

Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

July 13, 2006

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

Re: Air Construction Permit No. 0330045-014-AC
Gulf Power Company- Crist Electric Generating Plant
Unit 7 Cooling Tower Replacement Project

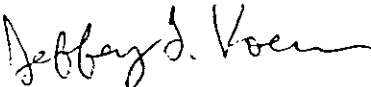
Dear Ms. Manuel:

On June 8, you submitted an application for an air permit to construct a new cooling tower for Unit 7. The new cooling tower will be constructed at the Crist Electric Generating Plant, which 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 construction of the emissions unit 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,

For 
Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jk/jh

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

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

Draft Air Permit No. 0330045-014-AC
Crist Electric Generating Plant
Unit 7 Cooling Tower Project
Escambia County, Florida

Facility Location: The applicant proposes to construct a new Cooling tower for Unit 7 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 construct a new cooling tower for Unit 7. Details of the project are provided 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.

WRITTEN 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, 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.

For 

Trina L. Vielhauer, Chief
Bureau of Air Regulation

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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 July 13, 2006 to the persons listed below.

Penny M. Manuel, Vice President, Power Generation, Gulf Power Company*
G. Dwain Waters, Q.E.P., Gulf Power Company (E-mail)
Gregory N. Terry, P.E., Gulf Power Company (E-mail)
Kevin White, P.E., DEP-NWD (E-mail)
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.

Victoria Gibson
(Clerk)

7/13/2006
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Bureau of Air Regulation
Draft Air Permit No. 0330045-014-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 cooling tower for Unit 7 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 construct a new 14-cell cooling tower for Crist Unit 7. The new cooling tower has the potential to emit an average of 3.82 tpy of particulate matter. The existing 12-cell cooling tower for Unit 7 will need to be removed in order to make room for a new planned wet flue gas desulfurization (WFGD) scrubber system to comply with the future CAIR and CAMR regulations. The new cooling tower will be constructed on an area that is currently part of the cooling water intake canal. Brackish water with an average TDS value of 1,935 parts per million (as the cooling medium) and a design drift rate of 0.0005% of the circulating flow are proposed. It is expected that actual PM emissions will decrease as a result of this project due to the shutting down of the old, less efficient, cooling tower.

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

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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.

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

Gulf Power Company – Crist Unit 7

New Cooling Tower

Escambia County

0330045-014-AC



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

July 13, 2006

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL INFORMATION

1.1 APPLICANT NAME AND ADDRESS

Gulf Power Company
One Energy Place
Pensacola, Florida 32520
Authorized Representative: Penny Manuel, Responsible Official

1.2 REVIEWING AND PROCESS SCHEDULE

June 8, 2006 Received Permit Application
June 14, 2006 Application complete

2. FACILITY INFORMATION

2.1 FACILITY LOCATION

The facility is located on Pate Road Rd., off of 10 Mile Road, Escambia County, Florida

2.2 STANDARD INDUSTRIAL CLASSIFICATION CODES (SIC)

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

2.3 FACILITY CATEGORY

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.

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 air construction permit application, the facility is a Title V source, a major source of hazardous air pollutants (HAPs), and a PSD major source of air pollutants.

3. DESCRIPTION

This project addresses the following emissions unit(s):

Emissions Unit No.	Emissions Unit Description
014	Unit 7, Mechanical Draft Cooling Tower with a maximum circulation rate of 180,000 GPM.

3.1 PROJECT DESCRIPTION

The project involves the installation and subsequent operation of a new 14 cell cooling tower for Crist Unit 7. The existing 12 cell cooling tower for Unit 7 will need to be removed in order to make room for

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

a new planned wet flue gas desulphurization (WFGD) scrubber system to comply with the future CAIR and CAMR regulations. The new cooling tower will be constructed on an area that is currently part of the cooling water intake canal. Brackish water with an average TDS value of 1,935 parts per million (as the cooling medium) and a design drift rate of 0.0005% of the circulating flow are proposed.

3.2 DESCRIPTION OF CURRENT STATUS

Fossil fuel steam generator unit 7 is a pulverized coal dry bottom, front and rear wall fired boiler. Steam generator unit 7 began commercial operation in 1973. This steam generating unit is constructed with a closed loop cooling system. Make up water for the system is drawn from an intake canal that is fed from the Escambia River.

4. PROJECT EMISSIONS

The following emission decreases are indicated by the applicant:

Pollutant	Past Actual Annual Emissions (TPY)	Future Potential Annual Emissions (TPY)	Net Change	PSD Threshold (TPY)	PSD Review Required
PM	1,400.38	3.82	-1,396.56	25	No
PM ₁₀	840.22	2.29	-837.93	15	No

Notes: The above calculations are based upon the paper "Calculating Realistic PM₁₀ Emissions from Cooling Towers" which is built upon the methodology presented in EPA's AP-42, the portion of PM which is emitted as PM₁₀ decreases as the TDS in the circulating water increases. For this project, the average TDS of the brackish water (1,935 ppm) results in about a 60% fraction of PM₁₀ emissions.

The Department does not render an opinion on the calculations of past actual emissions. However, it does recognize that the design of the new cooling tower (which includes drift eliminators with a drift rate of 0.0005%) will be much more efficient than the existing cooling tower that was not designed with drift eliminators, and that actual PM emissions will decrease as a result of this project.

