

June 13, 2017

Stephanie Zapata Moore  
Designated Representative  
Luminant Generation Company LLC  
1601 Bryan Street  
Dallas, TX 75201

Re: Petition to use the low mass emissions (LME) methodology in 40 CFR 75.19 for Units CT1, CT2, CT3, CT4, and CT5 at the Permian Basin power plant (ORISPL 3494).

Dear Ms. Moore:

The United States Environmental Protection Agency (EPA) has reviewed the February 8, 2017 LME application and petition under 40 CFR 75.66 submitted by Luminant Generation Company LLC (Luminant), as supplemented on March 29, 2017, requesting authorization to use the low mass emissions (LME) methodology in § 75.19 to determine reported emissions for Units CT1, CT2, CT3, CT4, and CT5 at the Permian Basin power plant beginning on April 1, 2017. EPA approves the request, with conditions, as further described below.

### **Background**

Luminant owns and operates the Permian Basin facility which is located near Monahans, Texas. The facility includes five General Electric simple cycle combustion turbines and ancillary equipment. Each of the five units can combust either natural gas or diesel fuel and has a nominal capacity rating of approximately 90 MW.

According to Luminant, all five turbines (Units CT1, CT2, CT3, CT4, and CT5) are subject to Cross-State Air Pollution Rule (CSAPR) trading programs for sulfur dioxide (SO<sub>2</sub>) emissions and annual and ozone-season NO<sub>x</sub> emissions.<sup>1</sup> Luminant is therefore required to continuously monitor and report SO<sub>2</sub> and NO<sub>x</sub> emissions and heat input for these units in accordance with 40 CFR part 75. From 2008, when the units first became subject to equivalent requirements under the Clean Air Interstate Rule (CAIR), through 2012, Luminant met the units' part 75 monitoring and reporting requirements through use of the LME methodology in § 75.19. However, in a period of unusually high utilization that began in 2011, the units lost their LME qualification, and starting in 2013 Luminant has met the units' monitoring and reporting requirements using a combination of continuous emission monitoring systems (CEMS) and the

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<sup>1</sup> In response to a remand of the CSAPR Phase 2 SO<sub>2</sub> budget by the D.C. Circuit, EPA has proposed to withdraw the federal implementation plan (FIP) provisions requiring Texas units to participate in CSAPR programs for SO<sub>2</sub> and annual NO<sub>x</sub>. *See* 81 FR 78954 (November 10, 2016). As of the date of this letter, that proposal remains pending.

excepted methodology in part 75, appendix D. In the February 8, 2017 LME application and petition, Luminant seeks authorization to recommence use of the LME methodology beginning on April 1, 2017.

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 SO<sub>2</sub>, NO<sub>x</sub>, carbon dioxide (CO<sub>2</sub>) and heat input values (as applicable) as an alternative to using CEMS or the methodologies in part 75, appendices D, E, and G. Where a unit is required to report under subpart H of part 75 (i.e., NO<sub>x</sub> 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 SO<sub>2</sub> annually, less than 100 tons of NO<sub>x</sub> annually, and no more than 50 tons of NO<sub>x</sub> during the ozone season.<sup>2</sup> Parallel provisions applicable to non-ARP-affected units identify similar requirements only for NO<sub>x</sub>, requiring demonstrations with respect to both the annual and ozone-season NO<sub>x</sub> limits or only the ozone-season NO<sub>x</sub> limit depending on whether the unit reports NO<sub>x</sub> mass emissions on an annual basis or an ozone-season basis.<sup>3</sup> 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 SO<sub>2</sub> limit that applies to ARP-affected units also applicable to non-ARP-affected units subject to part 75 requirements under another SO<sub>2</sub> program, such as a CSAPR SO<sub>2</sub> program.<sup>4</sup> Part 75 also requires continuing annual demonstrations that the applicable LME limits are not exceeded each year.<sup>5</sup>

The possible bases for the required initial demonstrations of compliance with the applicable LME limits include emissions data reported under part 75 for the previous three years.<sup>6</sup> Where a unit has reported using the LME methodology in the past and has been disqualified, as part of any LME reapplication the designated representative must certify that operations during the years for which historical emissions data are being submitted are representative of the unit's projected future operations.<sup>7</sup>

Based on the information provided by Luminant in its LME application, Units CT1, CT2, CT3, CT4, and CT5 meet these substantive qualification requirements as to NO<sub>x</sub>. Because the units combust only natural gas or diesel fuel, 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

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<sup>2</sup> § 75.19(a)(1)(i)(A)(1).

<sup>3</sup> § 75.19(a)(1)(i)(A)(2)-(3).

<sup>4</sup> See, e.g., EPA response to petition for West Lorain plant (November 17, 2016), available at <https://www.epa.gov/airmarkets/responses-40-cfr-part-75-petitions-2016>. When the LME regulations were promulgated, the ARP was the only program that required part 75 monitoring and reporting for SO<sub>2</sub> emissions. EPA intends to clarify the LME regulations in a future rule revision by adding express references to SO<sub>2</sub> programs other than the ARP.

<sup>5</sup> § 75.19(b)(1).

<sup>6</sup> § 75.19(a)(2)(ii)(A).

