7/28/04

Dear Yolanta,

Per your request, I am forwarding the e-mail that we received from Joel Huey with EPA Region 4 regarding CAM applicability to water injection. Take care.

Bruce

-----Original Message-----
From: Holtom, Jonathan
Sent: Monday, July 19, 2004 2:22 PM
To: Mitchell, Bruce
Subject: FW: CAM Applicability for Water Injected Combustion Turbines

Joel's response.

-Jonathan

-----Original Message-----
From: Huey.Joel@epamail.epa.gov [mailto:Huey.Joel@epamail.epa.gov]
Sent: Monday, July 19, 2004 2:16 PM
To: Holtom, Jonathan
Cc: Pennington, Jim; worley.gregg@epamail.epa.gov
Subject: RE: CAM Applicability for Water Injected Combustion Turbines

Jonathan,
My understanding is that it's standard protocol for a source to seek applicability determinations from its permitting authority, and when states have questions or need assistance, they consult EPA. I can't advise you on whether to tell them you agree with them or not, but I would advise against permitting the facility without the CAM requirements because EPA would have to object to the permit. If GRU and Florida are not satisfied with the position I've conveyed via email, I'd suggest that you send EPA a letter requesting a formal determination.
Joel

-----"Holtom, Jonathan" <Jonathan.Holtom@dep.state.fl.us> wrote: -----

****

8-27-04
@ 4:00
Spoke to Trina - Ok by her to accept NOx CEMS for compliance and issue an EC to reject the #/hr & TPY allowable limits to equivalent limits.

PERMITTEE: **Permit Number: PSD-FL-212**
Gainesville Regional Utilities **Expiration Date: June 30, 1996**

8-27-04
@ 4:01
left Yolanta a message to call me back.
8-27-04
4:11
Spoke to Yolanta - 1-CEMS for compliance
- 2. BACT & Permit limits (#/hr & TPY) - to become equivalent limits
- Excess emissions on startup & shutdown - will request some add. time - suggest that we take a look at this issue on a

SPECIFIC CONDITIONS:

Emission Limits

6. The maximum allowable emissions from the DHCT3, when firing natural gas or No. 2 fuel oil, in accordance with the BACT determination, and at 95 - 100% percent load based on the manufacturer's curves submitted to the DEP, shall not exceed the following limits except during periods of start up, shutdown, and malfunction load change and fuel switching pursuant to Rule 62-210.700, F.A.C.:

MAXIMUM ALLOWABLE EMISSION LIMITS

POLLUTANT	FUEL	BACT STANDARD	LBS/HR	TPY
NO_x*	Gas	15 ppmvd @ 15% Oxygen	58	113(a)
	Oil	42 ppmvd @ 15% Oxygen	184	184(b)
			Combined(c)	239
PM_{10}	Gas	Good combustion; visible emissions shall not exceed 10% opacity	7(d)	14(a)(d)
	Oil	Good combustion of low sulfur oil; visible emissions shall not to exceed 10% opacity	15(d)	15(b)(d)
			Combined(c)	22
SO_2	Gas	Good combustion	29(d)	57(a)(d)
	Oil	Good combustion of low sulfur fuel oil: max. 0.05% sulfur content, by weight	53(d)	53(b)(d)
			Combined(c)	81
	Oil	Good combustion, limited quantity: max. 0.25% sulfur content, by weight		
H_2SO_4 Mist	Gas	Good combustion	3(d)	6(a)(d)
	Oil	Good combustion of low sulfur fuel oil: max. 0.05% sulfur content, by weight	6(d)	6(b)(d)
			Combined(c)	9
	Oil	Good combustion, limited quantity: max. 0.25% sulfur content, by weight		

*These values will be calculated using F factors.
(a) Based on a maximum of 3900 hours of operation with natural gas firing.
(b) Based on a maximum of 2000 hours of operation with fuel oil firing.
(c) Based on 1900 hours natural gas firing and 2000 hours of operation with fuel oil firing.
(d) Compliance shall be demonstrated through fuel sulfur analysis.

ECT
Environmental Consulting & Technology, Inc.

July 1, 2004

Mr. James K. Pennington, P.E.
North Permitting Section Administrator
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Re: City of Gainesville, Gainesville Regional Utilities
Deerhaven Generating Station
Title V Permit No. 0010006-002-AV Renewal Application

Dear Mr. Pennington:

The City of Gainesville, Gainesville Regional Utilities (GRU) Deerhaven Generating Station is an existing electric generation facility located in Gainesville, Alachua County, Florida. The Deerhaven Generating Station includes two fossil fuel fired steam generators (DH-1 and DH-2), three dual fuel simple cycle combustion turbines (DHCT-1, DHCT-2, and DHCT-3), coal handling and storage activities, and ancillary supporting equipment. Operation of the Deerhaven Generating Station emission units is currently authorized by Title V FINAL Permit Revision No. 0010006-002-AV. FINAL Permit Revision No. 0010006-002-AV was issued with a permit revision effective date of May 26, 2002 and an expiration date of December 31, 2004.

