test methods and procedures.	0330045				Unit 006
Subpart OOO — Standards of Performance for Nonmetallic Mineral Processing Plants						
60.672	Standard for Particulate Matter.	0330045				Unit 006
60.674	Monitoring of Operations.	0330045				Unit 006
60.676	Reporting and Recordkeeping.	0330045				Unit 006
Part 61 - EPA Regulations on National Emission Standards for Hazardous Air Pollutants						
Subpart A — General Provisions						
61.05	Prohibited Activities.	0330045	✓			Facility
61.09	Notification of Startup.	0330045				Facility
61.10	Source Reporting and Request for Waiver of Compliance.	0330045				Facility
61.11	Waiver of Compliance.	0330045				Facility
61.12(b)	Compliance with Standards and Maintenance Requirements.	0330045	✓			Facility
61.13	Emission Tests and Waiver of Emission Tests.	0330045				Facility
61.14	Monitoring Requirements.	0330045				Facility
61.19	Circumvention.	0330045				Facility
Subpart M — National Emission Standards for Asbestos		0330045	✓			Facility

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
Appendix C to Part 61 — Quality Assurance Procedures		0330045	✓			Facility
Part 63 - EPA Regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories						
Subpart A — General Provisions						
63.4	Prohibited Activities and Circumvention.	0330045		X		Unit 006
63.6	Compliance with Standards and Maintenance Requirements.	0330045				Unit 006
63.7	Performance Testing Requirements.	0330045				Unit 006
63.8	Monitoring Requirements.	0330045				Unit 006
63.9	Notification Requirements.	0330045				Unit 006
63.10	Reporting and Recordkeeping Requirements.	0330045				Unit 006
63.11	Control Device Requirements.	0330045				Unit 006
Subpart Q — National Emission Standards for Industrial Process Cooling Towers						
63.402	Standard.	0330045				Unit 006
63.403	Compliance Dates.	0330045				Unit 006
63.404	Compliance Demonstrations.	0330045				Unit 006
63.405	Notification Requirements.	0330045				Unit 006
63.406	Recordkeeping and Reporting Requirements.	0330045				Unit 006
Subpart T — National Emission Standards for Halogenated Solvent Cleaning						
63.462	Batch Cold Cleaning Machine Standards.	0330045				Unit 006
63.463	Batch Vapor and In-Line Cleaning Machine Standards.	0330045				Unit 006
63.464	Alternative Standards.	0330045				Unit 006
63.465	Test Methods.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
63.466	Monitoring Procedures.	0330045				Unit 006
63.467	Recordkeeping Requirements.	0330045				Unit 006
63.468	Reporting Requirements.	0330045				Unit 006
Part 72 - EPA Acid Rain Program Permits						
Subpart A — General Provisions						
72.7	New Units Exemption.	0330045				Unit 006
72.8	Retired Units Exemption.	0330045				Unit 006
72.9	Standard Requirements.	0330045	✓			Unit 006
Subpart B — Designated Representative						
72.20	Authorization and Responsibilities of the Designated Representative	0330045	✓			Unit 006
72.21	Submissions.	0330045	✓			Unit 006
72.22	Alternate Designated Representative.	0330045	✓			Unit 006
72.23	Changing the Designated Representative, Alternate Designated Representative; Changes in the Owners and Operators.	0330045	✓			Unit 006
Subpart C — Acid Rain Applications						
72.30	Requirements to Apply.	0330045	✓			Unit 006
72.32	Permit Applications Shield and Binding Effect of Permit Application.	0330045	✓			Unit 006
72.33	Identification of Dispatch System.	0330045	✓			Unit 006
Subpart D — Acid Rain Compliance Plan and Compliance Options						
72.40	General.	0330045	✓			Unit 006
72.41	Phase I Substitution Plans.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
72.42	Phase I Extension Plans.	0330045	✓		Crist Unit 6 & 7	Unit 006
72.43	Phase I Reduced Utilization Plans.	0330045	✓			Unit 006
72.44	Phase II Repowering Extensions.	0330045				Unit 006
Subpart E — Acid Rain Permit Contents						
72.51	Permit Shield.	0330045	✓			Unit 006
Subpart I - Compliance Certification						
72.90	Annual Compliance Certification Report.	0330045	✓			Unit 006
72.91	Phase I Unit Adjusted Utilization.	0330045	✓			Unit 006
72.92	Phase I Unit Allowance Surrender.	0330045	✓			Unit 006
72.93	Units with Phase I Extension Plans.	0330045				Unit 006
72.94	Units with Repowering Extension Plans.	0330045				Unit 006
Part 73 - EPA Acid Rain Program Sulfur Dioxide Allowance System						
Subpart C — Allowance Tracking System						
73.33	Authorized Account Representative	0330045	✓			Unit 006
73.35	Compliance.	0330045	✓			Unit 006
Part 75 - EPA Acid Rain Program For Continuous Emission Monitoring						
Subpart A — General						
75.4	Compliance Dates.	0330045	✓			Unit 006
75.5	Prohibitions.	0330045	✓			Unit 006
Subpart B — Monitoring Provisions						
75.10	General Operating Requirements.	0330045	✓			Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
75.11	Specific Provisions for Monitoring SO_2 Emissions (SO_2 and Flow Monitors).	0330045	✓			Unit 006
75.12	Specific Provisions for Monitoring NO_x Emissions (NO_x and Diluent Gas Monitors).	0330045	✓			Unit 006
75.13	Specific Provisions for Monitoring CO_2 Emissions.	0330045	✓			Unit 006
75.14	Specific Provisions for Monitoring Opacity.	0330045	✓			Unit 006
75.15	Specific Provisions for Monitoring SO_2 Emissions Removal by Qualifying Phase I Technology.	0330045		–		Unit 006
75.16	Specific Provisions for Monitoring Emissions from Common, By-Pass, and Multiple Stacks for SO_2 Emissions and Heat Input Determinations.	0330045		–		Unit 006
75.17	Specific Provisions for Monitoring Emissions from Common, By-Pass, and Multiple Stacks for NO_x Emission Rate.	0330045		–		Unit 006
75.18	Specific Provisions for Monitoring Emissions from Common, By-Pass, and Multiple Stacks for Opacity.	0330045		–		Unit 006
Subpart C — Operation and Maintenance Requirements						
75.20	Certification and Recertification Procedures.	0330045	✓			Unit 006
75.21	Quality Assurance and Quality Control Requirements.	0330045	✓			Unit 006
75.22	Reference Test Methods.	0330045	✓			Unit 006
75.24	Out-of-Control Periods.	0330045	✓			Unit 006
Subpart D — Missing Data Substitution Procedures						
75.30	General Provisions.	0330045	✓			Unit 006
75.31	Initial Missing Data Procedures.	0330045	✓			Unit 006
75.32	Determination of Monitor Data Availability for Standard Missing Data Procedures.	0330045	✓			Unit 006
75.33	Standard Missing Data Procedures.	0330045	✓			Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
75.34	Units with Add-On Emission Controls.	0330045				Unit 006
75.35	Missing Data Procedures for CO2	0330045	✓			Unit 006
75.36	Missing Data Procedures for Heat Input	0330045	✓			Unit 006
Subpart E — Alternative Monitoring Systems						
75.40	General Demonstration Requirements.	0330045				Unit 006
75.41	Precision Criteria.	0330045				Unit 006
75.42	Reliability Criteria.	0330045				Unit 006
75.43	Accessibility Criteria.	0330045				Unit 006
75.44	Timeliness Criteria.	0330045				Unit 006
75.45	Daily Quality Assurance Criteria.	0330045				Unit 006
75.46	Missing Data Substitution Criteria.	0330045				Unit 006
75.47	Criteria for a Class of Affected Units.	0330045				Unit 006
75.48	Petition for an Alternative Monitoring System.	0330045				Unit 006
Subpart F — Recordkeeping Requirements						
75.50	General Recordkeeping Provisions.	0330045	✓			Unit 006
75.51	General Recordkeeping Provisions for Specific Situations.	0330045				Unit 006
75.52	Certification, Quality Assurance, and Quality Control Record Provisions.	0330045	✓			Unit 006
75.53	Monitoring Plan.	0330045	✓			Unit 006
75.54	General Recordkeeping Provisions	0330045	✓			Unit 006
75.55	General Recordkeeping Provisions for Special Situations	0330045	✓			Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
75.56	Certification, Quality Assurance and Quality Control Record Provision	0330045	✓			Unit 006
Subpart G — Reporting Requirements						
75.60	General Provisions.	0330045	✓			Unit 006
75.61	Notification of Certification and Recertification Test Dates.	0330045	✓			Unit 006
75.62	Monitoring Plan.	0330045	✓			Unit 006
75.63	Certification or Recertification Applications.	0330045	✓			Unit 006
75.64	Quarterly Reports.	0330045	✓			Unit 006
75.65	Opacity Reports.	0330045	✓			Unit 006
Appendix A to Part 75 — Specifications and Test Procedures		0330045	✓			Unit 006
Appendix B to Part 75 — Quality Assurance and Quality Control Procedures		0330045	✓			Unit 006
Appendix C to Part 75 — Missing Data Statistical Estimation Procedures		0330045	✓			Unit 006
Appendix D to Part 75 — Optional SO_2 Emissions Data Protocol for Gas-Fired Units and Oil-Fired Units		0330045		–		Unit 006
Appendix E to Part 75 — Optional NO_x Emissions Estimation Protocol for Gas-Fired Peaking Units and Oil-Fired Peaking Units		0330045		–		Unit 006
EPA Part 76 - Acid Rain Nitrogen Oxides Emission Reduction Program						
76.5	NO_x Emission Limitations for Group 1 Boilers.	0330045	✓			Unit 006
76.8	Early Election for Group 1, Phase II Boilers.	0330045				Unit 006
76.9	Permit Applications and Compliance Plans.	0330045	✓			Unit 006
76.10	Alternative Emission Limitations.	0330045	✓			Unit 006
76.11	Emissions Averaging.	0330045	✓			Unit 006
76.12	Phase I NO_x Compliance Extensions.	0330045				Unit 006

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
76.13	Compliance and Excess Emissions	0330045	✓			Unit 006
76.14	Monitoring, Recordkeeping, and Reporting.	0330045	✓		Cost reporting under 76.14 (c).	Unit 006
76.15	Test Methods and Procedures.	0330045	✓		Only if AEL is requested.	Unit 006
EPA Part 77 - Excess Emissions						
77.3	Offset Plans	0330045	✓			Unit 006
77.5(b)	Deduction of Allowances	0330045	✓			Unit 006
77.6	Excess Emission Penalties for SO2 and Nox; and	0330045	✓			Unit 006
EPA Part 82 - Protection Of Stratospheric Ozone						
Subpart B - Servicing of Motor Vehicle Air Conditioners						
82.34	Prohibitions.	0330045	✓			Facility
82.36	Approved refrigerant recycling equipment.	0330045	✓			Facility
82.38	Approved independent standards testing organizations.	0330045	✓			Facility
82.40	Technician training and certification.	0330045	✓			Facility
82.42	Certification, recordkeeping and public notification requirements.	0330045	✓			Facility
Subpart F - Recycling and Emissions Reduction						
82.154	Prohibitions.	0330045	✓			Facility
82.156	Required practice.	0330045	✓			Facility
82.158	Standards for recycling and recovery equipment.	0330045	✓			Facility
82.160	Approved equipment testing organizations.	0330045	✓			Facility
82.161	Technician certification.	0330045	✓			Facility
82.162	Certification by owners of recovery and recycling equipment.	0330045	✓			Facility

EPA Rule	GULF POWER - CRIST UNIT 6 EPA APPLICABLE REQUIREMENTS LIST EPA Title	(AIRS) Facility Emission Unit Identification Number(s)	Applicable Requirement		Comments/Discussion	Unit/Facility Potential Applicability
			Yes	No/NA		
82.164	Reclaimer certification.	0330045	✓			Facility
82.166(k)(m)	Reporting and recordkeeping requirements for owners/operators.	0330045	✓			Facility
40 CFR 279.72	Used Oil Regulations.	0330045	✓		Facility burns on-spec used oil.	Facility

Permit

Description of SNCR System

Facility wide NOx limit & Reference to agreement
Compliance CEMS for NOx
annual test for NOx
annual test for NH_3 Slip

Initial test requirements for NH_3 Compl. with
Instituted PPM Limit on NH_3

Use Jeffs Unit 7 TEPD as Template

Do some research on SNCR to be able to
make statements on T.E.P.D..

