



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

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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 2 (Facility ID (ORISPL) 6021)

Dear Mr. Walker:

This is in response to your March 26, 2004 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 2 at the Craig Power Station (Craig Station). As discussed below, and for the same reasons that we approved a similar petition for Unit 1 at the Craig Station, EPA approves the petition.

Background

Tri-State owns and operates the Craig Station in Craig, Colorado. Unit 2 at the Craig Station 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 (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon dioxide (CO<sub>2</sub>) emissions from Unit 2 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<sub>x</sub> emissions, and to upgrade the existing SO<sub>2</sub> scrubbers on Craig Station Units 1 and 2. According to the March 26, 2004 petition, Craig Station Unit 2 was taken off line on March 13, 2004 to allow the completion of this work, and is scheduled to return to service on April 27, 2004. According to Tri-State, Unit 2 was returned to service on April 27, 2004.

The terms of the March 19, 2001 Consent Decree require Tri-State to perform a full battery of recertification tests of the SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow continuous emi

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 2, Tri-State returned Unit 2 to service on April 27, 2004, and commenced 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 performed probationary calibration error tests of all of the CEMS, and then, as required by §75.20(b)(3)(iv), performed the cycle time tests and linearity checks of the SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> CEMS within 168 unit operating hours of the probationary calibration error test and completed the 7-day calibration error tests of the gas and flow monitors within 21 unit operating days of the probationary calibration error test. Tri-State performed the COMS comparability testing for Unit 2 on May 12, 2004.

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 March 26, 2004 petition that the RATA testing deadline be extended so that the new deadline is 1,056 operating hours after the unit re-starts. This is the same extension that EPA granted to Unit 1 in a December 1, 2003 petition response.

#### EPA's Determination

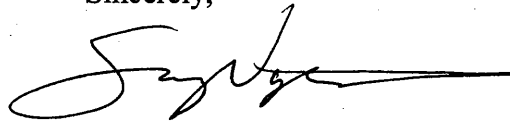
Tri-State suggests that the RATAs should be performed in the new, wetter stack environment that will exist after the reheat bypass dampers for the scrubber are welded shut. EPA agrees with this assessment. The probationary calibration error tests, cycle time tests, linearity checks, and 7-day calibration 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 Station Unit 2 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).

The unit startup and the probationary calibration error test for Unit 2 occurred on April 27, 2004, and assuming continuous unit operation, §75.20(b)(3)(iv) would require RATAs for the SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and volumetric flow CEMS to be completed by May 27, 2004 (within 720 consecutive unit operating hours of the probationary calibration error test). The May 27, 2004

date would provide Tri-State approximately two 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, two weeks may not be adequate. As we did for Unit 1 in our December 1, 2003 petition response, 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 alternate RATA test deadline of 1,056 operating hours after the unit re-starts for the gas and flow monitor RATAs on Unit 2 at the Craig Station. 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 March 26, 2004 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 202-343-9158 or at ([schakenbach.john@epa.gov](mailto:schakenbach.john@epa.gov)) .

Sincerely,



Sam Napolitano, Director  
Clean Air Markets Division

cc: Albion Carlson, Region 8  
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