Please note that due to the late notice GRU received via third parties regarding EPA's October 2003 determination that a CAM plan was required for combustion turbines using water injection while combusting fuel oil, a CAM plan for DHCT-3 is not included in this application. DHCT-1 and DHCT-2 are unregulated emissions units that are not subject to CAM. GRU requested an applicability determination from FDEP on June 10, 2003 regarding this issue. The request was forwarded to EPA and on June 12, 2003 GRU was copied on an E-mail from Mr. Joel Huey (EPA) to Mr. Jonathan Holtom (FDEP), stating that water injection is not a control device as defined under 40 CFR 64.1, when it is used to prevent pollutants from forming as is the case with DHCT-3.

Apparently, on October 9, 2003 Joel Huey notified FDEP via E-mail that EPA had changed its mind and determined that a CAM plan was necessary. On October 10, 2003 FDEP confirmed this position with Mr. Huey and specifically referenced the City of Gainesville. Unfortunately, GRU, the affected party, was never informed of this until June 24, 2004 (and then only via an E-mail to its consultant from a third party) leaving GRU only 5 working days to complete a CAM plan before the Title V application due date (July 5, 2004). GRU is disappointed that it was never informed directly by FDEP/EPA regarding their change of heart and of being put in a position where it has to submit an application that potentially does not address all requirements. Since GRU disagrees with EPA's determination, GRU will address any applicable CAM requirements after they have had time to evaluate their options.

3701 Northwest
98th Street
Gainesville, FL
32606

(352)
332-0444

FAX(352)
332-6722

Pursuant to Rule 62-213.420(1)(a)3. and Rule 62-4.090, F.A.C., an application for renewal of a Title V operation permit must be submitted 180 days prior to expiration. Since Title V FINAL Permit Revision No. 0010006-002-AV expires on December 31, 2004, the permit renewal application for the Deerhaven Generating Station must be submitted no later than July 5, 2004. On behalf of GRU, this application package, consisting of the Department's Application for Air Permit – Long Form and all required supplemental facility and emission unit information, is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C.

If you have any questions or comments pertaining to this application, please contact Ms. Yolanta Jonynas of GRU at (813) 393-1284.

Sincerely,

Thomas w. Davis, P.E.
Principal Engineer

Attachments

cc: Ms. Yolanta Jonynas, GRU

10/1/04

Dear Yolanta and Rob,

Thank you for the time and effort on the CAM issues. I have attached the latest version per our conversation. Please advise if you see anything of concern. Take care.

Bruce

APPENDIX CAM

Compliance Assurance Monitoring Requirements

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:
   (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
   (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
   (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.
[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.)** and reporting exceedances or excursions (see **CAM Conditions 10. – 14.**).
[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).
[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the

operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR 64.7(c)]

8. Response to excursions or exceedances.
a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8.a.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
[40 CFR 64.8(a)]

11. Elements of a QIP:
a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.
(ii) Process operation changes.
(iii) Appropriate improvements to control methods.
(iv) Other steps appropriate to correct control performance.
(v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
a. Failed to address the cause of the control device performance problems; or
b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

15. General reporting requirements.
a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
(iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.
a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data,

monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.**, and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

Emissions Unit -005

2,428 MMBtu/Hr Coal, Natural Gas and/or Distillate Fuel Oils (Nos. 1 & 2) Fired Boiler
Particulate Matter Emissions Controlled By ESP

Monitoring Approach

	Indicator No. 1
I. Indicator	Stack opacity
Measurement Approach	The opacity is measured using a Continuous Opacity Monitoring System (COMS) in the stack downstream of the ESP.
II. Indicator Range	An excursion is defined as any one hour average measured stack opacity greater than 13% or greater than 18% opacity for one six minute reading, excluding those events defined as startup/shutdown and malfunctions. An excursion will trigger an evaluation of the operation of the boiler and ESP. Corrective action will be taken as necessary.
III. Performance Criteria	
A. Data Representativeness	Opacity is related to the size and concentration of particles in the flue gas. As particulate mass emissions increase, it can be reasonably expected that stack opacity will also increase. The stack is equipped with a COMS that meets the installation and minimum acceptable accuracy requirements of 40 CFR Part 60, Performance Specification 1. The COMS is located downstream of the ESP and, therefore, reflects the performance of the primary particulate control device.
B. Verification of Operational Status	Not applicable. Monitoring approach uses existing equipment and procedures.
C. QA/QC Practices and Criteria	Daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in the applicable version of Performance Specification 1.
D. Monitoring Frequency	Continuous.
E. Data Collection Procedures	Six-minute averages are recorded by the DAHS. Daily reports with all six-minute averages are generated. One-hour averages are determined every six minutes from the average of the previous ten consecutive six-minute averages.
F. Averaging Period	The averaging period for opacity observations is a 6-minute block average.