Memorandum

Florida Department of
Environmental Protection

3/3/05

TO: Michael G. Cooke

THRU: Trina Vielhauer
Jim Pennington

FROM: Jonathan Holtom

DATE: March 1, 2005

SUBJECT: Cooling Tower Replacement

Attached for approval and signature is an exemption (pursuant to Rule 62-4.040(1)(b), F.A.C) from the construction permitting requirements of Rule 62-210.300, F.A.C. for the replacement of the Unit 6 cooling tower at Gulf Power's Crist Generating Station. The previous cooling tower was damaged beyond repair during hurricane Ivan. Gulf Power had been waiting for a settlement commitment from their insurance company before making a final decision on the choice of the replacement unit. In order to meet the water discharge temperature differentials that are required by the NPDES permit, installation of the new cooling tower must be completed during April. Gulf Power has chosen to install a newer version of the same model that was destroyed, but have elected to include additional drift eliminators that were not installed on the old cooling tower. The addition of these drift eliminators will result in a decrease in particulate matter emissions from a potential of 1,465 tons per year down to an estimated 3.4 tons per year. This replacement project does not quite qualify for a generic emissions unit exemption, pursuant to Rule 62-210.300(3)(b), F.A.C., because the potential VOC emissions are just over the 5 ton per year cut-off at 5.17 tons per year. The cooling tower is not subject to 40 CFR 63, Subpart Q because chromium-based water treatment chemicals are not used. Because there are no applicable requirements, the three cooling towers at the Crist plant are included in the Title V permit as unregulated emissions units.

I recommend your approval and signature.

Attachments

/jh

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

March 2, 2005

CERTIFIED MAIL – Return Receipt Requested

Mr. Gene L. Ussery, Jr.
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0100

Re: Crist Electric Generating Station
Conditional Exemption for Unit 6 Cooling Tower Replacement

Dear Mr. Ussery:

The Department is in the process of reviewing an air construction permit application which you recently submitted. Included in the application is a request to replace the cooling tower for Unit 6 that was damaged beyond repair during hurricane Ivan. Based on communications with Mr. Dwain Waters, we understand that there is some urgency associated with gaining the approval to reconstruct the damaged cooling tower in order to meet the required water discharge temperature differentials imposed by the NPDES permit. We also understand that the required temperature differentials are seasonal in nature. Because the seasonal temperature differential requirement changes during the spring season, the cooling tower replacement must be operational during the month of April. Based on the information submitted, the cooling tower will be replaced with an identical cooling tower, but will include additional drift eliminators that were not on the original unit. As a result, the particulate matter (PM) emissions will be reduced from a past potential of 1,465 tons per year to an estimated 3.4 tons per year. Potential VOC emissions will remain unchanged at an estimated 5.17 tons per year.

The existing facility is a "major source of air pollution" or "Title V Source" for criteria pollutants and hazardous air pollutant emissions pursuant to Rule 62-210.200, Florida Administrative Code (F.A.C.), Definitions. A renewal of the Title air operation permit became effective on January 1, 2005. Since the cooling tower replacement will result in such a significant decrease in actual PM emissions, the proposal is not subject to PSD new source review pursuant to Rule 62-212.400(5), F.A.C. Also, for PSD review consideration pursuant to Rule 62-212.400(6)(b), F.A.C., it is determined that the proposal is not considered as part of a phased project. Finally, there are no specific emission limiting standards pursuant to Rule 62-204.800 and Chapter 62-296, F.A.C.

Based on the above findings, the Department is granting a conditional exemption from the air construction permitting requirements of the Florida Department of Environmental Protection for the replacement of the cooling tower for Unit 6. The exemption is based on the premise that any air pollutants emitted from the proposed cooling will not be in significant quantities to contribute to air pollution problems in the state pursuant to Rule 62-4.040(1)(b), F.A.C.

The conditions of this exemption for the Unit 6 Cooling Tower are as follows:

1. The new cooling tower will be designed to meet at least the same specifications as the original cooling tower.
2. The design flow rate of the new cooling tower shall not exceed the old design flow rate of 150,960 GPM.
3. No chromium-based water treatment chemicals shall be used.

4. The design of the old cooling tower shall be improved by the installation of additional drift eliminators in order to reduce the PM emissions to an estimated 3.4 tons per year.
5. The operation of this activity shall not cause or contribute to an objectionable odor.
6. If the conditions on which this exemption are based change, the operator shall notify the Department's Bureau of Air Regulation of the changes and request the exemption be amended.

This conditional exemption will take effect on the clerking date unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes (F.S.). The procedures for petitioning for a hearing are set forth below.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and, (f) A demand for relief.

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

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

Mediation is not available in this proceeding.

NOTICE OF APPEAL RIGHTS

Any party to this conditional exemption has the right to seek judicial review of it under Section 120.68, F.S., by filing a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this conditional exemption is filed with the Clerk of the Department.

A copy of the conditional exemption and accompanying materials related to the proposed agency action are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Division of Air Resources Management, Suite 23, Magnolia Courtyard, 111 South Magnolia Drive, Tallahassee, Florida 32301, and at the Department's Northwest District Office, 160 Governmental Center, Pensacola, Florida 32501-5794.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michael G. Cooke, Director
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF CONDITIONAL EXEMPTION and all copies were sent by certified mail before the close of business on 3/3/05 to the person(s) listed:

Mr. Gene L. Ussery, Jr., Gulf Power Company

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF CONDITIONAL EXEMPTION were sent by electronic mail on the same date to the person(s) listed:

Ms. Sandra Veazey, NWD
Mr. Andy Allen, NWD
Mr. G. Dwain Waters, Q.E.P., Gulf Power Company

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

(Clerk) 3/3/05 (Date)

MGC/TLV/jh

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

February 24, 2005

Mr. Gene L. Ussery, Jr.
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0100

CERTIFIED MAIL – Return Receipt Requested

Re: Request for Additional Information Regarding Addition of SNCR to Unit 6
File No.: 0330045-012-AC

Dear Mr. Ussery:

The Department has received your permit revision application for the Crist Electric Generating Plant for the purpose of adding SNCR to unit 6. However, in order to continue processing this application, the Department is requesting the additional information outlined below. Should your response to any of the listed items require new calculations or result in changes to the submitted information, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form, certified by your Professional Engineer.

1. Page 3 of the application, Purpose of Application: Only the box for Air Construction permit has been checked. However, in the comment box on the same page, Item 3 has requested that the long term use of biomass be incorporated into the Title V permit. The construction permit that temporarily authorized the burning of biomass to determine the feasibility of burning it in order to reduce NO_X emissions expired October 4, 2003. Pursuant to Rule 62-213.420(1)(a)4., F.A.C., for a Title V operation permit revision application to have been considered a timely request, it must have been submitted at least ninety days prior to expiration of the construction permit, but no later than 180 days after the emissions unit commenced operation as modified. As such, there is no currently valid authorization for burning biomass that can be incorporated into a Title V permit. If Gulf Power desires to establish the authority to burn biomass as a new fuel during the current construction permit revision, please submit a summary of the results of the testing that was performed during the test burns in 2002 and 2003. Based on the results of the tests, provide an analysis comparing past actual emissions (prior to the burning of biomass) to future actual emissions (while burning biomass), and a statement of how the burning of biomass will affect the total annual heat input over the next five years. Include a statement of request specifying which of the four biomass fuels you would like to establish the authority to burn as new fuels, and the requested amount(s) of these fuels that can be burned hourly and annually without causing unstable conditions in the boilers.

2. Page 10 of the application, List of Pollutants Emitted by Facility: List contains a statement of "no change from previous Title V permit". It is suspected that with the addition of biomass burning in Units 4 and 5, and with the addition of SNCR on unit 6, the pollutants that will be emitted from these units after being modified could be different than those currently emitted. Provide a complete list of all pollutants that will be emitted as a result of the modifications.

3. Page 12 of the application, Additional Requirements for All Applications: Reference is made to the Title V application that was previously submitted 6/22/04. The ability to reference previously submitted information only applies to a Title V permit revision provided that the required information has been previously submitted within the past five years. Because this is a construction permit revision that will be allowing modifications to existing operations, the information required by this section of the application must be submitted in order to detail any changes as a result of the authorized modifications.

4. Page 12 of the application, Additional Requirements for Air Construction Permit Applications: Box 3, Rule Applicability Analysis was not addressed. This information needs to be provided, especially as it relates to the requested modifications.

5. Regarding the Cooling Tower: The information submitted states that the new cooling tower will be a like kind replacement with the exception that the drift and evaluation percent of flow will be reduced from 2.4% to 2.1%. What is different about the new cooling tower that will provide the reduced drift? Explain the difference in design drift reduction (2.4% to 2.1%) and the estimated drift reduction (2% vs. 0.005%), and what effect these changes have on actual emissions from the cooling tower.

6. Regarding the SNCR: Provide a description of the location of the urea injection ports, the degree of mixing that can be expected at the injection locations, and how the controller will adjust the injection rates/number of injectors required based on load changes. How will the proposed 5ppm ammonia slip emission rate (24 hour average) be monitored? The application states that the SNCR system is designed to remove 25% of the NO_X from the exhaust stream with a guarantee of 20% reduction. Based on the design and the location of the injection ports, is 25% reduction the maximum that can ever be achieved, or could a greater reduction be achieved if needed in the future? The application also states that the SNCR system is designed for 25% removal "when operating". Does that imply that The SNCR system will be operated at will, or that it will always be operating when the proper temperature is reached in the boiler?

The above comments require a written response to the Department within ninety days of receipt of this notice unless additional time is requested pursuant to Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please contact Jonathan Holtom, P.E., at (850) 921-9531, or me at (850) 921-9515.

Sincerely,

James K. Pennington, P.E.
Administrator
North Permitting Section

JKP/jh

CC: Mr. Gregory N. Terry, P.E., Gulf Power Company
Mr. G. Dwain Waters, Gulf Power Company
Ms. Sandra Veazey, DEP, Northwest District Office (E-mail)
Mr. Greg Worley, U.S. EPA Region 4 (E-mail)

SENDER: *COMPLETE THIS SECTION*

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

1. Article Addressed to:

Mr. Gene L. Ussery, Jr.
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0100

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X James Blakely ☐ Agent ☐ Addressee

B. Received by (Printed Name) James Blakely
C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7001 1140 0002 1578 2335

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

7001 1140 0002 1578 2335

O F F I C I A L U S E

Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorse
Total F

Delivered Mar 3rd/2005

Postmark Here

Sent T Mr. Gene L. Ussery, Jr.
Gulf Power Company
Street, or PO I One Energy Place
Pensacola, Florida 32520-0100
City, Sta

PS Form 3800, January 2001 See Reverse for Instructions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001"identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

Agreement

On August 28, 2002, Gulf Power Company and the Florida Department of Environmental Protection entered into an agreement titled, "Agreement for the Purpose of Ensuring Compliance with the Ozone Ambient Air Quality Standards". Throughout the permit, this is cited as the "Agreement".

