November 6, 2019

Kathleen Garrett
Director of Environmental, Health and Safety Services
Austin Energy
Town Lake Center
721 Barton Springs Road
Austin, Texas 78704-1145

Re: Petition for waiver of certain disqualification and requalification provisions of the low mass emissions methodology under 40 CFR 75.19 for units GT-4A and GT-4B at the Decker Creek Power Plant (Facility ID (ORISPL) 3548).

Dear Ms. Garrett:

The United States Environmental Protection Agency (EPA) has reviewed the October 29, 2018 petition[1] submitted under 40 CFR 75.66 by the City of Austin (COA) requesting a waiver of certain disqualification and requalification provisions of the low mass emissions (LME) methodology at 40 CFR 75.19 for units GT-4A and GT-4B at the Decker Creek Power Plant based on the imposition of new federally enforceable limits on the units' hours of operation. EPA approves the petition, with conditions, as discussed below.

Background

COA owns and operates combustion turbine units GT-1A, GT-1B, GT-2A, GT-2B, GT-3A, GT-3B, GT-4A, and GT-4B at the Decker Creek Power Plant (Decker Creek) located near Austin, Texas. The eight units are assembled into four "Twin-Pacs" where a pair of combustion turbines is coupled to a single generator rated to produce 50 MW of electrical power. Each of the eight units has a maximum heat input capacity of 350 MMBtu/hr and combusts pipeline natural gas as the primary fuel. The units are also permitted to combust "other oil" as a secondary fuel, but little or no oil combustion has been reported for the units since 2008. According to COA, the units are subject to the CSAPR NO_X Ozone Season Group 2 Trading Program. COA is therefore required to continuously monitor and report NO_X mass emissions and heat input for the units in accordance with 40 CFR part 75.

COA has elected to use the LME methodology in § 75.19 to satisfy the part 75 monitoring requirements for each of the Decker Creek combustion turbine units. Under

[1] COA added the required certification statements found in § 72.21 and submitted an amended petition to EPA on July 17, 2019.

§ 75.19(c)(1)(ii), a gas- or oil-fired unit, as defined in § 72.2, may determine reported NO_X mass emissions using either default NO_X emission rates from Table LM-2 of § 75.19 or fuel-and-unit-specific NO_X emission rates determined based on testing. Historically, COA has elected to report NO_X mass emissions using the default NO_X emission rate of 0.7 lb/mmBtu specified in Table LM-2 for the combustion of natural gas in a turbine along with the units' maximum rated hourly heat input. Under § 75.19(a)(1)(i)(A)(*2*) and (a)(1)(i)(B), in order to remain qualified to use the LME methodology, a unit that is required to report NO_X mass emissions for the ozone season and elects to report for the entire year must annually demonstrate that its NO_X mass emissions are less than 100 tons annually and no more than 50 tons during the ozone season. Under § 75.19(b)(2)(ii), exceeding either the annual NO_X limit or the ozone-season NO_X limit in a given year causes a unit to lose its qualification to use the LME methodology and requires that the unit implement another part 75 monitoring methodology by December 31 of the calendar year immediately following the year in which the NO_X limit was exceeded.

A unit applying for initial qualification to use the LME methodology must submit a demonstration of the unit's ability to comply with the NO_X mass emissions limits noted above based on either historical or, in some circumstances, projected emissions data. Under § 75.19(a)(3), one circumstance under which a unit's application for initial qualification may rely on projected instead of historical emissions data is where the unit has become subject to a federally enforceable permit condition limiting its hours of operation sufficiently stringent to ensure that the unit will meet the applicable emissions limits in future years. Under § 75.19(b)(5), a unit applying for requalification to use the LME methodology following disqualification must similarly submit a demonstration of the unit's ability to comply with the NO_X mass emissions limits noted above. However, the regulations do not identify any circumstances where projected instead of historical emissions data may be used for purposes of an application for requalification.

In 2018, the reported ozone season NO_X mass emissions for Decker Creek units GT-4A and GT-4B as calculated using the default 0.7 lb/mmBtu NO_X emission rate and maximum rated hourly heat input were 54 tons for each unit, exceeding the ozone season limit of 50 tons applicable to units using the LME methodology. Absent a waiver of some of the disqualification and requalification provisions summarized above, units GT-4A and GT-4B would lose their qualification to use the LME methodology based on the 2018 reported ozone season NO_X emissions, COA would be required to implement another part 75 monitoring methodology at the units by December 31, 2019, and the units would be unable to requalify to use the LME methodology without first obtaining actual emissions data below the applicable emissions limits for three consecutive years after 2018.

