

## **FINAL DETERMINATION**

Gulf Power Company  
Crist Electric Generating Plant  
Air Permit No. 0330045-017-AC

The Department distributed a public notice package on April 23, 2007, to authorize minor revisions to the original Unit 7 SCR construction permit (Permit No. 0330045-005-AC) at the Gulf Power Crist Electric Generating Plant, which is located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County. These revisions clarify the NO<sub>x</sub> testing requirements and provide more flexibility for the timing of Selective Catalytic Reduction repairs and maintenance. The Public Notice of Intent to Issue was published in The Pensacola News Journal on April 26, 2007.

### **COMMENTS/CHANGES**

No public comments were received during the 14-day public comment period.

### **CONCLUSION**


The final action of the Department is to issue the final permit without any changes.

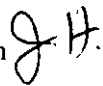
Florida Department of  
Environmental Protection

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**Memorandum**

TO: Joseph Kahn

THRU: Trina Vielhauer   
Jeff Koerner

FROM: Jonathan Holtom 

DATE: May 16, 2007

SUBJECT: Project No. 0330045-017-AC  
Final Construction Permit For Gulf Power Crist  
Clarification Of NO<sub>x</sub> Testing Requirements and Minor Changes To The  
Selective Catalytic Reduction (SCR) Bypass Condition

Attached for your approval and signature is a final construction permit for Gulf Power's Crist Electric Generating Plant. This permit makes minor revisions to the original Unit 7 SCR construction permit (Permit No. 0330045-005-AC) to clarify the NO<sub>x</sub> testing requirements and to provide more flexibility for the timing of SCR repairs and maintenance.

The Public Notice requirements were met on April 26 by publishing in the Pensacola News Journal. No comments were received from either the public or the applicant in response to this Public Notice, and no petitions were filed for an Administrative Hearing.

I recommend your approval and signature.

Attachments

TLV/jk/jh



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

In the Matter of an  
Application for Permit by:

Gulf Power Company  
Crist Electric Generating Station  
One Energy Place  
Pensacola, Florida 32520-0328

Permit No. 0330045-017-AC Facility ID No. 0330045 SIC No. 4911
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*Authorized Representative:*

Penny Manuel, Vice President and SPO

On January 23, 2007, Gulf Power submitted an application to revise Conditions of Permit No. 0330045-005-AC. The original permit authorized construction of a new electrostatic precipitator and the installation of a new selective catalytic reduction (SCR) system for Boiler No. 7 (EU-007) at the Crist Electric Generating Station, which is located on Pate Road, off of 10 Mile Road on Governors Bayou, Escambia County, Florida. With regard to this permit, the applicant requested a revision to clarify the testing requirement for the SCR control efficiency and, additional flexibility to bypass the SCR system to perform maintenance or repair. The Department approves these requests as specified in the attached revisions.

Enclosed is the Final Permit Revision, which modifies the original air construction permit. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

Ms. Penny Manuel, Vice President and SPO  
Gulf Power Company  
One Energy Place  
Pensacola, Florida 32520-0328

Air Permit No. 0330045-017-AC  
Crist Electric Generating Plant  
Escambia County

Enclosed is Final Permit Number 0330045-017-AC. This permit makes minor changes to the original Unit 7 Selective Catalytic Reduction (SCR) construction permit (Permit No. 0330045-005-AC) to clarify the NO<sub>x</sub> testing requirements and to provide more flexibility for the timing of SCR repairs and maintenance. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



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Trina L. Vielhauer, Chief  
Bureau of Air Regulation

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination and the Final Permit) was sent by e-mail with return receipt requested before the close of business on 5/22/07 to the persons listed:

Ms. Penny M. Manuel, Gulf Power Company ([pmmanuel@southernco.com](mailto:pmmanuel@southernco.com))

Mr. G. Dwain Waters, Gulf Power Company ([gdwaters@southernco.com](mailto:gdwaters@southernco.com))

