

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

June 17, 2020

Mr. Daniel R. Wilkus
Director, Environmental Services
Alternate Designated Representative
Evergy, Inc.
818 South Kansas Avenue
Topeka, Kansas 66612

Re: Petition to use the low mass emissions (LME) methodology in 40 CFR 75.19 for units 1, 2, 3, and 4 at the Greenwood Energy Center (ORISPL 6074) beginning on July 1, 2020.

Dear Mr. Wilkus:

The United States Environmental Protection Agency (EPA) has reviewed the May 5, 2020 petition submitted by Evergy, Inc. (Evergy) under 40 CFR 75.66 requesting authorization to use the low mass emissions (LME) methodology in § 75.19 to determine reported emissions for units 1, 2, 3, and 4 at the Greenwood Energy Center (Greenwood) beginning on July 1, 2020. EPA approves the request, with conditions, as further described below.

Background

Evergy owns and operates four General Electric 7821B combustion turbines (units 1, 2, 3, and 4) at the Greenwood Energy Center located in Greenwood, Missouri. Each of the four units can combust either natural gas or diesel oil and has a nominal capacity rating of approximately 58 MW.

According to Evergy, Greenwood units 1, 2, 3, and 4 are subject to Cross-State Air Pollution Rule (CSAPR) trading programs for sulfur dioxide (SO₂) and annual and ozone season nitrogen oxides (NO_x). Evergy is therefore required to continuously monitor and report SO₂ and NO_x mass emissions and heat input for these units in accordance with 40 CFR part 75. Evergy has historically met the monitoring and reporting requirements for SO₂ mass emissions and heat input using the excepted methodology in appendix D to part 75, while meeting the requirements for NO_x mass emissions using heat input data from the appendix D methodology in combination with NO_x emission rate (lb/mmBtu) data from a continuous emission monitoring system (CEMS). In the May 5, 2020 petition, Evergy seeks authorization to instead use the LME methodology in § 75.19 for the units beginning on July 1, 2020.

Under part 75, a unit that qualifies as gas-fired or oil-fired under 40 CFR 72.2 and that has emissions below specified maximum levels may elect to use the LME methodology in § 75.19 to determine reported SO₂, NO_x, and CO₂ mass emissions and heat input values (as applicable) as an alternative to using CEMS or the methodologies in appendices D, E, and G to part 75. Where a unit is required to report under subpart H of part 75 (i.e., NO_x mass emissions provisions) as well as the Acid Rain

Program (ARP), in order to qualify to use the LME methodology an initial demonstration must be provided that the unit emits no more than 25 tons of SO₂ annually, less than 100 tons of NO_x annually, and no more than 50 tons of NO_x during the ozone season.¹ Parallel provisions applicable to non-ARP-affected units identify similar requirements only for NO_x, requiring demonstrations with respect to both the annual and ozone-season NO_x limits or only the ozone-season NO_x limit depending on whether the unit reports NO_x mass emissions on an annual basis or an ozone-season basis.² However, consistent with the purpose of the LME regulations to provide an exception to CEMS requirements only when a unit's emissions are low enough to merit such an exception, EPA interprets the requirement in § 75.19(a)(1) that the LME methodology “must be used for all parameters that are required to be monitored by the applicable programs” as making the SO₂ limit that applies to ARP-affected units also applicable to non-ARP-affected units subject to part 75 requirements under another SO₂ program, such as a CSAPR SO₂ program.³ The possible bases for the required initial demonstration include emissions data reported under part 75 for the previous three years.⁴

Based on the information provided by Evergy for Greenwood, units 1, 2, 3, and 4 meet these substantive qualification requirements. Because the units combust only natural gas or distillate oil, they would qualify as either gas-fired or oil-fired under the § 72.2 definitions of these terms (depending on the proportions of natural gas and distillate oil that are actually combusted). Further, as noted in the petition, for the years 2017 through 2019 Greenwood reported SO₂ emissions of no more than 1.1 tons and NO_x emissions of no more than 10.0 tons for each of the units, well below the LME qualification limits.