On October 29, 2018, COA submitted a petition requesting that units GT-4A and GT-4B be allowed to continue to use the LME methodology after December 31, 2019 without interruption if each unit obtained a sufficiently stringent federally enforceable permit condition limiting its hours of operation during the ozone season (i.e., May 1 through September 30). On September 30, 2019, the Texas Commission on Environmental Quality (TCEQ) issued a revised permit which limits each of the eight Decker Creek combustion turbine units (i.e., not only GT-

4A and GT-4B, but also GT-1A, GT-1B, GT-2A, GT-2B, GT-3A, and GT-3B) to no more than 400 hours of operation during the period of May 1 through September 30 in any calendar year.[2]

EPA's Determination

EPA approves COA's petition to continue to use the LME methodology at Decker Creek units GT-4A and GT-4B after December 31, 2019 without interruption. EPA interprets the petition as effectively constituting a request for requalification to use the LME methodology that relies on projected rather than historical emissions data for the required demonstration of the units' ability to meet the applicable emissions limits in future years, as would be permissible in an application for initial qualification in certain circumstances. Given the new federally enforceable permit conditions limiting units GT-4A and GT-4B to no more than 400 hours of operation each during the ozone season, EPA authorizes requalification, waiving the requirement under § 75.19(b)(5) to use only historical emissions data for purposes of the requalification application. The reason for the waiver is that a default NO_X emission rate of 0.7 lb/MMBtu and a maximum heat input of 350 MMBtu/hour/turbine together translate into an hourly NO_X mass emission rate of 245 lbs/hour which, combined with the new hourly ozone-season limit of 400 operating hours, results in a maximum potential total of 49 tons of NO_X emissions per unit during each ozone season, below the applicable limit of 50 tons. Further, in light of the units' requalification to use the LME methodology after December 31, 2019, EPA also waives the disqualification provision under § 75.19(a)(2)(ii) requiring the units to implement other monitoring systems meeting part 75 requirements by that date. The following conditions apply to this approval:

1) COA shall continue to be subject to the provisions of § 75.19(b). That is, if the NO_X emissions from unit GT-4A or GT-4B exceed 50 tons during the ozone season[3] or equal or exceed 100 tons annually in 2020 or a subsequent year, then COA shall be disqualified from using the LME methodology at the unit, shall implement other monitoring systems that meet part 75 requirements by December 31 of the calendar year following the year of the exceedance, and shall thereafter report emissions data and heat input data for the unit from such monitoring systems unless and until the unit requalifies to use the LME methodology pursuant to an application meeting the requirements of § 75.19(b)(5).

2) COA shall maintain federally enforceable permit conditions for units GT-4A and GT-4B restricting each unit to no more than 400 hours of operation for the period May 1 through September 30 of each calendar year.

EPA notes that although COA has obtained federally enforceable permit conditions limiting the hours of operation for each of the eight Decker Creek combustion turbine units, according to submitted emissions data, units GT-1A, GT-1B, GT-2A, GT-2B, GT-3A, and GT-

[2] The permit modification can be found by searching for a "Primary ID" of "17380" on the TCEQ Central File Room Online available at: https://records.tceq.texas.gov/cs.

[3] EPA notes that if the units were to deviate from their historical practice and begin combusting oil instead of natural gas, reported ozone season NO_X emissions calculated using the default NO_X emission rates from Table LM-2 could exceed 50 tons even if the units operate for less than 400 hours.

3B have each met the conditions in the regulations for continuing qualification to use the LME methodology and do not require waiver of any part 75 requirements. This response therefore addresses only units GT-4A and GT-4B.

EPA's determination relies on the accuracy and completeness of COA's October 29, 2018 petition and July 17, 2019 amended petition 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 by e-mail at johnson.travis@epa.gov.

Sincerely,

/s/
Reid P. Harvey, Director
Clean Air Markets Division

cc: Emad Shahin, EPA Region VI
Carolyn Maus, Texas CEQ
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