



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

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JAN 9 2016

Mr. Jeff Paulseth
Vice President
Minnesota Power Generation Operations
30 West Superior Street
Duluth, MN 55802-2093

OFFICE OF
AIR AND RADIATION

Re: Petition for Units 1 and 2 at Laskin Energy Center (Facility ID (ORISPL) 1891)
for a Waiver of the Requirement to Submit Operating Data to Qualify as "Gas-Fired" Under 40 CFR 72.2

Dear Mr. Paulseth:

The United States Environmental Protection Agency (EPA) has reviewed the petition under 40 CFR 75.66 from Minnesota Power (an operating division of Allete, Inc.) initially submitted on March 3, 2015, and resubmitted with additional information on October 22, 2015. In the petition, Minnesota Power requests a waiver for Units 1 and 2 at Laskin Energy Center (Laskin) of the requirement to submit operating data in order to qualify as "gas-fired" units under 40 CFR 72.2. EPA approves the petition, with conditions, as discussed below.

Background

Allete owns and Minnesota Power operates the Laskin Energy Center, which is located near Hoyt Lakes, Minnesota. Laskin Units 1 and 2 were historically operated as coal-fired boilers, with fuel oil or natural gas used for ignition. Each unit has a design heat input capacity of 660 million Btu per hour (mmBtu/hr) and serves a generator with a nameplate capacity of 55 megawatts. Laskin Units 1 and 2 exhaust through a common stack (CS0001). According to Minnesota Power, these units are subject to the Acid Rain Program and the Cross-State Air Pollution Rule (CSAPR) annual trading programs for nitrogen oxides (NO_x) and sulfur dioxide (SO₂). Minnesota Power is therefore required to continuously monitor and report NO_x, SO₂, and carbon dioxide (CO₂) mass emissions, NO_x emission rate, and heat input rate for these units in accordance with 40 CFR part 75. Part 75 also requires Minnesota Power to continuously monitor opacity and report exceedances to the Minnesota Pollution Control Agency. To meet these requirements, Minnesota Power has installed and certified a NO_x-diluent CEMS, an SO₂ CEMS, a CO₂ CEMS, a stack gas flow rate CEMS, and a continuous opacity monitoring system (COMS) on CS0001.

Allete is also a party to a consent decree in *United States v. Allete, Inc.*, No. 0:14-cv-2911-ADM-LIB (D. Minn. entered Sept. 29, 2014). The consent decree includes requirements applicable to Laskin Units 1 and 2, including emissions monitoring requirements.

In the March 3, 2015 initial submission, Minnesota Power describes a plan to permanently convert Units 1 and 2 from coal-fired units to natural gas-fired units in the near future. As part of the conversion certain equipment required for coal combustion, including all coal delivery piping from the pulverizers to the boilers and all coal burners, would be removed and replaced with equipment designed for natural gas combustion, and all fuel oil piping from the main delivery header to the boiler igniters would be permanently removed. In addition, modifications to the Title V operating permit for the Laskin Energy Center would prohibit Units 1 and 2 from combusting fuel other than natural gas after the conversion. In the October 22, 2015 resubmission, Minnesota Power states that these actions have been carried out.

Under part 75, units that meet the definition of “gas-fired” units in 40 CFR 72.2 have monitoring options that are not available to coal-fired units, including the option to quantify the units’ SO₂ mass emissions and heat input rate using the methodology in appendix D to part 75, which relies on measurements of the quantity and quality of fuel combusted, as an alternative to using SO₂ and stack gas flow rate CEMS. Gas-fired units also have options for quantifying CO₂ mass emissions under appendix G to part 75 that are not available to coal-fired units. In addition, part 75 does not require opacity monitoring for gas-fired units.

Minnesota Power’s petition requests a waiver of an otherwise applicable condition for Laskin Units 1 and 2 to be considered “gas-fired” units for purposes of 40 CFR part 75 following the conversion to natural gas combustion. The definition of the term “gas-fired” in 40 CFR 72.2 includes provisions under which a unit that previously has not qualified as gas-fired can qualify as gas-fired based upon the submission of operating data for three calendar years or 720 operating hours, whichever is less, demonstrating that the unit has combusted natural gas for specified minimum percentages of its overall fuel usage and only fuel oil for its remaining fuel usage. In the petition, Minnesota Power requests that Laskin Units 1 and 2 be considered gas-fired units for purposes of part 75 without the submission of such operating data.

EPA’s Determination

Absent the waiver requested in the Minnesota Power’s petition, following conversion of Laskin Units 1 and 2 to natural gas combustion Minnesota Power would be required to submit three calendar years or 720 operating hours of operating data for the units in order to demonstrate that the units qualify as gas-fired under 40 CFR 72.2. The purpose of this data submission requirement is to provide assurance that the conversion is permanent. As described above, in the petition Minnesota Power has provided other information intended to demonstrate the permanence of the conversion. Specifically, the units have undergone physical modifications that render them incapable of combusting coal and the Title V operating permit has been modified to prohibit combustion of fuels other than natural gas. EPA views these factors as providing sufficient assurance that the conversion of Units 1 and 2 from coal to gas combustion is permanent, fulfilling the purpose of the operating data submission requirement and making that requirement unnecessary in this instance.

In view of these considerations, EPA approves Minnesota Power’s petition for a waiver of the requirement to submit three calendar years or 720 hours of unit operating data to demonstrate that Laskin Units 1 and 2 meet the definition of “gas-fired” under 40 CFR 72.2. These units are considered gas-fired for purposes of 40 CFR part 75, the Acid Rain Program, and CSAPR as of 2

their first hour of operation following completion of the physical modifications and operating permit modifications summarized above. EPA notes that this approval by itself does not alter any requirement to continue to use a COMS or CEMS that may arise under legal authority other than 40 CFR part 75, such as the facility's Title V operating permit, a state regulation, or the consent decree described above.

Conditions of Approval

As conditions of this approval to be considered a gas-fired unit for purposes of 40 CFR part 75, the Acid Rain Program, and CSAPR without the submission of operating data that would otherwise be required, Minnesota Power shall:

1. Make all necessary revisions to the electronic monitoring plans for Laskin Units 1 and 2 to represent the change from coal combustion to natural gas combustion and any changes in monitoring methodology. The monitoring plan revisions include, but are not limited to, assigning appropriate closeout dates, activation dates and codes for monitoring systems, monitoring methodologies, emissions and heat input rate formulas, and monitoring system span and range values;
2. Ensure that the natural gas flowmeters are certified according to section 2.1.5 of appendix D to part 75; and
3. Ensure that the data acquisition and handling system is properly programmed to use the appendix D methodology for quantifying SO₂ mass emissions and heat input rate and Equation G-4 in appendix G to part 75 for quantifying CO₂ mass emissions.

EPA's determination relies on the accuracy and completeness of Minnesota Power's March 3, 2015 initial petition and the October 22, 2015 resubmission and is appealable under 40 CFR part 78. If you have any questions regarding this determination, please contact Louis Nichols at (202) 343-9008. Thank you for your continued cooperation.

Sincerely,



Reid P. Harvey, Director
Clean Air Markets Division

cc: Michael Compher, EPA Region V
Ethan Chatfield, EPA Region V
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Louis Nichols, EPA, CAMD