UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Natural Gas Interchangeability) **Docket No. PL04-3-000**

COMMENTS OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

Pursuant to the Commission's notice issued May 19, 2005, seeking comments on the Petition for Rulemaking on Natural Gas Quality and Interchangeability filed with the Commission by the Natural Gas Supply Association ("NGSA") on May 16, and seeking further comments on the previously-filed NGC+ White Papers on those subjects,[1] the Interstate Natural Gas Association of America ("INGAA") submits the following comments. INGAA, an active participant in the collaborative process that produced the White Papers, represents the interstate and interprovincial natural gas pipeline industry operating in North America. INGAA's United States members, which account for over 90 percent of all natural gas transported and sold in domestic interstate commerce, are regulated by the Commission pursuant to the Natural Gas Act, 15 U.S.C. §§ 717-717w.

[1] *White Paper on Liquid Hydrocarbon Drop Out in Natural Gas Infrastructure* and *White Paper on Natural Gas Interchangeability and Non-Combustion End Use*.

I. EXECUTIVE SUMMARY

A. Implementation of the NGC+ White Papers

Nationwide standards for hydrocarbon drop out and interchangeability are a laudable goal. The challenge in articulating and implementing a policy to achieve this goal is that there is variability in the composition of the supply of gas, variability in pipeline and distributor operations, and variability in end-use requirements and a number of identified unknowns that can be solved only through additional research and equipment testing.

A policy statement is the appropriate procedural vehicle for the Commission to give advance notice of how it will deal with hydrocarbon drop out (also referred to as hydrocarbon dew point, or "HDP")[2] and interchangeability issues as they arise in the future. Given the substantial increase in projected Liquefied Natural Gas (LNG) imports, and the potential reoccurrence of the hydrocarbon drop out problems that surfaced in winter 2000-2001, a policy statement will facilitate long-range planning by all segments of the natural gas industry and by affected stakeholders outside the industry. At this time, however, there is neither a need nor an adequate foundation for generic Commission regulations that require all pipelines to file or amend tariff specifications for liquid hydrocarbon drop out or interchangeability. Neither hydrocarbon drop out nor interchangeability are presently an industry-wide problem. And, as the Interchangeability White Papers make clear, and as Chairman Wood acknowledged in his recent letter to Energy Secretary Bodman,[3] further research is necessary if any national standards are to be adopted with respect to natural gas interchangeability.

[2] HDP refers to a series of matching pressure and temperature points at which hydrocarbons condense into liquid ("drop out") from a natural gas mixture. See HDP White Paper at 18-19, and Figure 4-1.

[3] See Letter of May 20, 2005, urging support from the Department of Energy for federally-funded research on natural gas quality and interchangeability.

Accordingly, INGAA recommends that the Commission issue a policy statement that sets out how the Commission intends to approach the HDP and interchangeability issues that come before it. In several proceedings involving HDP issues, the Commission has already made decisions on certain issues that may properly be incorporated into such a policy statement. These include:

- Pipelines may adopt permanent safe harbor tariff HDP provisions, which guarantee acceptance of compliant gas, along with mechanisms for posting more tolerant specifications that vary over time and receipt point, depending on conditions. *See Natural Gas Pipeline Co. of America*, 104 FERC ¶ 61,322 at PP. 24 and 39 (1993)("*Natural*").

- In establishing maximum HDP limits, a pipeline has the right to require that the gas that it receives into its system will allow it to meet quality specifications of downstream pipelines. *Id.* at PP. 48-53.

- Pipeline enforcement of a quality standard against shippers that inject rich, non-conforming gas is not unduly discriminatory when it is necessary to prevent hydrocarbon drop out or to sustain the pipeline's ability to deliver gas off-system. *Id*. at P. 51.

- Shippers that wish to inject "out of spec" gas into any point or pool of receipt or along any given line segment of a pipeline's system should be required to pay the processing costs needed to bring the gas into conformity. *Id*. at P. 56.

- The complaint process is the method the Commission uses in finding and rectifying discriminatory actions once it accepts appropriate tariff provisions. *Id*. at P. 61.

In addition, INGAA urges the Commission to announce in a policy statement that it intends to adhere to the following principles (more fully described at pp. 12-21 below)[4] in addressing HDP and interchangeability issues as they arise:

- Following a review by all pipelines of their operations and tariffs, those that are facing HDP or interchangeability problems, and have not adequately addressed the

[4] In the interest of brevity at this point, some of the principles set out below have been collapsed into the following nine points,

issues in their tariffs, should make limited NGA § 4 tariff filings to address the problems in accordance with precedent and the following principles:

- Upstream suppliers (producers, processors, gatherers) must take responsibility in the first instance for delivering "pipeline quality" gas into the system and should not inject gases that can cause operational harm to the pipeline.

- Pipelines currently facing hydrocarbon drop out concerns or interchangeability issues should file tariff specifications that govern receipt of gas into their system.

  A CHDP of 15° F is presumptively valid as a hydrocarbon drop out "safe harbor," although a pipeline may establish a different safe harbor if the + 15° CHPD[5] is not adequate to protect its system, or clearly exceeds what is necessary.

  If a pipeline must address interchangeability specifications in its tariff, it should work with shippers, suppliers and customers to determine the appropriate interchangeability limits for its system using the NGC+ Interchangeability White Paper recommendations as the guide.

