



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 30 2011

OFFICE OF
AIR AND RADIATION

Darrell D. Dorsey
Designated Representative, Quindaro Facility
Board of Public Utilities
Manager of Electric Production
312 N 65th Street
Kansas City, KS 66102

Dear Mr. Dorsey:

This letter is a determination of applicability by the U.S. Environmental Protection Agency (EPA) under § 72.6 of the Acid Rain regulations, applying the provisions of part 76 of the Acid Rain regulations that establish which units subject to the Acid Rain Program (ARP) are subject to ARP NO_x emissions limitations. This determination applies to Unit 1 of Kansas City Board of Public Utilities' (KCBPU) Quindaro facility, plant code (ORISPL) 1295, in Wyandotte County, Kansas, and is made in response to KCBPU's statement in the ARP NO_x Compliance plan submitted for Quindaro dated August 27, 2010 that Unit 1 is not subject to an ARP NO_x emission limitation. Supporting documentation dated November 4, 2011 was subsequently submitted to EPA by KCBPU.

EPA is treating the statement and supplemental information as a request for an applicability determination under § 72.6 of the Acid Rain regulations. After reviewing the data submitted by KCBPU and the regulations establishing which units subject to the ARP are subject to NO_x emissions limitations, EPA has concluded that Unit 1 is not subject to an ARP NO_x limit under §§ 76.5, 76.6, and 76.7 of the Acid Rain regulations under title IV of the Clean Air Act.

Background

The Quindaro facility consists of two units subject to the Acid Rain Program under § 72.6, Units 1 and 2. Unit 1 commenced commercial operation May 1, 1965, and is a coal-fired cyclone boiler serving a generator with nameplate capacity of 81.6 MWe. Unit 2 commenced commercial operation December 1, 1971, and is also coal-fired, but is a dry bottom wall-fired boiler that serves a generator with nameplate capacity of 157.5 MWe. Both boilers produce steam used for the production of electricity for sale.

EPA Determination

Under § 76.2 of the ARP NO_x regulations, a Group 2 boiler is defined as a:

A wet bottom wall-fired boiler, a cyclone boiler, a boiler applying cell burner technology, a vertically fired boiler, an arch-fired boiler, or any other type of utility boiler (such as a fluidized bed or stoker boiler) that is not a Group 1 boiler.

Since Quindaro Unit 1 is a cyclone boiler, it is a Group 2 boiler as defined at § 76.2. However, § 76.6(a)(2), which establishes NO_x limits for Group 2 boilers and, in particular, the 0.86 lb/mmBtu annual average NO_x emission limitation for cyclone boilers, states that such limitation applies:

. . . for cyclone boilers with a Maximum Continuous Steam Flow at 100% of Load of greater than 1060, in thousands of lb/hr.

The definitions at § 76.2 also define “Maximum Continuous Steam Flow at 100% of Load” as:

the maximum capacity of a boiler as reported in item 3 (Maximum Continuous Steam Flow at 100% Load in thousand pounds per hour), Section C (design parameters), Part III (boiler information) of the Department of Energy’s Form EIA-767 for 1995.

The November 4, 2011 submission by KCBPU to EPA included a copy of the Department of Energy’s (DOE) Form EIA-767 submitted by the owners and operators for Quindaro for calendar year 1995.¹ In section C, Schedule III of the DOE Form EIA-767 submitted for 1995 for Quindaro, Unit 1 is listed as having Maximum Continuous Steam Flow (thousand pounds/hour) at 100% Load of 575, well below the 1060 thousand pounds/hour threshold that a cyclone boiler must produce at maximum load to be subject to a NO_x limit under the ARP.

None of the other NO_x limits established under the ARP apply to cyclone boilers. These NO_x limits apply to other boiler types.

Conclusion

EPA concludes therefore that Quindaro Unit 1 is not subject to an ARP NO_x limit under §§ 76.5, 76.6, and 76.7 of the Acid Rain Program.

This determination relies, and is contingent, on the accuracy and completeness of the representations made by KCBPU in the submissions dated August 27, 2010 and November 4,

¹ The DOE Form EIA-767 submitted by the owners and operators was signed by Larry Adair, Manager Electric Supply, and dated March 11, 1996.

2011 and is appealable under part 78 of the Acid Rain regulations. If you have further questions regarding the Acid Rain Program, please contact Robert Miller of EPA's Clean Air Markets Division at (202) 343-9077.

Sincerely,

A handwritten signature in black ink, appearing to read "Sam Napolitano", with a long horizontal flourish extending to the right.

Sam Napolitano, Director
Clean Air Markets Division

cc: Russ Brichacek, Kansas Dept. of Health and Environment
Jon Knodel, EPA Region 7