Where a unit that reports emissions data on a year-round basis will be using the LME methodology, part 75 requires that the unit must begin using the LME methodology in the “first unit operating hour in the calendar year designated in the certification application as the first year in which the methodology will be used.”⁵ Part 75 also requires the certification application to be submitted at least 45 days prior to the date on which use of the LME methodology is expected to commence.⁶ Evergy's certification application for the LME methodology for Greenwood units 1, 2, 3, and 4 was submitted electronically to EPA on May 11, 2020, via email, and is dated May 5, 2020. In order for Greenwood to have met the timing requirements just described related to the commencement of use of the LME methodology and the submittal of the certification application, Evergy would have had to submit an LME certification application no later than November 2019 designating the year 2020 as the first calendar year in which the LME methodology would be used. Absent EPA's approval of an exception to the timing requirements, based on the initial LME certification application submittal date of May 5, 2020, the earliest that Greenwood would be able to begin using the LME methodology for units 1, 2, 3, and 4 would be the first unit operating hour in 2021.

In the May 5, 2020 petition, Evergy requests relief for Greenwood from the requirement to start using the LME methodology on the first unit operating hour in the calendar year designated in the certification application as the first year in which the methodology will be used, and instead requests authorization to

¹ § 75.19(a)(1)(i)(A)(1). Part 75 also requires continuing annual demonstrations that these emission limits have not been exceeded. § 75.19(b).

² § 75.19(a)(1)(i)(A)(2)-(3).

³ Refer to, *e.g.*, EPA response to petition for Permian Basin plant (June 13, 2017), available at <https://www.epa.gov/airmarkets/responses-40-cfr-part-75-petitions-2017>. EPA notes that when the LME regulations were promulgated, the ARP was the only program that required part 75 monitoring and reporting for SO₂ emissions. EPA intends to clarify the LME regulations in a future rule revision by adding express references to SO₂ programs other than the ARP.

⁴ § 75.19(a)(2)(ii)(A).

⁵ § 75.19(a)(1)(ii)(A).

⁶ § 75.19(a)(2).

begin using the LME methodology on July 1, 2020, which is the start of the first quarterly reporting period that is more than 45 days after the date of the initial petition. In support of this request, Evergy points out that Greenwood units meet the substantive qualification requirements to use the LME methodology and notes that EPA has previously granted similar petitions.

EPA's Determination

EPA has reviewed the information provided by Evergy in the May 5, 2020 petition requesting authorization to begin reporting using an LME methodology for Greenwood units 1, 2, 3, and 4 beginning on July 1, 2020 instead of January 1, 2021. As discussed above, historical reported emissions data for the units support qualification of the units to use the LME methodology. EPA also notes that enhancements to the Agency's data systems have removed technical limitations that in the past limited the ability to accept quarterly emissions data reports for a unit reflecting different part 75 methodologies in a single calendar year, and that the Agency consequently expects to propose to amend § 75.19 in the future to allow qualifying units to commence use of the LME methodology at the beginning of any calendar quarter.

EPA approves the request to authorize Greenwood units 1, 2, 3, and 4 to begin using the LME methodology on July 1, 2020. The basis for the approval is as follows:

- A. The LME qualification records submitted by Evergy in the certification application are based on three years of emissions data monitored and reported in accordance with 40 CFR part 75. These reported data have been electronically verified by the Agency's Emissions Collection and Monitoring Plan System software reporting tool.
- B. Evergy submitted the certification application more than 45 days prior to the date on which use of the LME methodology is expected to commence, and the application contained the information required by § 75.19(a)(2)(i)-(iv).

As a condition of this approval, Evergy must meet the requirements of § 75.19(b) for an annual demonstration that annual and ozone season emissions for 2020 from each of the four Greenwood units are below the limits necessary for the units to continue to qualify to use the LME methodology. Evergy must make that demonstration including all unit operating hours for the 2020 calendar year or the 2020 ozone season, as applicable – i.e., not just the unit operating hours on and after July 1, 2020 – as though the units had begun using the LME methodology as of January 1, 2020.

EPA's determination relies on the accuracy and completeness of the information provided by Evergy in the May 5, 2020 petition and is appealable under 40 CFR part 78. If you have any questions regarding this determination, please contact Ron Sobocinski at (202) 343-9722 or by e-mail at sobocinski.ron@epa.gov. Thank you for your continued cooperation.

Sincerely,

Reid P. Harvey

Reid P. Harvey, Director
Clean Air Markets Division

cc: Ron Sobocinski, U.S. EPA
Scott Postma, U.S. EPA, Region 7
Josh Vander Veen, Missouri DNR