

January 27, 2006

Mr. Andrew M. Chadwick  
Alternate Designated Representative  
AES Greenidge, L.L.C.  
P.O. Box 187  
Dresden, NY 14441

Re: Petition to Use Alternative Missing Data Substitution for Unit 6 at AES  
Greenidge (Facility ID (ORISPL) 2527)

Dear Mr. Chadwick:

The United States Environmental Protection Agency (EPA) has reviewed the April 25, 2005 petition submitted under §75.66 by AES Greenidge, L.L.C (AES), in which AES requested: (1) confirmation of the quality-assured status of certain 2004 and 2005 emissions data for Unit 6 at its Greenidge facility; and (2) permission to use an alternative missing data routine for a specified time period in the 1<sup>st</sup> quarter of 2005, to provide substitute volumetric flow rate data for Greenidge Unit 6. EPA grants the first request but denies the second, for the reasons given below.

### Background

Unit 6 at the Greenidge facility in Dresden, New York, is a coal-burning 132 MWe dry-bottom, tangentially-fired boiler. Unit 6 is subject to the Acid Rain Program. Therefore, AES is required to continuously monitor and report sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon dioxide (CO<sub>2</sub>) emissions and heat input for the unit, in accordance with 40 CFR Part 75. To meet the SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> monitoring requirements of Part 75, AES also is required to collect hourly stack gas volumetric flow rate data using a certified flow monitor.

To quality-assure the data from a flow monitor, section 2.3.1.3 (c) in Appendix B of Part 75 requires an annual relative accuracy test audit (RATA) to be performed. At least once every five calendar years, the annual RATA must be done at 3 load levels. If five consecutive years elapse without a 3-load flow RATA having been done, section 2.3.3 (a) of Appendix B specifies that the test must be completed within a 720 operating hour grace period, or data from the flow monitor will be considered invalid.

On February 25, 2005, AES discovered that more than five years had elapsed since the last 3-load flow RATA of the Unit 6 flow monitor. A 3-load test was last done in April, 1999, and none of the five subsequent annual RATAs (i.e., from 2000 through 2004) was done at 3-

loads. To correct this situation, AES immediately made arrangements for a 3-load flow RATA to be done. The test was successfully completed on March 11, 2005.

On April 25, 2005, AES submitted a petition to EPA, asking the Agency to accept as quality-assured the data recorded by the flow monitor in the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2004 and in the period from January 1 through January 30, 2005. AES also asked EPA to consider allowing some of the flow rate data recorded in the period from January 31 through March 11, 2005 to be reported as quality-assured.

AES' rationale for the first request was two-fold.

- First, the company cited section 2.3.1.3 (c)(4) of Part 75, Appendix B, which states that a 3-load flow RATA is required once every "5 consecutive calendar years". According to AES, this rule text means that whenever a 3-load RATA is done, the deadline for the next 3-load RATA will be at the end (i.e., December 31<sup>st</sup>) of the fifth consecutive calendar year following the year of the test. For the 3-load RATA that was done in April, 1999 at Greenidge Unit 6, the due date for the next 3-load test would therefore be December 31, 2004. Given this due date, the 3<sup>rd</sup> and 4<sup>th</sup> quarter flow rate data for Unit 6 would be unaffected by the failure to perform a 3-load RATA in 2004 and should be accepted as quality-assured.
- Second, AES cited the grace period provisions in section 2.3.3 (a)(2) of Appendix B, which allow a 720 unit operating hour grace period in which to perform a 3-load RATA whenever "five consecutive calendar years have elapsed without a required 3-load flow RATA having been conducted." On this basis, AES asserted that the flow rate data recorded in the grace period following the December 31, 2004 test deadline (i.e., the data recorded between January 1 and January 30, 2005) should also be accepted as quality-assured.

AES' rationale for its second request in the April 25, 2005 petition was as follows. Since the 2004 flow RATA was performed and passed at the mid and high operating levels, only the flow rate data at the low operating level should be invalidated in the time period extending from the expiration of the grace period until the 3-load RATA was completed (i.e., from January 31 to March 11, 2005).

#### EPA's Determination

EPA grants AES' first request in the April 25, 2005 petition. The Agency concurs that the due date for the 3-load RATA of the flow monitor installed on Greenidge Unit 6 was December 31, 2004. Therefore, the 3<sup>rd</sup> and 4<sup>th</sup> quarter, 2004 flow rate data may be reported as quality-assured. Further, the flow rate data recorded in the January 1-January 30, 2005 grace period may also be reported as valid data. However, the Agency notes that the "five consecutive calendar year" methodology for determining due dates for 3-load flow RATAs is inconsistent with other Part 75 provisions where testing is required once every five years. In particular, the five-year interval between successive tests of Appendix E peaking units, low mass emissions

(LME) units, and (in some cases) fuel flowmeters is defined as 20 calendar quarters from the quarter of the previous test. EPA intends to propose revisions to Appendix B of Part 75, to make the five-year cycle for 3-load flow RATAs consistent with these other types of tests.

EPA denies AES's petition to use an alternative missing data substitution routine for stack gas flow rate at Greenidge Unit 6 in the time period extending from January 31 through March 11, 2005. According to AES, the reason for the missed 3-load flow RATA was an "oversight". AES has the same obligation as any other owner or operator to carefully track the quality-assurance test requirements for its unit and to perform any required 3-load RATA on time. AES's "oversight" does not provide a basis for distinguishing this case and approving an alternative to standard missing data.

EPA notes that the Agency has recently revised its implementation policy for substitute data (see Question 15.5 in the "Part 75 Emissions Monitoring Policy Manual"). The new policy allows the missing data algorithms to be applied in a less conservative, stepwise approach rather than using the more conservative "block" approach. Using the stepwise missing data approach for Unit 6 may lessen the impact of substitute data on the reported SO<sub>2</sub> mass emissions.

EPA's determination relies on the accuracy and completeness of the information provided in AES' April 25, 2005 petition and is appealable under Part 78. If you have any questions regarding this determination, please contact Matthew Boze at (202) 343-9211.

Sincerely,

/s/

Sam Napolitano, Director  
Clean Air Markets Division

cc: Ann Zownir, USEPA Region II  
Don Spencer, NYDEC  
Matthew Boze, CAMD