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PERMITTEE

Gulf Power Company
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Authorized Representative:
James Vick, Environmental Affairs Director

Air Permit No. 0330045-032-AC
Expires: April 01, 2013

Crist Electric Generating Plant
Facility ID No. 0330045
Crist Unit 6 ESP Project

PROJECT

This is the final air construction permit that authorizes reconstruction of the electrostatic precipitator (ESP) for Unit 6 at the existing Crist Electric Generating Plant, which is categorized under Standard Industrial Classification No. 4911. The existing facility is located in Escambia County at 11999 Pate Street in Pensacola, Florida. The UTM coordinates are Zone 16; 478.5 km East; 3381.44 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C.

Upon issuance of this final permit, 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

Joseph Kahn, Director
Division of Air Resource Management

12/29/10
(Date)

SECTION 1. GENERAL INFORMATION

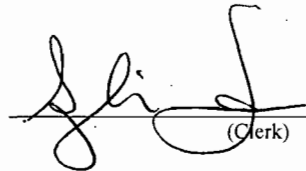
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 12/28/10 to the persons listed below.

Mr. James Vick, Gulf Power Company (jovick@southernco.com)
Mr. G. Dwain Waters, Gulf Power Company (gdwaters@southernco.com)
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Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILED 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.



(Clerk)

12/28/10
(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

This existing facility consists of four active fossil fuel fired steam generators (boilers). Boilers 4 and 5 were Acid Rain Phase I substitution Units. Boilers 6 and 7 were Acid Rain Phase I Units. All four boilers are subject to the Acid Rain Phase II and Clean Air Interstate Rule (CAIR) requirements. Pulverized coal is the primary fuel for Boilers 4, 5, 6 and 7. Natural gas, fuel oil and on-specification used oil are used as supplemental fuels in all four of the boilers.

Facility ID No. 0330045	
ID No.	Emission Unit Description
004	Boiler 4 – 1,096.7 MMBtu/hour (Acid Rain Phase I substitution & CAIR Unit)
005	Boiler 5 – 1,096.7 MMBtu/hour (Acid Rain Phase I substitution & CAIR Unit)
006	Boiler 6 – 3,704.8 MMBtu/hour (Acid Rain Phase I & CAIR Unit)
007	Boiler 7 – 6,406.4 MMBtu/hour (Acid Rain Phase I & CAIR Unit)

PROPOSED PROJECT

The project authorizes the facility to reconstruct the ESP for existing Unit 6 at the Crist Electric Generating Plant. The project includes the addition of two rows of collecting electrodes, replacement of high voltage discharge electrodes, upgrades of the power supply and computer control systems, and external strengthening of the shell. The proposed project will not increase emissions nor change the capacity.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. The project is not subject to PSD preconstruction review.
- The facility is subject to applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted 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, Suite 308, Pensacola, Florida 32501-5794.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified 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. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
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. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1) (a), F.A.C.]
7. Source Obligation:
 - (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.[Rule 62-212.400(12), F.A.C.]
8. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. 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 completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 006 – Boiler No. 6

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
006	Unit 6 is a front wall fired, dry bottom boiler manufactured by Foster Wheeler. The primary fuels are coal and natural gas with No. 2 fuel oil as a secondary fuel. It is rated at a maximum heat input rate of 3,704.8 MMBtu/hour when firing pulverized coal or natural gas, and 714.8 MMBtu/hr when firing No. 2 fuel oil or on-specification used oil. It operates a wet flue gas desulfurization (FGD) system to control SO ₂ emissions from Units 4 – 7 sharing a common stack under normal conditions with the wet FGD system in operation. There is a shared stack for Units 6 and 7 to bypass FGD for periods of startup and shutdown, malfunction of the Units or the wet FGD system, repair, scheduled, or maintenance of the wet FGD system. The common scrubber stack height is 490 feet with a diameter of 35 feet, and the actual volumetric flow rate is 3,282,000 actual cubic feet per minute. The shared bypass stack is 450 feet tall with a diameter of 23.2 feet. Particulate matter is controlled by a cold side electrostatic precipitator. A selective non-catalytic reduction system is used to control nitrogen oxides.

EQUIPMENT

1. Electrostatic Precipitator: The permittee is authorized to conduct, but not limited to, the following work to rebuild the existing ESP on Unit 6.

- Upgrade and replace collecting electrodes as necessary;
- Upgrade rappers;
- Install and provide of new anti-sneak baffles;
- Improve, replace and install discharge electrodes;
- Upgrade hot roofs and cold roof floors;
- Upgrade access doors as necessary;
- Supply new electrical and power system as necessary;
- Upgrade the existing computer;
- Supply and install of key interlock systems for access doors;
- Supply and install penthouse heating and ventilation systems (purge air system fans and controls);
- Improve the internal water wash system;
- Replacement of all ash hoppers;
- Reinforcement of the internal and external walls of each precipitator box; and
- Upgrade and replacement of insulation.