- Tariff specifications should apply to pipeline receipt points rather than delivery points, utilize safe harbor concepts to improve inter-pipeline transportation, and there should be a transition period for shippers to adapt to changed specifications.

- Broad merchantability clauses should not be allowed to impose broad warranty and indemnification obligations on the pipelines for third-party gas quality**.**

- Pipelines retain authority to issue operational flow orders ("OFOs") to ensure operational integrity.

- De Minimis exceptions must be made pipeline-by-pipeline, based on operational conditions.

- The Commission supports the Interchangeability NGC+ Working Group's recommendation for further study on, inter alia, the effect of gas supply on end-use equipment.

- The Commission, as part of its outreach program, will encourage state agencies to announce or implement the same policies for intrastate and Hinshaw pipelines.

[5] Cricondentherm Hydrocarbon Dew Point, or equivalent. See HDP White Paper at § 4.2.

B. The Commission Should Reject the NGSA Proposal

The Commission should not adopt NGSA's rulemaking proposal for a number of reasons. First, given that neither hydrocarbon drop out nor interchangeability is an industry-wide problem, and given the consensus on the need for further research with respect to interchangeability, rulemaking procedures are not suited to the problems. Pipelines that are experiencing problems need the flexibility to work with their customers and shippers within the White Paper guidelines, outside the context of rigid regulations. A policy statement in which the Commission announces non-binding principles as to how it is likely to view solutions that pipelines and their customers reach, with the guidance and application of the White Papers, is the proper procedural approach here. A rulemaking, by contrast, because it is binding and subject to judicial review, is more likely to polarize positions that lead to unnecessary litigation.

Second, NGSA's proposal to use downstream delivery points rather than pipeline receipt points as the site for tariff specifications will not work. "Pipeline quality" gas must be established upstream, because, among other reasons, pipelines do not have adequate means to manage gas flows and are not parties to the sales contracts, which should establish the quality of gas the shipper is to deliver to the pipeline receipt point.

Third, NGSA's proposal is inconsistent with the White Paper consensus recommendations in several important respects. For example, NGSA's sanction of a 1400 Wobbe maximum standard for interchangeability ignores the White Paper's critical recommendation to calculate appropriate Wobbe numbers locally, based on historical experience, *subject to the 1400 maximum*. While a nationwide standard is desirable in the abstract, there currently is an insufficient factual record to prescribe any such figure by rule.

Fourth, NGSA's proposed rules are unworkable because they place an unreasonably onerous burden on parties that may wish to challenge the default standards for HDP (A(5)-(6)) and interchangeability (B(4)-(5).

Fifth, while NGSA's proposal to require pipelines to adopt non-discriminatory tariff provisions for aggregation, blending, and pairing may be desirable in the abstract, the practical effect of such a proposal would be to make the pipeline rather than the shippers responsible for creating "pipeline quality" gas. There are a host of reasons why putting such a burden on pipelines is impractical and unfair. One consequence of the unbundling of pipeline merchant operations and the shipper flexibility enhancements following implementation of Order Nos. 436-636 is that pipelines simply have less control over gas flows on their systems. For example, Commission pooling requirements and shippers' ability to make multiple intra-day nominations make it virtually impossible to track and manage the quality of different gas streams. Moreover, pipelines simply do not have sufficient receipt point chromatographs, gas processing information, or the expertise to administer such a responsibility. See discussion below at 24-25. In short, requiring pipelines to publish detailed "non-discriminatory" tariff provisions spelling out how they will manage the pipeline in unforeseeable, dynamic, future situations is untenable, will produce unnecessary rigidity in the process, and result in more reliance on enforcing specifications through shut-ins, with the undesirable end result of reducing the supply of flowing gas.

II. PROPOSED POLICY STATEMENT

A. A Policy Statement Rather than a Rulemaking is Appropriate to the Task

As stated in INGAA's April 1, 2005 comments on the NGC+ White Papers, INGAA was an active participant in the collaborative process leading to those papers, and supports the

technical findings, recommendations, and interim guidelines set out there. While the process set out in the White Papers is an acceptable means of establishing interchangeability specifications on an interim basis for pipelines currently facing those issues, INGAA supports the Interchangeability White Papers' recommendation for additional research, and Chairman Wood's letter of May 20, 2005, to Energy Secretary Bodman, urging federally-funded research on natural gas interchangeability. At this stage, however, there is neither a need for nor an adequate foundation for Commission regulations that require pipeline tariff specifications for interchangeability.[6]

With regard to hydrocarbon drop out, while the White Paper established the methodology for establishing an HDP, a significant number of INGAA members applying the HDP While Paper methodology determined that a +15° F HDP safe harbor would prevent liquid hydro dropout, the White Paper was silent on the appropriate HDP or whether a nation-wide HDP was practical.

