



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

PERMITTEE:

Gulf Power Company
Crist Electric Generating Plant
One Energy Place
Pensacola, Florida 32520

ARMS Permit No.	0330045-014-AC
Facility ID No.	0330045
SIC No.	4911
Expires:	December 31, 2007

Authorized Representative:

Penny Manuel
Vice President, Power Generation

PROJECT AND LOCATION

The proposed project authorizes the construction of a new 14 cell cooling tower for use with Crist Unit 7 to replace the old 12 cell cooling tower that must be removed to make room for a new wet flue gas desulphurization (WFGD) scrubber system. This project does not authorize any increase in heat input to Unit 7, even though the new cooling tower is larger and more efficient than the old one.

The project will be located at the existing Crist Electric Generating Plant, located on Pate Road, off of 10 Mile Road, Escambia County, Florida.

STATEMENT OF BASIS

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

APPENDICES

The following Appendix is attached as part of this permit.

Appendix GC Construction Permit General Conditions

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Joseph Kahn, PE, Acting Director
Division of Air Resource Management

"More Protection, Less Process"

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SECTION II. ADMINISTRATIVE REQUIREMENTS

FACILITY DESCRIPTION

This facility consists of four fossil fuel fired steam generators (boilers) and two fly ash silos. Boilers 4 and 5 are substitution Acid Rain Phase I Units. Boilers 6 and 7 are Acid Rain Phase I Units. All four boilers are subject to the Acid Rain Phase II requirements. Pulverized coal is the primary fuel for boilers 4, 5, 6 and 7. Fuel oil is used as supplemental fuel in all four of the boilers.

PROJECT DESCRIPTION

The Project consists of the construction and operation of a new cooling tower comprised of 14 cells, with a width of 105', a length of 367.5', a height of 68', includes drift eliminators rated at 0.0005%, operates at a maximum brackish-water flow rate of 180,000 gallons per minute for all cells combined. Brackish water is sprayed through the tower where fan induced air flow causes evaporative cooling. Water vapor, saltwater droplets (drift) and salt particles are emitted. Drift emissions are controlled by drift eliminators.

REGULATORY CLASSIFICATION

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

This facility is within an industry included in the list of the 28 Major Facility Categories as defined for Major Stationary Sources in Rule 62-210.200, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Based upon the construction permit application, the facility is a major source of hazardous air pollutants (HAPs).

PERMIT SCHEDULE

- 06-08-06: Date of Receipt of Permit Application
- 06-14-06: Application deemed complete
- 07-12 -06: Intent issued
- xx-xx-xx: Notice published in the XXXXX

RELEVANT DOCUMENTS

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 06-08-06
- Technical Evaluation and Preliminary Determination dated 07-12-06

SECTION II. ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400. The phone number 850/488-0114 and the fax number is 850/921-9533.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications should be submitted to the FDEP Northwest District Office, 160 Governmental Center, Pensacola, Florida 32501-5794. The phone number is 850/595-8364 and the fax number is 850/595-8417.
3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.
4. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 & 62-210.900, F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) & 62-212.300(1)(a), F.A.C.]
8. Expiration: This air construction permit shall expire on December 31, 2007. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C.]
9. Title V Permit: This permit authorizes the construction of the permitted emissions unit and initial operation to demonstrate that the stated design parameters were achieved. A Title V operation permit revision is required for continued operation of the permitted emissions unit. The Permittee shall submit an application for a permit revision at least ninety days prior to the expiration date of this air construction permit, but no later than 180 days after the emissions unit commences operation. [Rules 62-4.030 & 62-213.420, F.A.C.]

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

Cooling Tower (EU 014)

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EMISSIONS UNITS

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

ID	Emission Unit Description
014	Mechanical Draft Cooling Tower with a maximum circulation rate of 180,000 GPM.

EQUIPMENT

1. Cooling Tower: The permittee is authorized to construct a new 14-cell mechanical draft cooling tower with the following nominal design characteristics: a circulating water flow rate of 180,000 gpm; drift eliminators; and, a drift rate of no more than 0.0005 percent of the circulating water flow. [Application; Design]

EMISSIONS AND PERFORMANCE REQUIREMENTS

2. Hours of Operation: The new cooling tower shall be allowed to operate 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C.; and, Applicant's requests in AC permit application received June 08, 2006.]
3. Cooling Tower Design: The cooling tower shall be designed, operated and maintained to achieve a drift rate of no more than 0.0005% of the circulating water flow. [Application; Design]

{Note: This equates to an estimated average emission rate of particulate matter (PM) from the cooling tower at 0.87 pounds per hour and 3.82 tpy, based on an average TDS rate of 1,935 ppm. The PM₁₀ emissions are estimated to be approximately 60% of the estimated particulate matter emission rate.}
4. Circulating Water Flow-meter: The cooling tower shall be equipped with a circulating water flow-meter. [Rule 62-4.070, F.A.C.]
5. Drift Rate: Within 60 days of commencing operation, the permittee shall certify that the cooling tower was constructed and installed so as to achieve the specified drift rate of no more than 0.0005 percent of the circulating water flow rate. [Rule 62-4.070, F.A.C.]

{Note: This emissions unit is not subject to a visible emissions limitation. Emissions from this emissions unit include water droplets, so visible emission testing is not possible.}
6. Maintenance: A maintenance plan shall be implemented to assure that the drift elimination system on the cooling tower shall be maintained so as to minimize pluggage and to insure timely repair of broken sections of the drift eliminators. [Rule 62-4.070, F.A.C.]

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SECTION 4. APPENDIX GC
CONSTRUCTION PERMIT 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

SECTION 4. APPENDIX GC
CONSTRUCTION PERMIT GENERAL CONDITIONS

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);
 - b. Determination of Prevention of Significant Deterioration (Not Applicable); and
 - c. Compliance with New Source Performance Standards (Not Applicable).
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.