{Permitting Note: Based upon the application, the new ESP will consist of two compartments and 20 separate electrical fields. The revised collection plate area will be 508,816 ft². The gas velocity through the precipitator will be 3.84 feet/second. The precipitator system on Crist Unit 6 consists of two casings and is designed for a total gas flow of 1,325,820 acfm at 340° F. The precipitator is powered by 20 transformer rectifier (T-R) sets (10 T-R sets per casing) and consisting of five mechanical fields in the direction of gas flow. Each is 11.8 feet in length for a total of 59 feet of treatment in the direction of gas flow. Each casing has 2 non-gas tight cells. Each casing has 44 gas passages or 22 per cell. The existing total collecting plate height is 49 feet with an effective height of 47 feet. The configuration is a 16 inch-spaced rigid discharge electrode design. The collection plate gauge is 16. The new configuration will also be configured as a 16 inch-spaced rigid discharge electrode design. There will be no change to plant operations for soot blowing for Unit 6. The proposed ESP will be designed to maintain a particulate matter removal efficiency of 99.6%}

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 006 – Boiler No. 6

[Design and Application No. 0330045-032-AC]

EMISSIONS STANDARDS

- Opacity Standards:** After completing construction of the rebuilt ESP and satisfactorily conducting the initial particulate matter test, the stack opacity shall not exceed 20% based on a six-minute average except for one six-minute average per hour of not more than 27% opacity during normal operation. [Rule 62-4.070(3), F.A.C.]

{Permitting Note: Unit 6 remains subject to all particulate emissions standards previously, specified in valid air construction and air operation permits.}

TESTING REQUIREMENTS

- Initial Compliance Tests:** In accordance with EPA Methods 5 or 17, Unit 6 shall be tested to demonstrate initial compliance with the emissions standards for particulate matter. The initial tests shall be conducted within 60 days after returning Unit 6 to service with the rebuilt ESP and achieving permitted capacity, but not later than 180 days after the return to service. Subsequent compliance tests shall be conducted in accordance with the conditions of the Title V permit. [Rules 62-4.070(3) and 62-297.310(7) (a) 1, F.A.C.]
- Test Requirements:** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7) (a) 4, F.A.C.]
- Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
17	Determination of Particulate Emission from Stationary Source (In Stack Filtration Method)

{Permitting Note: A transmissometer used to demonstrate compliance should record sufficient data so as to be equivalent to a Method 9 test. Method 9 requires determining an average based on 24 readings at 15-second intervals, thus, a six-minute average. The transmissometers in use at this facility make a permanent recording every six minutes based on an average of readings taken every 15 seconds. After the six-minute average is recorded, the individual readings are erased and a new 6-minute average is determined based on the next set of twenty four individual readings. This six-minute block recording is consistent with the requirements of Method 9.}

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C. and Permit No. 0330045-005-AC]

- ESP Parameters:** The ESP parameters shall be monitored and recorded at the beginning and end of each required PM test. [Rule 62-4.070(3), F.A.C.]

MONITORING REQUIREMENTS

- CAM Plan:** Unit 6 is subject to the Compliance Assurance Monitoring (CAM) requirements. Emissions monitoring and analysis procedures or test methods specified by applicable requirements including 40 CFR

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 006 – Boiler No. 6

64, Compliance Assurance Monitoring, adopted and incorporated by reference at subsection 62-204.800, F.A.C. The permittee shall update the current CAM plan as necessary when the Title V is revised.

8. COMS: The permittee shall continue to operate and maintain the existing continuous opacity monitoring system (COMS) to demonstrate compliance with the stack opacity standard for Unit 6.

RECORDS AND REPORTS

9. Stack Test Reports: The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements specified in Rule 62-297.310(8), F.A.C. All stack test data collected during the field-testing program shall be submitted for review. For each test run, the report shall also indicate the information required by this permit. For each required stack test, the permittee shall submit a written report that summarizes the results with 45 days of completing such test. [Rule 62-297.310(8), F.A.C.]
10. Final Report: Within 90 days of completing construction, the permittee shall submit a report summarizing the as-built project and critical ESP parameters (field voltages, rapping intensity, and rapping frequency). [Rule 52-4.070(3), F.A.C.]