The need for a policy statement rather than a rulemaking is supported by a number of considerations. First, there is not an industry-wide problem with regard to either HDP or interchangeability that is amenable to industry-wide regulations. While the Commission may rely on generic or general findings to support imposition of an industry-wide solution, "proportionality between the identified problem and the remedy is the key." *INGAA v. FERC*, 285 F.3d 18, 37 (D.C. Cir. 2002); *Associated Gas Distributors v. FERC*, 824 F.2d 981, 1019 (D.C. Cir. 1987). Many interstate pipelines have no present problems on their systems with hydrocarbon drop out or interchangeability because, for example, they operate exclusively in

[6] INGAA agrees with Florida Power & Light, *et al*. that it "would be inappropriate for the Commission . . . to move forward with inadequately supported interim guidelines that have not been fully researched and are unproven for a large group of end users." See letter to Commissioners filed in this docket on June 3, 2005.

temperate climates or are not interconnected with LNG facilities. Other pipelines already have tariff provisions that adequately address both issues. Finally, some pipelines are resolving particular gas quality issues through settlement or litigation.[7] Virtually all of those commenting on the White Papers acknowledged that hydrocarbon drop out and interchangeability issues vary from one pipeline to the next.[8] In these circumstances, where problems exist "in isolated pockets[,]" *Associated Gas Distributors, supra*, 824 F.2d at 1019, rulemaking procedures are unsuitable.

Second, there is not an adequate record on which to base specific regulations. With respect to HDP, in terms of specifications that could be incorporated in pipelines tariffs, the HDP White Paper found that use of a CHDP was valid and offered the greatest operational flexibility for use as a control parameter, see HDP White Paper at §§ 7.1.3 and 7.1.4, but did not make findings as to an appropriate HDP for any pipeline system, not to mention a national HDP. The HDP White Paper recommended additional research to develop accurate HDP measurement. *Id.* at § 7.1.9. While a significant number of INGAA members, applying the HDP White Paper Appendix B methodology, determined that 15° F would protect the majority of end-use equipment on their systems, this is not an adequate basis for the Commission to prescribe such a figure.[9]

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[7] See Docket No. RP04-435, *ANR Pipeline Co.*, Docket No. RP01-503, *Natural Gas Pipeline Company of America*, and Docket No. RP04-249-001, *AES Ocean Express LLC v. Florida Gas Transmission Co.*

[8] See, e.g., AGA Comments of April 1, 2005, at 27; NGSA Supplemental Comments of April 1, 2005, at 10-11, 20.

[9] In the ongoing proceedings involving HDP specifications, the principal outstanding issue set for hearing is the adequacy of the data in support of system-wide 15° F CHDP safe harbor specification proposed by Natural in RP01-503 and ANR in RP04-435. See *ANR*, 108 FERC ¶ 61,323 at P. 19 (2004); *Natural*, supra,104 FERC at P. 62.

Similarly, with respect to interchangeability, the White Paper did not establish an adequate basis for nation-wide or even pipeline-system-wide specifications. Rather, the interim guidelines proposed in the White Paper contemplate calculation of specifications based on local historical averages. *See* Interchangeability White Paper at p. 27. Moreover, the White Paper stressed the existence of "data gaps" and the need for further research. *Id*. at p. 21, P.28 ("[i]t has become apparent . . . that significant data gaps exist that inhibit non-traditional supplies from entering the North American market[,]" and "an aggressive schedule [i.e., two year time frame from 2005] is necessary to minimize risks associated with any interim guidelines adopted while awaiting the additional information needed to allow LNG import and additional domestic supplies maximum penetration into the North American market."); *id.* at 25 (major gaps in data; use of interim guidelines depends on filling major data gaps). Even the consensus among the industry stakeholder groups to propose interim guidelines "relies upon establishing a process and timeframe for filling the technical gaps based on sound scientific analysis and testing."). *Id*. at 23, P. 8. The need for more research on the safety, environmental, and performance characteristics of end use equipment (e.g., turbines) was a particular concern that led the NGC+ Work Group to outline a systematic program.

Third, the generic goal of "designing" a natural gas stream that will maximize the supply of natural gas that meets end-use specifications is not a goal that the FERC can achieve by imposing a set of rigid specifications across all pipelines. With regard to HDP, while the imposition of a single HDP level across the nation may be desirable in the interest of uniformity, it may work to restrict gas where it would otherwise normally flow, or force gas to flow where it will create problems. Similar considerations counsel against the

Commission establishing a single set of standards for interchangeability. While desirable from the perspective of providing LNG importers with certainty that gas processed to a certain level will be acceptable universally within U.S. market, given the need for additional research and equipment testing, the Commission is nowhere near being able to set such numbers on a basis that will be broadly accepted by the market and that has sufficient record support to withstand judicial review. Furthermore, even if one accepts that such numbers can be established, there will often be circumstances where more flexible, i.e., lenient, numbers will enable more gas to flow. In each case, the location of the interconnection with the LNG facility or other non-traditional supply (i.e., coal bed methane) will determine whether there will be a direct effect on end users that cannot be mitigated by "coincidental blending" (i.e., the blending of different quality gas streams that occurs without pipeline or other parties' active management) in the supply area or a direct impact on end users. While markets located downstream of such coincidental blending will allow broader interchangeability standards, a market that consumes LNG with little or no coincidental blending will require interchangeability standards that are much tighter. In addition, some markets (e.g., those which have a significant number of low NO_X gas turbine electric generation units) will require specifications that may be tighter than required by other markets. Thus, a single set of criteria could either frustrate the entry of LNG in some cases or allow the flow of LNG outside of an acceptable interchangeability range in other cases, or both.

