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

APR 30 2002

OFFICE OF  
AIR AND RADIATION

Mr. Manny Sanchez  
Authorized Account Representative  
Doswell Limited Partnership  
10098 Old Ridge Road  
Ashland, VA 23005

Re: Request for EPA Evaluation of Fuel Flowmeters Installed on Doswell Limited Partnership Units 501, 502, 601 and 602

Dear Mr. Sanchez:

This is in response to your letter, dated January 14, 2002, in which Doswell Limited Partnership ("DLP") requested an EPA evaluation of accuracy testing performed on four fuel flowmeters installed on DLP Units 501, 502, 601 and 602. DLP requested that EPA determine whether the flowmeters meet the certification requirements of Subpart H of 40 CFR Part 75 and are acceptable for use in the NO<sub>x</sub> Budget Trading Program. DLP further requested permission to extend the deadlines for the next accuracy tests of the flowmeters, if the fuel flow-to-load ratio test described in section 2.1.7 of Appendix D to Part 75 is performed and passed each quarter. Based on a review of the information and data provided with the January 14, 2002 letter, EPA finds that the four turbine-type gas fuel flowmeters which measure natural gas flow to the Unit 501, 502, 601 and 602 combustion turbines meet the certification requirements of Part 75 and may be used to report data under the NO<sub>x</sub> Budget Trading Program. The Agency also approves DLP's request to use the fuel flow-to-load ratio test to extend the certification deadlines for these flowmeters, subject to the conditions discussed below.

Background

DLP owns and operates four units, known as Units 501, 502, 601 and 602, which are affected units under the NO<sub>x</sub> Budget Trading Program. These units are combined cycle combustion turbines, each of which is capable of burning both natural gas and fuel oil. Each unit also has a duct burner. Oil and gas flow to each combustion turbine (CT) and to each duct burner is measured with a separate fuel flowmeter. Natural gas flow to the CTs is measured with turbine-type flowmeters, manufactured by Tokeim.

The four Tokeim flowmeters were tested for accuracy in 2000 and 2001, using ASME

Method MFC-7M-1987 (Reaffirmed 1992), "Measurement of Gas Flow by Means of Critical Flow Venturi Nozzles", which is one of the allowable fuel flowmeter calibration methods listed in section 2.1.5.1 of Part 75, Appendix D. The results of the accuracy tests show that the flowmeters met the 2.0% accuracy requirement in Appendix D, section 2.1.5.

Section 2.1.6 (a) of Appendix D requires each certified fuel flowmeter to be recalibrated once every four "fuel flowmeter QA operating quarters" (i.e., calendar quarters in which the fuel measured by the flowmeter is combusted for  $\geq 168$  hours). Since DLP Units 501, 502, 601 and 602 operate frequently, most, if not all, calendar quarters will be "QA" quarters, meaning that the fuel flowmeters must be recalibrated approximately once a year. However, section 2.1.7 of Appendix D allows the deadline for the next flowmeter accuracy test to be extended for up to 20 calendar quarters, if the optional fuel flow-to-load ratio test described in section 2.1.7 is performed and passed each quarter.

The four Tokeim flowmeters on DLP Units 501, 502, 601 and 602 were calibrated, respectively, on May 1, 2000, March 28, 2001, May 4, 2001, and November 8, 2001. This means that unless the accuracy test deadlines are somehow extended, all four of these flowmeters will have to be recalibrated before the May 1, 2003 compliance date under the NO<sub>x</sub> Budget Program. In the January 14, 2002 letter, DLP cited two main reasons why recalibration of the Tokeim flowmeters prior to May, 2003 is infeasible. First, the flowmeters would have to be removed from operation and sent to a laboratory for testing. This would require DLP Units 501, 502, 601 and 602 to incur unscheduled unit shutdowns. Second, modification of existing natural gas pipework to install an in-line reference meter, though possible, would be costly and potentially dangerous.

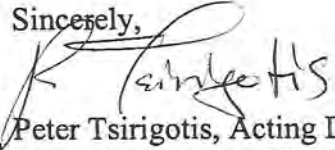
In view of these considerations, DLP proposed to demonstrate that no further accuracy testing of the Tokeim flowmeters is needed prior to May, 2003, by performing the fuel flow-to-load ratio test for each of the flowmeters, beginning with the calendar quarter following the quarter in which the flowmeter was calibrated. The results of these data analyses, which are presented in the January 14, 2002 letter, show that each flowmeter has met the 10.0% pass/fail criterion for the fuel flow-to-load ratio test, in each quarter since the flowmeter was calibrated.

#### EPA's Determination

Based on the representations made in the January 14, 2002 letter and the supplementary information provided, EPA finds that the four Tokeim gas fuel flowmeters installed on DLP Units 501, 502, 601 and 602 have demonstrated compliance with the 2.0% accuracy requirement of Part 75, Appendix D, section 2.1.5, and are therefore approved for use under the NO<sub>x</sub> Budget Trading Program. No further accuracy testing of these flowmeters is required prior to May 1, 2003, provided that the flowmeters continue to pass the fuel flow-to-load ratio test each quarter. However, should any flowmeter fail a quarterly fuel flow-to-load ratio test prior to May 1, 2003, the flowmeter must be recalibrated by May 1, 2003.

After May 1, 2003, if DLP elects to use the fuel flow-to-load ratio test to extend the fuel flowmeter accuracy test deadlines for Units 501, 502, 601 and 602 and the test is failed, the provisions of section 2.1.7.4 of Appendix D must be followed.

EPA's determination in this letter relies on the accuracy and completeness of the information provided by DLP in the January 14, 2002 petition and is appealable under Part 78. If you have any questions or concerns about this determination, please contact Robert Vollaro, at (202) 564-9116. Thank you for your continued cooperation.

Sincerely,  
  
Peter Tsirigotis, Acting Director  
Clean Air Markets Division

cc: Renee McLaughlin, EPA Region III  
Lisa Earhart, Virginia DEQ  
✓ Robert Vollaro, CAMD