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable to project);
    b. Determination of Prevention of Significant Deterioration (not applicable to project); and
    c. Compliance with New Source Performance Standards (not applicable to project).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF POWER
A SOUTHERN COMPANY

August 29, 2002

Ms. Blanca S. Bayo, Director
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

020943-EI

Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Petition for Approval of FDEP/Gulf Power Company Agreement Pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for Purposes of Cost Recovery of the Related Expenditures and Expenses through the Environmental Cost Recovery Clause.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Petition in Microsoft Word format as prepared on a Windows NT based computer.

Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

cc: Beggs and Lane
Jeffrey A. Stone, Esquire

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	Docket No. 02_____-EI Date Filed: August 30, 2002

PETITION FOR APPROVAL OF FDEP/GULF POWER AGREEMENT PURSUANT TO SECTION 366.8255(1)(d)7 OF THE FLORIDA STATUTES FOR PURPOSES OF COST RECOVERY OF THE RELATED EXPENDITURES AND EXPENSES THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE

GULF POWER COMPANY ("Gulf Power", "Gulf", or "the Company"), by and through its undersigned counsel, and pursuant to Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session and Florida Public Service Commission ("Commission") Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, hereby petitions this Commission for approval of the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" ("Ozone Agreement") entered into on August 28, 2002 between the Florida Department of Environmental Protection ("FDEP") and Gulf Power as a new program for cost recovery through the Environmental Cost Recovery Clause ("ECRC"). As grounds for the relief requested by this petition, the Company would respectfully show:

(1) Notices and communications with respect to this petition and docket should be addressed to:

Jeffrey A. Stone
Russell A. Badders
Beggs & Lane
P. O. Box 12950
Pensacola, FL 32591-2950

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780

(2) Gulf is a corporation with its headquarters located at 500 Bayfront Parkway, Pensacola, Florida 32501. The Company is an investor-owned electric utility operating under the jurisdiction of this Commission.

(3) Gulf owns and operates the Crist Plant generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuels. The combustion of fossil fuels produces nitrogen oxides ("NOx"), which are some of the precursor compounds that contribute to the formation of ozone in the ambient air. The Crist Plant currently satisfies all federal and state air emissions requirements, including those applicable to NOx.

(4) Under the authority of the Clean Air Act, the United States Environmental Protection Agency ("USEPA") promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period ("Ozone Standard"). Based upon the best available information, including ambient air quality monitoring data, FDEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area ("PFMPA").

(5) In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with FDEP or USEPA, for the purpose of ensuring compliance with ozone ambient air quality standards. The

legislation, which was sponsored in the Florida House by Representative Jerry Maygarden of Pensacola and in the Florida Senate by Senator Charlie Clary of Destin, and was supported during the legislative session by FDEP Secretary David Struhs and Florida Governor Jeb Bush, was signed into law by Governor Bush on May 23, 2002. In order to qualify for recovery through the ECRC, the agreement between the electric utility and the qualifying environmental agency for the purpose of ensuring compliance with ozone ambient air quality standards must be entered into on or after May 23, 2002 and prior to October 1, 2002.

(6) Representatives of FDEP and Gulf have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended by Chapter 2002-276 of the Laws of Florida. A copy of the resulting Ozone Agreement, which was signed by the parties on August 28, 2002, is attached to and made a part of this petition as Appendix A.

(7) The Ozone Agreement calls for Gulf Power to make changes in its equipment and/or operations at Plant Crist. Such changes are designed to reduce the overall NOx emission rate at the plant as part of a community wide effort to reduce ozone precursor compounds in the PFMPA. When fully implemented, the Ozone Agreement will limit the overall 30 day average NOx emission rate at Plant Crist to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit No. 7 ("Crist 7") is offline.[1] The predominant change envisioned by the agreement is the

[1] As the largest and most efficient of seven generating units at Plant Crist, Crist 7 is generally the economic choice to be operated. Whenever Crist 7 is offline, there is a greater reduction in NOx emissions than would otherwise result from operating Crist 7 with the new SCR. Since NOx reduction is the goal, the Ozone Agreement recognizes that the emission rate limit is not necessary when Crist 7 is not operating.

addition of Selective Catalytic Reduction ("SCR") technology to Crist 7 by May 1, 2005.[2] In addition to the NOx emission reductions that will occur as a result of the installation and operation of the Crist 7 SCR project, the Ozone Agreement also calls for further reductions in NOx emissions through the addition of NOx reduction technologies on one or more of the other coal-fired units at Plant Crist. The selection and installation of one or more additional NOx reduction technologies for one or more of the other units will follow engineering studies conducted as part of the Ozone Agreement.[3] The engineering studies contemplated by the Ozone Agreement are intended to produce unit specific cost and performance data that will allow Gulf to make a decision between various alternatives based on the relative cost-effectiveness of each technology. To augment the NOx reductions envisioned from the addition of the NOx reduction technologies discussed above, the Ozone Agreement also calls for the retirement of the three oldest Crist generating units (Crist 1, Crist 2 and Crist 3) by May 1, 2006.

(8) As shown in the graph set forth in Appendix B to this petition, the annual NOx emission reductions envisioned by the Ozone Agreement, as compared to 1999 baseline data, are equivalent to a result that could otherwise be achieved by the installation of SCR technology on both Crist 7 and Crist 6. The flexibility to study other alternatives for achieving an overall plant

[2] Due to structural interference and performance concerns for the new SCR, the Ozone Agreement also calls for a new Crist 7 precipitator to be constructed at a new location in order to allow the new SCR to be built in the location of the old Crist 7 precipitator. The new SCR will be completed one year after construction of the new precipitator is completed.

[3] The deadline for installing other selected NOx reduction technologies is May 1, 2006 unless the cost effective choice is determined to be SCR technology for Crist 6. If SCR for Crist 6 is selected, the deadline for installation will be December 31, 2007. The Ozone Agreement calls for Gulf to obtain written concurrence from FDEP before implementing NOx reduction technology or technologies on one or more of the remaining coal-fired units at Plant Crist. The written concurrence from FDEP will specify that the use of the selected technology or technologies is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in the Ozone Agreement.

wide btu weighted average NOx emission rate of 0.2 lbs/mmbtu may allow Gulf to avoid the cost of installing SCR technology on Crist 6 for a net savings of as much as $50 million or more.

(9) Gulf seeks approval of the Ozone Agreement as an environmental compliance program/activity appropriate for recovery through the ECRC pursuant to the amendments to the Florida Statutes contained in Chapter 2002-276 of the Laws of Florida. This new program is appropriate for ECRC recovery based on the provisions of Section 366.8255(1)(d)7 of the Florida Statutes and the prior orders of the Commission implementing the ECRC.

(10) The Company's expenses and/or expenditures associated with the activities discussed in the Ozone Agreement are not recovered through any other cost recovery mechanism or through base rates. These new activities were not included in the Company's last test year forecast upon which its current base rates were established. As a result, the expenditures and/or expenses associated with these activities will be incurred separate and apart from the expenditures and/or expenses for activities that were approved in the Company's last test year forecast upon which rates are based.

(11) Gulf is not requesting a change in the ECRC factors as part of this petition. The projected expenditures and expenses will be reflected in subsequent true-up and/or projection filings submitted as part of the ongoing docket addressing the ECRC. The actual expenditures made and expenses incurred by the Company will be addressed in subsequent ECRC filings and will be subject to audit.

(12) The parties to the Ozone Agreement acknowledge that the NOx reduction activities identified therein are conditioned upon timely approval by this Commission for cost recovery through the ECRC. Given that substantial expenditures must be undertaken early in 2003 in order to meet the deadlines set forth in the Ozone Agreement, it is imperative that Gulf obtain an order from this Commission authorizing Gulf to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause that is rendered final within 90 days of the execution of the agreement.[4] If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules set forth in the Ozone Agreement are subject to revision solely by mutual agreement of the parties in order to allow Gulf to move forward with the activities described therein above pending a final order by the FPSC. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement automatically becomes null and void unless extended by mutual written agreement of the parties within 30 days thereafter. The net effect of these provisions is that delay in final rendition of an order approving the request made by this petition beyond the end of this year will either result in delay of the NOx emission reductions contemplated by the Ozone Agreement or cancellation of the agreement altogether. Either result will frustrate the intent underlying enactment of Chapter 2002-276 of the Laws of Florida which is to enable communities such as the PFMPA to avoid becoming classified as non-attainment areas for ozone ambient air quality standards with the consequential effects that may include imposition of emission caps that could limit expansion of business and industry, addition of required vehicle emission testing, and federal road funding cutbacks. As a result, Gulf respectfully requests that

[4] A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction.

the Commission take this petition up for consideration as Proposed Agency Action at the earliest opportunity. Towards that end, Gulf respectfully suggests that a Commission decision on this petition as Proposed Agency Action at the Commission Conference scheduled for October 1, 2002 followed by expedited entry of a PAA order would allow the traditional 21 day period for substantially affected parties to request a hearing to run in time for the Commission to hold a hearing, if requested, on November 20-22, 2002 as part of the proceedings in Docket No. 020007-EI related to the ECRC. Absent a request for hearing, such a PAA order will become final and begin the time for a substantially affected party to file a notice of appeal. If no such notice is filed, the resulting order will be rendered final and no longer subject to review or appeal within the deadlines specified by the Ozone Agreement. If a request for hearing is filed by an appropriate party, a Commission decision could still be issued and made final in the absence of an appeal before the Ozone Agreement would be rendered null and void by its own terms.

WHEREFORE, Gulf Power Company respectfully requests the Commission to approve the "Agreement for the Purpose of Ensuring Compliance with Ozone Ambient Air Quality Standards" entered into on August 28, 2002 between the Florida Department of Environmental Protection and Gulf Power Company and the costs associated therewith for recovery through the

Environmental Cost Recovery Clause consistent with this petition, and that such approval and authorization be set forth in a Proposed Agency Action order issued by the Commission at the earliest practical opportunity or grant such other relief as is just and reasonable.

Respectfully submitted the 29th day of August, 2002.

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Appendix A

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

This agreement is entered into by the Florida Department of Environmental Protection (DEP) and Gulf Power Company (GULF), for the exclusive purposes as follows: (a) ensuring that GULF's electrical generating facility located within the Pensacola, Florida Metropolitan Planning Area (PFMPA) supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

WHEREAS:

I. GULF owns and operates the Crist Plant electrical generating facility in Escambia County, Florida. This plant generates electricity for the consuming public through the combustion of fossil fuel. The combustion of fossil fuels produces some of the precursor compounds that contribute to the formation of ozone in the ambient air.

II. Under the authority of the Clean Air Act, the U. S. Environmental Protection Agency (EPA) promulgated regulations dealing with air quality, including ambient air quality standards designed to protect human health and welfare. One such regulation places a limit on the amount of ozone that is considered to be acceptable in the ambient air during any 8-hour period (Ozone Standard).

III. Based upon the best available information, including ambient air quality monitoring data, DEP does not expect Escambia and Santa Rosa Counties to be in compliance with the Ozone Standard in 2004/2005 unless significant reductions of emissions of ozone precursor compounds are achieved in the Pensacola, Florida Metropolitan Planning Area.

IV. In its 2002 session, the Florida legislature adopted amendments to section 366.8255(1)(d) of the Florida Statutes to provide that an electric utility may seek recovery of costs and expenses prudently incurred pursuant to a voluntary agreement with DEP or EPA, for the purpose of ensuring compliance with ozone ambient air quality standards.

