

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

Natural Gas Interchangeability )

Docket No. PL04-3-000

COMMENTS OF THE NATURAL GAS SUPPLY ASSOCIATION

On February 28, 2005, the Natural Gas Council (“NGC”) filed two reports in the above captioned docket: White Paper on Liquid Hydrocarbon Drop Out in Natural Gas Infrastructure (“Hydrocarbon Liquid Drop Out White Paper”) and White Paper on Natural Gas Interchangeability and Non-Combustion End Use (“Interchangeability White Paper”), collectively referred to as “White Papers”. Representatives of the NGC summarized the reports at the Federal Energy Regulatory Commission (“FERC” or “Commission”) March 2, 2005, Open Meeting and the Commission issued a Notice Seeking Comments (“Notice”) on the reports on March 2, 2004.

Pursuant to the Notice, the Natural Gas Supply Association (“NGSA”) submits the following comments for the Commission’s use in determining how to use the White Papers in technical and policy decisions addressing issues of natural gas quality and natural gas interchangeability. Correspondence regarding the comments in this proceeding should be directed to -

Jennifer Deegan, Director of Energy Markets  
Natural Gas Supply Association  
805 15<sup>th</sup> Street, NW  
Suite 510  
Washington, DC 2005  
[jdeegan@ngsa.org](mailto:jdeegan@ngsa.org)  
202-326-9317 (phone)  
202-326-9331 (facsimile)

NGSA recognizes the value in the important milestone reached by the collaborative process of Natural Gas Council in the development of the White Papers. Through the unprecedented effort of the individuals involved in the task forces, the industry developed a common vocabulary that fostered a technical understanding of how to maximize supply while maintaining the downstream safety and operational integrity needed to minimize risks from natural gas quality and interchangeability issues. Absent the collaborative technical look at the natural gas quality and interchangeability<sup>1</sup> issues over the last year, it is possible that the industry could have ended up with an overly conservative natural gas quality requirement to remove virtually all but methane from the natural gas stream, limiting supply and resulting in unnecessary costs.

NGSA stands behind the technical findings of the White Papers. While policies surrounding implementation may continue to be a point of discussion within the industry, the White Papers identify consensus technical approaches to determine hydrocarbon dew point and evaluate interchangeability. Prior to the collaborative effort, the industry faced a wide range of technical approaches and methodologies for looking at these issues. The

---

<sup>1</sup>The Interchangeability White Paper at page 2 defines interchangeability as “the ability to substitute one gaseous fuel for another in a combustion application without materially changing operational safety, efficiency, performance or materially increasing air pollutant emissions.”

industry risked regulatory uncertainty from decisions based on arguments from parties that did not have a common technical understanding.

In satisfying safety concerns, the White Papers provide the industry with two key benefits: 1) precision regarding the evaluation of interchangeability through the use of the Wobbe and a limit on inert gases, *inter alia*, and 2) consensus on how to use cricondenthem and a phase diagram to establish the hydrocarbon dew point on a pipeline, which maximizes supply while recognizing safety.<sup>2</sup> In stark contrast to the multitude of competing technical methodologies for measuring natural gas quality and evaluating interchangeability that were espoused prior to the consensus effort, the industry has agreed on the best technical approaches.

With regard to hydrocarbon liquid drop out, the technical group agreed to a uniform methodology for pipeline determination of cricondenthem hydrocarbon dew point<sup>3</sup>, which maximizes supply without compromising downstream safety. Prior to the consensus effort, natural gas quality was looked at via heating value or composite concentrations of heavier hydrocarbons<sup>4</sup>.

Simplifying the evaluation of interchangeability, the industry has agreed on four technical criteria: a Wobbe maximum of 1400, subject to a 4% tolerance band relative to the local historical Wobbe; a maximum 4% inert level (CO<sub>2</sub> plus N<sub>2</sub>); and a maximum butanes plus limit of 1.5 mole percent. The consensus decision to use the Wobbe as a

---

<sup>2</sup>In a natural gas stream, the hydrocarbon dew point is the temperature at which gaseous hydrocarbons in the natural gas stream will begin to condense at a given pressure to produce a mixture of gas and liquid. Cricondenthem is the highest temperature at which it is possible to form a liquid.

