



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

FEB 28 2012

Mr. Jeffrey T. Steeber  
Alternate Designated Representative  
Environmental, Health and Safety Engineer  
Hunlock Creek Energy Center  
390 Route 11  
Hunlock Creek, PA 18621

OFFICE OF  
AIR AND RADIATION

Re: Petition for Extension of the CEMS Certification Deadline for Units CT5 and CT6 at the Hunlock Creek Energy Center (Facility ID (ORISPL) 3176)

Dear Mr. Steeber:

The United States Environmental Protection Agency (EPA) has reviewed the October 19, 2011 petition submitted by the Hunlock Creek Energy Center (Hunlock) under §75.66(a), in which Hunlock requested an extension of the deadline for completing continuous emission monitoring system (CEMS) certification testing at two new combined-cycle combustion turbines. EPA approves the petition in part, with conditions, as discussed below.

Background

The Hunlock Generating Facility, located in Hunlock Creek, Pennsylvania includes two new combined cycle gas-fired combustion turbines, known as Units CT5 and CT6. These units are subject to the Acid Rain Program and the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> and SO<sub>2</sub> Trading Programs. Therefore, Hunlock 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 Units CT5 and CT6 in accordance with 40 CFR Part 75. To meet these monitoring requirements, Hunlock has installed and certified fuel flow meters and NO<sub>x</sub> emission rate CEMS.

For a new Acid Rain Program unit, §75.4(b)(2) specifies the "compliance date" by which the required CEMS must be certified. The compliance date is 180 calendar days after the unit commences commercial operation (as defined in 40 CFR 72.2). Under CAIR, however, the compliance date is the earlier of 90 unit operating days or 180 calendar days after the unit commences commercial operation (see 40 CFR Part 96, sections 96.170(b), 96.270(b), and 96.370(b)).

According to Hunlock, Units CT5 and CT6 commenced commercial operation on June 2 and May 28, 2011<sup>1</sup>, respectively. The units have operated very little since then. As of November 29, 2011, Unit CT5 had operated on only 59 days and Unit CT6 had operated on only 27 days.<sup>2</sup> Therefore, the applicable compliance date for Unit CT5 is November 29, 2011, which is 180 calendar days after June 2, 2011, and the compliance date for CT6 is November 24, 2011, which is 180 calendar days after May 28, 2011.<sup>3</sup>

Although Unit CT5 was operational on its compliance date, the CEMS certification testing on Unit CT5 was not completed until December 6, 2011, seven days after the certification deadline of November 29, 2011. According to Hunlock, the certification deadline was not met due to flooding that required pumps, condensers, motors and electrical panels to be rebuilt.<sup>4</sup>

In the October 19, 2011 petition and in subsequent e-mails, Hunlock states that the CEMS certification testing at Unit CT6 was not completed by November 24, 2011 due to major equipment failure. On July 28, 2011, when Unit CT6 was in the process of starting up, the unit experienced back pressure, which should have tripped the combustion turbine and kept it from firing, but it did not. As a result, the walls of the heat recovery steam generator (HRSG) were bowed out, causing severe structural damage. Presently, the HRSG is being dismantled and new modules are on order. According to Hunlock, it will take about 26 weeks to receive the new modules, and after the modules arrive, it will take several more weeks to reassemble the HRSG. Unit CT6 is not expected to be operational until May 2012 at the earliest.

In the October 19, 2011 petition, Hunlock requested an extension of the CEMS certification deadlines for Units CT5 and CT6. Specifically, Hunlock asked for an additional 720 unit operating hours to complete the testing at each unit.

#### EPA's Determination

In view of the circumstances that caused the CEMS certification on CT5 to be delayed, EPA approves a seven day extension of the November 29, 2011 certification deadline, i.e., to

<sup>1</sup> In the October 19, 2011 petition, Hunlock incorrectly identified the "commence commercial operation" date for both units as July 1, 2011. However, the actual dates on which the CT5 and CT6 commenced commercial operation by selling electricity to the grid were June 2 and May 28, 2011, respectively. Hunlock confirmed these dates in an e-mail dated January 6, 2012.

<sup>2</sup> This information was provided by Hunlock in e-mails on November 30, 2011 and January 6, 2012.

<sup>3</sup> Due to the limited operation of the units since they commenced commercial operation on June 2 and May 28, 2011, neither unit accumulated 90 operating days prior to "day 180". Therefore, since "day 180" occurred before the 90<sup>th</sup> operating day for both units, the applicable compliance dates for CT5 and CT6 are November 29 and 24, 2011, respectively.

<sup>4</sup> This information was provided by Hunlock in an e-mail dated November 15, 2011.



December 6, 2011. In the past, EPA has granted similar test deadline extensions, for up to 720 unit operating hours when necessary. However in this case, only seven extra days beyond the November 29, 2011 deadline were required to complete the testing.

Although EPA is approving an extension of the deadline for completing the CEMS certification testing at Unit CT5, this does not relieve Hunlock of its responsibility under §75.64(a) to report emissions data for CT5 starting from the earlier of the relevant compliance date in §75.4(b) or the date on which certification testing is completed. In this case, since the compliance date in §75.4(b)(2) preceded the completion of certification testing by seven calendar days, Hunlock must report NO<sub>x</sub> emission rate data for each unit operating hour, starting with the first operating hour after November 29, 2011 and continuing through the hour in which the certification testing was successfully completed. During that time, Hunlock shall report NO<sub>x</sub> emission rate data for CT5 in accordance with §75.4(j), using either:

- (1) The maximum potential NO<sub>x</sub> emission rate;
- (2) Reference methods under §75.22(b); or
- (3) Another procedure approved by the Administrator pursuant to a petition under §75.66.

Regarding Hunlock's request for an extension of the November 24, 2011 deadline to complete the initial CEMS certification testing at Unit CT6, a special petition is unnecessary. In cases where certification testing cannot be completed by the applicable compliance date due to a forced unit outage, §75.4(d) already provides an additional window of time in which to complete CEMS certification (i.e., 90 operating days or 180 calendar days, whichever occurs first, after the unit recommences operation). A petition is not required in such cases; rather, the owner or operator must provide notification of the outage, in accordance with §75.61(a)(3). In view of this, EPA is treating the October 19, 2011 petition as the required notification.

In accordance with §75.64(a), when a unit is shut down on its compliance date and the owner or operator is unable to complete certification testing, quarterly emissions reports are not required until the unit recommences operation. Therefore, emissions reporting for Unit CT6 is not required until the calendar quarter in which the unit recommences operation. For all unit operating hours after November 24, 2011 until the required CEMS certification tests at Unit CT6 are successfully completed, Hunlock shall report NO<sub>x</sub> emission rate data for Unit CT6 in accordance with §75.4(d), using either:

- (1) The maximum potential NO<sub>x</sub> emission rate (as defined in 40 CFR 72.2);
- (2) The conditional data validation provisions of §75.20(b)(3);
- (3) Reference methods under §75.22; or
- (4) Another procedure approved by the Administrator pursuant to a petition under §75.66

EPA's determination relies on the accuracy and completeness of Hunlock's October 19, 2011 petition and the subsequent e-mails dated November 15, 21, and 30, 2011 and January 6, 2012 and is appealable under 40 CFR Part 78. If you have any questions regarding this determination, please contact Charles Frushour at (202) 343-9847. Thank you for your continued cooperation.

Sincerely,



Richard Haeuber, Acting Director  
Clean Air Markets Division

c: Leonard Hotham, EPA Region III

Charles Zadakis, Pennsylvania Department of Environmental Protection (PADEP)

Charles Frushour, CAMD