



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

JUN 25 2002

OFFICE OF  
AIR AND RADIATION

Chris M. Hobson  
Vice President  
Environmental Affairs  
Bin 10221  
241 Ralph McGill Boulevard, NE  
Atlanta, GA 30308-3374

Re: Petition for Extension of Certification Deadline for Wansley, Unit 6A (ORIS Code 6052)

Dear Mr. Hobson:

This is in response to your June 5, 2002 petition under § 75.66 (a), in which Georgia Power requested an extension of the continuous emission monitoring system (CEMS) certification deadline for Wansley, Unit 6A. EPA approves the petition, subject to the conditions discussed below.

Background

Georgia Power owns and operates a new combined cycle turbine plant, known as Unit 6A, at its Wansley facility. Unit 6A is subject to the Acid Rain Program. The unit commenced commercial operation on January 23, 2002. According to § 75.4 (b)(2), all required CEMS certifications for a new Acid Rain Program unit must be completed no later than 90 days after the unit commences commercial operation. In the case of Wansley Unit 6A, the CEMS certification deadline was April 22, 2002.

According to the June 5, 2002 petition, all required certification tests for Unit 6A except for the 7-day calibration error test of the NO<sub>x</sub>-diluent monitoring system, were completed prior to the April 22, 2002 deadline. The 7-day calibration error test was not completed until June 1, 2002, due to sporadic operation of the unit and a leak in the calibration gas system.

Georgia Power requested an extension of the certification test deadline for Unit 6A. In particular, Georgia Power asked to use the new CEMS certification deadline established in recent revisions to § 75.4(b)(2), which were signed by the Administrator on May 1, 2002. Revised § 75.4(b)(2) states that for new Acid Rain Program units, all monitoring systems must be installed and certified on or before "the earlier of 90 unit operating days or 180 calendar days after the

date the unit commences commercial operation". See 67 Fed.Reg. 40394, 40421 (June 12, 2002). These revised monitoring requirements will become effective on July 12, 2002. Georgia Power further noted that Unit 6A operated only 45 days in the time interval extending from the commencement of commercial operation to completion of the certification testing, i.e., from January 23, 2002 to June 1, 2002.

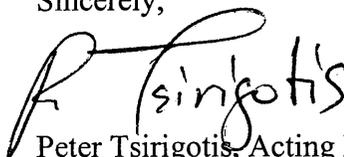
#### EPA's Determination

EPA is granting Georgia Power's request to extend the CEMS certification deadline for the unit until 90 unit operating days or 180 calendar days after the date of commencement of commercial operation. Problems associated with the unit's control system and with the calibration gas system prevented the 7-day calibration error testing from being completed within 90 calendar days, as required by the current rule. Under similar circumstances, EPA has approved petitions from other facilities for extensions of monitoring system certification deadlines. Although the revised § 75.4 (b)(2) is not yet effective, the new CEMS certification deadline in that rule provides a reasonable basis for setting an extended deadline in this case, where an extension is warranted.

In the June 5, 2002 petition, Georgia Power stated its intent to report emissions data for Unit 6A beginning with the original "day 90" (i.e., April 22, 2002), rather than the date on which the certification tests were completed. EPA concurs with this approach. Therefore, as a condition of approval, Georgia Power must report the maximum potential NO<sub>x</sub> emission rate (MER), as defined in § 72.2, in the period from April 22, 2002 to June 1, 2002.

EPA's approval of Georgia Power's petition under § 75.66 (a) relies on the accuracy and completeness of the information in the June 5, 2002 letter 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,

A handwritten signature in black ink, appearing to read "P. Tsirigotis". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Peter Tsirigotis, Acting Director  
Clean Air Markets Division

cc: Lynn Haynes, EPA Region IV  
Larry Webber, Georgia EPD  
Robert Vollaro, EPA, CAMD



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OFFICE OF  
AIR AND RADIATION

Raymond Terza  
General Manager  
United States Steel Corporation  
Clairton Works  
400 State Street  
Clairton, PA 15025-1855

Re: Petition for Alternative Substitute Data for USS Clairton Works

Dear Mr. Terza:

This is in response to your May 3, 2002 petition under § 75.66 (a) in which United States Steel Corporation ("USS") requested approval of alternative substitute data values for the fuel gross calorific value (GCV) and the oxygen-based F-factor ( $F_d$ ), for periods when the on-line gas chromatograph is inoperable. EPA approves the petition, subject to the conditions discussed below.

Background

Boilers 1 and 2 at the USS Clairton Works in Clairton, Pennsylvania are affected units under the  $\text{NO}_x$  Budget Trading Program, under 25 Pa. Code Chapter 145. The boilers combust a mixture of fuels, consisting principally of coke oven gas, which is supplemented at times with natural gas or jet gas (which is comprised of 2/3 natural gas, and 1/3 air).