V. Representatives of DEP and GULF have met and arrived at a mutual agreement in furtherance of the purposes of Section 366.8255(1)(d)7 of the Florida Statutes as amended during the 2002 Florida legislative session.

VI. DEP and GULF concur that installation of Selective Catalytic Reduction (SCR) controls at Crist Unit #7 as well as the implementation of other NOx reduction

technologies on one or more of the other three coal-fired generating units at Plant Crist will be needed as part of a community wide effort to reduce ozone precursor compounds in the Pensacola Metropolitan Planning Area. Due to structural interference and performance concerns for the new SCR, a new Unit #7 precipitator will also be constructed at a new location and the SCR will be completed one year later in the location of the old Unit #7 precipitator.

VII. It is anticipated that the implementation of this agreement will result in an approximately 61% reduction [9,188 tons] in annual NOx emissions from the GULF Crist Plant based upon 1999 baseline data.

NOW THEREFORE, in consideration of the premises and the mutual agreements contained herein, and intending to be legally bound, the DEP and GULF hereby agree as follows:

1. By May 1, 2005, GULF, after obtaining necessary permits and approvals, will install and begin and continue operating an SCR system at Crist Unit #7 whenever the Crist Unit #7 is online. The SCR system is designed to achieve no less than an 85% reduction in the quantity of nitrogen oxides as measured at the SCR unit inlet (SCR Project). The SCR Project includes the installation of a new precipitator necessary to structurally accommodate installation of the SCR. See Exhibit "A" for proposed project schedule.

2. In addition to the Crist Unit #7 SCR Project, and in order to achieve an overall plant wide Btu weighted average of 0.2 lbs/mmbtu NOx emission rate as further specified in paragraph 3 below, Gulf agrees to conduct engineering studies on the feasibility of other NOx reduction technologies on one or more of the remaining three coal-fired units at Plant Crist. Such 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 reburn technology, selective use of biomass fuel, etc. Gulf further agrees to complete these studies by May 1, 2005. In the event GULF identifies an SCR project for Crist Unit #6 as the NOx reduction technology, GULF will implement, begin and continue operating the SCR on Crist Unit #6 as described in paragraph 3 below by December 31, 2007. In the event GULF identifies a NOx reduction technology other than SCR on Crist Unit #6, GULF will select and implement one or more NOx reduction technologies on one or more of the three other Plant Crist coal-fired units by May 1, 2006. GULF will obtain written concurrence from DEP, before implementing such NOx reduction technology or technologies, that the use thereof is reasonable and necessary to achieve the overall plantwide emission rate of 0.2 lbs/mmbtu specified in paragraph 3 below.

3. GULF will make necessary changes identified and within the timeframes set forth in paragraph 2 above, that will allow it to limit the overall 30 day average NOx emission rate at the Crist Plant to 0.2 lbs./mmbtu year-round except for periods in which Crist Unit #7 is offline. The emission rate shall be calculated pursuant to the formula set forth in Exhibit "B" to this agreement. While Crist Unit #7 is online, this 0.2 lbs./mmbtu will be achieved by utilizing the SCR system on Crist Unit #7 [discussed in paragraph 1 above] and the controls identified pursuant to paragraph 2 above. During such time as Crist Unit #7 may be offline between May 1 and September 15, GULF agrees to operate any NOx reduction technology or technologies DEP may have determined to be reasonable and necessary at other Plant Crist coal-fired units, pursuant to paragraph 2 above, unless prevented from doing so by circumstances beyond its reasonable control.

4. In addition to the NOx emission rate reduction strategies implemented pursuant to paragraphs 1 through 3 above, as a further part of this agreement to support the PFMPA's compliance with the eight hour ozone ambient air quality standard, GULF agrees to retire Crist Unit #1 within 120 days of receiving a final order from the Florida Public Service Commission as provided in paragraph 8 below. In addition, GULF further agrees to retire Crist Unit #2 and Crist Unit #3 on or before May 1, 2006.

5. In the event state or federal law changes to require a change in NOx emissions or the PFMPA is declared non-attainment for ozone, any reduction requirements would be in accordance with all applicable state and federal requirements. In addition, although Florida currently has no state statute providing for NOx trading or credits, GULF shall be entitled to retain all NOx reduction credits and trading rights that may be authorized by Florida law in the future.

6. In the event the FPSC issues a final order authorizing GULF to recover costs incurred pursuant to this agreement, by July 5, 2004, GULF will submit a Title V renewal application to the Department's Bureau of Air Regulation, 2600 Blair Stone Rd, MS 5500, Tallahassee, FL 32399 to incorporate the control technologies contained in this agreement as well as the NOx emission rate as described in paragraphs 1 through 3 above. DEP concurs that the changes envisioned by this agreement will not constitute "modifications" that trigger New Source Review.

7. DEP concurs that the steps and changes described in paragraphs 1 through 4 above are prudent for purposes of (a) ensuring that GULF's electrical generating facility located within the PFMPA supports the Area's compliance with the eight hour ozone ambient air quality standard and (b) authorizing

related cost recovery pursuant to Section 366.8255(1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

8. This agreement is based upon the assumption that an order from the Florida Public Service Commission (FPSC) authorizing GULF to recover the costs incurred pursuant to this agreement through the Environmental Cost Recovery Clause is rendered final (final order) within 90 days of the execution of the agreement. A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction. If a final order is not rendered within 90 days of the date of execution of this agreement, the parties concur that the dates and schedules herein are subject to revision solely by mutual agreement, in order to allow GULF to move forward with the activities described in paragraphs 1-4 above pending a final order by the FPSC. Gulf will exercise good faith in seeking approval of such cost recovery from the FPSC in a timely manner. DEP will support the efforts of GULF before the FPSC and in any subsequent review or appeal. If a final order is not rendered within 120 days of execution of this agreement, the entire agreement shall automatically become null and void unless extended by mutual written agreement of the parties within 30 days thereafter.

9. This agreement shall bind the parties hereto and those whom they represent and may be modified only in writing with the consent of both parties.

10. This agreement is entered into and effective on the date of the last signature of the parties below.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: David B. Struhs

David B. Struhs
Secretary

Date: August 28, 2002

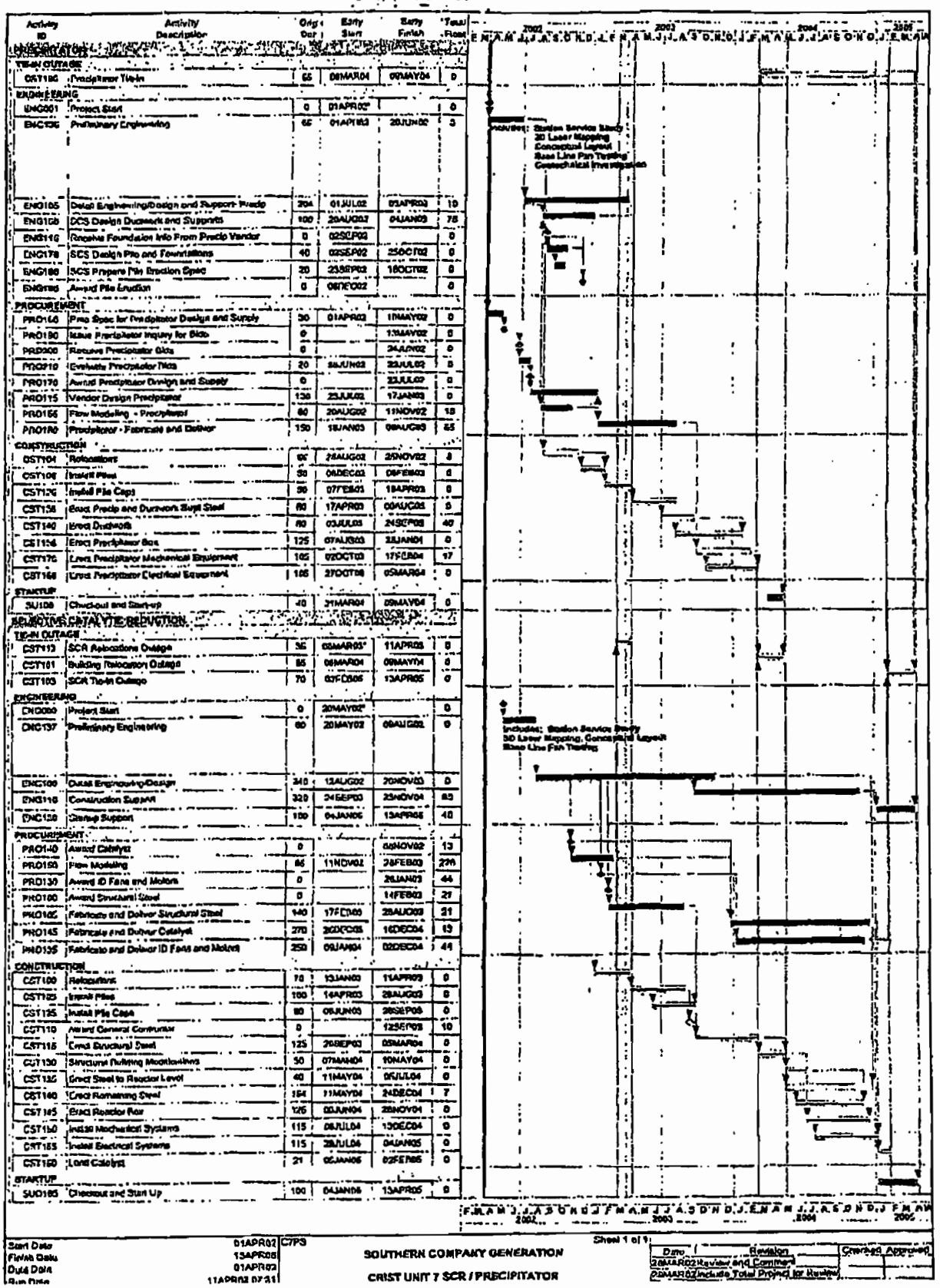
GULF POWER COMPANY

By: Thomas A. Fanning

Thomas A. Fanning
President and Chief Executive Officer

Date: August 28, 2002

Exhibit "A"



