

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
and Jon Wellinghoff.

Indicated Shippers

Docket No. RP04-99-001

v.

Tennessee Gas Pipeline Company

ORDER ON COMPLIANCE FILING AND ESTABLISHING TECHNICAL  
CONFERENCE

(Issued August 1, 2006)

1. On March 5, 2004, Tennessee Gas Pipeline Company (Tennessee) filed *pro forma* tariff sheets to comply with the Commission's order issued January 26, 2004 in this proceeding.<sup>1</sup> Tennessee proposed tariff revisions containing a hydrocarbon dewpoint limit of 15° F for gas entering its system and related provisions. The March 5 filing was held in abeyance pending industry-wide efforts concerning hydrocarbon liquids dropout. The Commission has subsequently issued a policy statement on gas quality and interchangeability which addresses hydrocarbon liquids dropout.<sup>2</sup> This order establishes procedures, requires Tennessee to submit a revised compliance filing addressing the

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<sup>1</sup> *Indicated Shippers v. Columbia Gulf Transmission Company and Indicated Shippers v. Tennessee Gas Pipeline*, 106 FERC ¶ 61,040 (2004) (January 26 Order). The proposed pro forma tariff sheets are identified on the Appendix.

<sup>2</sup> *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Pipeline Company Tariffs, Natural Gas Interchangeability* 115 FERC ¶ 61, 325 (2006) (Docket No. PL04-3-000) (*Policy Statement*).

requirements and concerns of the *Policy Statement*, and establishes a technical conference to discuss the revised filing.

### **Background**

2. In 2000 and 2001 there was an increase in the hydrocarbon dewpoint (HDP) levels of the gas Tennessee was transporting. HDP levels are the temperatures and corresponding pressures at which hydrocarbons will condense out of the gas stream and become liquid. As pressure rises from zero, the temperature necessary to maintain the gaseous state rises. However, once the pressure goes above a certain level, the temperature necessary to maintain the gaseous state starts to fall. The highest temperature on this curve is known as the cricondentherm hydrocarbon dewpoint (CHDP) of the gas stream in question.<sup>3</sup> The heaviest hydrocarbon drops out first, followed by the others in the order of their weight. Liquids in the gas stream can cause operational and safety problems. The Commission considers hydrocarbon dropout to be an issue of gas quality.<sup>4</sup>

3. Historically, producers have processed natural gas and removed the hydrocarbons heavier than methane. They were able to sell the extracted liquid hydrocarbons for a greater profit than that received for natural gas. The HDP issue arose because the price of natural gas increased in 2000 and 2001 to the point where it was more profitable to leave the heavier hydrocarbons in the gas stream to be sold as natural gas than to process the gas, extract the heavier hydrocarbons, and sell them as liquids.

4. In the winter of 2000-2001, producers on Tennessee stopped processing their gas on a continual basis and the processing plants serving the Tennessee system operated only intermittently.<sup>5</sup> The failure to process gas continued for the next two years. The result, according to Tennessee, was that from December 2000 through December 2003, it experienced a series of operational problems on its system with regard to hydrocarbon

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<sup>3</sup> See *ANR Pipeline Co.*, 116 FERC ¶ 61,002, at P-3-6 (2006), for a fuller explanation.

<sup>4</sup> This order uses the term “gas quality” to mean the impact of non-methane hydrocarbons on the safe and efficient operation of pipelines, distribution facilities, and end-user equipment, the meaning adopted in the *Policy Statement* at P 5.

<sup>5</sup> Answer and Motion to Dismiss of Tennessee Gas Pipeline Company at 5, Docket No. RP04-99-000 (December 23, 2003) (Answer).

liquids fallout<sup>6</sup> and that some of its customers experienced problems from liquids fallout as well.<sup>7</sup> In January 2001 and thereafter, in an attempt to control liquids dropout, Tennessee posted notices on its website stating that without proof of processing, it would not accept gas with a Btu content greater than, initially 1,050 Btus, after March 2001, 1,100 Btus, and, beginning in April 2001, a maximum dewpoint level of 20° F. These notices applied at times to portions of its system and at times to all supply legs on its system.

