NEW MEXICO
ENVIRONMENT DEPARTMENT

525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505
Phone (505) 476-4300 Fax (505) 476-4375
www.env.nm.gov

Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

December 23, 2019

Ms. Femi Serrano
Oxy USA
5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

Sent by electronic mail to: femi_serrano@oxy.com

Subject: Request for Additional Information on Four-Factor Analysis under the Regional Haze Program

Dear Ms. Serrano:

This letter requests additional information for the Indian Basin Gas Plant Four-Factor Analysis report that were received by the New Mexico Environment Department (NMED) Air Quality Bureau (AQB) on November 1, 2019. Pursuant to NMED's Regional Haze Guiding Principles, the four-factor analysis must consider new ideas that potentially offer better solutions to problems and must evaluate the newest engineering methods and technology advances in potential control measures.

Based on our initial review, the NMED requires additional information, analyses and clarifications on Targa's four-factor analyses as follows:

1. **Sour Gas Amine Treating Units**
   a. Consider and discuss adding a secondary control to the acid gas injection (AGI) system to reduce flaring emissions, such as LO-CAT sulfur recovery technology. If technically feasible, include a four-factor analysis.

2. **Flaring:** Please provide the following information for the flare Units at the IBGP Unit ES-42 Startup, Shutdown & Maintenance (SSM) (NO_X and SO_2), ES-50-SSM (SO_2):
   a. Provide a description of each flare, the design and type, and its purpose.
   b. List and describe the reasons that trigger each type of flaring event. This is to identify and clarify the causes to help find potential solutions to reduce flaring emissions.
   c. Complete a review and include an analysis about how the entire facility and/or source specific operations can be improved to reduce the frequency of SSM flaring events. If it is not possible to make any improvements to the facility or its processes to reduce SSM flaring events, then please explain why.
   d. Include a discussion of any potential alternative control options or operational changes that could reduce flaring NO_X and/or SO_2 emissions, including but not limited to,

i. infrastructure that allows re-routing or recirculating the gas within the facility or outside of the facility until an SSM event is over;
ii. sulfur absorbent technology used to remove sulfur from pipelines and other auxiliary equipment to reduce inlet or plant flaring SO_2 emissions;
iii. Gas Capture Plans with facilities located downstream and upstream similar to those required for producers to better synchronize upstream and downstream services with the IBGP;
iv. use of remote capture equipment; and
v. better infrastructure planning and changes to existing infrastructure that connects the downstream and upstream operations to the IBGP to ensure that there is adequate processing capacity to move produced gas to market.

e. For any technically feasible solutions, complete and submit a four-factor analysis. For additional information regarding potential alternative controls to flaring see the New Mexico Methane Strategy webpage.

2. **Simple Cycle Natural Gas Fueled Turbines**

Please provide the following information for Four Factor Analyses for NO_X from Simple Cycle Turbines Unit Numbers ES-06/07, EP-08/09, and ES-10/11:

a. Provide the Good Combustion Practices and the routine maintenance schedule and procedures that are currently used to help mitigate NOx emissions and are proposed as a feasible control.
b. Provide vendor specifications for the SoLoNO$_X$ Dry Low NOx (DLN) combustion technology that includes the guaranteed NO_X emission rates used in cost analysis, the cost information, recommendations, and equipment specifications for the turbine control estimates.
c. How will upgrading the turbine combustors with SoLoNO$_X$ affect the turbine capacities and the emission rates of NO_X and CO?
d. Provide the documentation from the turbine vendor stating why water injection is not technically feasible for Solar Turbines.
e. Provide the basis for the following statement; "communication with Solar has indicated that SCR *[selective catalytic reduction]* controls are available for each of the turbine models assessed here but the facility engineers have determined the additional power demands required to install SCR controls on the turbines are infeasible". Is the increase in power demand not technically feasible or too costly? If this determination is based on cost, then a cost analysis that includes the increase in energy demand, must be provided.
f. Consider and include a discussion on the feasibility and cost of load management including limited operating hours to reduce emissions.
g. Provide the electronic spreadsheets used for control technology cost calculations.
h. Please include a discussion of the following control options to reduce NO_X emissions:
    i. catalytic combustion such as a XONON^{TM} developed by Catalytic Combustion Systems, Incorporated (CESI);
    ii. lean and staged (DLN) combustors from turbine manufacturers other than Solar and complete a Four-Factor analysis on technically feasible options. That Solar does not manufacturer a particular control method or turbine combustor is not grounds for eliminating an option for technical reasons.

Please note that per EPA's Guidance on Regional Haze State Implementation Plans for the Second Implementation Period (August 20, 2019), "as part of meeting the requirement of the Regional Haze Rule for the state to document the cost and engineering information on which the State is relying every source-specific cost estimate used to support an analysis of control measure must be documented in the SIP". If you feel that your supplemental information should be classified as confidential business information (CBI), it will need to be reviewed and approved as such by NMED and EPA. Submit CBI with

the word 'confidential' included in the electronic file name and on each page of the document. Do not combine non-confidential business information and CBI in the same files. Also, the claimant must satisfy the conditions in 20.2.1.115.B(3)(a)-(d) NMAC when the CBI is submitted. Until NMED and EPA determines if the information qualifies as CBI, the information will not be disclosed to anyone other than those listed in 20.2.1.115 NMAC.

NMED respectfully requests that your company submit the additional information on four-factor analysis electronically as soon as possible to Mark Jones at mark.jones@state.nm.us and myself at kerwin.singleton@state.nm.us. Please contact NMED if you have questions about the additional information request. We encourage your questions in order to help expedite the technical analysis required under the Regional Haze Program. Staff would be happy to meet with you in person to discuss these requirements in more detail. Likewise, staff may further contact you with questions or require additional information during its review of your submittals.

Thank you for your assistance in this matter. If you have questions or need clarification, please contact me at (505) 476-4350, or Mark Jones at (505) 566-9746.

Sincerely,

Kerwin Singleton

Digitally signed by Kerwin Singleton
Date: 2019.12.23 13:15:37 -07'00'

Kerwin C. Singleton
Planning Section Chief

xc: Jane Romero Kotovsky, Trinity Consultants, jromero@trinityconsultants.com