SECTION 4. APPENDICES

Contents

- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions
- Appendix C. Common Conditions
- Appendix D. Common Testing Requirements

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or 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 for that county

“001” identifies the specific permit project number

“AC” identifies the permit as an air construction permit

“AF” identifies the permit as a minor source federally enforceable state operation permit

“AO” identifies the permit as a minor source air operation permit

“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of 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 number

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act	NESHAP: National Emissions Standards for Hazardous Air Pollutants
CMS: continuous monitoring system	NO_x: nitrogen oxides
CO: carbon monoxide	NSPS: New Source Performance Standards
CO₂: carbon dioxide	O&M: operation and maintenance
COMS: continuous opacity monitoring system	O₂: oxygen
DARM: Division of Air Resource Management	Pb: lead
DEP: Department of Environmental Protection	PM: particulate matter
Department: Department of Environmental Protection	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less.
dscf: dry standard cubic feet	ppm: parts per million
dscfm: dry standard cubic feet per minute	ppmv: parts per million by volume
EPA: Environmental Protection Agency	ppmvd: parts per million by volume, dry basis
ESP: electrostatic precipitator (control system for reducing particulate matter)	QA: quality assurance
EU: emissions unit	QC: quality control
F: fluoride	PSD: prevention of significant deterioration
F.A.C.: Florida Administrative Code	psi: pounds per square inch
F.A.W.: Florida Administrative Weekly	PTE: potential to emit
F.D.: forced draft	RACT: reasonably available control technology
F.S.: Florida Statutes	RATA: relative accuracy test audit
FGD: flue gas desulfurization	RBLC: EPA's RACT/BACT/LAER Clearinghouse
FGR: flue gas recirculation	SAM: sulfuric acid mist
ft²: square feet	scf: standard cubic feet
ft³: cubic feet	scfm: standard cubic feet per minute
gpm: gallons per minute	SIC: standard industrial classification code
gr: grains	SIP: State Implementation Plan
HAP: hazardous air pollutant	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
Hg: mercury	SO₂: sulfur dioxide
I.D.: induced draft	TPD: tons/day
ID: identification	TPH: tons per hour
kPa: kilopascals	TPY: tons per year
lb: pound	TRS: total reduced sulfur
MACT: maximum achievable technology	UTM: Universal Transverse Mercator coordinate system
MMBtu: million British thermal units	VE: visible emissions
MSDS: material safety data sheets	VOC: volatile organic compounds
MW: megawatt	

SECTION 4. APPENDIX B

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location 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 noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time then noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B

General Conditions

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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rules 62-120 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 for 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:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) 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.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the 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 624.130, 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 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.]
4. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority 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.]
5. 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.]

RECORDS AND REPORTS

6. 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 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

SECTION 4. APPENDIX D
Common Testing Requirements

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units that require testing.

COMPLIANCE TESTING REQUIREMENTS

1. 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.]
2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. 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.]
4. Applicable Test Procedures:
 - a. Required Sampling Time.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

SECTION 4. APPENDIX D
Common Testing Requirements

- 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.
- d. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- e. Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calibration liquid in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

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

5. 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.]

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Common Testing Requirements

REPORTS

6. Test Reports:

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 - (1) The type, location, and designation of the emissions unit tested.
 - (2) The facility at which the emissions unit is located.
 - (3) The owner or operator of the emissions unit.
 - (4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - (5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - (6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - (7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - (8) The date, starting time and duration of each sampling run.
 - (9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62297.620, 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 is 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

SECTION 4. APPENDIX D
Common Testing Requirements

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.]

MISCELLANEOUS

7. Stack and Duct: The terms stack and duct are used interchangeably in this rule. [Rule 62-297.310(9), F.A.C.]

Livingston, Sylvania

From: Livingston, Sylvania
Sent: Tuesday, December 28, 2010 3:30 PM
To: 'jovick@southernco.com'
Cc: 'gdwaters@southernco.com'; 'gnterry@southernco.com'; Bradburn, Rick; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; Gibson, Victoria; Koerner, Jeff; Coggins, Heidi; Walker, Elizabeth (AIR)
Subject: Gulf Power Company - Crist Electric Generating Plant; 0330045-032-AC
Attachments: 0330045-032-AC_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0330045.032.AC.F_pdf.ZIP

Owner/Company Name: GULF POWER COMPANY
Facility Name: CRIST ELECTRIC GENERATING PLANT
Project Number: 0330045-032-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION
Facility County: ESCAMBIA
Processor: Heidi Coggins

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9506
sylvia.livingston@dep.state.fl.us

Tracking:

Livingston, Sylvania

From: Waters, G. Dwain [GDWATERS@southernco.com]
Sent: Wednesday, December 29, 2010 6:08 AM
To: Livingston, Sylvania; Vick, James O.
Cc: Terry, Greg N.; Bradburn, Rick; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; Gibson, Victoria; Koerner, Jeff; Coggins, Heidi; Walker, Elizabeth (AIR)
Subject: Re: Gulf Power Company - Crist Electric Generating Plant; 0330045-032-AC

