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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

FEB 1 0 2003

OFFICE OF AIR AND RADIATION

Alfred Slowik
Designated Representative
Edison Mission Energy
Homer City Generation, L.P.
1750 Power Plant Road
Homer City, PA 15748

Re:

Petition for Relief from Expired RATA Grace Period for Homer City (Facility ID (ORISPL) 3122), Unit 1

Dear Mr. Slowik:

This is in response to your letter December 17, 2002, in which Edison Mission Energy (EME) requested relief from the data invalidation provisions of 40 CFR Part 75, Appendix B, section 2.3.3 (c), for Unit 1 at the Homer City, Pennsylvania facility. EPA approves the petition, for the reasons discussed below.

## **Background**

Homer City Unit 1 is a coal-fired boiler which is subject to the Acid Rain Program. Since 1995, EME and previous owners of the unit have been required to continuously monitor and report sulfur dioxide ( $SO_2$ ) mass emissions data to EPA, in accordance with the provisions of 40 CFR Part 75. For affected coal-fired units in the Acid Rain Program, Part 75 requires continuous emission monitoring systems (CEMS) capable of measuring  $SO_2$  concentration, nitrogen oxides ( $NO_2$ ) emission rate, carbon dioxide ( $CO_2$ ) concentration and stack gas volumetric flow rate to be installed, certified, operated, maintained and quality-assured. One of the quality assurance requirements for these CEMS is a relative accuracy test audit (RATA). The required frequency of RATA testing is semiannual unless the monitoring system achieves a relative accuracy of 7.5% or less, in which case the test frequency is annual. Through the years, the CEMS installed on Homer City Unit 1 have consistently qualified for annual RATA frequency.

The annual RATA tests of the gas monitoring systems ( $SO_2$ ,  $NO_x$  and  $CO_2$ ) on Homer City Unit 1 were due by the end of the  $4^{th}$  quarter of 2001. The tests were scheduled for

December 21, 2001. However, a forced outage of Unit 1 occurred on that date, and the tests were rescheduled for January 8, 2002. On January 3, 2002, a structural failure of a weld forced Unit 1 into outage until mid-February. The RATA testing was once again rescheduled, for February 12, 2002, but another forced outage on February 11, 2002 caused a third postponement of the testing. Unit 1 was scheduled for a maintenance outage from March 1 through April 5, 2002, so the RATA testing was rescheduled for May 1, 2002.

If Unit 1 had gone into its scheduled March maintenance outage and if the testing had been completed by May 1, 2002, it is likely that the required RATAs would have been completed within the 720 unit operating hour grace period allowed under section 2.3.3 of Part 75, Appendix B. However, on February 10, 2002, Homer City Unit 3 experienced a catastrophic collapse of the ductwork that connects the selective catalytic reduction (SCR) unit to the boiler. This collapse resulted in an immediate investigation into the structural stability of the similar SCR units installed on Units 1 and 2. Complex modeling was done to determine how to stiffen the ductwork on Units 1 and 2, to avoid a similar catastrophe on these units. The modeling was scheduled to be completed by March 1, 2002, in time for the planned outage of Unit 1, but due to delays, was not actually completed until April, 2002. Consequently, the Unit 1 outage did not begin until April, when the final modeling results were received. This necessitated a fourth postponement of the RATA testing. In the mean time, as EME awaited the final modeling results, the RATA grace period expired on March 20, 2002. Unit 1 finally returned to service on June 29, 2002 and the RATA tests were completed on July 10, 2002.

When a RATA is not completed by its due date or within a grace period thereafter, section 2.3.3 (c) of Appendix B requires the monitoring system to be declared out-of-control, and (unless quality-assured data from a backup monitor or reference method are available) the Part 75 missing data routines must be used until a RATA is performed and passed. In the December 17, 2002 letter, EME petitioned for relief from this requirement, in view of the circumstances surrounding the late RATA tests.

## **EPA's** Determination

EPA approves EME's petition for relief from the data invalidation requirements of Part 75, Appendix B, section 2.3.3 (c), as it pertains to the gas monitoring systems installed on Homer City Unit 1.

EPA believes that EME made every effort to complete the required RATA testing of the Unit 1 CEMS in a timely manner, but was unable to do so, due to highly unusual circumstances beyond EME's control. Numerous forced unit outages of Unit 1 between December, 2001 and June, 2002, coupled with the events surrounding the catastrophic ductwork collapse at Unit 3, prevented the tests from being completed by the due date (December 31, 2001) or within the grace period allowed under section 2.3.3 of Appendix B to Part 75.

According to EME, when Unit 1 finally returned to full-time service in late June, 2002, the required RATAs were completed within two weeks and were passed "hands-off" (i.e., the instruments were not adjusted prior to the testing). Also, in the time period extending from the expiration of the grace period (March 20, 2002) until completion of the RATA testing on July 10, 2002, the other required quality assurance tests of the Unit 1 gas monitors (i.e., daily calibrations and linearity checks) were performed and consistently passed. Therefore, from a technical standpoint, there is sufficient evidence to conclude that the emissions data recorded by these monitoring systems during that time period were accurate.

In view of these considerations, emissions data recorded by the Unit 1 gas monitoring systems in the time period extending from March 20, 2002 to July 10, 2002 may be reported as quality-assured in the electronic quarterly reports required under § 75.64 (c).

EPA's determination relies on the accuracy and completeness of the information provided by EME in the December 17, 2002 petition and is appealable under Part 78. If you have any questions or concerns about this matter, please contact Robert Vollaro of my staff at (202) 564-9116. Thank you for your continued cooperation.

Sincerely

Sam Napolitano, Acting Director Clean Air Markets Division

cc: Renee McLaughlin, EPA Region III Joseph Nazzaro, Pennsylvania DEP Robert Vollaro, EPA, CAMD