Fourth, the Commission should recognize that to the extent that conditioning or processing natural gas is necessary to meet the standards for general pipeline-quality gas, the responsibility for such processing and conditioning (i.e., the cost) should be decided as a part of the purchase and sales transaction between supplier and end user (or marketer standing in

place of one or both). The pipeline as transporter is now only a conduit for the gas and has no control over the source of the gas or the economics of the sale and processing. Those conditioning and processing decisions are up to the buyer and seller, each of which successively holds title to the gas. Thus, it is up to the holders of title to condition and process the gas to meet the standards for general pipeline-quality gas which will allow for transportation in a general commingled stream. The Commission should allow this negotiation process to continue to operate independent of the transportation component in the chain. The Commission, however, should recognize that pipelines may properly refuse to accept gas when necessary to protect the transportation component of the chain.

In sum, without a well-developed record, any attempt by the Commission to impose something approximating a one-size-fits-all solution upon gas consumers through a rulemaking cannot be supported based on substantial evidence or reasoning, and will likely be met with strong resistance and likely litigation from one or more industry segments. See, e.g. *Natural*, 104 FERC at P. 38 (issue of appropriate HDP "hotly contested."). A notice and comment rulemaking under the Administrative Procedure Act (APA), 5 U.S.C. 553, as proposed by NGSA, is a procedural approach that does not fit.

Nevertheless, given recent occurrences of shippers introducing unprocessed gas into pipelines, and particularly the projections of need for LNG in the near future, see Interchangeability White Paper at § 1.0; HDP White Paper at § 2.3, there is a need for some guidance regarding the Commission's policy with respect to gas quality and interchangeability. The appropriate procedural approach for the Commission at this time is a "general statement of policy," issued pursuant to the APA, 5 U.S.C. § 553(b)(A). Under the APA, an agency may issue a general statement of policy that announces to the public the

policy that the agency hopes to implement in future rulemakings or adjudications. It differs from a rule in that it does not have binding or precedential effect because the agency retains its discretion to depart from the policy if circumstances warrant. *Panhandle Eastern Pipe Line Co*. v. FERC, 198 F.3d 266, 269 (D.C. Cir. 1999). In *Pacific Gas & Elec. Co. v. FPC*, 506 F.2d 33, 38 (1974), the Court observed that "[t]his advance-notice function of policy statements yields significant informational benefits, because policy statements give the public a chance to contemplate an agency's views before those views are applied to particular factual circumstances. This opportunity to anticipate the agency's actions "facilitates long range planning within the regulated industry and promotes uniformity in areas of national concern." *See also Interstate Natural Gas Ass'n v. FERC*, 285 F.3d 18, 59 (D.C. Cir. 2002) ("Policy statements" differ from substantive rules that carry the "force of law," because they lack "present binding effect" on the agency).

B. Proposed Policy Statement

The Commission has already established certain principles in the pending proceedings with respect to HDP that INGAA supports and that could be reiterated as Commission policy. In the *Natural* case, 104 FERC ¶ 61,322, the Commission made a number of specific rulings that effectively establish its policy on certain fundamental issues. Thus, the Commission made the following determinations:

- Pipelines may incorporate a permanent safe harbor HDP provision in their tariffs. That gas, however, must still meet other gas quality standards in the pipeline's tariff. Id.

Comment: Such a permanent safe harbor provision serves to protect pipelines and shippers against discrimination and allegations of discrimination. See *id*. at P. 38.

- A pipeline may post on its website HDP limits for gas receipts that may vary over time and from place to place on its system [subject to the permanent system-wide safe harbor level], depending upon current conditions." *Id.* at P. 39, 41. Changes would be

subject to 30-days notice, and a requirement that the pipeline provide information regarding its calculations.

Comment: The Commission observed that giving the pipeline "this flexibility would benefit shippers, by permitting [the pipeline] to accept rich gas on parts of the system where it could blend that gas with gas with fewer liquids." *Id*. at P. 39. See also *Indicated Shippers v. Columbia Gulf Transmission Co.*, 106 FERC ¶ 61,040 at P.37 (2004) (describing tariff provisions approved in *Natural*).

- In establishing maximum HDP limits on the content of gas entering its system, a pipeline has the right to require that gas received into its system allows it to meet quality specifications of downstream pipelines. *Natural*, 104 FERC at P. 42, 48-53; accord, CIG, 103 FERC ¶ 61,058 at P. 3 (2003).

Comment: In so deciding, the Commission observed that this is consistent with its goal to achieve a seamless grid, P. 49, and rejected producer arguments to the effect that a pipeline's producers and shippers should not be forced to incur additional processing costs to meet the downstream pipeline's specifications where such costs are not required to meet the upstream pipeline's operational requirements and are not justified by incremental transportation revenue. P. 47; see also P.53:

> Indicated Shippers essentially asks the Commission to allow shippers of rich gas to shift the burden of bringing non-conforming gas to the tariff's standard onto other shippers, which may be unjust and unreasonable. . . . [W]e shall not require Natural to do a cost/benefit analysis to balance the incremental transportation revenues derived by Natural from off-system deliveries against the incremental cost incurred by producers and shippers processing gas.

- "[A]pplication of a quality standard to shippers that inject rich, non-conforming gas is not unduly discriminatory when operational constraints require [a pipeline] to enforce … its tariff to prevent liquids fallout or sustain the pipeline's ability to deliver gas off-system on behalf of its customers. Id. at P. 51 (citing Consolidated Edison Co. v. FERC, 165 F.3d 992, 1013 (D.C. Cir. 1999), for the proposition that operational constraints in particular parts of a pipeline system may justify treating shippers differently).

