



Gas Pipeline – Transco
2800 Post Oak Blvd.
Houston, Texas 77056

Via Electronic Mail

September 26, 2011

Mr. Alexander Ryan-Bond (arbond@otcair.org)
Ozone Transport Commission
Hall of the States
444 North Capitol Street, Suite 638
Washington, DC 20001

Re: Comments on the OTC Model Rule for Control of NO_x Emissions from Natural Gas Pipeline Compressor Fuel-Fired Prime Movers

Dear Mr. Ryan-Bond:

Transcontinental Gas Pipe Line Company, LLC (Transco) hereby submits the following comments in response to the Ozone Transport Commission (OTC) Model Rule for Control of NO_x Emissions from Natural Gas Pipeline Compressor Fuel-Fired Prime Movers (Model Rule). Transco welcomes the opportunity to provide these comments and additional information to improve OTC's understanding of natural gas transmission prime movers, including technology, emissions performance, and background on Transco operations in the OTC region.

Transco is a subsidiary of The Williams Companies, Inc., with general offices located in Houston, Texas. Transco owns and operates a bi-directional interstate natural gas pipeline transmission system extending from Texas to the Northeast through the southern and mid-Atlantic states. Transco currently operates natural gas pipeline compressor prime movers in four OTC states: Maryland, New Jersey, Pennsylvania, and Virginia.

Since the mid-1990s, Transco has implemented NO_x emission reduction projects on numerous natural gas fired compressor prime movers located in these four OTC states in response to state level Reasonably Available Control Technology (RACT) requirements and in response to federal NO_x SIP Call Phase II Rule requirements. Based upon these NO_x reduction efforts, the large majority of Transco prime movers located in these states are already controlled to NO_x emission rates near or marginally above the levels proposed in the draft model rule.

Comments on the Draft Model Rule

Due to the short timeframe for development of comments, Transco did not prepare expansive company specific comments on the OTC draft model rule. Instead, Transco worked closely with members of the Interstate Natural Gas Association of America (INGAA) in the development of industry comments on

the draft model rule. Transco fully endorses INGAA's comments on the model rule, including the following key points:

- OTC should carefully assess the NO_x reductions available from natural gas transmission prime movers in the region. INGAA's initial review of available data indicates that most compressor drivers in northeast states are already controlled, with controlled NO_x emission levels marginally higher than the limits proposed in the Model Rule. Pursuing incremental reductions for these units would incur significant costs with minimal benefit. Limited available reductions raises questions regarding the need for the Model Rule.
- Emission limits are overly stringent and should properly consider proven technology performance for *retrofit* control of existing units. Recent NSPS considered implications of retrofit technology, and NSPS limits are appropriate for the Model Rule. In addition, an 80% NO_x reduction target is reasonable for reciprocating engines, but a lower threshold is appropriate for turbines, which have inherently lower baseline emissions.
- The Model Rule should include flexible approaches – i.e., emissions averaging should be allowed and a company should be able to apply averaging statewide (i.e., across multiple facilities within the state).
- A more reasonable schedule is required to implement NO_x controls for the fleet of existing prime movers. The proposed schedule is infeasible and could result in reliability problems associated with natural gas delivery to northeastern states.
- Compliance monitoring should allow use of portable NO_x analyzers. Monitoring should be based on annual tests, allow "skip tests" and/or an operating hours based threshold, and allow testing a subset of multiple similar units at a site. Additional compliance assurance should be achieved based on an operator-defined O&M Plan rather than the multiple plans proposed in the Model Rule.
- The Model Rule should more appropriately consider technology limitations for retrofit application of emission controls to natural gas transmission prime movers. These limitations have implications for the emission standards at reduced load and applicable *proven* technology.
- Higher size thresholds are warranted. INGAA recommends 1000 hp or higher for reciprocating engines and 5 MW (6700 hp) for turbines. These thresholds consider the population of equipment, controls from other standards (i.e., NESHAP controls for rich burn engines 1000 hp and smaller), and technology limitations. In addition, a higher use threshold should be considered.
- "Nameplate" rating is an ambiguous term. Based on examples from other regulations, unit capacity for determining applicability should be based on "ISO" standard conditions for turbines and "site rated" capacity for reciprocating engines.
- The temporary replacement provisions should clearly indicate its applicability to replacement of an entire unit and not sub-components that may be associated with routine maintenance.
- Reporting and Recordkeeping requirements should be revised consistent with other recommended changes and to consider Part 70 or Part 71 reporting.