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float
TIE-IN OUTAGE					
CST186	Precipitator Tie-In	65	08MAR04	09MAY04	0
ENGINEERING					
ENG001	Project Start	0	01APR02*		0
ENG136	Preliminary Engineering	65	01APR03	26JUN03	3
ENG105	Detail Engineering/Design and Support- Precip	204	01JUL02	01APR03	19
ENG106	DCS Design Ductwork and Supports	100	29AUG03	04JAN04	76
ENG110	Receive Foundation Info From Precip Vendor	0	02SEP02		0
ENG178	SCS Design Pile and Foundations	40	02SEP02	25OCT02	0
ENG180	SCS Prepare Pile Erection Spec	20	25SEP02	18OCT02	0
ENG186	Award Pile Erection	0	08DEC02		0
PROCUREMENT					
PRO140	Prep Spec for Precipitator Design and Supply	50	01APR03	11MAY02	0
PRO190	Issue Precipitator Inquiry for Bids	0		13MAY02	0
PRD300	Receive Precipitator Bids	0		24JUN02	0
PRO210	Evaluate Precipitator Bids	20	25JUN02	22JUL02	0
PRO170	Award Precipitator Design and Supply	0		22JUL02	0
PRO115	Vendor Design Precipitator	130	23JUL02	17JAN03	0
PRO155	Flow Modeling - Precipitator	60	20AUG02	11NOV02	19
PRO160	Precipitator - Fabricate and Deliver	150	18JAN03	09AUG03	65
CONSTRUCTION					
CST104	Relocations	95	24AUG02	25NOV02	0
CST105	Install Piles	30	04DEC02	09FEB03	0
CST126	Install Pile Caps	50	07FEB03	18APR03	0
CST135	Erect Precip and Ductwork Supt Steel	80	17APR03	06AUG03	5
CST140	Erect Ductwork	80	03JUL03	24OCT03	40
CST154	Erect Precipitator Box	125	07AUG03	23JAN04	0
CST170	Erect Precipitator Mechanical Equipment	105	02OCT03	17FEB04	17
CST168	Erect Precipitator Electrical Equipment	105	27OCT03	09MAR04	0
STARTUP					
SU108	Checkout and Start-up	40	31MAR04	09MAY04	0
TIE-IN OUTAGE					
CST113	SCR Relocations Outage	35	03MAR03*	11APR03	0
CST101	Building Relocation Outage	65	08MAR04	09MAY04	0
CST103	SCR Tie-In Outage	70	03FEB05	13APR05	0
ENGINEERING					
ENG000	Project Start	0	20MAY02*		0
ENG137	Preliminary Engineering	60	20MAY02	09AUG02	9
ENG109	Detail Engineering/Design	340	12AUG02	20NOV03	0
ENG116	Construction Support	320	24SEP03	25NOV04	85
ENG150	Startup Support	150	04JAN05	13APR05	40
PROCUREMENT					
PRO140	Award Contract	0		09NOV02	13
PRO150	Flow Modeling	65	11NOV02	28FEB03	226
PRD130	Award ID Fans and Motors	0		26JAN03	44
PRO180	Award Structural Steel	0		14FEB03	21
PRO165	Fabricate and Deliver Structural Steel	140	17FEB03	29AUG03	21
PRO145	Fabricate and Deliver Catalyst	270	20DEC03	16DEC04	19
PRO135	Fabricate and Deliver ID Fans and Motors	250	09JAN04	02DEC04	44
CONSTRUCTION					
CST100	Relocations	70	13JAN03	11APR03	0
CST125	Install Piles	100	14APR03	28AUG03	0
CST125	Install Pile Caps	80	05JUN03	26SEP03	0
CST110	Award General Contractor	0		12SEP03	10
CST115	Erect Structural Steel	125	29SEP03	05MAR04	0
CST130	Structural Painting Modifications	50	07MAR04	10MAY04	0
CST135	Erect Steel to Reactor Level	40	11MAY04	05JUL04	0
CST140	Erect Remaining Steel	154	11MAY04	24DEC04	7
CST145	Erect Reactor Box	125	03JUN04	25NOV04	0
CST150	Install Mechanical Systems	115	06JUL04	13DEC04	0
CST155	Install Electrical Systems	115	29JUL04	04JAN05	0
CST160	Load Catalyst	21	05JAN05	02FEB05	0
STARTUP					
SU0105	Checkout and Start Up	100	04JAN05	13APR05	0

Start Date 01APR02 C7P3
Finish Date 13APR05
Data Date 01APR02
Run Date 11APR02 07:31

SOUTHERN COMPANY GENERATION
CRIST UNIT 7 SCR / PRECIPITATOR

Sheet 1 of 1

Date	Revision	Checked	Approved
28MAR02	Review and Comment		
29MAR02	Include Total Project for Review		

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH OZONE AMBIENT AIR QUALITY STANDARDS

Exhibit "B"

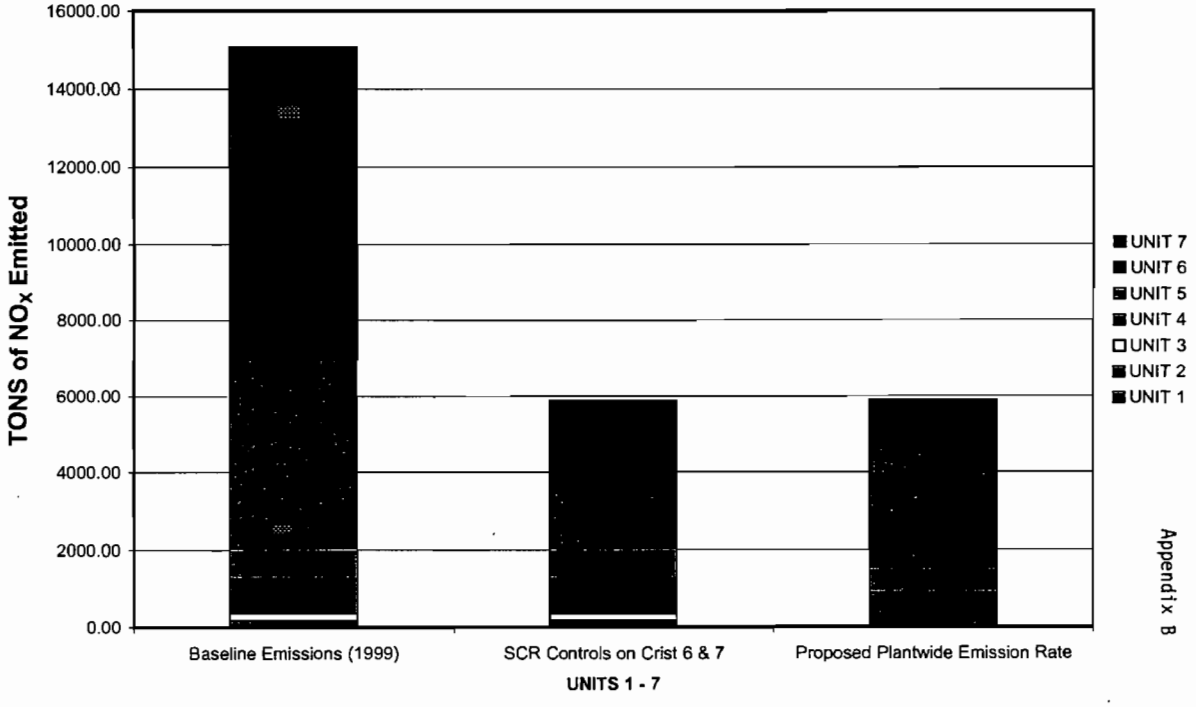
Gulf will measure its compliance with the emission rate limit set forth in paragraph 3 of this agreement by determining the Plant Crist NOx emission rate, when Crist Unit #7 has operated for 30 sequential days (which need not be consecutive) on a generating unit-specific btu weighted average basis pursuant to the following formula:

$$\text{plant wide daily mmbtu weighted NOx rate} = \frac{\sum_{\substack{\text{Units} \\ 4,5,6,7}} \left[\left(\text{Unit \# daily mmbtu}\right) \text{ X } \left(\text{24 hour avg unit \# NOx CEMs rate}\right)\right]}{\sum_{\substack{\text{Units} \\ 4,5,6,7}} \left(\text{Unit \# daily mmbtu}\right)}$$

For the purposes of this calculation, a Crist Unit #7 operating day means any calendar day that Crist Unit #7 is online a minimum of 18 hours.

Unit # daily mmbtu (heat input) in the foregoing formula is determined by Plant Crist's daily as-burned fuel analysis

Comparison of Crist Plant Emission Reduction Alternatives



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of FDEP/Gulf Power agreement pursuant to Section 366.8255(1)(d)7 of the Florida Statutes for purposes of cost recovery of the related expenditures and expenses through the Environmental Cost Recovery Clause.	)	Docket No. 02____-EI

Certificate of Service

I HEREBY CERTIFY that a copy of the foregoing has been furnished this 29th day of August 2002 by U.S. Mail or hand delivery to the following:

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Attorneys for Gulf Power Company

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

{Permitting Note: Unless otherwise specified by permit or rule, the following conditions apply to all emissions units and activities at this facility.}

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Unless otherwise specified in the permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

7. General Visible Emissions: Unless otherwise specified in the permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

8. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

9. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

10. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted

capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

11. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

12. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

    a. *Required Sampling Time.* 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

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

    c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    [Rule 62-297.310(4), F.A.C.]

13. 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.]

14. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

15. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

19. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

AC
Dec 30 - 2124

GULF POWER
A SOUTHERN COMPANY

Certified Mail

January 18, 2005

RECEIVED
JAN 25 2005
BUREAU OF AIR REGULATION

Jonathan Holtom
Florida Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Mail Station #5510
Tallahassee, Florida 32399-2400

0330045-012-AC

Dear Mr. Holtom:

RE: CRIST ELECTRIC GENERATING PLANT
CONSTRUCTION PERMIT APPLICATION
SNCR, Cooling Tower Replacement, Biomass, Mercury Test Center
Permit No: 0330045-009-AV

Please find enclosed Gulf Power's application for construction permit for several projects currently in planning at the Crist Electric Generating Plant located in Pensacola, Florida. Included in the application are the required certifications by the Responsible Official and Professional Engineer registered in Florida.

As you may be aware, Gulf Power's schedule to begin construction on these projects is critical pursuant to damages sustained by Hurricane Ivan and due to engineering & design delays due to the hurricane's impact on planning. Please advise Gulf Power as soon as possible any delay to the construction schedules due to permitting processes.

We appreciate your efforts to work with us regarding the startup of these emission control and research control systems. Please call me regarding any additional questions or concerns.

Sincerely,

Dwain Waters, Q.E.P.

G. Dwain Waters, Q.E.P.
Air Quality Programs Supervisor

cc: w/att: Trina Vielhauer, FDEP – Tallahassee Office
Jim Vick, Gulf Power Company
Wright, Terry, Gulf Power Company
John Dominey, Gulf Power Company
Ms. Sandra Veazey, FDEP Northwest District Office, Pensacola, Florida
Mr. Richard Fancher, FDEP Northwest District Office, Pensacola, Florida

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Gulf Power Company	
2. Site Name: Crist Electric Generating Plant	
3. Facility Identification Number: 0330045	
4. Facility Location...: Street Address or Other Locator: Pate Road (Off of 10 Mile Road) City: Pensacola County: Escambia Zip Code: 32520-0340	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: G. Dwain Waters
2. Application Contact Mailing Address... Organization/Firm: Gulf Power Company Street Address: One Energy Place City: Pensacola State: Florida Zip Code: 32520-0328
3. Application Contact Telephone Numbers... Telephone: (850) 444-6527 ext. Fax: (850) 444-6217
4. Application Contact Email Address: gdwaters@southernco.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	1-25-05
2. Project Number(s):	0330045-012-AC
3. PSD Number (if applicable):	

APPLICATION INFORMATION

4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☒ Air construction permit.

Air Operation Permit

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

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

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

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

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

Application Comment

The purpose of this application is to request a construction permit for several projects at Plant Crist located in Pensacola, Florida. These projects include: 1) Construction of a Selective Non-Catalytic Reduction (SNCR) System on Crist Unit 6 to support the facility wide NOx emission limitation as outlined under the Gulf-FDEP Ozone Reduction Agreement. 2) Re-construction of the damaged Unit 6 cooling tower from Hurricane Ivan. 3) Continuation of the previously issued biomass use permit for Units 4 and 5 and incorporation of long term use of biomass fuel in the Title V permit. 4) Construction of a Mercury Test Center on Unit 5.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
004	Unit 4 Electric Utility Boiler - 1096.7 MMBtu/hr		
005	Unit 5 Electric Utility Boiler - 1096.7 MMBtu/hr		
006	Unit 6 Electic Utility Boiler - 3704.8 MMBtu/hr		
012	Cooling Towers (3)		

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :

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

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

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

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

   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   Gene L. Ussery, Jr.

