



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC -1 2003

OFFICE OF
AIR AND RADIATION

Mr. Jerry A. Walker
Designated Representative
Tri-State Generation and Transmission Association, Inc.
Craig Power Station
P.O. Box 33695
Denver, CO 80233-0695

Re: Request for Approval of a Relative Accuracy Test Audit Extension of Time for
Craig Power Station, Unit 1 (Facility ID (ORISPL) 6021)

Dear Mr. Walker:

This is in response to your September 26, 2003 petition in which Tri-State Generation and Transmission Association, Inc. (Tri-State) requested an extension of time to perform the gas and flow relative accuracy test audits (RATAs) on Unit 1 at the Craig Power Station. EPA approves the petition, for the reasons discussed below.

Background

Tri-State owns and operates the Craig Power Station in Craig, Colorado. Unit 1 at the Craig facility is a coal-fired boiler which is subject to the Acid Rain Program. Tri-State is therefore required to monitor and report sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) emissions from Unit 1 in accordance with 40 CFR Part 75. Part 75 also requires the owner or operator of a coal-fired unit to install and certify a continuous opacity monitoring system (COMS), unless the effluent gas stream is saturated and the owner or operator can demonstrate that the presence of condensed water would impede the accuracy of the opacity measurements (see §§75.14 (a) and (b)).

On March 19, 2001 a Consent Decree, between Tri-State and others, was entered by the Federal District Court in Denver, requiring Tri-State to install new baghouses to control particulate matter emissions, to install overfire air systems to control NO_x emissions, and to upgrade the existing SO₂ scrubbers on Craig Station Units 1 and 2. According to the September 26, 2003 petition, Craig Station Unit 1 was taken off line on September 13, 2003 to allow the completion of this work, and was scheduled to return to service on October 27, 2003. However, on October 29, 2003, EPA was informed by Tri-State that start up of Unit 1 would be delayed until at least November 3, 2003.

The terms of the March 19, 2001 Consent Decree require Tri-State to perform a full battery of recertification tests of the SO₂, NO_x, CO₂, and volumetric flow continuous emissions

monitoring systems (CEMS) and the continuous opacity monitoring system (COMS) installed on each unit after the control device installations and modifications have been completed. The Consent Decree also requires COMS comparability testing of each unit (i.e., comparing a COMS on the stack to a COMS installed in the ductwork) under dry stack conditions, after which the existing reheat bypass dampers in each scrubber module are to be welded shut, so that 100 percent of the flue gas will be treated by the scrubbers.

After completing the control device installations and modifications at Unit 1, Tri-State plans to start up the unit on or about November 3, 2003, and to commence recertification of the continuous monitoring systems. A new COMS will be permanently installed in the duct between the baghouse and the scrubber, but none of the existing CEMS is being replaced. Tri-State plans to perform probationary calibration error tests of all of the CEMS, and then, as required by §75.20(b)(3)(iv), to perform the cycle time tests and linearity checks of the SO₂, NO_x, and CO₂ CEMS within 168 unit operating hours of the probationary calibration error test and to complete the 7-day calibration error tests of the gas and flow monitors within 21 unit operating days of the probationary calibration error test. Next, Tri-State will perform the COMS comparability testing for Unit 1. This testing has been tentatively scheduled for November 11, 2003.

After completing the COMS comparability testing, the reheat bypass dampers will be welded shut and relative accuracy test audits (RATAs) of the CEMS will be conducted. Section §75.20(b)(3)(iv) would require all RATAs of the monitoring systems to be completed within 720 unit operating hours of the probationary calibration error test. However, for the reasons discussed below, Tri-State does not believe that this deadline can be met, and has requested in its September 26, 2003 petition that the RATA testing deadline be moved to December 6, 2003.

EPA's Determination

Tri-State suggests that the RATAs should be performed in the new, wetter stack environment that will exist after the reheat bypass dampers for the scrubber are welded shut. EPA agrees with this assessment. The probationary calibration error tests, cycle time tests, linearity checks, and 7-day calibration error tests can all be done before the dampers are welded shut. These tests should be unaffected by stack gas moisture content because none of them relies on accurate analysis of the stack gas characteristics. However, in a RATA, the stack gas concentration or volumetric flow rate is directly measured, by both the installed CEMS and the EPA reference test method, and these measurements are affected by changes in stack gas moisture content. Therefore, the RATAs at Craig Unit 1 should not be performed until the normal expected moisture conditions exist within the stack environment (i.e., after the reheat bypass dampers have been welded shut).

Assuming that unit startup and the probationary calibration error test for Unit 1 occur on November 3, 2003, and assuming continuous unit operation, §75.20(b)(3)(iv) would require RATAs for the SO₂, NO_x, CO₂, and volumetric flow CEMS to be completed by December 3, 2003 (within 720 consecutive unit operating hours of the probationary calibration error test). The December 3, 2003 date would provide Tri-State approximately three weeks after the COMS comparability testing to complete the essential welding of the reheat bypass dampers and to

complete the RATA tests. According to Tri-State, three weeks may not be adequate. EPA agrees with this assessment, considering the possibility of unforeseen delays in the COMS siting and comparability testing, the welding operations, or completion of the RATA testing. Therefore, EPA approves Tri-State's petition for an extension of the deadline for the gas and flow monitor RATAs on Unit 1 at the Craig Power Station.

However, due to the uncertainty in the exact re-start date of Unit 1, EPA approves an alternate RATA test deadline of 1,056 operating hours after the unit re-starts, in lieu of the December 6, 2003 deadline requested by Tri-State. Expressing the RATA deadline in terms of unit operating hours after re-start, rather than specifying a particular calendar date, ties the deadline to unit operations, as well as the re-start date. EPA believes that 1,056 operating hours (which represents an extra 336 hours (i.e., two weeks) above the 720 operating hours allotted for RATA testing under §75.20(b)(3)(iv)) is sufficient for Tri-State to perform the COMS comparability testing, to weld the reheat bypass dampers shut, and to complete the RATAs.

EPA's determination relies on the accuracy and completeness of the information provided by Tri-state in the September 26, 2003 petition, and is appealable under Part 78 of the Acid Rain regulations. If there are any further questions or concerns about this matter, please contact John Schakenbach of my staff at 202-564-9158 or at (schakenbach.john@epa.gov).

Sincerely,



Sam Napolitano, Acting Director
Clean Air Markets Division

cc: Albion Carlson, Region 8
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