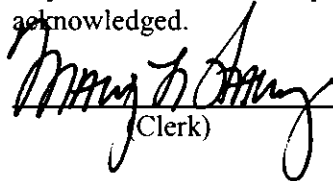
Mr. Tom Davis, ECT ([tdavis@ectinc.com](mailto:tdavis@ectinc.com))

Mr. Rick Bradburn, NWD ([rick.bradburn@dep.state.fl.us](mailto:rick.bradburn@dep.state.fl.us))

Mr. Gregg Worley, EPA Region 4 ([worley.gregg@epa.gov](mailto:worley.gregg@epa.gov))

Clerk Stamp

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

  
\_\_\_\_\_  
(Clerk)

5/22/07  
\_\_\_\_\_  
(Date)

**FINAL PERMIT REVISION**

**Permit No. 0330045-017-AC (Revises Original Permit No. 0330045-005-AC)**

The following emissions unit is addressed in this permit revision:

ID No.	Common Emission Unit Description
-007	Boiler Number 7 (6,406.4 million Btu per hour)

All construction related to the selective catalytic reduction (SCR) project that was authorized by Permit No. 0330045-005-AC is complete and no further construction is authorized by this action. The permit conditions are revised as follows. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements. Deletions are indicated by “~~strike through~~” and additions are indicated by “double underline”.

1. To provide additional flexibility to bypass the SCR system to perform maintenance or repair during the ozone season, Specific Condition No. 3.A.9. of Permit No. 0330045-005-AC is changed as follows:

- 9. SCR Bypass, Catalyst Maintenance and Repair: The permittee may bypass the SCR system to perform ~~catalyst~~ maintenance and repair for up to ~~15 days~~ 360 hours per ~~year~~ consecutive 12 months during the non-ozone ~~season~~ events. During such allowable bypass periods, the uncontrolled NOx emissions from Unit 7 shall not exceed 0.35 lb/MMBtu based on a 24-hour average. The daily NOx emission rates for these periods may be excluded from the plant-wide 30-day NOx standard specified in Subsection 3B. The permittee shall notify the Compliance Authority in advance of the purpose of the SCR bypass, the expected dates of SCR bypass, and the expected duration of SCR bypass. To the extent practical, the permittee shall schedule regular maintenance of the SCR system for the non-ozone season. {Permitting Note: The ozone season is defined as May 1<sup>st</sup> through September 15<sup>th</sup>. An Ozone event is defined as any level on the Air Quality Index for Ozone greater than good or moderate (green or yellow).} [Rules 62-210.700 and 62-4.070(3), F.A.C.]

2. To clarify the testing requirement for the SCR control efficiency, Specific Condition No. 3.A.12. of Permit No. 0330045-005-AC is changed as follows:

- 12. Nitrogen Oxides, Compliance Tests: Within 60 days after completing construction of the SCR system and bringing Unit 7 on line, the permittee shall conduct tests to demonstrate compliance with the design specification to achieve no less than an 85% reduction in the nitrogen oxide emission rate, as compared to the baseline emissions rate of 0.70 lb/MMBtu. The permittee shall concurrently test the SCR inlet and SCR outlet in accordance with EPA Method 7E as adopted by reference in Rule 62-204.800, F.A.C. Data collected during the annual NOx RATA testing may be used to represent NOx emissions at the SCR outlet. Alternatively, the permittee may submit data collected from the NOx rate process monitors at the SCR inlet and SCR outlet, which are part of the ammonia injection system. The data shall be collected for at least three consecutive hours. Subsequent tests shall be conducted during each federal fiscal year (October 1st to September 30th) in order to demonstrate that the SCR system continues to operate at the designed level of operation (i.e., 85% reduction from the baseline rate). [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

