

FINAL DETERMINATION

PERMITTEE

DeSoto County Generating Company, LLC
3800 Northeast Roan Street
Arcadia, FL 34266

Responsible Official: Ms. Dana P. Claburn, Plant Manager

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation, Air Permitting North Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Project No. 0270016-006-AC
Modification of Permit No. 0270016-001-AC (PSD-FL-284)
DeSoto County Energy Park

DeSoto County Generating Company, LLC (Applicant) requested several changes to the Air Construction Permit No. 0270016-001-AC (PSD-FL-284) for Emission Unit's 001, 002 and 004. The changes reflected the current regulatory requirements for fuel oil storage tanks, fuel oil usage requirements for the two simple cycle combustion turbines and other minor modifications. The changes were done concurrently with the renewal of the Title V Operating Permit.

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue an Air Construction Permit Modification and Title V Air Operation Permit Renewal package on October 9, 2007. The applicant published the Public Notice of Intent to Issue Air Construction Permit Modification and Title V Air Operation Permit Renewal in the DeSoto Sun on October 15, 2007. The Department received the proof of publication on October 22, 2007. The public comment period for the Air Construction Permit Modification was 14 days and for the Title V Air Operation Permit Renewal is 30 days.

COMMENTS

No comments on the Air Construction Permit Modification were received from the public, the Department's Southwest District Office, the EPA Region 4 Office or the National Park Service.

Comments were submitted by the applicant on October 23, 2007. The following summarizes their comments and the Department's response:

1. The language of Specific Condition 14 of Section III of the Construction Permit Modification needs to be revised. The applicant recommends striking the term "curtailment" from the inserted language and revising the phrase to read: "During any consecutive 12-month period that includes an episode where natural gas availability is limited, ...". Additionally, the applicant requested that the Department delete the last sentence of the inserted text and replace it with the following language: "The permittee shall maintain documentation sufficient to authenticate any limitation on the availability of natural gas relied upon under this condition and shall make such documentation available to the Department upon request."

The Department will accept the applicant's request for changing the term "curtailment" to any episode where natural gas availability is limited. This change would more clearly include each of these scenarios:

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(i) that gas supply is scheduled and flowing to the facility, but is subsequently interrupted and discontinued; (ii) that gas supply is requested based on apparent availability, but is not able to be scheduled due to actual unavailability, and (iii) that gas transportation is known to be restricted such that no request to schedule supplies to DeSoto would reasonably be fulfilled.

The Department will still require documentation for non-availability of natural gas of each episode to be submitted to the Department initially for the first year, and thereafter, the permittee can submit quarterly reports listing the dates of the episodes, the reasons provided by the supplier for limited natural gas supply and the duration of each episode during that quarter. Therefore, the condition will be revised to read as follows:

Fuel Oil Usage. The amount of back-up fuel (fuel oil) burned at the site (in BTU's) shall not exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) during any consecutive 12-month period. During any consecutive 12-month period that includes an episode where natural gas availability is limited (e.g., gas supply is scheduled and flowing to the facility, but is subsequently interrupted and discontinued; gas supply is requested based on apparent availability, but is not able to be scheduled due to actual unavailability; and gas transportation is known to be restricted such that no request to schedule supplies would reasonably be fulfilled), the amount of back-up fuel (fuel oil) burned at the site (in BTU's) may exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) for that consecutive 12-month period. The permittee shall provide notification (telephonic or e-mail) of each episode within 2 business days to the Department's Southwest District Office until September 30, 2008. Thereafter, the permittee shall provide quarterly documentation of the episodes to the Department's Southwest District Office. The documentation shall include the dates of the episodes, the reasons provided by the supplier for limited natural gas availability, and the duration of each episode during that quarter. [Rule 62-210.200, F.A.C. (BACT); and 0270016-001-AC, Specific Condition 14]

2. The applicant requested removal of the nitrogen content sampling requirement for fuel oil shipments contained in Specific Condition 45 of Air Construction Permit 0270016-001-AC (PSD-FL-284).

The rule citation for Specific Condition 45 is 40 Code of Federal Regulations (CFR) 60.335(d) from New Source Performance Standards (NSPS) Subpart GG. The Department will revise Specific Condition 45 as the rule citation in the specific condition is obsolete. The subpart only requires fuel oil nitrogen monitoring if the permittee claims an allowance for fuel bound nitrogen. Since the BACT standard does not provide fuel bound nitrogen allowance, sampling of nitrogen content for fuel oil is not required. Therefore, Specific Condition 45 will be revised as follows:

Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content ~~and nitrogen content~~ of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR ~~60.335(d)~~ 60.334(h).