Comment: This policy reaffirms basic principles as to what constitutes undue discrimination under the NGA.

- [S]hippers injecting rich gas into any point of receipt or along any given line segment of [a pipeline's] system where the quality specifications are more stringent —not shippers nominating gas for delivery out of such points —should be required to pay the processing costs needed to make the gas meet the more stringent standards, since it is their rich gas creating the problem." Id. at P. 56.

Comment: The Commission observed that "[s]hippers injecting rich gas where more stringent gas quality standards are imposed should bear the cost of additional processing, not other shippers who are only taking delivery from those points." *Id.* at P. 57.

- "The complaint process is the method the Commission uses in finding and rectifying discriminatory actions once it accepts appropriate tariff provisions." Id. at P. 61.

Comment: In response to shipper allegations that the complaint process is not sufficiently expeditious or cost-effective in adjudicating discrimination complaints in this context, the Commission confirmed that NGA § 5 is the statutory means of seeking relief, and that the Commission has sufficient remedies available.

In addition to these policies that have already been resolved in particular litigation, INGAA proposes that any Commission policy statement on hydrocarbon drop out and gas interchangeability include the following features:

- **Tariff Filing**: All pipelines should review their operations and tariffs to determine whether hydrocarbon drop out and interchangeability are adequately addressed. Pipelines that currently are facing hydrocarbon liquid drop out or gas interchangeability problems and which do not already have proceeding pending would file tariff provisions that address those issues in accordance with the additional general principles that follow.

Comment: Pipelines that are not experiencing such problems, and pipelines that either have filed or have Commission-approved tariff provisions in place that already adequately address those issues, would be under no obligation to file revised tariff provisions.

Consistent with the Commission's decision in *Natural*, 104 FERC at P. 61, disputes over whether such a filing is necessary would be resolved pursuant to NGA § 5.

- ***Gas Conditioning Obligations***: As a general rule, it is the obligation of shippers and upstream suppliers (producers, gatherers, processors) to perform any conditioning and take any other actions required to be able to tender to the pipeline natural gas that meets hydrocarbon liquid drop out and interchangeability specifications established by the pipeline.

  Comment: In substance, this reiterates the policy that the Commission has already adopted in the *Natural* case where it held that shippers who inject "out-of-spec" rich gas must bear the cost of processing it. *See, e.g.*,104 FERC at P. 13.

- ***Limited Section 4 Filings***: Tariff filings pursuant to this Policy Statement should be made pursuant to Section 4 of the NGA, and all proceedings filed pursuant to the Policy Statement will be limited to the issues of hydrocarbon drop out and interchangeability.

  Comment: This is consistent with the approach the Commission took in Order No. 636 and other proceedings in order to address discrete issues, and to foreclose parties from expanding such filings and making them a platform for airing other grievances.

- ***Hydrocarbon Dewpoint (HDP)***: If a pipeline must address hydrocarbon liquid drop out specifications in its tariff, the pipeline may adopt and implement a safe harbor/limit of +15 degrees F.

  A pipeline may establish a different safe harbor specification for its system or regions or points on its system, or different specifications for different regions or points on its systems, if it can demonstrate that the +15 degree F CHDP safe harbor number will not adequately guard against liquid drop out on its system, or if that level clearly exceeds what is necessary.

  A pipeline may post higher, or no, HDP limits for all or a portion of its system to the extent allowed by operating conditions.

  Comment: The +15 degree F specification would act as a guarantee for shippers that gas tendered at or below that CHDP level would be accepted into the pipeline's system. Applying the Appendix B methodology from the HDP White Paper, a significant number of

the INGAA member companies that do not currently have an HDP specification in their tariffs have found that +15 degrees F Cricondentherm HDP (or equivalent C6+ GPM number) would prevent liquid hydrocarbon dropout in their pipeline systems and the delivery to their customers. Thus if required to file new or amended tariff specifications, a +15 degree F safe harbor would appear to be a good starting place for a default standard that balances the goals of maximizing gas supply and providing end users with acceptable gas. A CHDP at that level would be presumptively valid.

Further, the fact that local distribution companies, even within the same geographic area, may have different HDP requirements, illustrates the flaw in the AGA position that each pipeline should arrive at *delivery point* specifications that reflect historic customer usage. The AGA approach would result in one of two unsatisfactory outcomes: Under the first alternative, if the pipeline was required to establish different HDP specifications for different customers, it is likely to result in a highly balkanized gas supply market. Supply would not be able to flow freely across the pipeline grid. Further, since pipelines are not able to manipulate supply, or custom blend gas to ensure the delivery of different quality gas to different customers, the approach is unworkable. In the alternative, should the pipeline have to meet all customer needs, the pipeline would be forced to establish HDP specifications that meet the strictest end use requirements (lowest common denominator), resulting in diminished gas supply and increased commodity prices.

- ***Interchangeability***: In order to address interchangeability problems in its tariff, a pipeline should work with shippers, suppliers and customers to determine the appropriate interchangeability limits for its system using the NGC+ Interchangeability White Paper's Interim Guidelines (p. 27). 10

[10] In order to address concerns about the corrosion implications of the injection of flue gas (CO_2, CO, O_2) as a combustion inert (an issue not addressed in the White Paper), in addition to the 4% limit on total inerts, a cap on CO2 injections should be required.