5. On December 3, 2003, a group of producers, Indicated Shippers, filed a complaint against Tennessee to obtain an order requiring it to cease and desist from enforcing the maximum Btu limit and the hydrocarbon dewpoint limit the pipeline had established through its notices. Indicated Shippers alleged that Tennessee's tariff does not set a maximum limit on the hydrocarbon dewpoint of gas, that the hydrocarbon dewpoint limit was new gas quality standard, and that the pipeline could only make such a revision to its tariff by filing under section 4 of the NGA. Indicated Shippers also alleged that Tennessee's tariff did not give the pipeline authority to impose the hydrocarbon dewpoint limit.

6. The Commission issued its order on the Indicated Shippers' complaint on January 26, 2004.<sup>8</sup> The Commission found that the additional specifications Tennessee had adopted did not violate its tariff. The Commission found Tennessee has authority under Article II, section 9 of its General Terms and Conditions (GT&C) to require gas to be processed and so did not require Tennessee to cease and desist from enforcing the gas quality standards in its notices. However, the Commission found that Article II, section's 3(b) and 9 of Tennessee's tariff, gave Tennessee too much discretion to vary gas quality standards for gas to be accepted into its system without processing. The Commission stated that Tennessee's tariff contains no provisions for minimum notice periods to shippers or the provision of information concerning the justification for the limits to shippers. Accordingly, the Commission found these sections unjust and unreasonable under section 5 of the Natural Gas Act (NGA) and required Tennessee to file revised sections. The Commission stated that until Tennessee files new sections that the

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<sup>6</sup> Answer at 6-7 (fallout incidents given in detail).

<sup>7</sup> *Id.* at 8-10.

<sup>8</sup> *Indicated Shippers v. Columbia Gulf Transmission Company and Indicated Shippers v. Tennessee Gas Pipeline*, 106 FERC ¶ 61,040 (2004).

Commission finds are just and reasonable under section 5 of the NGA, its current sections remain in effect.<sup>9</sup>

7. The Commission stated that if Tennessee believes it is necessary to require processing of gas with a dewpoint in excess of 20° F on a permanent basis, Tennessee must propose to include this limit in its tariff. To the extent it desires flexibility to vary these standards in particular circumstances, the Commission stated Tennessee should include in its tariff a mechanism for doing so, including a dewpoint safe harbor as in *Natural Gas Pipeline Company of America*.<sup>10</sup> Last, the Commission noted that it had announced a public conference in Docket No. PL04-3-000 to gain more information about the impacts of natural gas quality and interchangeability on the nation's energy customers and the companies regulated by the Commission.

8. On February 3, 2004, the Commission issued notice of a technical conference to discuss the issues in this proceeding before Tennessee filed to comply with the January 26, 2004 Order. The technical conference was held on February 24, 2004. Tennessee provided a presentation concerning its proposal for modifications to the existing gas quality provisions of its tariff. On March 5, 2004, Tennessee filed the compliance filing that is the subject of this order and the parties subsequently filed comments on March 25, 2004, and reply comments on April 14, 2004.

9. However, the Commission had begun to address gas quality issues at an industry-wide level. The Commission and members of the gas industry undertook several such efforts as described below. The Commission has held Tennessee's compliance filing in abeyance until the completion of those efforts.

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<sup>9</sup> *Citing Regulation of Short-Term Natural Gas Transportation Services, and Regulation of Interstate Natural Gas Transportation Services, Order on Remand*, 101 FERC ¶ 61,127 at P 24, 34-35 (2002).

<sup>10</sup> *Order After Technical Conference and Rehearing*, 102 FERC ¶ 61,234 (*Natural Gas I*), *Order on Rehearing and Compliance Filing and Establishing Hearing*, 104 FERC ¶ 61,322 (2003) (*Natural Gas II*) (together the *Natural Gas* orders). The *Natural Gas* orders accepted procedures for posting Btu and HDP limits on the pipeline's website, subject to notice and the provision of information to shippers and provided for an HDP safe harbor limit.

