Florida Department of Environmental Protection

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Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

May 18, 2011

Electronically Sent – Received Receipt Requested

Mr. James Vick, Environmental Affairs Director
Gulf Power Company
One Energy Place, BIN 0328
Pensacola, FL 32520

Re: Project No. 0330045-034-AC
Amends Permit No. 0330045-029-AC
Crist Electric Generating Plant, Existing Units 4 – 7
Extension to Conduct Additional Sulfuric Acid Mist (SAM) Testing
Letter of Authorization

Dear Mr. Vick:

On May 11th, the Department received a request from Gulf Power Company for an extension to conduct additional stack tests to determine SAM emissions from existing Units 4 – 7. The plant recently installed a wet flue gas desulfurization (FGD) system to control sulfur dioxide (SO_2) emissions from Units 4 – 7. In addition, Unit 7 operates a selective catalytic reduction (SCR) system to reduce nitrogen oxides (NOx) and the plant is authorized to install an SCR on Unit 6 as well. The catalysts in SCR systems have been shown to increase sulfur trioxide formation, which results in increased SAM emissions. Also, due to the successful installation and operation of the wet FGD system, Permit No. 0330045-029-AC authorized a higher sulfur coal blend for Units 4 – 7. This permit included an emissions cap to ensure that the project did not result in a significant increase in SAM emissions. Since hydrated lime injection (HLI) was added to reduce SAM emissions, the permit required performance tests to establish operating conditions (e.g., HLI rates) that would determine the estimated SAM emissions rates that would be used to show compliance with the emissions cap.

The plant conducted preliminary stack tests to determine the SAM emissions rates. These initial tests indicated 90% or more control of SAM emissions by the wet FGD system without any HLI. This was substantially confirmed by additional parametric tests on the system. This means that the plant may be able to comply with the SAM emissions cap without any HLI.

Condition 6 in Subsection 3A of Permit (0330045-029-AC) requires performance tests to determine SAM emissions at various load ranges with the HLI on and off. These tests are required to be conducted within 90 days of first firing the higher sulfur coal, which the permittee believes will expire on May 30th. In consideration of an extension to conduct these tests, the permittee agrees to:

- Test the scrubber outlet stack with and without HLI to establish full load removal efficiencies of the system and submit a report within 45 days. The preliminary schedule for this test is during June of 2011.
- Operate the HLI only as necessary if the performance tests provide "reasonable assurance" of compliance with the SAM emissions cap without HLI.
- Conduct quarterly SAM emissions tests at the scrubber stack until the SCR on Unit 6 commences operation in the Spring of 2012. At that time, Gulf will meet the testing provisions as outlined in Permit No. 0330045-

028-AC for the Unit 6 SCR. This will provide the final parametric model to demonstrate "reasonable assurance" that the higher sulfur coal did not result in a signifant emissions increase.

Based on the information provided and the given circumstances, the Department approves your request. Specifically, the requirement to conduct the SAM emissions performance tests is extended through July 31, 2011. In addition, this test may be conducted only at full load with the HLI on and off. If lower load testing is not elected, then compliance with the SAM emissions cap must be conservatively demonstrated based on the full load data. As new SAM emissions and performance data become available, the permittee shall update and work with the Department's Northwest District Office on the "reasonable assurance" methodology used to verify compliance with the SAM emissions cap. The SAM emissions performance tests are referenced in several permits as the projects were being constructed. At its option, Gulf Power may submit an application to clarify all SAM emissions performance tests in a single air construction permit to clarify the testing requirements and deadlines. The permittee will submit an application to revise the Title V air operation permit to incorporate the acid mist conditions after completing the tests required in Permit 0330045-028-AC for the Unit 6 SCR system.

The Department will consider this action final unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, of the Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed 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 (received) in the Department's Office of General Counsel, MS #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this notice. Petitions filed by any other person must be filed within 14 days of receipt of this proposed action. A petitioner must 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 Department'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 indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (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 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 Department's final action may be different from the position taken by it in this notice. 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.

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a Notice of Appeal, under Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, 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 of Appeal must be filed within thirty days from the date this notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

For Trina L. Vielhauer, Deputy Director
Division of Air Resource Management

TLV/jfk

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this authorization was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 5/18/11 to the persons listed below.

Mr. James Vick, Gulf Power Company (jovick@southernco.com)
Mr. G. Dwain Waters, Gulf Power Company (gdwaters@southernco.com)
Mr. Gregory Terry, Gulf Power Company (gnterry@southernco.com)
Mr. Rick Bradburn, DEP NWD Office (rick.bradburn@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp
FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 5/18/11 (Date)