

SCOTT A. THOMPSON Executive Director

## OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

January 31, 2022

Ford Benham Oklahoma Gas & Electric PO Box 321 MC601 Oklahoma City, OK 73102-0321

Subject: Additional clarifications on OG&E's 4-factor analysis on control scenarios under the

Clean Air Act Regional Haze Program

Dear Mr. Benham:

In a letter dated July 1, 2020, the Oklahoma Department of Environmental Quality (DEQ) identified the Horseshoe Lake Generating Station as subject to a four-factor reasonable progress analysis under the Regional Haze Rule as part of DEQ's development process for the state implementation plan covering the second planning period (Round 2) of 2021 – 2028.

On September 29, 2020, OG&E submitted its four-factor analysis to DEQ for the Horseshoe Lake Generating Station. OG&E included in its response that there were no cost-effective nitrogen oxides (NO<sub>x</sub>) control measures available for units 6 through 10. DEQ included these conclusions in its draft Regional Haze SIP for Planning Period 2 that was shared with the Federal Land Managers and the U.S. Environmental Protection Agency (EPA) for their review and comment. DEQ requests that OG&E review its four-factor analysis for potential NO<sub>x</sub> control measures for Horseshoe Lake and respond to the following questions, which are based on EPA's review of Oklahoma's draft SIP. We understand that some of the requested data/analysis may be gleaned or explained from DEQ's permitting and compliance files, and/or OG&E's submittal. However, your response will allow OG&E to document the information that best explains and supports the conclusions of your four-factor analysis. DEQ intends to continue its analysis in parallel.

- 1. Please provide additional discussion on why the baseline  $NO_x$  emissions used in the four-factor analysis were based on 2016 actual emissions for the units evaluated. Actual  $NO_x$  emissions in 2020 were higher than 2016 emissions for all units, and actual  $NO_x$  emissions in 2019 were at least twice as high as 2016 emissions for all units except Unit 8. Actual  $NO_x$  emissions in 2018 were also higher than 2016 emissions for all units except Unit 8. The four-factor analysis states that the year 2016 was used for this evaluation as it has been deemed most representative of 2028 operation. Please explain why actual 2016  $NO_x$  emissions are most representative of anticipated 2028 operation.
- 2. For the time necessary for implementation, please explain why it is anticipated that it would take a minimum of four years to install selective catalytic reduction (SCR) on one unit. Based

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on historical data, the installation of SCR at similar units can be typically completed in three years.

- 3. The federal reviewers stated that the assumption of a shortened remaining useful life (20 years) in the cost analysis for controls evaluated for Units 6, 7, and 8 is not appropriate without an enforceable shutdown date for these units. As discussed in EPA's August 2019 Guidance, "In the situation where an enforceable shutdown date does not exist, the remaining useful life of a control under consideration should be full period of useful life of that control as recommended by EPA's Control Cost Manual.<sup>1</sup>" (See August 2019 Guidance at 34.)
- 4. The federal reviewers stated that the use of a 7% interest rate in the cost analysis is not appropriate. The cost analysis should be based on either the bank prime rate or a company-specific interest rate for consistency with the Control Cost Manual<sup>2</sup>. If a company-specific interest rate is available and is being used to estimate the cost of controls, documentation supporting that interest rate should be provided with the cost analysis.

DEQ respectfully requests that OG&E respond to EPA's questions no later than February 28, 2022. Thank you for your assistance with this matter. Please contact Melanie Foster at 405-702-4218 for any questions or clarification.

Sincerely,

Kendal Stegmann

Director, Air Quality Division

¹ https://www.epa.gov/sites/default/files/2019-08/documents/8-20-2019\_-\_regional\_haze\_guidance\_final\_guidance.pdf

<sup>&</sup>lt;sup>2</sup> https://www.epa.gov/sites/default/files/2017-12/documents/epaccmcostestimationmethodchapter\_7thedition\_2017.pdf