10. The Commission commenced its industry-wide consideration of gas interchangeability on January 15, 2004 in Docket No. PL04-3-000.<sup>11</sup> On February 18, 2004, the Commission held a public conference in Docket No. PL04-3-000 which included discussion of both gas quality and interchangeability issues. Following the conference the natural gas industry, under the auspices of the Natural Gas Council,<sup>12</sup> initiated a collaborative effort to seek consensus on industry-wide standards for gas quality and interchangeability. On February 28, 2005, the Natural Gas Council filed a report on gas quality entitled *Liquid Hydrocarbon Drop Out in Natural Gas Infrastructure* (HDP Report or *White Paper*).<sup>13</sup>

11. The *White Paper* interim recommendation on gas quality was to adopt interim standards that translate historic experience into terms of CHDP or C6+ GPM methodologies,<sup>14</sup> taking best available historical data into account. The *White Paper* also recommended that additional research be conducted to better understand gas composition, and to develop improved analytic equipment suitable for daily operational use.

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<sup>11</sup> That proceeding was initially concerned only with gas interchangeability, but was later broadened in scope to include the gas quality issue of hydrocarbon liquids dropout.

<sup>12</sup> The Natural Gas Council is an organization made up of the representatives of the trade associations of the different sectors of the natural gas industry. The associations particularly involved in writing the *White Paper* were the Independent Petroleum Association of America (IPAA), representing independent natural gas producers; the Natural Gas Supply Association (NGSA), representing producers and marketers of natural gas; the Interstate Natural Gas Association of America (INGAA), representing interstate pipelines; and the American Gas Association (AGA) representing natural gas utilities (LDCs).

<sup>13</sup> The NGC+ group, which wrote the paper, included many industry volunteers from the member companies of the various trade associations as well as other industry participants interested in these issues.

<sup>14</sup> The phrase “C6+ GPM” stands for hexanes and hydrocarbons with more than six carbon atoms, as measured in gallons per million cubic feet of natural gas. Measuring and controlling for the amount of these heavier hydrocarbons in the natural gas stream is an alternative to the CHDP method.

12. The Commission solicited written comments on the NGC+ Reports and subsequently convened a technical conference on May 17, 2005 to allow for further public comment on and discussion of the issues raised by the Reports. In addition, the Commission solicited comments on the NGSA's May 16, 2005 petition for rulemaking.

13. On June 15, 2006, the Commission issued its *Policy Statement* on gas quality and interchangeability.<sup>15</sup> The Commission's policy embodies five principles: (1) only natural gas quality and interchangeability specifications contained in a Commission-approved gas tariff can be enforced; (2) pipeline tariff provisions on gas quality and interchangeability need to be flexible to allow pipelines to balance safety and reliability concerns with the importance of maximizing supply, as well as recognizing the evolving nature of the science underlying gas quality and interchangeability specifications; (3) pipelines, their customers, and other interested parties<sup>16</sup> should develop gas quality and interchangeability specifications based on technical requirements; (4) in negotiating technically based solutions, pipelines and their customers are strongly encouraged to use the Natural Gas Council Plus (NGC+) interim guidelines filed with the Commission on February 28, 2005<sup>17</sup> as a common reference point for resolving gas quality and interchangeability issues; and, (5) to the extent the parties cannot resolve disputes over gas quality and interchangeability, those disputes can be brought before the Commission to be resolved on a case-by-case basis, on a record of fact and technical review.

14. The Commission will now address Tennessee's compliance filing with the guidance provided by the *Policy Statement*.

### **The Filing**

15. Tennessee proposes the following new provisions. In Article I, section 36 Tennessee defines hydrocarbon dewpoint as "the cricondenthem, the highest temperature at which the vapor-liquid equilibrium may be present." Tennessee will calculate the

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<sup>15</sup> 115 FERC ¶ 61,325 (2006) (*Policy Statement*).

