



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

November 3, 2006

(Sent by Electronic Mail – Return Receipt Requested)

Mr. Robert W. Klemans, P.E.
Interim Environmental Resource Coordinator
Gainesville Regional Utilities
P.O. Box 147117, Station A136
Gainesville, Florida 32614-7117

Re: Gainesville Regional Utilities, Deerhaven Generating Station
Current Title V Permit No. 0010006-003-AV
Steam Boiler No. 2 - Excess Emissions Due to Startup, Shutdown, and Malfunction

Dear Mr. Klemans:

I received your letter dated October 18th requesting additional periods of excess emissions from Steam Boiler No. 2 due to startup, shutdown, and malfunction. Such a request must be made by submitting the application form (No. 62-210.900(1)) to revise your Title V air operation permit along with the proper signatures, certifications and the information necessary to support this request. The form is available from the Division's web site at: <http://www.dep.state.fl.us/Air/forms/application.htm>.

According to your letter, Steam Boiler No. 2 operates in excess of the opacity standard during startups, shutdowns, and malfunctions. Currently, this unit is restricted by Rule 62-210.700(1), F.A.C., which limits the duration of excess emissions to no more than two hours in a 24-hour period. Rule 62-210.700(5), F.A.C., states "Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest." This provides the Department the authority to adjust the restrictions imposed by the rule based on the unique factors for a given unit. Some of the factors and information you need to provide for our consideration include, but are not limited to:

- For each startup and shutdown event, identify each pollutant that is in excess of an emissions standard, the emissions standard, and the method used to determine the compliance status during the event.
- Provide supporting data (i.e., CEMS, COMS, etc.) that identifies the level and duration of excess emissions during the event.
- Identify the number and duration of startups, shutdowns, and malfunctions based on actual operation over the last 5 years.
- Provide a detailed description of the procedures used to startup and shutdown.
- Identify the procedures used to startup the air pollution control equipment, when this equipment is fully functional, and any limiting conditions for this equipment.
- Describe the best operational practices used by the operators to minimize emissions during startups and shutdowns.

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Malfunctions are defined in Rule 62-210.200, F.A.C. as, "Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner." Frequent, recurring failures may indicate poor operation and/or maintenance. In accordance with Rule 62-4.130, F.A.C., excess emissions from malfunctions must be immediately reported identifying: pertinent information as to the cause of the problem and the corrective actions being taken to correct the problem to prevent its recurrence. Although such notification does not release the permittee from any liability for failure to comply with Department rules, the Compliance Authority may consider the circumstances of the event and the corrective actions in determining any enforcement action.

Again, to revise your current Title V air operation permit, you must submit the proper application form and information to support your request. If you have any questions, please contact me at 850-921-9536.

Sincerely,



Jeffery F. Koerner, Administrator
Air Permitting North, Bureau of Air Regulation

This document was electronically mailed to the following people.

Mr. Robert W. Klemans, GRU (klemansrw@gru.com)

Ms. Yolanta E. Jonynas, GRU (jonynasve@gru.com)

Mr. Tom Davis, ECT (tdavis@ectinc.com)

Mr. Chris Kirts, NED (kirts_c@dep.state.fl.us)



October 18, 2006

Mr. Jeff Koerner, P.E.
Professional Engineer Administrator
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 23
Tallahassee, Florida 32301

RECEIVED

OCT 25 2006

BUREAU OF AIR REGULATION

Re: Gainesville Regional Utilities, Deerhaven Generating Station
Permit No. 0010006-003-AV, Title V Operating Permit Revision

Dear Mr. Koerner:

The Gainesville Regional Utilities (GRU) Deerhaven Generating Station (DGS) includes two steam boilers and three simple cycle combustion turbines. Operation of these emission units is currently authorized by Final Title V Operating Permit No. 0010006-003-AV with an effective date of January 1, 2005 and an expiration date of December 31, 2009. GRU is requesting a minor Title V operating permit revision to allow excess emissions during start-up, shutdown and malfunction of Steam Boiler No. 2 to exceed two hours in any 24-hour period.

