

## **FINAL DETERMINATION**

**Gulf Power Company**

**Crist Electric Generating Plant**

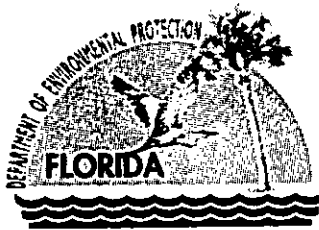
**Project No.: 0330045-003-AC**

### **I. Public Notice and Comments.**

The Public Notice of the permitting project was published in the Pensacola News Herald on July 11, 2002. No comments were received during the Public Notice period (14-days), which concluded at the close of business of July 25, 2002.

### **II. Conclusion.**

It is recommended to issue the authorization letter as noticed.



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

July 26, 2002

CERTIFIED MAIL – Return Receipt Requested

Mr. Gene L. Ussery  
V.P. of Power Generation/Transmission  
Gulf Power Company  
One Energy Place  
Pensacola, Florida 32520-0328

Dear Mr. Ussery:

RE: Authorization to Conduct Pollutant Testing and Parameter Measurements for the Development of a Compliance Assurance Monitoring (CAM) Protocol for the Gulf Power Company's Crist Electric Generating Plant's Units Nos. 4, 5 & 6's Electrostatic Precipitator (ESP)  
0330045-003-AC

The Department has reviewed the request that you provided on June 5, 2002. We have considered the Department's legal authority to allow Gulf Power Company to conduct the requested testing and measurements on its Crist Electric Generating Plant's Units Nos. 4, 5 & 6's ESP (electrostatic precipitator) located in Pensacola, Escambia County. The purpose is to help the company address Compliance Assurance Monitoring (CAM), which will have to be addressed regarding the ESP upon renewal of their Title V Operation Permit. Paragraph 403.061(16), Florida Statutes (F.S.), authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Rule 62-210.700(5), Florida Administrative Code (F.A.C.), authorizes the Department to consider variation in industrial equipment and make allowances for excess emissions that provide reasonable and practical regulatory controls consistent with public interest.

In accordance with the provisions of Paragraphs 403.061(16) and (18), F.S., and Rule 62-210.700(5), F.A.C., you are hereby authorized to conduct pollutant testing and parameter measurements for the development of a CAM protocol for the Gulf Power Company's Crist Electric Generating Plant's Units Nos. 4, 5 & 6's ESP. This evaluation will require Gulf Power Company to vary the collection efficiency of the ESP to establish a performance curve between opacity, particulate matter emissions and ash resistivity, thus creating an operational condition near or in excess of the Florida particulate matter emissions and opacity standards. The data gathered will allow the calibration of an EPRI (Electrical Power Research Institute) computer model to evaluate the performance of the Crist Units Nos. 4, 5 & 6's ESP. The pollutants and or parameters to be measured or monitored will include sulfur dioxide [CEM (continuous emission monitor)], nitrogen oxides (CEM), particulate matter, carbon dioxide (CEM), ash content of the fuel, ultimate fuel analyses, unit operational parameters including load, fuel flow, excess air, flue gas temperature, and other unit specific parameters that are needed for the EPRI computer model. Particulate size distribution may be evaluated also.

*"More Protection, Less Process"*

*Printed on recycled paper.*

Mr. Gene L. Ussery  
Gulf Power Company  
Crist Electric Generating Plant: Units Nos. 4, 5 & 6  
0330045-003-AC  
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The performance tests and parameter measurements or monitoring shall be subject to the following conditions:

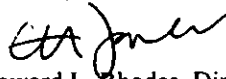
1. Unless waived, the permittee shall notify the Department's Northwest District Office and Bureau of Air Regulation Office at least 15 days prior to commencement of the performance tests and parameter measurements or monitoring. A written report shall be submitted to these offices within 45 days upon completion of the last test run and parameter measurements and monitoring.
2. The authorized testing and measurement and monitoring schedule is from September 1 through November 30, 2002. If additional time is needed, the permittee shall provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the testing and measurements or monitoring.
3. The parameters to be measured or monitored are sulfur dioxide [CEM (continuous emission monitor)], nitrogen oxides (CEM), particulate matter, carbon dioxide (CEM), ash content of the fuel, ultimate fuel analyses, unit operational parameters including load, fuel flow, excess air, flue gas temperature, and other unit specific parameters that are needed for the EPRI computer model. Particulate size distribution may be evaluated also.
4. Emissions testing shall be conducted concurrently for the following pollutants and using the following test methods:
  - a. Particulate matter           EPA Test Method 17 (including EPA Test Methods 1 thru 4)
  - b. Visible emissions           EPA Test Method 9
5. The performance test plans are as follows:
  1. Conduct a performance test (three 1-hour runs) using EPA Method 17 at "normal" operations;
  2. Conduct a performance test (three 1-hour runs) using EPA Method 17 at a reduction in the ESP efficiency; and,
  - 3.a. If the test results show that the PM allowable limit was exceeded; then the ESP's efficiency will be increased and a third performance test using EPA Method 17 will be conducted (supposedly between "normal" and "at the reduced efficiency"); or,
  - b. If the test results show that the PM allowable limit was not exceeded; then the ESP's efficiency will be further decreased and a third performance test using EPA Method 17 will be conducted in an attempt to define the outer range of the ESP's efficiency at which the PM allowable limit will be exceeded; and,
  - c. If the outer range is not established by the 2<sup>nd</sup> and 3<sup>rd</sup> performance tests, then the performance testing is ended for that emissions unit; and, Gulf Power Company will use the data to help define their CAM Plan for that emissions unit tested.
6. The release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C., is not authorized for this activity.
7. Performance testing shall immediately cease upon the occurrence of a valid environmental complaint by a citizen or other party, or a nuisance or danger to the public health or welfare. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.

Mr. Gene L. Ussery  
Gulf Power Company  
Crist Electric Generating Plant: Units Nos. 4, 5 & 6  
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8. The performance tests and parameter measurements and monitoring shall be under the direct supervision and responsible charge of a professional engineer registered in Florida.
9. This Department action is just to authorize the performance testing and parameter measurements and monitoring for the Crist Units Nos. 4, 5 & 6's ESP for the purpose of developing a CAM protocol.
10. Complete documentation of the activity shall be kept on file for at least 5 (five) years.
11. The Department shall be notified in writing on the date of the last test run and parameter measurement and monitoring completion. If after work hours, notification shall occur on the next work day.
12. Attachment Section.
  - a. Mr. G. Dwain Waters's letter received June 5, 2002.
  - b. Final Determination.

The Department has relied on the information referenced in the Attachment Section and conversations with representatives of Gulf Power Company in authorizing this activity.

Sincerely,

  
for Howard L. Rhodes, Director  
Division of Air Resources Management

HLR/rbm

Enclosures

cc: Clair Fancy, DEP - BAR  
Scott Sheplak, DEP - BAR  
Sandra Veazey, DEP - NWD  
Kevin White, DEP - NWD  
Joe Kahn, DEP - BAMMS  
G. Dwain Waters, Q.E.P., GPC  
Gregory N. Terry, P.E., GPC

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 Mr. Gene L. Ussery  
 V.P. of Power Generation/Transmission  
 Gulf Power Company  
 One Energy Place  
 Pensacola, Florida 32520-0328

2. Article Number (Copy from service label)  
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**Mr. Gene L. Ussery**  
 Street, Apt. No., or PO Box No.  
**One Energy Place**  
 City, State, ZIP+4  
**Pensacola, Florida 32520-0328**