

May 6, 2010

William Eastman  
Director, Environmental Services  
Jeffrey Energy Center  
818 S. Kansas Avenue  
P.O. Box 889  
Topeka, Kansas 66601-0889

Re: Petition for an Exemption from Continuous Opacity Monitoring  
Requirements for Unit 2 at the Jeffrey Energy Center (Facility ID  
(ORISPL) 6068)

Dear Mr. Eastman:

The United States Environmental Protection Agency (EPA) has reviewed the December 22, 2009 petition under §75.66, in which Westar Energy, Inc. (Westar) requested an exemption from the requirement to install a continuous opacity monitoring system (COMS) on Unit 2 at the Jeffrey Energy Center. EPA approves the petition, for the reasons discussed below.

#### Background

Westar owns and operates a coal-fired boiler, Unit 2, at the Jeffrey Energy Center in St. Mary's, Kansas. According to Westar, Unit 2 is subject to the Acid Rain Program. Therefore, Westar 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 Unit 2, in accordance with 40 CFR Part 75. Part 75 also requires the owner or operator of a coal-fired unit to install and certify a continuous opacity monitoring system (COMS), unless the effluent gas stream is saturated and the owner or operator can demonstrate that the presence of condensed water impedes the accuracy of the opacity measurements (see §§75.14 (a) and (b)).

Because Unit 2 has a wet flue gas desulfurization (FGD) system to control SO<sub>2</sub> emissions, Westar believes that the unit qualifies for an exemption from the opacity monitoring requirement under §75.14(b). Therefore, Westar submitted a petition to EPA on December 22, 2009, requesting this exemption. The petition included demonstration data, including a copy of the test report, to show that the gas stream is saturated.

Question 5.6 in the "Part 75 Emissions Monitoring Policy Manual" provides guidance on how to qualify for the opacity monitoring exemption under §75.14(b). Question 5.6 explains that the data used to demonstrate that the effluent gas stream is

saturated should be collected under conditions representative of normal unit operation (i.e., normal load, normal fuel, common weather conditions, and normal emission control equipment operation). The December 22, 2009 petition states that the moisture data were collected during normal unit operation.

#### EPA's Determination

In the December 22, 2009 petition, Westar provided the results of eighteen stack gas moisture determinations for Unit 2. EPA Reference Method 4 was used for the tests, which were performed on July 13-16, 2009. Data from all eighteen runs indicate that the stack gas moisture content was above the saturation level.

According to Westar, the moisture data were collected at conditions representative of normal load, normal fuel, and common weather conditions. The load during the testing was approximately 760 megawatts (MW), which is within the unit's normal operating range of 720 to 775 MW. The average ambient temperatures for the test dates ranged from 70 to 93 °F, which is typical for that time of year in Wichita, Kansas. The coal that was combusted during the testing was obtained from the same mine that has supplied Unit 2 since the plant opened in the late 1970s, and, according to Westar, coal for Unit 2 will continue to be obtained from that mine for the foreseeable future.

The unit's electrostatic precipitator and flue gas desulfurization (FGD) system were operating during the moisture testing. However, only nine of the test runs (July 13-14, 2009) represented baseline, or normal operating conditions. The other nine runs (July 15-16, 2009) were performed under abnormal conditions, with the electrostatic precipitator (ESP) de-tuned, for the purposes of the unit's Compliance Assurance Monitoring (CAM) correlation testing. Therefore, EPA considered only the nine runs in which the ESP and FGD systems were operating normally in its determination.

In view of the information provided by Westar in the December 22, 2009 petition and the accompanying test report, EPA finds that the nine moisture test runs at Unit 2 on July 13-14, 2009 were performed at conditions representative of the unit's normal operation and demonstrate that the unit's gas stream is saturated, which would impede the accuracy of opacity measurements by a COMS. The Agency therefore approves Westar's petition for an exemption from the requirement in §75.14(a) to install and certify a COMS on Unit 2 at the Jeffrey Energy Center. Note, however, that this approval only exempts Unit 2 from the COMS requirements of the Acid Rain Program. If another State or federal regulatory program requires a COMS to be installed on Unit 2, Westar must either comply with that requirement or submit a separate petition to the agency administering the program, requesting an exemption.

EPA's determination relies on the accuracy and completeness of the information in the December 22, 2009 petition and is appealable under Part 78.

If you have any questions or concerns about this determination, please contact Robert Vollaro of my staff at (202) 343-9116 or at [vollaro.robert@epa.gov](mailto:vollaro.robert@epa.gov)

Sincerely,

/s/

Sam Napolitano, Director  
Clean Air Markets Division

cc: Robert Vollaro, CAMD  
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Jon Knodel, EPA Region VII  
Mindy Bowman, Kansas DHE  
Dan Wilkus, Westar, Jeffrey Energy Center