DGS Steam Boiler No. 2 is rated at 2,428 MMBtu/hr and began commercial operation in 1981. This emissions unit is fired on coal, natural gas and/or distillate fuel oil and is used for baseload operations. Particulate matter emissions are controlled by a "hot-side" electrostatic precipitator (ESP), i.e. the ESP operates at elevated temperatures since it is located on the upstream side of the air preheater. Steam Boiler No. 2 is subject to 62-210.700(1), Florida Administrative Code (F.A.C.) which states "Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emission shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration."

Steam Boiler No. 2 has experienced periods of excess opacity emissions during startup, shutdown and malfunction which have exceeded the two hour in any 24 hour limit. All instances of excess opacity emissions have occurred despite GRU adhering to best operational practices to minimize excess emissions at all times. Historically, GRU reported these infrequent instances of excess emissions via telephone and was granted verbal authorization by FDEP to exceed the two hour in any 24 hour limit. A more recent interpretation from FDEP has indicated that this verbal authorization is no longer acceptable and a Title V operating permit revision is required.

Despite GRU's best efforts to minimize excess emissions during startup, shutdown or

Mr. Jeff Koerner, P.E.
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malfunction, Steam Boiler No. 2 continues to periodically experience periods of excess opacity emissions. One contributing factor is the basic operational design of the hot-side ESP, which is designed to effectively remove particulate matter (PM) at the relatively high temperatures experienced under normal operating conditions. While the ESP operates very effectively (i.e., well below the permitted PM emission limits) at higher load conditions, which equates to higher inlet temperature conditions, the PM removal efficiency is compromised when the inlet gas temperature falls below the design temperature which typically occurs during periods of startup, shutdown and malfunction.

Since Steam Boiler No. 2 is a baseload generating unit, the frequency of scheduled routine maintenance outages (i.e., startups and shutdowns) is kept to a minimum. Reasons for unscheduled outages include boiler tube leaks, equipment (such as a sensor) malfunction, or a unit trip due to lightning - malfunctions that are beyond GRU's control. Based on a review of historical records, GRU does not anticipate excess opacity emissions related to scheduled or unscheduled startups, shutdowns, and malfunctions to exceed twelve hours on a frequent or routine basis.

For all the reasons discussed above, GRU requests a permit revision to revise Title V operating permit condition D.2 to read as follows:

“Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emission are adhered to and the duration of excess emissions shall be minimized but in no case exceed twelve hours in any 24 hour period unless specifically authorized by the Department for longer duration.”

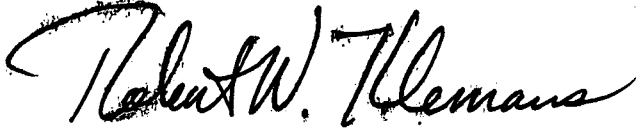
GRU notes that this condition will be essentially a temporary Title V operating permit condition since planned future additions to the existing Steam Boiler No. 2 air pollution control system include the installation of a sulfur dioxide (SO₂) dry scrubbing system. This SO₂ scrubber system will include a baghouse for PM control. It is anticipated that the baghouse, which will be located downstream of the air preheater, will greatly improve the overall efficiency of PM matter removal at the lower gas temperatures experienced during startups, shutdowns, and malfunctions resulting in lower opacities during these events.

GRU believes that incorporation of the requested permit condition will not adversely affect any ambient air quality standard but will provide GRU with the operational flexibility needed during unavoidable periods of startup, shutdown and malfunction. GRU will continue to implement the best operational practices to minimize excess emissions at all times. GRU appreciates your review and prompt response in this matter.

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If you have any questions, please contact me by phone at (352) 393-1283, by e-mail at klemansrw@gru.com or at the address at the bottom of the first page of this letter.

Sincerely,

A handwritten signature in black ink that reads "Robert W. Klemans". The signature is written in a cursive style with a large initial 'R'.

Robert W. Klemans, P.E.
Interim Environmental Resource Coordinator

RWK

cc: G. Allen
C. Kirts (FDEP/Jax)
E. Regan
D. Beck
D. Moffett
M. Procopio
T. Davis (ECT)
R. Embry
Y. Jonynas

file: CAA/Title V – DH