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

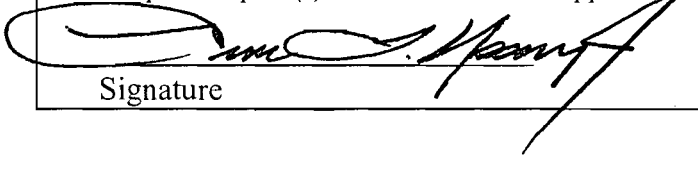
3. Application Responsible Official Mailing Address...
   Organization/Firm: Gulf Power Company
   Street Address: One Energy Place
   City: Pensacola State: Fl Zip Code: 32520-0100

4. Application Responsible Official Telephone Numbers...
   Telephone: (850) 444-6383 ext. Fax: (850) 444-6744

5. Application Responsible Official Email Address: GLUSSERY@southernco.com

6. Application Responsible Official Certification:

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



Signature

1-18-05
Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Gregory N. Terry
   Registration Number: 52786
2. Professional Engineer Mailing Address...
   Organization/Firm: Gulf Power Company
   Street Address: One Energy Place
   City: Pensacola State: Fl Zip Code: 32520-0340
3. Professional Engineer Telephone Numbers...
   Telephone: (850) 429-2381 ext. Fax: (850) 429-2246
4. Professional Engineer Email Address: GNTERRY@southernco.com
5. Professional Engineer Statement:

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

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Gregory N. Terry
Signature

1-14-2005
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 16 East (km) 478.27 North (km) 3381.36		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 30 33 58 Longitude (DD/MM/SS) 87 13 44	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: G. Dwain Waters
2. Facility Contact Mailing Address... Organization/Firm: Gulf Power Company Street Address: One Energy Place City: Pensacola State: FL Zip Code: 32520-0329
3. Facility Contact Telephone Numbers: Telephone: (850) 444-6527 ext. Fax: (850) 444-6217
4. Facility Contact Email Address: gdwaters@southernco.com

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

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

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
No Change from previous Title V application		

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant - Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NOx					

7. Facility-Wide or Multi-Unit Emissions Cap Comment:
Units 4, 5,6 & 7 are is subject to a NOx emissions cap of 0.20 lb/mmbtu (30 day rolling average) as outlined in the Gulf - FDEP Ozone Reduction Agreement.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date:06/22/2004
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date:06/22/2004

Need New Process Flow

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date:06/22/2004

Need New

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification:
   ☒ Attached, Document ID:_____
3. Rule Applicability Analysis:
   ☐ Attached, Document ID:_____
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable (no exempt units at facility) ✓
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): (2)(b) ✓
   ☐ Attached, Document ID:_____ ☒ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): /
   ☐ Attached, Document ID:_____ ☒ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): /
   ☐ Attached, Document ID:_____ ☒ Not Applicable Area of collateral increase is Significant
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): ✓
   ☐ Attached, Document ID:_____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): ✓
   ☐ Attached, Document ID:_____ ☒ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Non attainment ✓
    ☐ Attached, Document ID:_____ ☒ Not Applicable

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID: ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

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

Title V only

Additional Requirements Comment

Crist Electric Generating Plant
Unit 6 Cooling Tower Project

Due to damage sustained during Hurricane Ivan in September, 2004, Gulf Power has elected to re-build the Crist Unit 6 Cooling Tower. The structure will be re-constructed as a like kind replacement with the exception that the drift and evaluation percent of flow will be reduced from 2.4% to 2.1%. This change will slightly reduce volatile organic matter and particulate matter. Attached is a comparison of the new emission estimates for the Crist Unit 6 Cooling Tower and a replacement sheet for Plant Crist Emissions Unit #12 as previously submitted for Title V permitting.

Cooling Tower Information

	Cr 1-5	Crist 6	Crist 7	Total
GPM Design		150960	165000	
Evaporation Loss Design		2.10%	3.10%	
Dift Loss Design		0.0005%	0.20%	
Max Cu Ft/sec Flow (EIA 767)	426	310	344	
GPM	191444.4	139314	154593.6	
Cu Ft/sec Consumption (Eia 767)	0	7.3	9.9	
GPM	0	3280.62	4449.06	
Note: Consumption is Makeup less Blowdown				
Emission Calculations:				
Based on Circulating Flow & Apparent Factor				
Flow (GPM)	191444.4	150960	165000	
Flow (Annual Gallons)	1.00623E+11	7.9345E+10	86724000000	
PM10 Tons (=.019 lb/1000 gal/2000 lb/lb))	955.9	753.8	823.9	2,533.6
Based on Design Drift & Drift Factor				
Drift & Evaporation % of Flow	2.1%	2.1%	3.3%	
Drift & Evap (GPM)	4021.3	3170.9	5445.0	
Drift (Annual Gallons)	2113589825	1666632819	2861892000	
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))	**1796.6**	**1416.6**	**2432.6**	**5,645.8**
Based on Estimated Drift & Drift Factor				
Drift & Evaporation % of Flow	2.0%	0.005%	2.0%	
Drift (GPM)	3828.9	7.5	3300.0	
Drift (Annual Gallons)	2012463533	3967228.8	1734480000	
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))	1710.6	3.4	1474.3	3,188.3
Based on Consumption & Drift Factor				
Drift (GPM)	unknown	3280.62	4449.06	
Drift (Annual Gallons)		1724293872	2338425936	
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))		1465.6	1987.7	3,453.3
Maximum Annual PM10 Tons	**1796.6**	**1465.6**	**2432.6**	**5,694.8**
Based on Design Drift & Drift Factor				
Drift (Annual Gallons)	2113589825	1666632819	2861892000	
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))	**6.34**	**5.00**	**8.59**	**19.93**
Based on Estimated Drift & Drift Factor				
Drift (Annual Gallons)	2012463533	3967228.8	1734480000	
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))	6.04	0.01	5.20	11.25
Based on Consumption & Drift Factor	0	1724293872	2338425936	
Drift (Annual Gallons)	0.00	5.17	7.02	12.19
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))				
Maximum Annual VOC Tons	**6.34**	**5.17**	**8.59**	**20.10**

Cooling Tower Information

		Old **Crist 6**	New **Crist 6**
GPM Design		150960	150960
Evaporation Loss Design		2.20%	2.10%
Dift Loss Design		0.20%	0.0005%
Max Cu Ft/sec Flow (EIA 767)		310	310
GPM		139314	139314
Cu Ft/sec Consumption (Eia 767)		7.3	7.3
GPM		3280.62	3280.62
Note: Consumption is Makeup less Blowdown			
Emission Calculations:			
Based on Circulating Flow & Apparent Factor			
Flow (GPM)		150960	150960
Flow (Annual Gallons)		7.9345E+10	79344576000
PM10 Tons (=.019 lb/1000 gal/2000 lb/lb))		753.8	753.8
Based on Design Drift & Drift Factor			
Drift & Evaporation % of Flow		2.4%	2.1005%
Drift & Evap (GPM)		3623.0	3170.9
Drift (Annual Gallons)		1904269824	1666632819
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))		**1618.6**	**1416.6**
Based on Estimated Drift & Drift Factor			
Drift & Evaporation % of Flow		2.0%	0.005%
Drift (GPM)		3019.2	7.5
Drift (Annual Gallons)		1586891520	3.967E+06
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))		1348.9	3.4
Based on Consumption & Drift Factor			
Drift (GPM)		3280.62	3280.62
Drift (Annual Gallons)		1724293872	1724293872
PM 10 Tons (=1.7 lb/1000 gal/(2000 lb/ton))		1465.6	1465.6
Maximum Annual PM10 Tons		**1618.6**	**1465.6**
Based on Design Drift & Drift Factor			
Drift (Annual Gallons)		1904269824	1666632819
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))		**5.71**	**5.00**
Based on Estimated Drift & Drift Factor			
Drift (Annual Gallons)		1586891520	3967228.8
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))		4.76	0.01
Based on Consumption & Drift Factor		1724293872	1724293872
Drift (Annual Gallons)		5.17	5.17
VOC's Tons (=6.0 lb/10^6 gallons/(2000 lb/ton))			
Maximum Annual VOC Tons		**5.71**	**5.17**

decrease in design ppm increase in effic.

why big drop in estimated vs design?

??

GDW 01/10/05

Plant Crist, Unit 6
Selective Non-Catalytic Reduction Retrofit
System Description

Gulf Power Company is making application to install selective non-catalytic reduction, or "SNCR," technology on the Plant Crist Unit 6 boiler. The SNCR systems will be designed to provide approximately 25% removal of nitrogen oxides (NO_x) when operating.

SNCR is a post-combustion technology for reducing NO_x emissions from flue gases by chemical conversion. This chemical reaction requires the injection of urea into the hot flue gas stream in the upper regions of the furnace to reduce the nitrogen oxides to nitrogen, water, and small quantities of carbon dioxide. The reduction is normally expressed by the following equations:

(1) $4NO + 2CO(NH_2)_2 + O_2 \Rightarrow 4N_2 + 4H_2O + 2CO_2$

(2) $2NO_2 + 2CO(NH_2)_2 + O_2 \Rightarrow 3N_2 + 4H_2O + 2CO_2$

N_2O is also a by-product of the SNCR process and is typically in the range of 10-20% of the NO_x reduced. Small amounts of CO emissions can also be expected from the process. There are no other known organic emissions from the SNCR process beyond CO and CO_2.

The SNCR process takes place in a temperature range between 1600°F to 2200°F, which normally occurs in the convective sections of the boiler. Urea is delivered and stored on-site at a concentration of ~40%. Prior to injection into the boiler, the urea is further diluted to a concentration somewhat less than 30%. Dilution is required to improve the mixing characteristics of the urea stream with the flue gas stream. The urea/water mixture is injected into the boiler via air atomizing wall lances.

The SNCR equipment to be installed at Crist Unit 6 is fabricated by Fuel Tech, Inc.

The SNCR system will be tuned to achieve the maximum level of NO_x reduction while limiting average ammonia slip across the duct to 5 ppmvd corrected to 3% O2 (24 hour basis). Ammonia slip can react with small quantities of sulfur trioxide (SO_3) present in the flue gas to form ammonium bisulfate (NH_4HSO_4), which can foul and corrode downstream equipment (especially the air preheater).

The components of the SNCR system include a reagent unloading station, reagent storage tanks, reagent circulation module, reagent metering modules, reagent distribution modules, and air atomized injectors.

Below is a list of information previously requested by FDEP for the Crist Unit 6 SCR.

1. SNCR System Design Information:

	Crist 6
Heat Input, MBtu/hr	3704.8
Current NO_x, lbs/MBtu	0.578
SNCR Inlet NO_x, lbs/Mbtu	0.35
SNCR Inlet NO_x, lbs/hr	1296.68
NO_x Emissions (SNCR Outlet), lbs/MBtu	0.28
NO_x Emissions (SNCR Outlet), lbs/hr	1037.34
NH_3 slip, ppmvd @ 3% O_2	5
SNCR Design NOx removal, %	25%
SNCR Guaranteed NOx removal, %	20%

2. Flow Diagram:
See attachment flow diagram.

Cor R?

3. Narrative of the SNCR process:
See introduction

4. Reagent Circulation and Distribution Loop:
Urea is delivered and stored as a 40% aqueous solution that is maintained at a temperature of approximately 40° by circulating through the SNCR system piping loop and heating module. Using plant service water or other dilution water source, the metering module further dilutes the reagent to a predetermined concentration and precisely controls the flow of 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.

5. Plant Equipment Modifications:
The only anticipated change to the Unit 6 boiler is an adaptation of the boiler tube panels to accommodate the installation of wall-mounted injection lances. The Unit 6 SNCR will be designed with 6 wall-mounted injectors.

locations?

6. Peak Urea Injection Rate:
At peak load for Crist Unit 6, with 0.35 lbs./MBtu inlet NO_x and 20% reduction, urea injection would be 741 lb/hr on a dry basis. This translates to an ammonia flow of 333.8 lb/hr.