<sup>3</sup>The uniform methodology for establishing a cricondenthem hydrocarbon dew point limit is provided in the Hydrocarbon Liquid Drop Out White Paper Appendix B at page 30.

<sup>4</sup>Hydrocarbon liquid drop out control measures are discussed more fully in the Hydrocarbon Liquid Drop Out White Paper at pages 15 and 16.

foundation measurement greatly simplifies the evaluation of interchangeability. For instance, prior to the consensus, interchangeability could be evaluated via a number of technical methodologies including single and multiple index methods that included the Weaver indices for flame lifting, yellow-tipping and incomplete combustion.<sup>5</sup> While Wobbe is not perfect, the technical group has agreed that it is good enough for now to establish interchangeability limits in pipeline tariffs.

In addition to achieving consensus on new criteria that maximize supply and provide important certainty to the industry, the consensus process made the regulatory outcome much more predictable, bringing our business and regulatory risk to commercially acceptable levels. It is NGSAs belief that prior to the consensus process, the “over-processing” solution – potentially the most costly option to the consumer – was viewed by many as the only option from a safety standpoint. Through the consensus process, the industry learned the same technical language, has agreed to technical methodologies and understands there is a *safe* solution that also maximizes supply. NGSAs sees this understanding as the foundation of sound regulatory policy decisions that will decrease both business and regulatory risks.

In deciding how to address natural gas quality and interchangeability, the Commission should adopt the White Papers as the technical foundation underpinning immediate policy decisions that will add certainty to the marketplace. During the March 2, 2005, Open Meeting, the Commission seemed to draw the conclusion that the industry still does not have enough information to add gas quality certainty to the pipeline tariffs.

---

<sup>5</sup>The various methods for evaluating interchangeability are discussed more fully in the Interchangeability White Paper at pages 7 and 8.

This is not so. The certainty that will come from policies based on the existing technical work is essential to continued supply development. NGSA believes that future research and development is likely to allow for a wider range of the natural gas quality and interchangeability requirements.

NGSA suggests that the FERC employ two broad principles in making decisions about natural gas quality and interchangeability. First, natural gas quality and interchangeability policy and decisions must reduce uncertainty in the marketplace. For instance, a reduction in uncertainty is achievable in part through pipeline incorporation of natural gas quality and interchangeability specifications into individual pipeline tariffs based on the technical findings. To prepare supply for market, a producer or marketer of natural gas must know the natural gas quality requirements with certainty in order to properly design any necessary infrastructure. This certainty is vital to the continued economic development of domestic and imported natural gas resources.

Second, the policy for implementing natural gas quality and interchangeability specifications must be simple so that it does not have the effect of adding an unintended and unnecessary layer of regulatory risk or duplicative analytical work. If a producer does not know how a gas quality policy may be applied, mere regulatory uncertainty could impede the development of supplies, thereby harming the efficiency of the marketplace while causing the diversion of supplies to areas that may have less uncertainty. Above all, the policy for addressing natural gas quality and interchangeability should be pragmatic and work for the country as a whole.

Undoubtedly, the challenge facing the FERC and the industry is in the creation and implementation of natural gas quality and interchangeability policies that are essential for

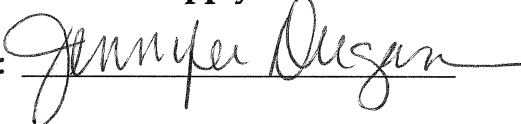
continued growth. However, the FERC must, at the same time, avoid a prescription that homogenizes the natural gas stream beyond the level required for safety that would bring the nation to a natural gas quality range that is so restrictive that it eliminates economically viable supply options.

### **CONCLUSION**

The question of natural gas interchangeability is complex and to a large extent fact-specific. Because it is complex, NGSA believes it is essential that FERC policy be pragmatic and reduce uncertainty in the marketplace. The key to successful policy decisions will be an approach that allows for, and encourages, a continuation of the current natural gas quality flexibility that exists today, while simultaneously ensuring greater regulatory certainty, and thereby encouraging a continuation of the most efficient and economical supply response.

Respectfully submitted,

**Natural Gas Supply Association**

By: 

Jennifer B. Deegan  
Director of Energy Markets  
Natural Gas Supply Association  
805 15<sup>th</sup> Street, N.W., Suite 510  
Washington, D.C. 20005  
202-326-9317 (phone)  
202-326-9331 (fax)

March 16, 2005