<sup>7</sup> § 75.19(b)(5).

diesel fuel that are actually combusted). Further, for the years 2014 through 2016 Luminant reported annual NO<sub>x</sub> emissions of no more than 48.3 tons and NO<sub>x</sub> ozone season emissions of no more than 9.4 tons for each of the units, below the LME qualification limits. In the application, which on March 29, 2017 was certified by the units' alternate designated representative, Luminant states that operations in the years after 2013 are representative of expected operations levels for the foreseeable future.

Luminant did not include historical SO<sub>2</sub> emissions data in its LME application. As noted above, EPA interprets the LME regulations as requiring not only ARP-affected units but also non-ARP-affected units subject to part 75 requirements under SO<sub>2</sub> programs other than the ARP to demonstrate compliance with the LME SO<sub>2</sub> limit. For the years 2014 through 2016, Luminant reported annual SO<sub>2</sub> emissions of no more than 0.3 tons for each of the Permian Basin CT units, well below the LME SO<sub>2</sub> limit, using the excepted methodology in appendix D to part 75. In these circumstances, EPA will consider Luminant's LME application, as supplemented by the March 29, 2017 certification and the historical SO<sub>2</sub> emissions data from the 2014-2016 quarterly reports, as including all required information.

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."<sup>8</sup> 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.<sup>9</sup> Luminant's certification application for the LME methodology for Permian Basin Units CT1, CT2, CT3, CT4, and CT5 was initially submitted on February 8, 2017, more than 45 days prior to the date on which Luminant requests authorization to recommence use of the LME methodology.<sup>10</sup>

As part of the February 8, 2017 LME application, Luminant petitions for relief from the requirement to start 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, and instead requests authorization to begin using the LME methodology on April 1, 2017, which is the start of the first quarterly reporting period that is more than 45 days after the date of the LME certification application. In support of this request, Luminant points out that the units meet the substantive qualification requirements to use the LME methodology and also notes that EPA has recently granted a similar petition.<sup>11</sup> Absent approval of this request, Luminant would not be eligible to recommence use of the LME methodology at the units until January 1, 2018.

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<sup>8</sup> § 75.19(a)(1)(ii)(A).

<sup>9</sup> § 75.19(a)(2).

<sup>10</sup> February 8, 2017 is 52 days prior to the requested LME start date of April 1, 2017.

<sup>11</sup> See EPA response to petition for Devon generating station (August 31, 2016), available at <https://www.epa.gov/airmarkets/responses-40-cfr-part-75-petitions-2016>.

## **EPA's Determination**

EPA has reviewed the information provided by Luminant in the February 8, 2017 LME application and petition, as supplemented by the March 29, 2017 certification and the 2014-2016 SO<sub>2</sub> emissions data reported under part 75, requesting authorization to recommence reporting using the LME methodology for Permian Basin Units CT1, CT2, CT3, CT4, and CT5 beginning on April 1, 2017, instead of January 1, 2018. 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 for different quarterly reporting periods 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 Permian Basin Units CT1, CT2, CT3, CT4, and CT5 to begin using the LME methodology on April 1, 2017 or the first day of a subsequent quarter in 2017 (i.e., July 1 or October 1, 2017). The basis for the approval is as follows:

- a. The LME qualification records submitted by Luminant in the certification application and the SO<sub>2</sub> emissions data included in the units' quarterly reports 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 (ECMPS) software reporting tool.
- b. Luminant submitted the initial certification application more than 45 days prior to the date on which use of the LME methodology is expected to recommence, and the application, as supplemented by the March 29, 2017 certification and the 2014-2016 quarterly reports, contained the information required by § 75.19(a)(2)(i)-(iv) and (b)(5).

As a condition of this approval, Luminant must meet the requirements of § 75.19(b)(1) for continuing annual demonstrations that SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone season NO<sub>x</sub> emissions from each of the five Permian Basin units are below the limits necessary for the units to qualify to use the LME methodology, as described above.<sup>12</sup> For 2017, Luminant must make that demonstration including all unit operating hours for the 2017 calendar year or the 2017 ozone season, as applicable – i.e., not just the unit operating hours on and after the start of use of LME methodology (e.g., April 1, 2017).

EPA's determination relies on the accuracy and completeness of the information provided by Luminant in the February 8, 2017 LME application and petition, the March 29, 2017

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<sup>12</sup> If and when the pending proposal to withdraw the FIP provisions requiring Texas units to participate in CSAPR programs for SO<sub>2</sub> and annual NO<sub>x</sub> is finalized, Luminant will be required to make annual demonstrations under § 75.19(b)(1) only with regard to the LME limits for annual and/or ozone-season NO<sub>x</sub> emissions (depending on whether the units report on an annual basis or an ozone-season basis) in accordance with § 75.19(a)(1)(i)(A)(2) or (3) and will no longer be required to make annual demonstrations with regard to the LME limit for SO<sub>2</sub> emissions.

certification, and the 2014-2016 quarterly reports, and is appealable under 40 CFR part 78. If you have any questions regarding this determination, please contact Travis Johnson at 202-343-9018 or johnson.travis@epa.gov. Thank you for your continued cooperation.

Sincerely,

/s/

Richard A. Haeuber, Acting Director  
Clean Air Markets Division

cc: Travis Johnson, CAMD  
Raymond Magyar, EPA Region VI  
Carolyn Maus, Texas CEQ