Comment: To establish such specifications, it is necessary to know (i) the location of the interconnection with the LNG facilities, (ii) the flow of LNG on that particular part of the system and whether there will be coincidental blending or whether the LNG will flow directly to end users, and (iii) the type of end users and the gas quality tolerances of the end users if LNG flows directly into the market and to end users.

- ***Operational Flow Orders (OFOs)***: Pipelines retain OFO authority to ensure the operational integrity of their systems.

Comment: While there are disputes about the duration and other aspects of OFO use, we are not aware of any challenge to this basic principle. Pipelines should not, however, use OFOs as an alternative to filing specific gas hydrocarbon liquid drop out or interchangeability tariff language in response to persistent hydrocarbon liquid drop out and interchangeability problems.

- ***Receipt Point Specification***: Any HDP or interchangeability specifications approved by the Commission should apply to interstate pipeline receipt points rather than delivery points. In special cases, the receipt would be at the commingled outlet of the processing plant.[11]

Comment: Gas quality must be established at the upstream receipt point for both technical/physical reasons as well as contractual/legal reasons. From a physical perspective, in general, pipelines are not in the business of conditioning or processing gas.[12] What comes into the pipeline will aggregate into a stream of pipeline-quality gas and will proceed to the delivery points. From a contractual perspective, pipelines are not parties to the purchase and

[11] For example, offshore Gulf Coast pipelines operate dual-phase-flow pipelines which carry both injected liquids and liquefiables entrained in the commingled, unprocessed gas stream. The producers in these instances must process gas onshore prior to delivery for further transportation to the market area.

[12] "Conditioning" refers to removing water vapor and free liquids, while "processing" refers to removing condensable hydrocarbons. In other cases, there are straddle plants on pipeline systems that operate as processing market participants.

sale contract. It is that economic relationship that establishes the quality of the gas that the shipper obtains and that establishes whether there will be processing or not. The processing function is wrapped up in the economics of the commodity. Thus, the cost of the processing function is properly a cost of the natural gas commodity and should continue to be a commodity cost in order to ensure proper economic signals to the production sector. Accordingly, specifications must apply upstream at the point that gas is received into the system, and shippers and upstream suppliers must perform the conditioning and processing necessary at that point.

- ***Merchantability:*** Broad merchantability clauses should not be allowed to impose broad warranty and indemnification obligations on the pipelines for third-party gas quality.

Comment: INGAA strongly opposes AGA's proposal that all interstate pipelines adopt broad "merchantability" clauses in addition to HDP and interchangeability specifications. INGAA asserts that merchantability clauses were inserted in pipeline tariffs pre-Order No. 436 to provide the pipeline with the tariff authority to shut out inferior gas in the event the other gas quality specifications did not specifically cover the situation. Merchantability clauses were never intended, and should not be allowed to be construed, to provide customers the ability to "trump" all other tariff specifications. Moreover, since AGA's proposed merchantability clause does not define "merchantability", it would require the pipeline to warrant the quality of third-party gas at a time of changing end-use applications, the tightening of environmental emission requirements, and customer mix changes behind the citygate. As the AGA witness at the FERC technical conference admitted, the merchantability clause would provide customers with the means to shift liability upstream, away from the LDC, if the customer experienced property damage or operational

harm from bad gas. AGA is attempting to impose on the pipelines a broad indemnification provision that would require the pipelines to continue to meet the ever changing gas quality needs of the customers – outside of the pipeline's control or knowledge - even if the pipeline is satisfying its other gas quality (HDP) and/or interchangeability specifications. This financial exposure or risk would undoubtedly result in severe supply flexibility reductions as pipelines would have no alternative but to enforce stricter gas quality specifications in order to avoid downstream liabilities. To the extent that AGA and others expect pipelines to exercise discretion and flexibility by allowing for out of specification gas to enter the pipeline system and be blended with other gas, in order to increase supply and moderate commodity prices, AGA's broad merchantability clause would eliminate the pipeline's interest or ability to do so when balanced against the huge potential liability of doing so.

- ***De minimis Volume Receipt Point Exception***: Individual pipelines will make the determination, based on operational conditions and the distribution of supplies connected to its system, whether a de minimis exception should apply to any specifications that it may incorporate in its tariff, and the terms of eligibility for such an exception.

  Comment: What constitutes "de minimis" is inherently a pipeline-by-pipeline determination that depends on volume of gas and many other factors.

- ***Transition Period***: There should be a transition period for shippers to align supplies to any new specification, for pipelines to adapt administrative systems, and for LDCs and end users to adjust systems to accommodate the new specifications.

  Comment: There should be a transition period for the new specifications to be implemented. The pipeline may have to install additional monitoring equipment or change administrative systems to accommodate the new monitoring and notification systems. End users, producers and processors may have to make modifications or adjust their equipment to

accommodate the changes in the specifications. Also shippers may have to change gas purchase contracts to accommodate the new specifications.

- ***Burden of Proof***: The burden is on the party challenging specifications adopted in accordance with the policy statement to show that they are inadequate.

Comment: In the interest of administrative efficiency, a pipeline that incorporates tariff specifications in accordance with a Commission policy statement should have this procedural benefit of presumptive validity. In a section 4 case, where the pipeline has the ultimate statutory burden of proof, compliance with the policy statement would meet the pipeline's initial burden of going forward with the evidence. Because a policy statement is not, by definition, binding on the Commission, however, any party would be free to challenge the basis for the policy.