In the May 3, 2002 petition, USS stated that for the unique mixture of fuels combusted in Boilers 1 and 2, the missing data value for GCV specified in Table D-6 of Appendix D to 40 CFR Part 75 is inappropriately high. According to Table D-6, the substitute GCV value for gaseous fuels other than natural gas is 2100 Btu/scf.

To characterize the GCV of the fuel combusted in Boilers 1 and 2, USS performed a demonstration, using an on-line gas chromatograph (GC). USS collected 1511 hours of GCV data for Boiler 1 and 1232 hours of data for Boiler 2, in the time period extending from March 1, 2002 through May 2, 2002. USS also used the GC to concurrently determine hourly values of  $F_d$ , the oxygen-based F-factor for the fuel.

The hourly GCV values obtained in the demonstration ranged from 448 to 614 Btu/scf,

averaging 544 Btu/scf for Boiler 1 and 515 Btu/scf for Boiler 2. The hourly  $F_d$  values ranged from 7421 to 8265 scf/mmBtu, averaging 7858 scf/mmBtu for Boiler 1 and 7768 scf/mmBtu for Boiler 2.

USS also performed a statistical analysis of the GCV and  $F_d$  data, according to the criterion in section 2.3.5 of Appendix D. Both the GCV and the  $F_d$  were found to have low variabilities, based on the statistical analysis.

Since the fuel has a low GCV variability, the fuel qualifies under section 2.3.5 of Appendix D for monthly GCV sampling, rather than daily sampling. Despite this, the May 3, 2002 letter indicates that USS intends to continue to use the gas chromatograph to determine the GCV of the fuel hourly, for the purpose of calculating the hourly heat input to the boilers. USS also intends to keep using the GC to obtain hourly  $F_d$  values, for the purposes of calculating hourly  $NO_x$  emission rates. The only time that hourly GCV and  $F_d$  values will not be available for these calculations is when the GC is in the maintenance mode. According to USS, these times are relatively rare.

In the May 3, 2002 petition, USS requested to use the mean GCV and  $F_d$  values obtained in the March 1-May 2, 2002 demonstration for missing data purposes, whenever the GC is in the maintenance mode. USS noted that the prescribed Appendix D missing data value for GCV is 2100 Btu/scf, which is outside the range of GCV values observed in the demonstration (i.e., 448 to 614 Btu/scf). USS also noted that Part 75 does not provide any missing data procedures for F-factors.

#### EPA's Determination

EPA reviewed the summarized GCV and  $F_d$  data provided by USS in the May 3, 2002 petition. Based on this review, the Agency concludes that the missing data values proposed by USS are reasonable for maintenance outages of the on-line gas chromatograph. Clearly, the Appendix D missing data value of 2100 Btu/scf for GCV is too high for the fuel mixture combusted in Boilers 1 and 2, as the highest GCV observed in more than 2700 hourly determinations for the two units was 614 Btu/scf. Also, since the fuel has been shown to have a low variability for both GCV and  $F_d$ , it is reasonable to use the mean values of these quantities for missing data substitution. EPA therefore approves the petition, with the following conditions:

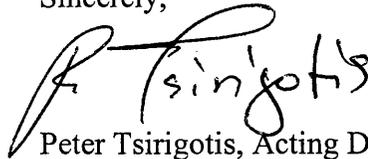
- (1) During maintenance outages of the gas chromatograph, USS shall report the higher of the two GCV and  $F_d$  mean values obtained in the demonstration, for both Boilers 1 and 2. That is, for both boilers, USS shall use 544 Btu/scf as the substitute data value for GCV and 7858 scf/mmBtu as the substitute data value for  $F_d$ .
- (2) In the event that an outage of the gas chromatograph is so extensive that valid values of the GCV and  $F_d$  are not obtained for an entire calendar month, USS shall report the maximum potential GCV and  $F_d$  values for that month, and shall continue reporting the maximum potential values for each subsequent operating

hour until valid GCV and  $F_d$  values are obtained. Based on the demonstration data provided by USS in the May 3, 2002 letter, EPA concludes that the maximum potential GCV and  $F_d$  values for the fuel are, respectively, 614 Btu/scf and 8265 scf/mmBtu.

- (3) If the fuel combusted in Boiler 1 or Boiler 2 is modified in any way that could potentially increase the average or maximum potential GCV or  $F_d$  values for such fuel, USS shall notify EPA and the Pennsylvania Department of the Environment within 90 days of such modification.

EPA's approval of USS's petition under § 75.66 (a) relies on the accuracy and completeness of the information in the May 3, 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,

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Peter Tsirigotis, Acting Director  
Clean Air Markets Division

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