3. To provide consistency and clarity, Specific Condition No. 3.B.2. of Permit No. 0330045-005-AC is changed as follows:

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

**FINAL PERMIT REVISION**

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

The "Unit # daily MMBtu" shall be determined by the daily as-burned fuel analysis and the fuel fired for each unit. The "Unit # daily NOx CEMS Rate" shall be determined by the daily average of NOx CEMS data for each unit and reported in terms of "lb/MMBtu heat input". The plant-wide daily NOx emissions rate shall be determined each day regardless of the operating status for Unit 7. The plant-wide 30-day rolling NOx average shall be determined for each 30 sequential Unit 7 operating days, which need not be consecutive. A Unit 7 operating day means any calendar day that Unit 7 operates a minimum of 18 hours. The Unit 7 daily NOx CEMS rate may consist of less than 18 hours of data if this is due to: CEMS malfunction; or invalid CEMS data; or exempted data due to start up, shut down or SCR bypass, described below. When the catalyst temperature is below 600° F during a startup or shutdown, NOx emissions data collected during such periods may be excluded from the daily NOx average CEMS Rate. In accordance with Condition No. 9 of Subsection 3A, limited NOx emissions data collected during SCR bypass during the non-ozone season events may be excluded from the daily NOx average CEMS Rate. The plant-wide NOx emission standard shall be achieved by utilizing the SCR system for Unit 7 and implementing the selected NOx control strategy for Units 4, 5, and 6. The effective date for the plant-wide NOx emission standard is:

- a. The startup date of the selected additional NOx reduction project, (excluding an SCR project for Unit 6), but no later than May 1, 2006; or
- b. The startup date of the SCR project for Unit 6, but no later than December 31, 2007.

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

**Friday, Barbara**

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**From:** Harvey, Mary  
**Sent:** Tuesday, May 22, 2007 3:48 PM  
**To:** 'Ms. Penny M. Manuel, Gulf Power Company'; 'Mr. G. Dwain Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT'; Bradburn, Rick; 'Mr. Gregg Worley, EPA Region 4'  
**Cc:** Holtom, Jonathan; Adams, Patty; Gibson, Victoria  
**Subject:** Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL  
**Attachments:** 0330045.017.AC.F\_.pdf.zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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

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

Thank you,

DEP, Bureau of Air Regulation

6/26/2007



**Friday, Barbara**

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**From:** Harvey, Mary  
**Sent:** Wednesday, May 23, 2007 9:00 AM  
**To:** Adams, Patty  
**Subject:** FW: Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL

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**From:** Tom Davis [mailto:tdavis@ectinc.com]  
**Sent:** Tuesday, May 22, 2007 5:41 PM  
**To:** Harvey, Mary  
**Subject:** RE: Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL

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**From:** Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]  
**Sent:** Tuesday, May 22, 2007 3:48 PM  
**To:** Ms. Penny M. Manuel, Gulf Power Company; Mr. G. Dwain Waters, Gulf Power Company; Mr. Tom Davis, ECT; Bradburn, Rick; Mr. Gregg Worley, EPA Region 4  
**Cc:** Holtom, Jonathan; Adams, Patty; Gibson, Victoria  
**Subject:** Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL

Dear Sir/Madam:

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The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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

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Thank you,

DEP, Bureau of Air Regulation

6/26/2007

**Friday, Barbara**

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**From:** Harvey, Mary  
**Sent:** Wednesday, May 23, 2007 9:00 AM  
**To:** Adams, Patty  
**Subject:** FW: Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL

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**From:** Bradburn, Rick  
**Sent:** Wednesday, May 23, 2007 8:07 AM  
**To:** Harvey, Mary  
**Subject:** Read: Gulf Power Company - Facility ID No. 0330045-017-AC-FINAL

Your message

**To:** 'Ms. Penny M. Manuel, Gulf Power Company'; 'Mr. G. Dwain Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT'; Bradburn, Rick; 'Mr. Gregg Worley, EPA Region 4'  
**Cc:** Holtom, Jonathan; Adams, Patty; Gibson, Victoria  
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**Sent:** 5/22/2007 3:48 PM

was read on 5/23/2007 8:07 AM.