- ***Intrastate Specifications***: The Commission, as part of its outreach program, will encourage State agencies to announce or implement the same policies for intrastate and Hinshaw pipelines.

Comment: State agencies that regulate intrastate and Hinshaw pipelines should adopt these recommendations for such pipelines that compete with interstate pipelines in the interest of promoting a level playing field. Efforts should be made through NARUC and IOGCC to focus attention on this issue. In addition, the Commission should explore its ability to implement such a policy through its jurisdiction under Section 311 of the NGPA and the blanket certificates that it grants to Hinshaw pipelines.

- ***Research***: The Commission supports the recommendations of the NGC+ Interchangeability Work Group urging further study of historical gas composition data and additional research on the effects of changing gas supply and on end use equipment with respect to interchangeability.

Comment: The interchangeability guidelines endorsed by the NGC+ technical working group are "interim" guidelines and the stakeholders supported these interim

guidelines on the express condition that there be additional appliance and equipment testing and research. Absent additional testing and research it will be difficult, if not impossible, to develop a sound scientific basis and a consensus among stakeholders to support a generally-applicable interchangeability default standard.

- ***Injectable Inert Gas***: Pipelines should address limits on gases injected (C02, CO N2, O2) in the gas stream to improve interchangeability that may cause operational problems.

  Comment: Various methods have been proposed to improve the interchangeability of gas (adjust the Wobbe Number) by injecting gases that are inert from a combustion standpoint. These gases may cause other operational problems and those problems should be addressed during the development of the specification.

- ***Incompatible Interconnect Specifications***: Pipelines should adopt and implement safe harbor or limits that encourage flow of gas between interconnects

  Comment: When HDP or interchangeability specifications do vary between pipelines that are interconnected, the safe harbor concept allows the pipeline to adjust temporary limits when operating conditions allow. This variance allows the interconnect specification of the upstream and downstream pipeline to be compatible during most periods during the year.

- ***Growing supplies of LNG and non-traditional gas***: Pipelines should review market and supply conditions to determine if previously-negotiated specifications predicated on the NGC+ methodologies averages may become outdated.

  Comment: An interchangeability specification (e.g. LNG import) can be determined using the criteria in the NGC+ white paper, but at some later date the supply may enter into some other market areas that were not involved in the original determination or some new technologies may be available to allow the pipeline to adjust the original specification.

III. THE COMMISSION SHOULD NOT ADOPT NGSA'S PROPOSAL

For the reasons discussed above, INGAA submits that a policy statement is a preferable procedural vehicle to address HDP and interchangeability issues than the rulemaking proceeding proposed by NGSA. Even assuming that a rule is appropriate, however, the substance of NGSA's proposed regulations is flawed in a number of respects.

First, the sweep of NGSA's proposal is unnecessarily broad insofar as it requires all pipelines to make tariff filings. Neither hydrocarbon drop out nor gas interchangeability are industry-wide problems at this time calling for industry-wide action by the Commission. Still, these issues are being addressed on each of the pipelines in question and will be resolved based upon the specific facts pertaining to each of those pipelines. To be sure, there are projections for substantially increased imports of LNG, but, given the need for further research and the uncertainty of when and where LNG will actually enter particular pipelines,[13] it is not now possible to establish fixed gas quality standards that are applicable on a nationwide basis. Further research and testing may establish the basis for a generally acceptable interchangeability default standard, but that has yet to be established. Also, currently, and presumably in the future, it will be desirable to have the flexibility to establish interchangeability limits that fit the unique circumstances of the case, including: (i) the location of the interconnection with the LNG facilities, (ii) the flow of LNG on that particular part of the system and whether there will be coincidental blending or whether the LNG will flow directly to end users, and (iii) the type of end users and the gas quality tolerances of the

[13] For example, on June 1, 2005 Florida Power and Light Co (FPL) issued a press release indicating that it has discontinued its request for proposal for the importation of LNG. While FPL states that it "remains interested" in LNG, there is no indication if or when conditions will change to the extent that the FLP "customers will benefit" and LNG will be acceptable.

end users if LNG flows directly into the market and to end users. Only then can the specifics of the LNG interchangeability standards be set.

Second, it would be a mistake for the Commission to put its imprimatur on NGSA's proposal to use downstream delivery points rather than interstate pipeline receipt points as the proper site for imposing gas specifications. As discussed above, gas quality must be established at the pipeline's upstream receipt point.

Third, NGSA's proposal is inconsistent with the NGC+ White Papers in several respects. Most importantly, with respect to interchangeability, NGSA's proposal that the Commission sanction a 1400 Wobbe number as a maximum scuttles the White Paper interim guideline's use *a range* of plus or minus 4 % of local historical averages, subject to a maximum 1400 Wobbe. Interchangeability White Paper at 27 (A). It also discards the "grandfather" exception for service territories with demonstrated experience exceeding the 1400 Wobbe and other interim guideline limits. *Id*. at (C). Moreover, NGSA's proposal fails to give effect to the Interchangeability White Paper's Recommendation 6, which provides that, "[w]hile adopting a wide national range for key specifications such as the Wobbe number is important for supply flexibility, acceptable interchangeability ranges for specific regions or market areas may be more restrictive as a consequence of historical compositions and corresponding end use settings." *See id.* at 22-23. In addition, the NGSA proposal ignores the requirement under the Interim Guidelines for a heating value limit of 1110 Btu/scf. All of the requirements of the Interim Guidelines, as well as the flexibility to adapt specifications to local or regional requirements, were fundamental components of the consensus among industry stakeholders.