<sup>16</sup> See *ANR Pipeline Co.*, 116 FERC ¶ 61,002 at P 110 (2006).

<sup>17</sup> *Report on Liquid Hydrocarbon Drop Out in Natural Gas Infrastructure* (HDP Report) and *Report on Natural Gas Interchangeability and Non-Combustion End Use* (Interchangeability Report).

cricondenthem hydrocarbon dewpoint (CHDP) using the Peng-Robinson equation of state.<sup>18</sup>

16. In Article II, sections 3 and 3(b) Tennessee proposes that gas delivered to it shall be of merchantable quality and that it will be free of solid or liquid matter that might interfere with its merchantability or cause injury to or interference with proper operation of the equipment through which it flows.<sup>19</sup> In Article II, section 3(b), Tennessee also proposes that Tennessee may establish and post CHDP limits for receipts on specified segments or other specified locations on its system to prevent hydrocarbon fallout or to assure that gas will be accepted for delivery into interconnects, including with interstate and intrastate pipelines, end-users, local distribution companies and others.<sup>20</sup> Postings shall include the duration of the limitation. Tennessee will give as much notice of a limitation as reasonably practicable and will attempt to provide at least ten days notice. To the extent operationally feasible, Tennessee will not apply the CHDP limits to meters that flow 500 dth or less per day and are not upstream of a processing plant with available capacity.

17. Tennessee proposes in Article II, section 3(b)(i) that the CHDP safe harbor will be 15° F. Tennessee proposes to accept gas with a CHDP equal to or less than 15° F that satisfies all other applicable provisions of Tennessee's tariff. Tennessee is prohibited from making a posting under Article II, section 3(b) that would set a CHDP lower than 15° F.<sup>21</sup> Tennessee states that its system is not designed to remove liquids from rich gas, but to operate in conjunction with the processing plants that straddle the system. Tennessee states it has set the safe harbor level to provide merchantable quality gas for downstream customers and, at the same time, attract as much gas supply to its system as possible. Tennessee states it has determined that 15° F is a level at which it could allow unprocessed gas onto its system and likely not experience liquid fallout, given current operating conditions and the current practice of processing plants. Tennessee states that

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<sup>18</sup> Second Revised Sheet No. 305A, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

<sup>19</sup> Fourth Revised Sheet No. 306, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

<sup>20</sup> *Id.* Tennessee cites the *Natural Gas II* at 62,214 (2004).

<sup>21</sup> First Revised Sheet No. 307, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

if the processing plants change their processing methods, or if other operational conditions change, then it may need to modify its tariff to address these changes.

18. In Article II, section 3(b)(ii) Tennessee proposes that it may accept gas with a higher CHDP than that posted pursuant to Article II, section 3(b), through aggregation or other means, to the extent operationally practicable.<sup>22</sup> Tennessee anticipates that a shipper could nominate or flow a combination of gas receipts into Tennessee such that the weighted average HDP calculation is less than or equal to the posted CHDP limit. It also anticipates that in order to aggregate, a customer would submit an aggregation proposal for Tennessee to review so that the pipeline can determine whether the proposed aggregation will adversely impact system operations and whether it will satisfy the posted CHDP requirements.

19. Tennessee proposes in Article II, section 3(b)(iii) that it will make available to a point operator or producer delivering gas to Tennessee at a point affected by a CHDP limit the CHDP value calculated by Tennessee at the point. Tennessee will make this information available on its website within twenty-four hours after making the calculations.<sup>23</sup>

20. In Article II, section 9, Tennessee proposes to delete the provision providing that the pipeline could, at its reasonable discretion, require gas to be processed or require evidence that arrangements had been made for the removal of liquid and liquefiable hydrocarbons.<sup>24</sup>

21. Finally, Tennessee states that it retains any existing OFO tariff authority and nothing in this filing is intended to change that authority.