For additional information on each of these topics, please see the full comments submitted by INGAA.

Please note that Transco has implemented NO_x emission reductions on more than 170 natural gas compressor prime movers in eleven states. As a result, Transco has significant experience with the issues and challenges associated with implementation of NO_x emission reduction projects, including the selection of emission reduction technologies as well as the timelines required for implementation of multiple, concurrent NO_x emission reduction projects. Transco also has significant experience with ongoing compliance monitoring associated with NO_x emission reduction projects. Based upon this experience, Transco offers the following additional comments on the draft OTC model rule.

- The OTC model rule must provide additional compliance flexibility for affected companies. As proposed, the model rule prescribes emission limitations on an individual unit basis – and does not allow a company to consider emissions averaging within a facility or within a geographic area (i.e. state). Based upon Transco’s past experiences, the flexibility to retrofit, retire, and/or replace affected units to achieve overall NO_x emission reduction targets is a key component to implementation of timely, cost effective NO_x emission reduction projects. A more flexible rule would allow companies to achieve targeted NO_x emission reductions through a combination of actions including over-controlling units that are known to respond well to NO_x control technology, while under-controlling units that do not respond well to NO_x control technology. In addition, a flexible compliance approach should allow NO_x emission reductions achieved through the retirement and/or replacement of affected units to be included in the overall compliance evaluation.
- The January 2015 compliance timeline specified in the draft OTC model rule is infeasible due to supply and scheduling issues that include technology availability (i.e., vendor supply limitations); receipt of required regulatory authorizations (i.e. air permits, FERC authorization); integrating downtime into schedules to avoid natural gas service interruption; consideration of budget cycles; and time necessary to commission and debug the control technology. Based upon Transco historical experiences with NO_x emission reduction projects, a typical compliance timeline for an affected natural gas pipeline facility is 36 months after the requirements are made definitive – in this case, 36 months after the final OTC model rule is implemented at the state level. Transco recommends that the final OTC model rule allow each state to work with affected companies to develop an appropriate compliance schedule.

Although Transco provided limited company specific comments due to the short comment period, Transco can provide additional information on these or other specific topics upon request.

Comments on the MARAMA 2007 Base Year Point Source Inventory

In addition to reviewing the draft model rule, Transco reviewed the MARAMA 2007 Base Year Point Source Inventory and identified some issues with the inventory data. As a result, Transco requests revision to the emission inventory data, specifically for its Maryland facility.

Accurate emissions factors are needed to model the effect of fine particulate matter (PM) and ozone emissions in the Northeast and Mid-Atlantic/Northeast Region. During its review of the MARAMA 2007 Base Year Point Source Inventory, Transco noted problems with the existing inventory in the use of cumulative emission points at Transco’s Maryland facility. Numerous emissions sources at the facility are represented in the inventory by one cumulative record. The use of a cumulative emission point leads to the incorrect assumption that there exists a large emission source that could potentially be subject to regulations developed in support of a State Implementation Plan (SIP), or implementation activities for the regional haze and fine particulate matter (PM) and ozone Nation Ambient Air Quality

Standards (NAAQS). To resolve this issue, Transco requests elimination of the incorrect cumulative records, and addition of individual point source records.

Transco has provided a detailed explanation of the requested changes and the reasons for the requested changes on a point source by point source basis for the Maryland facility. Attached please find an electronic data file [MARAMA_Corrected Data_Transco FIPS 24027.xls](#) which includes the corrected data records for the 2007 Base Year Point Source Inventory. Also attached is a copy of the 2007 Emission Certification Report/supporting documentation submitted to the Maryland Department of the Environment; this information is provided to corroborate Transco's request. Please note that Transco submitted a similar request for correction of the inventory to both MARAMA and the Maryland Department of Environment in November 2009.

Transco appreciates the opportunity to provide comments on the OTC draft model rule and the MARAMA 2007 Base Year Point Source Inventory. If you have any questions or require additional information, please feel free to contact me at (713) 215-4562 or mary.beth.whitfield@williams.com.

Sincerely,

Mary Beth Whitfield

Mary Beth Whitfield, REP, CIPS
Principal Environmental Scientist
Environmental Compliance
Williams Gas Pipeline - Transco

Attachments

- Electronic data file [MARAMA_Corrected Data_Transco FIPS 24027.xls](#)
- Electronic data file [Station 190_2007 Emissions Certification Report.pdf](#)

cc by email: Ali Mirzakhali, Delaware NREC (ali.mirzakhali@state.de.us)
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