

February 25, 2022

DELIVERED VIA E-MAIL

Kendal Stegmann
Director, Air Quality Division
Oklahoma Department of Environmental Quality
707 N. Robinson
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RE: Reply to ODEQ's January 31, 2022 request for additional clarifications on OG&E's September 29, 2020 Regional Haze 4-Factor Analysis for Horseshoe Lake Generating Station

Dear Ms. Stegmann:

This letter provides Oklahoma Gas & Electric Company's (OG&E's) replies to the four items requested in the Oklahoma Department of Environmental Quality's (ODEQ's) above-referenced letter.

DEQ Request #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.*

Reply #1. Actual 2016 emissions were used to represent 2028 emissions for several reasons. First, 2016 is what the Central States Air Resource Agencies (CenSARA) used in its Area of Impact (AOI) analysis that ODEQ relied upon to select sources for evaluation. Therefore, OG&E's use of 2016 emissions maintains consistency with previous agency decisions and analyses that underlie emission control choices for the Department. Second, OG&E's resource group advised that 2016 was the best prediction of future emissions in 2028 based on their analysis of projected demand, scheduled outages, generation portfolio, projected fuel prices, and other factors. The historically low natural gas prices in 2018 and 2019 are not expected to remain in effect in 2028 and make those years not appropriate for use in projections. Also note that 2020 emissions data was not available when the four-factor analysis was submitted in September 2020.

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

Reply #2. The request's statement about "historical data [on] the installation of SCR at similar units" does not identify any specific units that are considered similar and that have SCR. Estimates of the time

needed for installation of SCR at a “typical” gas-fired plant are not applicable to Horseshoe Lake, which is among the oldest active plants in the country and which has a unique physical configuration that limits the available space for SCR installation. Based on the best information available to OG&E,¹ an implementation schedule for SCR installation at Horseshoe Lake consists of three phases totaling four years:

1. Design, specification, and procurement, which is expected to take a total of 10 months due to the need for significant architect/engineer work on physical arrangement of systems in light of current plant layout;
2. Off-site fabrication and delivery, which is expected to take an additional 18 months, and expediting the time frame is likely to be impossible with supply chain and pandemic disruptions; and
3. Installation, commissioning, startup, and balance of plant constructions, which is expected to take another 20 months.

DEQ Request #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.”*

Reply #3. Each of the above-mentioned units is more than 50 years old. As stated in various public reports, including the Integrated Resource Plan, OG&E does not expect that the Horseshoe Lake units will operate for even 20 more years. Nevertheless, OG&E is willing to consider enforceable air permit conditions that require retirements for these units no later than 20 years from the effective date of the SIP.

DEQ Request #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. 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.*

Reply #4. The first part of the request, which suggests that 7 percent is not appropriate, represents a fundamental shift in policy. The Office of Management and Budget (OMB)-recommended 7 percent interest rate has been relied upon commonly for control technology analyses for many years, even decades, including during the regional haze first planning period when the bank prime rate was exactly the same as it is now (3.25%), i.e., from December 2008 to December 2015.

The second part of the request suggests that EPA’s Control Cost Manual presents the bank prime rate as a default absent a company-specific interest rate. This is incorrect. The bank prime rate is mentioned as one of several indicators of the cost of borrowing. Moreover, the purpose of the bank prime rate is not

¹ See Appendix B of OG&E’s September 29, 2020 *Regional Haze Four-Factor Reasonable Progress Analysis* submittal.

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at all related to the cost of capital for an individual company. It certainly does not represent OG&E's cost of borrowing. As of May 24, 2019, OG&E's cost of borrowing was documented to be 7.31 percent.²

In addition to these replies, OG&E is providing one update to its September 29, 2020 *Regional Haze Four-Factor Reasonable Progress Analysis* submittal. Figure 3-1 in Appendix B of that submittal has been updated to include the most recent Class I area observation data (for years 2019 and 2020). The updated version is enclosed. It demonstrates that actual visibility conditions in the Wichita Mountains have continued to improve, and this substantiates the conclusions drawn in OG&E's submittal – primarily that no additional controls are needed for this planning period.

Thank you for the opportunity to provide this information. OG&E looks forward to working with the ODEQ in its revisions to the regional haze SIP. Please contact me at 405-553-3221 or benhamf@oge.com if you have any questions or need any additional information.

Sincerely

OG&E



Ford Benham
Director of Environmental Operations

Enclosure Updated Figure 3-1 from Appendix B of OG&E's September 29, 2020 *Regional Haze Four-Factor Reasonable Progress Analysis* submittal

cc: Charles Wehland, Jones Day
Jeremy Jewell, Trinity Consultants
Ruseal Brewer, OGE Legal

² Donald R. Rowlett's *Testimony in Support of the Non-unanimous Joint Stipulation and Settlement Agreement* before the Corporation Commission of Oklahoma (May 24, 2019), page 3. (<https://ogeenergy.gcs-web.com/static-files/b8aae59a-2677-45d3-ad90-c2a9283da3a9>)

Updated Figure 3-1. Observations and Model Predictions Compared to Glidepath for WIMO