Additionally, the Department will make the following correction to Specific Condition 8:

The Department will make a correction by removing the strikethrough of the last sentence of the specific condition. The requirement of providing manufacturers curves for heat input rates corrected to ambient conditions was a requirement of the construction permit, and needs to be a part of that condition. The condition will be revised as follows:

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Permitted Capacity. The ~~maximum nominal~~ heat input rates, based on the lower heating value (LHV) of each fuel to each Unit (001 and 002) at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,612 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,806 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These ~~maximum nominal~~ heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correcting to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and 0270016-001-AC, Specific Condition 8]

CONCLUSION

The final action of the Department is to issue the Air Construction Permit Modification with the minor revisions, corrections, and clarifications as described above.



Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jell Kottkamp
Lt. Governor

Michael W. Sole
Secretary

October 31, 2007

Electronically sent with received receipt requested.

dpclabur@southernco.com

Ms. Dana P. Claburn, Plant Manager
DeSoto County Generating Company, LLC
3800 NE Roan Street
Arcadia, Florida 34266

Re: DeSoto County Energy Park
Project No. 0270016-006-AC
Modification of Permit No. 0270016-001-AC (PSD-FL-284)

Dear Ms. Claburn:

On June 25, 2007, the Department received your request to make several changes to the air construction permit 0270016-001-AC (PSD-FL-284) for Emission Unit's 001, 002 and 004. Based on your application and subsequent letter, the Department will modify this permit, previously issued on June 30, 2000, as follows:

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

5. ARMS Emission Unit 004, Fuel Storage, consisting of one 1.5 million gallon distillate fuel oil storage tanks shall comply with all applicable provisions of 40CFR60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800, F.A.C. [Rule 62-204.800(7)(b), F.A.C. Design]
8. Permitted Capacity. The ~~maximum nominal~~ heat input rates, based on the lower heating value (LHV) of each fuel to each Unit (001 and 002) at ambient conditions of 59^oF temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,612 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,806 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These ~~maximum nominal~~ heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correcting to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and 0270016-001-AC, Specific Condition 8]
11. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturer or facility determined best practices after approval by the Department. The permittee shall submit the facility determined best practices to the Department prior to

implementing the practices. All operators (~~including supervisors~~) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and 0270016-001-AC, Specific Condition 11]

14. Fuel Oil Usage. The amount of back-up fuel (fuel oil) burned at the site (in BTU's) shall not exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) during any consecutive 12-month period. During any consecutive 12-month period that includes an episode where natural gas availability is limited (e.g., gas supply is scheduled and flowing to the facility, but is subsequently interrupted and discontinued; gas supply is requested based on apparent availability, but is not able to be scheduled due to actual unavailability; and gas transportation is known to be restricted such that no request to schedule supplies would reasonably be fulfilled), the amount of back-up fuel (fuel oil) burned at the site (in BTU's) may exceed the amount of natural gas (primary fuel) burned at the site (in BTU's) for that consecutive 12-month period. The permittee shall provide notification (telephonic or e-mail) of each episode within 2 business days to the Department's Southwest District Office until September 30, 2008. Thereafter, the permittee shall provide quarterly documentation of the episodes to the Department's Southwest District Office. The documentation shall include the dates of the episodes, the reasons provided by the supplier for limited natural gas availability, and the duration of each episode during that quarter. [Rule 62-210.200, F.A.C. (BACT); and 0270016-001-AC, Specific Condition 14]
29. Initial (I) performance tests (for both fuels) were performed on each unit while firing natural gas as well as while firing oil. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.
- EPA Reference Method 9 (30 minutes), "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG and (I, A) short-term NOX BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirements).
 - EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.

In accordance with Rule 62-297.310(7), F.A.C., the Department may require the initial test to be repeated after a modification (and shakedown period not to exceed 100 days after restart) of a combustion turbine. Within 60 days of replacing combustors and restarting a unit, the permittee shall conduct an EPA Method 10 test to determine compliance with the CO emissions standard for firing natural gas. NOx CEMS data collected during each of the CO test runs shall be averaged and reported in the test report. The results of this test may be used to satisfy the requirements for an annual CO emissions test. [Rule 62-297.310, F.A.C.; and Permit No. PSD-FL-284B (0270016-004-AC), Specific Condition 29]

45. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content ~~and nitrogen content~~ of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR ~~60.335(d)~~ 60.334(h).

Details of the Department's review are available in the Technical Evaluation and Preliminary Determination that accompanied the Draft Permit modification package. This permit modification is issued pursuant to Chapter 403 of the Florida Statutes. Attached are copies of air construction permit No. 0270016-001-AC (PSD-FL-284). A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Any party to this order (permit modification) 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.

Sincerely,



Joseph Kahn, Director
Division of Air Resource Management

11/1/2007

(Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit Modification was sent electronically with received receipt requested before the close of business on

11/02/07
to the persons listed:

Dana Claburn, DeSoto County Generating Company: dpclabur@southernco.com

Kevin White, P.E., Southern Company: kwhite@southernco.com

Mara Nasca, Southwest District Office: mara.nasca@dep.state.fl.us

Jim Little, EPA: little.james@epa.gov

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.

Mary L. Army
(Clerk)

11/2/07
(Date)