Based on what?

7. Ammonia Tank Sizes:
Liquid urea at a concentration of 40% will be stored in 1 tank with capacity to store 45,000 gallons of solution. This arrangement will provide a minimum of 7 days operating inventory.

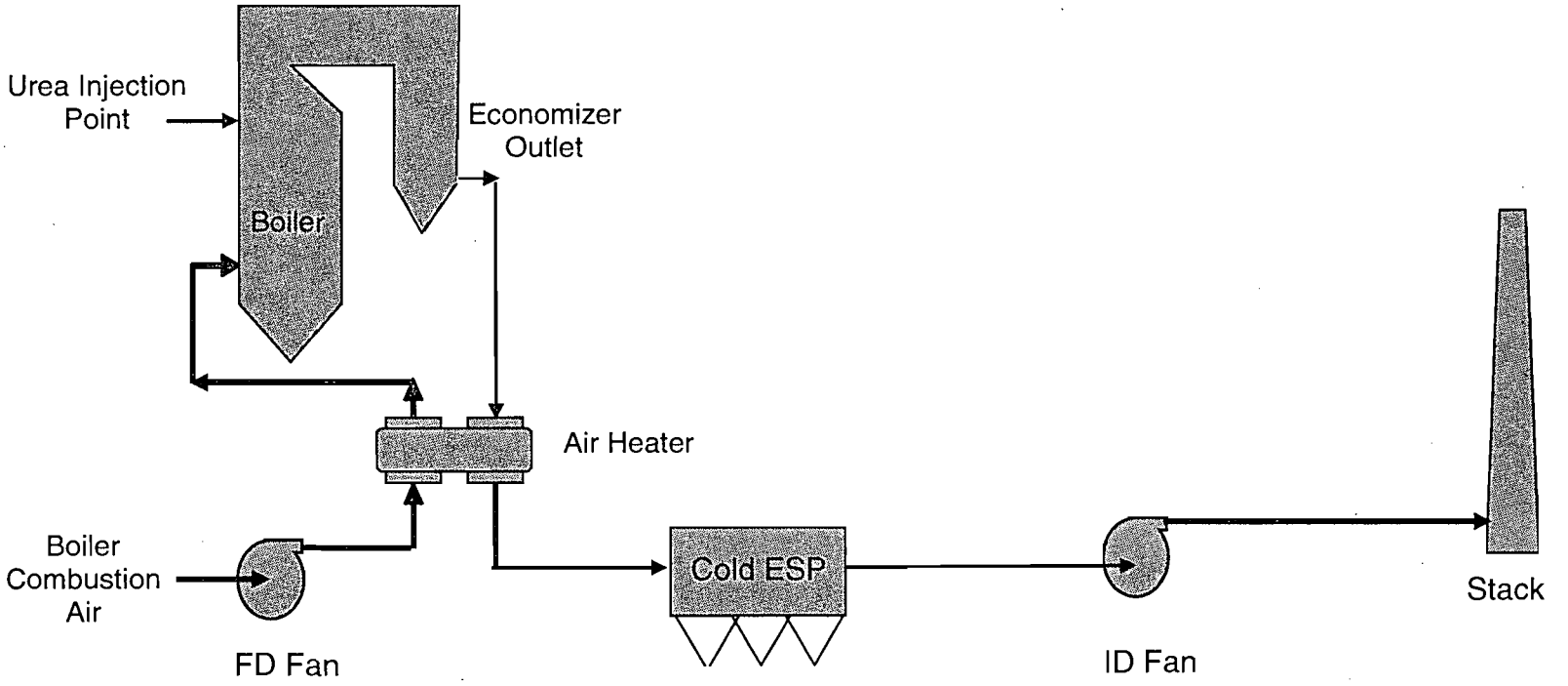
8. Peak Ammonia Slip:
The SNCR is designed and guaranteed to have an ammonia slip concentration of 5 ppm by volume (dry basis) corrected to 3% O_2 as averaged over a 24 hour period in the duct cross sectional area for all boiler operating loads.

~~Cont. Monitor~~ ?

NO

9. Construction Schedule:

- Mobilize Construction – June 27, 2005
- Equipment Deliveries – June 28, 2005 – July 1, 2005
- Pre-Outage Construction - June 28, 2005 – September 9, 2005
- Unit 6 Outage – September 10, 2005 – November 20, 2005
- Optimized System – May 1, 2006



Gulf Power Company
Plant Crist, Unit 6
SNCR Process Flow Diagram

Crist Electric Generating Plant
Biomass Fuels for Units 4 & 5

Gulf Power is making application to include the following fuel for use in at Plant Crist Units 4 and 5 as previously outlined in the 2004 Title V Renewal Application. Use of this fuel was not incorporated in the recently finalized Crist Title V permit. Gulf Power successfully demonstrated Crist 4 and 5 as units being "capable of accommodating" biomass fuels under a construction permit issued in 2003. Below is the information previously submitted in the 2004 Title V renewal application.

With - drawn

SCC Code: 10100903
Units: Tons Wood Burned
Description 1: External Combustion Boiler
Description 2: Electric Generation
Description 3: Wood/Bark Waste
Description 4: Wood-fired Boiler - Wet Wood (>= 20% moisture)
Is this a valid segment? Yes
Segment Description: Biomass (wood, switchgrass, sawdust, and sander dust)

Segment comment: Permit allows up to 97.7 equivalent mmbtu/hr of biomass (wood, switchgrass, sawdust, and sander dust) with TPH limits for each biomass fuel.

Gulf Power Proposed Mercury Research Center (MerRC)

In March 2005, the U.S. EPA is scheduled to promulgate rules that will require utilities to significantly reduce their Hg emissions. Currently, there are no commercially available Hg control technologies with documented long term performance on coal flue gas. Because of the lack of experience, Hg chemistry in flue gas is not very well understood. However, research performed over the past couple of years has shown that pollution control technologies designed to control NO_x, SO_2, and PM can significantly affect overall Hg performance. In order to investigate these relationships, Gulf Power is planning a 5 MW equivalent slip-stream facility equipped with a complete system of flue gas cleanup technologies.

System Description

The proposed slip-stream facility will incorporate a Selective Catalytic Reduction (SCR) system, rotary air-preheater, Electrostatic Precipitator (ESP), baghouse (BH), and wet Flue Gas Desulphurization (wFGD). Each system will be designed with the appropriate level of functionality so that a large number of existing plants can be represented. Because of the complex interactions of Hg with various surfaces in flue gas, it is difficult to generate representative data for full scale installations at the pilot scale. However, the 5 MW scale is sufficiently large enough to provide the appropriate surface to volume ratios to gather representative data. Figure 1 shows a schematic for the proposed system.

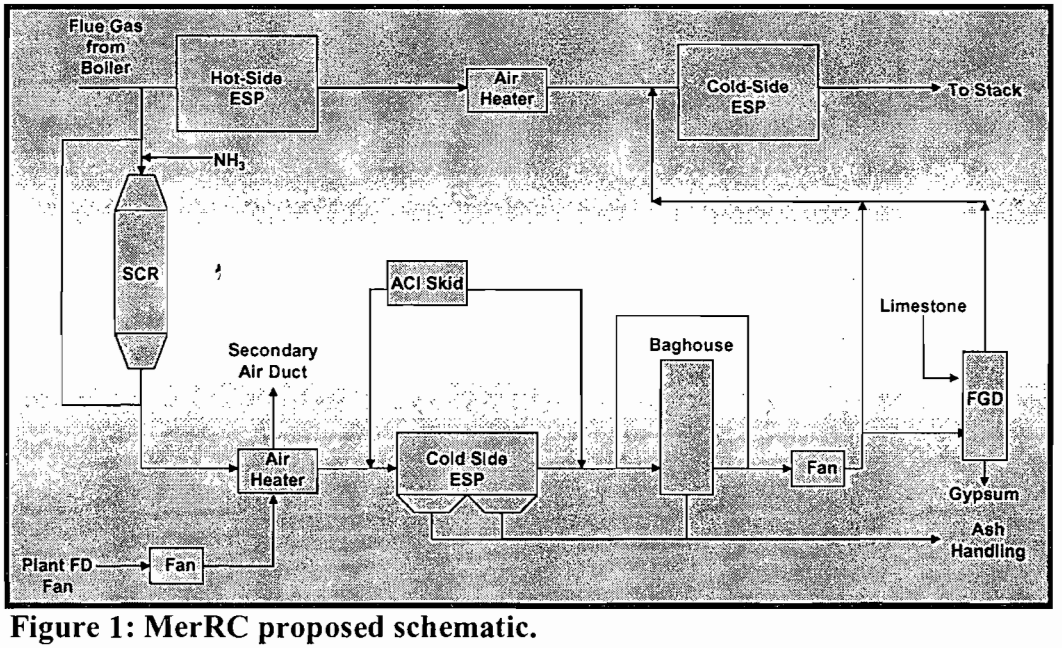


Figure 1: MerRC proposed schematic.

Host Facility

Because of its history with research facilities of this magnitude, Plant Crist Unit 5 was chosen as the host plant for the slip-stream facility. Crist Unit 5 is a wall fired PC boiler

burning low-sulfur bituminous coals and is equipped with hot and cold side ESPs arranged in series. The process gas supplied to the MerRC will be drawn from the inlet of the hot-ESP. The typical flue gas characteristics for this gas stream are presented in Table 1.

Table 1: Typical flue gas characteristics for MerRC inlet.

	Value	Units
Temperature	600	°F
Pressure	-6	inches H_2O
N_2	80	%
CO_2	15	%
O_2	3	%
SO_2	0.6-2.4	lb/mmBtu
NO_x	0.5-0.7	lb/mmBtu
Particulate	7	lb/mmBtu
Hg	6	lb/tBtu
MerRC System Flow	25,000	wacfm

Flue Gas Temperature Control

Because Hg chemistry has been shown to be temperature dependent, temperature control at the inlet of the research facility is crucial. This will be accomplished by using a combination of an economizer bypass line, providing ~ 900°F gas to the facility, or a flue gas heater. The heater will be sized to allow for a wide range of operating temperatures, up to and including 750°F. The heaters will be simple resistance type and will not introduce any additional compounds to the process gas. Typical heater characteristics are presented in Table 2.

Table 2: Flue gas heater parameters.

Heater Type	Electric Resistance heater	
Inlet Temp	600	°F
Max Outlet Temp	750	°F
Heat Input Requirement	3.5	mmBtu/hr
Power Requirement	600	kW

Selective Catalytic Reduction (SCR) system

SCR for NO_x control has been widely incorporated throughout the world and is well understood. However, there is little known on the details of Hg chemistry in the SCR. The SCR designed for MerRC will resemble a typical full scale system installed at any number of plants. The scale of MerRC will allow for the use of full scale catalyst modules, with the cross section designed to achieve representative space velocities for the system. Typical SCR design points are shown in Table 3. The SCR will be equipped with 3 catalyst layers, which will allow for greater than 80% control of NO_x and a maximum pressure drop of 6 in. H_2O.

Table 3: Typical SCR system design points.

SCR System Inlet NO_x	0.7 lb/mmBtu
Expected SCR Performance	90%
Typical SCR Outlet	0.07 lb/mmBtu
Number of Catalyst Layers	3
Typical Maximum NH_3 slip	5 ppm_{vd} @ 3% O_2

The research facility will also incorporate a SCR reactor by-pass to allow for testing of alternate designs. Although research has shown that SCRs do not control Hg, data has shown it can significantly affect the chemistry of downstream devices, which could significantly change the performance of those systems. The ability to operate with and without SCR in service is a necessary requirement in order to investigate seasonal operation as well as alternate plant configurations.