5.0 PROJECT REVIEW

5.1 APPLICANT REVIEW

The applicant is proposing to build a new cooling tower that includes drift eliminators with a drift rate of 0.0005%, and a total circulating water flow usage limitation of 9.46E10 gallons per year (equivalent to 8,760 hours per year of full operation at 180,000 gallons per minute). This yields a maximum annual PM emissions of 3.82 TPY and a maximum annual PM₁₀ emissions of 2.29 TPY. The applicant states that the cooling tower meets the definition of an unregulated emissions unit pursuant to Rule 62-213. The applicant also states that Unit 7 is projected to experience a heat rate improvement of less than 1% during the summer months due to the more efficient thermal system, but this slight change in heat rate will not meaningfully impact the plant dispatch or change the load capability of the unit.

5.2 DEPARTMENT REVIEW

The Department has previously conducted BACT reviews via an inspection of the RACT/BACT/LAER Clearinghouse for mechanical draft cooling towers permitted between January 2003 and January 2006. Based upon these reviews, the Department has concluded that BACT for mechanical draft cooling towers is almost universally based upon drift eliminators. Additionally, BACT emission rates can be established as low as 0.0005%. It is noted that the lower end of the BACT range (0.0005%) is what the applicant has

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

proposed for this project. Based on the maximum annual water flow rate and the historical annual average total dissolved solids concentration of 1,935 ppm, the expected annual particulate matter emissions from the new cooling tower would be:

$$180,000 \text{ gal/min} * 0.0005\% * 1,935 \text{ ppm} * 8.337 \text{ lb H}_2\text{O/gal} * 60 \text{ min/hr} * 8,760 \text{ Hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 3.82 \text{ tpy.}$$

At a PM₁₀ fraction of 60%, expected annual PM₁₀ emissions from the new cooling tower would be:

$$3.82 \text{ tpy} * 0.60 = 2.29 \text{ tpy}$$

At these levels of emissions based on the average TDS of the cooling water, the unit could potentially qualify as an insignificant emissions unit pursuant to Rule 62-213, F.A.C. However, it was noted in the application that the highest TDS of the cooling water was measured at 14,700 ppm. In the unlikely event that this level of TDS was recorded for an entire year, the PM emissions from the new cooling tower could potentially be as high as:

$$180,000 \text{ gal/min} * 0.0005\% * 14,700 \text{ ppm} * 8.337 \text{ lb H}_2\text{O/gal} * 60 \text{ min/hr} * 8,760 \text{ Hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 28.99 \text{ tpy.}$$

In order to be classified as an insignificant emissions unit in the Title V permit, potential emissions would have to remain below 5 tpy. The department agrees that because the new cooling tower does not use chromium as an additive to the cooling water, there are no specific applicable regulatory requirements that apply to the proposed cooling tower. Also, because the potential emissions could possibly exceed 5 tons per year, the new cooling tower will meet the requirements for classification as an unregulated emissions unit when it is added to the Title V permit.

6.0 CONCLUSION

Based on the foregoing technical evaluation of the application, the Department has made a determination that the proposed project is capable of meeting the Department's air emission standards.

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



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
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

DRAFT

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

"More Protection, Less Process"

Printed on recycled paper.

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)

DRAFT

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.

Friday, Barbara

To: White, Kevin M.; 'GDWATERS@southernco.com'; GNTERRY@southernco.com
Cc: Koerner, Jeff
Subject: DRAFT AC Permit No.: 033045-014-AC - Gulf Power Company - Crist Electric Generating Plant
Attachments: 0330045-014-AC-D.zip

Attached for your records is a zip file for the subject DRAFT AC Permit.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday
Planner II
Bureau of Air Regulation
(850)921-9524
Barbara.Friday@dep.state.fl.us

7/13/2006

Friday, Barbara

From: System Administrator
To: White, Kevin M.; Koerner, Jeff
Sent: Thursday, July 13, 2006 12:58 PM
Subject: Delivered: DRAFT AC Permit No.: 033045-014-AC - Gulf Power Company - Crist Electric Generating Plant

Your message

To: White, Kevin M.; 'GDWATERS@southernco.com'; 'GNTERRY@southernco.com'
Cc: Koerner, Jeff
Subject: DRAFT AC Permit No.: 033045-014-AC - Gulf Power Company - Crist Electric Generating Plant
Sent: 7/13/2006 12:57 PM

was delivered to the following recipient(s):

White, Kevin M. on 7/13/2006 12:58 PM
Koerner, Jeff on 7/13/2006 12:58 PM



Jeb Bush
Governor

Department of Environmental Protection

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.: 0330045-014-AC
Facility ID No.: 0330045

Project: Minor Air Construction Permit to Construct New Cooling Tower for Unit 7.

The project involves the installation and subsequent operation of a new 14 cell cooling tower for Crist Unit 7. The existing 12 cell cooling tower for Unit 7 will need to be removed in order to make room for a new planned wet flue gas desulphurization (WFGD) scrubber system to comply with the future CAIR and CAMR regulations. The new cooling tower will be constructed on an area that is currently part of the cooling water intake canal. Brackish water with an average TDS value of 1,935 parts per million (as the cooling medium) and a design drift rate of 0.0005% of the circulating flow are proposed.

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

Jonathan K. Holtom, P.E.

Registration Number: 0052664

7/13/06

Date

Permitting Authority:

Florida Department of Environmental Protection
Division of Air Resources Management, Bureau of Air Regulation
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

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1. Article Addressed to:

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *P. Beach* Agent
 Addressee

B. Received by (Printed Name) *P. R. BEACH* C. Date of Delivery *7-17-06*

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 Penny M. Manuel

Street, Apt. No.,
 or PO Box No. -- One Energy Place

City, State, ZIP+4 -- Pensacola, FL 32520

PS Form 3800, June 2003 See Reverse for Instructions