Gulf Power has received the Crist 6 ESP permit. Thanks, Dwain Waters

Dwain Waters, QEP

From: Livingston, Sylvania <Sylvia.Livingston@dep.state.fl.us>
To: Vick, James O.
Cc: Waters, G. Dwain; Terry, Greg N.; Bradburn, Rick <Rick.Bradburn@dep.state.fl.us>; forney.kathleen@epa.gov <forney.kathleen@epa.gov>; abrams.heather@epa.gov <abrams.heather@epa.gov>; Gibson, Victoria <Victoria.Gibson@dep.state.fl.us>; Koerner, Jeff <Jeff.Koerner@dep.state.fl.us>; Coggins, Heidi <Heidi.Coggins@dep.state.fl.us>; Walker, Elizabeth (AIR) <Elizabeth.Walker@dep.state.fl.us>
Sent: Tue Dec 28 14:29:50 2010
Subject: Gulf Power Company - Crist Electric Generating Plant; 0330045-032-AC

Dear Sir/ Madam:

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http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0330045.032.AC.F_pdf.ZIP

Owner/Company Name: GULF POWER COMPANY
Facility Name: CRIST ELECTRIC GENERATING PLANT
Project Number: 0330045-032-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION
Facility County: ESCAMBIA
Processor: Heidi Coggins

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Project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems

Livingston, Sylvania

From: Vick, James O. [JOVICK@southernco.com]
Sent: Thursday, December 30, 2010 10:20 AM
To: Livingston, Sylvania
Subject: RE: Gulf Power Company - Crist Electric Generating Plant; 0330045-032-AC

we are in receipt.

Jim Vick
Director Environmental Affairs
8-420-6311
850-444-6311
Cell: 850-982-6204
Have a great day.

From: Livingston, Sylvania [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, December 28, 2010 2:30 PM
To: Vick, James O.
Cc: Waters, G. Dwain; Terry, Greg N.; Bradburn, Rick; forney.kathleen@epa.gov; abrams.heather@epa.gov; Gibson, Victoria; Koerner, Jeff; Coggins, Heidi; Walker, Elizabeth (AIR)
Subject: Gulf Power Company - Crist Electric Generating Plant; 0330045-032-AC

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Walker, Elizabeth (AIR)

From: Scott Stacy [sstacy@derenzo.com]
Sent: Monday, January 03, 2011 9:07 AM
To: Walker, Elizabeth (AIR)
Subject: Read: RAI - Brevard Energy, LLC, Central Disposal Facility 0090069-009-AC(PSD-FL-378C)/0090069-010-AV
Attachments: ATT00001

Memorandum

Florida Department of Environmental Protection

TO: Joseph Kahn, Division of Air Resource Management
THROUGH: Trina Vielhauer, Bureau of Air Regulation
FROM: Jeff Koerner, New Source Review Section *W Coggins for*
DATE: December 27, 2010
SUBJECT: Final Air Permit No. 0330045-032-AC
Gulf Power Company
Crist Unit 6 ESP Project

The final permit authorizes Gulf Power Company to upgrade the existing electrostatic precipitator for Unit 6 at the existing Crist Electric Generating Plant. This project will not increase emissions nor change the capacity; therefore, the project is not subject to PSD preconstruction review.

I recommend your approval of the attached Final Permit.

Attachments

FINAL DETERMINATION

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, Florida 32520

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Air Permit No. 0330045-032-AC
Gulf Power Company

The permit authorizes to upgrade the electrostatic precipitator (ESP) for Unit 6, which is located at the existing Crist Electric Generating Plant (SIC No. 4911) in Escambia County at 11999 Pate Street in Pensacola, Florida.

NOTICE AND PUBLICATION

The Department electronically distributed an Intent to Issue Permit package on December 08, 2010. The applicant published the Public Notice of Intent to Issue in the Pensacola News Journal on December 10, 2010. The Department received the proof of publication on December 17, 2010.

COMMENTS

On December 08, 2010, the Department received comments via email from the applicant. The following summarizes the comments and the Department's response.

- 1) "Gulf would request to retain the current 40% opacity."

Department Response: The Department established an opacity of 20% based on a six-minute average except for one six-minute average per hour of not more than 27% opacity during normal operation. This is identical to the standard specified for Unit 7, where the ESP was upgraded. It is noted that these units share a common stack and now have the same opacity. The ESP rebuild design specification is for 10% opacity.

- 2) "The description has the bypass stack height and width which is correct. This is the bypass stack and not the normal stack which is the common 4-7 scrubber stack which is higher and wider."

Department Response: The Department clarified the stack configurations.

- 3) "A small typo: Replacement of ash hopper(s). There is more than one hopper."

Department Response: The draft permit was modified as requested.

CONCLUSION

The final action of the Department is to issue the permit as drafted.