Fourth, NGSA's proposed rules are unworkable insofar as they put an unreasonably

onerous burden on parties that may wish to challenge the default standards for HDP (A(5)-(6)) and interchangeability (B(4)-(5).

Fifth, the particular mechanics of the NGSA's proposal to require tariff language establishing aggregation, blending and pairing on a non-discriminatory basis are unclear, and in any event implementation is impractical. To begin with, the pooling or aggregating of supplies under pipelines' required pooling services make it virtually impossible to determine which supplies meet the standards and which do not. In fact, the title to gas routinely changes numerous times before the gas is taken under a shipper contract at a pooling point and is scheduled for delivery. Producers and aggregators make purchases and sales among themselves prior to the entry of the gas into the pool. Within the pool gas routinely changes hands among marketers. Even if it were possible to trace nominations through pooling points, the changes in the rates of flow due to the four daily nomination opportunities (due, in part, to changing customer utilization patterns) and due to producer decisions to change flow rates, make the implementation of such a system costly and difficult, even if possible to administer. The pipeline has no control over the actions of the customers in their utilization patterns, the shippers in their changes in nominations or the suppliers in their changes of rate of flow. Therefore, there would be no practical way to administer an elaborate balancing and aggregating system as envisioned by NGSA.[14]

[14] Pipelines do not have the real-time information or personnel knowledgeable about processing plant operations that would be required to implementation NGSA's mechanism. Processing plants typically provide monthly aggregated data one to two months after the production month. Pipelines would need adequate volumetric measurement data and gas composition data for volumes delivered to a processing plant, volumes received from a processing plant, volumes bypassed at a processing plant, and knowledge of how extracted liquids are allocated to the various sources. In addition, pipelines do not have the requisite information about processing plant contractual arrangements, NGL pricing and markets, all of

Even to attempt to implement such a proposal would require a huge capital investment and a huge ongoing operational expense. Such a proposal would require continuous policing of each supply source and continuous monitoring of the mainstream at each point where a supply source joined the mainline. Real-time information would be required and this would require (1) installation of expensive chromatographs and associated SCADA data retrieval equipment (up to $65,000 installed), (2) initial and ongoing telecommunication costs; and (3) a gas quality measurement system at the home office, for each supply point and at each mainline interconnection point and the continuous monitoring of data from these chromatographs, which would result in increased operating expense for all customers, even those who purchase quality gas. Even assuming such a monumental investment, because of all of the complexities of the pipeline system and the difference in gas qualities, the use of paring and aggregation would be extremely limited. Pipelines make deliveries to customers and other pipelines over the full length of the pipeline system. Therefore, pairing and aggregation could occur only on isolated portions of the system that are upstream of any delivery points.

Moreover, NGSA does not address the many administrative and logistical questions associated with any such entitlement system which would make the whole enterprise questionable and which would most likely waste valuable administrative time and result in disputes which would not otherwise arise. For example, are pipelines to take the coincidence out of blending by exercising flow control at production points based on their gas quality to ensure that the desired blending actually happens? Are pipelines to "pair" "out of spec"

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which are key determinants with respect hydrocarbon drop out. Moreover, as a general practice, pipelines do not have contractual relationships with producers or processing plants.

producers with "in-spec" producers and trust that their daily flow variations will always be in lock step in order to establish a good "safe harbor" mix? What if a supplier does not wish to be paired up? What if a supplier demands a certain cost reimbursement? What if one of the parties fails to perform or misrepresents the quality of its gas?[15] How far out of spec must a party be in order to have the system apply. How would a pipeline develop a system to match differing hydrocarbon components? Thus, it is easy to see that an entitlement system as proposed by NGSA, even if it were possible to implement, would result in unjustified expenses and, ultimately, inefficient use of economic resources. Moreover, it puts the burden in the wrong place. As discussed above, the burden should be on the party introducing gas into the system.

On the other hand, it is in the public interest to allow pipelines to continue to exercise their flexibility to achieve a pipeline-quality stream of gas in a way that maximizes the supply flowing to customers. This can occur only if pipelines are free to respond to circumstances which change due to an infinite number of combinations of factors. Requiring pipelines to publish detailed "non-discriminatory" tariff provisions spelling out how they will manage the pipeline in unforeseeable, quick moving, future situations is untenable, will rigidify the process, result in more reliance on enforcing specifications through shut-ins, with the end result of reducing the supply of flowing gas.

[15] The task of administering a pairing program would be unlike administering a pipeline's capacity release program, where the pipeline has all the information necessary to match buyers and sellers. (See supra.) Moreover, unlike a pairing transaction, which must be carried out in the interest of maintaining the integrity of the gas supply, whether or not a capacity release transaction is successfully executed does not affect the transportation function.

CONCLUSION

The Commission should adopt a policy statement on natural gas hydrocarbon drop out and interchangeability in accordance with the principles set out above. The Commission should deny the petition for rulemaking filed by NGSA.

Respectfully submitted,

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