In order to achieve NO_x reductions within the SCR, ammonia must be fed as a reagent to react with NO and NO_2 per the following equations.

$$4NO + 4NH_3 + O_2 \rightarrow 4N_2 + 6H_2O$$
$$2NO_2 + 4NH_3 + O_2 \rightarrow 3N_2 + 6H_2O$$

Typically 95% of NO_x in the flue gas stream is NO, with the remainder NO_2. At these ratios, an ammonia flow rate of ~25 lb/hr to the SCR can be expected in order to achieve the stated NO_x reduction goals. At these rates, an ammonia slip of less than 5 ppm (0.065 lb/hr) is expected. However, during some research programs, this value could be exceeded for short periods of time.

Air Pre-heater (APH)

In order to mimic the time-temperature profile of a full scale system, the MerRC will incorporate a rotary type APH for flue gas cooling. The APH will cool the flue gas from ~700°F to 300°F before sending it to the downstream air pollution control equipment. In order to reject the heat transferred from the flue gas, a cooling air fan will be installed. The cooling air fan will provide ambient air supplied from the plant forced draft fan to the APH and, after heating, will force the air back into the plant secondary air duct in order to minimize the efficiency impacts of the MerRC. Table 5 presents pertinent APH design information.

Table 5: APH typical design criteria.

APH Type	Rotary (Lungstrom)
Heat load	5.5 mmBtu/hr
Flue Gas inlet Temp	700 °F
Air inlet Temp	72 °F
Flue Gas outlet	300 °F
Air Outlet	550 °F

Electrostatic Precipitator (ESP)

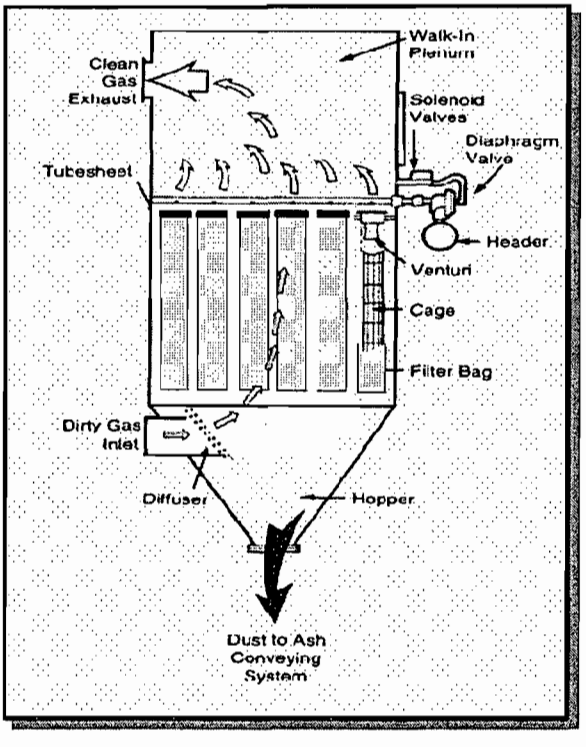
The utility industry has operated ESPs for several decades. However, in the future, more stringent particulate emission requirements will force operators to make incremental improvements in performance. Additionally, the co-benefit of Hg removal in these ESPs could play a significant role in achieving least cost compliance. The ESP installed in the MerRC will be designed as a single casing 4 field unit, able to achieve >99% removal efficiency of particulate matter. Typical design data are listed in Table 6.

Table 6: Typical ESP design data.

Number of fields	4
Field Length	5 ft
Field Height	12 ft
SCA (ft^2/1000acfm)	225
Efficiency	>99%

Baghouse

Currently, the most mature Hg control technology is TOXECON™. TOXECON™ is an EPRI patented technology that incorporates a high (air to cloth) ratio fabric filter downstream of an ESP, with activated carbon injection (ACI) between. The high ratio baghouse, or COHPAC baghouse, is designed to minimize conserve footprint while weighing increased pressure drop due to higher bag face velocities. There are only a handful of installations of this technology in the industry, and 2 of them are located at Alabama Power's Plant Gaston near Birmingham, AL. Southern Company has significantly contributed to the development, and would be able to continue this development at the MerRC. The baghouse will be designed to allow for multiple bag configurations, bag types, and inlet loadings so that critical parameters for long term performance of these systems can be investigated. Figure 2 shows a schematic for a typical COHPAC baghouse.



Activated Carbon Injection (ACI)

As stated above, the most mature Hg control technology is TOXECON (ACI into COHPAC baghouse). Significant work has been performed by Southern Company and others to investigate ACI into existing ESPs. Although results from these programs show promising Hg control results, there is concern that the additional solids loading to the ESP will degrade the particulate removal performance. In order to understand long term performance and BOP issues of both of these control concepts, the MerRC will

incorporate a carbon injection skid. The skid will be designed with enough variability to allow for both injection schemes. Typical injection rates for ACI into ESPs vary from 5-20 lbs Carbon/mmacf (5-20 lbs/hr) of flue gas, and for TOXECON from 0.5-2 lbs/mmacf (0.5-2 lbs/hr). As the art of ACI matures over time, the MerRC will also provide a testing ground for the latest innovation in sorbents. Assuming an annual capacity factor of 10% for ESP injection, you could expect ~7.5 tons of activated carbon, and ~0.5 tons of activated carbon for the TOXECON injection case.

Wet Flue-gas Desulphurization

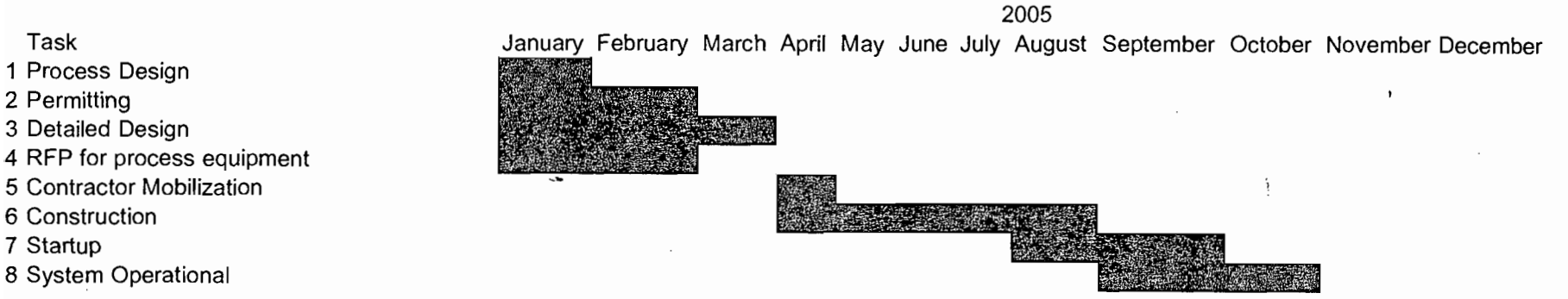
Over the next decade, Southern Company will be installing a large number of FGD systems throughout its fleet, including some of Gulf Power's units. In order to achieve the lowest cost Hg compliance, it will be paramount that these systems be optimized for Hg removal efficiency. Tests have shown that wet FGD systems can efficiently capture oxidized Hg. However, little about Hg chemistry in the FGD is understood. Research to uncover the critical factors affecting these chemical processes is needed.

Southern Company currently owns a 1 MW scale pilot wet FGD system. This system will be incorporated into the MerRC to study the effects described above. The FGD will require a limestone feed for SO_2 control, and will produce a gypsum byproduct. Typical process flows are presented in Table 7. Applying an annual capacity factor of 20% to the FGD projects an annual gypsum production of ~45 tons.

Table 7: Typical stream flows for FGD pilot.

System Flow	3000 acfm @ 300°F
SO_2 Concentration	1100 ppm_v
SO_2 Feed (lb/hr)	24
Limestone Feed (lb/hr)	37.5
Gypsum Draw off (lb/hr)	51

Crist Mercury Research Center



Holtom, Jonathan

From: Vielhauer, Trina
Sent: Thursday, October 21, 2004 12:11 PM
To: Holtom, Jonathan
Subject: FW: list for SNCR

-----Original Message-----
From: Koerner, Jeff
Sent: Tuesday, October 05, 2004 1:48 PM
To: Holtom, Jonathan; Vielhauer, Trina
Subject: RE: list for SNCR

For an SNCR system, I think we would want:

- The designed NOx emission rate to be met after control. 0.28 lb/MMBTU
- The designed NOx reduction efficiency (%) at the maximum uncontrolled NOx emission rate. 25%; 20% guaranteed.
- A description of the SNCR system components (tanks, pumps, mixers, injectors, individual injector levels, control system, monitored parameters, etc.) with a schematic or process flow diagram. ✓
- A description of how the system works to reduce NOx emissions over a variety of load ranges. ✓
- The furnace temperature operating range. 1600 – 2200°F
- The minimum operating temperature before placing the SNCR system in service.
- Anhydrous or aqueous ammonia? aqueous
- The expected operating range for the ammonia injection rate. 1600–2200°F, convective Section of Boiler
- The designed ammonia slip rate. 5ppmvd @ 3% O_2
- A requirement for NOx CEMS monitoring. Acid Rain Requirement 6 wall mounted injectors
- A description of how the control system adjusts the ammonia injection points and rates based on different boiler loads. For example, the SNCR system may consist of three levels of 9 injectors per level. At 70% load, perhaps only levels 1 and 3 are in operation at a given ammonia injection rate to provide the necessary control.

As for the permit, we typically include items such as: a description of the system and components, the expected design control efficiency, the NOx emission standard (with appropriate averaging period), an ammonia slip standard, a requirement that the SNCR be properly functioning when the minimum operating temperature is met, requirements for a NOx CEMS, ammonia slip monitoring, a provision for tracking an appropriate ammonia injection rate vs. load should the NOx monitor go down, and record keeping/reporting. Need desc. for control system a feedback loop.

Jeff Koerner, BAR - Air Permitting South
Florida Department of Environmental Protection
850/921-9536

Cooling Tower
Description in Regulated unit Section
i.e. Boiler w/ cooling tower designed to meet ... specs.
0.005% drift etc.

-----Original Message-----
From: Holtom, Jonathan
Sent: Tuesday, October 05, 2004 11:54 AM
To: Vielhauer, Trina
Cc: Koerner, Jeff
Subject: RE: list for SNCR

Dwain did not supply any information regarding the make, model, etc. It may be something they are fabricating themselves. I have never processed an AC for control devices, so I'm not sure what all we typically require. I'll check with Jeff to see what all he required for the SCR on unit 7 and let you know.

-Jonathan

-----Original Message-----
From: Vielhauer, Trina
Sent: Tuesday, October 05, 2004 11:48 AM
To: Holtom, Jonathan
Subject: RE: list for SNCR

Do we have the name of the vendor/mfgr for the SNCR? I'm trying to give Mike an idea of the information that we would typically include in a permit [or that they'd give us in their application] that we currently do not have. I would envision Mike sending Dwain an email indicating these items [the list that we provide to Mike] are still needed for the SNCR project and, probably, giving them a choice of doing a TV revision or an AC. I emphasized that the current draft TV didn't have enough details in it to suffice for the long run.

Does that help?

-----Original Message-----
From: Holtom, Jonathan
Sent: Tuesday, October 05, 2004 11:41 AM
To: Vielhauer, Trina
Subject: RE: list for SNCR

Trina,

I included the NOX agreement in the Crist permit, along with the conditions from the AC that referenced it. The two main conditions are shown below:

{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]}

There is not any specific requirement in the Title V Draft permit for what action they will take, it