### **Procedural Matters**

22. Public notice of Tennessee's March 5, 2004 compliance filing in Docket No. RP04-99-001 was issued on March 10 and March 12, 2004. Protests were due to be filed by March 25, 2004 and reply comments were due by April 14, 2004. Some entities filed

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<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> Third Revised Sheet No. 308, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

late motions to intervene.<sup>25</sup> Pursuant to Rule 214, 18 C.F.R. § 385.214 (2005), any motions to intervene out-of-time filed before the issuance date of this order are granted. Granting late intervention at this stage of the proceeding will not disrupt the proceeding or place additional burdens on existing parties.

23. Several parties filed protests, comments, and reply comments as described below.

## **Comments**

### **A. The 15° F CHDP Safe Harbor Proposal**

#### **1. Initial Comments**

##### **a. Local Distribution Companies and End Users**

24. The local distribution companies' (LDCs) foremost concerns in setting gas quality standards are that Tennessee's system and the systems of LDCs and end users remain safe and reliable and that the gas Tennessee delivers continues to be merchantable. Nicor Gas (Nicor); PSEG Energy Resources & Trade LLC (PSEG);<sup>26</sup> National Fuel Gas Distribution (National Fuel); the Keyspan Delivery Companies;<sup>27</sup> and Nashville Gas Company, a division of Piedmont Natural Gas Company (Piedmont) support Tennessee's filing largely because they believe it will provide them with gas that is merchantable and meets their gas quality standards. They assert the pipeline's delivery of merchantable gas

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<sup>25</sup> Superior Natural Gas Corporation and Walter Oil & Gas Corporation (Superior) filed a late motion to intervene on February 10, 2004. The following entities filed late motions to intervene in March, 2004: the Independent Petroleum Association of America (IPAA); the Tennessee Valley Authority (TVA); Duke Energy Trading and Marketing, L.L.C. and Duke Energy Marketing America, L.L.C. (Duke Energy); Gulf South Pipeline Company, LP (Gulf South); and Nicor Gas. High Island Offshore System, L.L.C. (High Island) filed a late motion to intervene on June 30, 2004.

<sup>26</sup> PSEG is a firm transportation and storage customer of Tennessee.

<sup>27</sup> The KeySpan Delivery Companies consist of: the Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York ("KeySpan Energy NY"); KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island ("KeySpan Energy LI"); and Boston Gas Company, Colonial Gas Company, EnergyNorth Natural Gas, Inc., and Essex Gas Company (collectively "KeySpan Energy NE"), all direct and indirect subsidiaries of KeySpan Corporation.

is an obligation that is contractual and also set forth in Tennessee's existing and proposed tariff provisions.<sup>28</sup> They support Tennessee's CHDP proposals only to the extent that they do not change these obligations.

25. The East Ohio Gas Company, d/b/a Dominion East Ohio and The Peoples Natural Gas Company d/b/a/ Dominion Peoples (Dominion LDCs), and Tennessee Municipal Group<sup>29</sup> protest the filing and urge Tennessee to explain how its proposed HDP standards will affect the quality of gas. Dominion LDCs oppose the 15° F safe harbor because they believe it would permit an increased Btu content of gas delivered which would harm their operations, safety, gas measurement, and revenue.

26. The Tennessee Valley Authority (TVA) and the Process Gas Consumers (PGC), end users, support the 15° F CHDP safe harbor.<sup>30</sup> However, PGC seeks some modifications including a maximum HDP level of 25° F, a longer notice period, and a minimum time period for effectiveness of an HDP level.

#### **b. Gulf South Pipeline Company, LP**

27. Gulf South Pipeline Company, LP (Gulf South) protests the filing as unjust and unreasonable. Gulf South does not challenge the science relied on or the conclusions that Tennessee has reached regarding the operational needs of Tennessee's system. Rather Gulf South claims that the proposed 15° F CHDP limit will impede its ability to make deliveries into Tennessee, even though the gas being delivered meets Gulf South's current tariff requirements,<sup>31</sup> and that the 15° F CHDP limit would diminish its ability to secure new gas supplies. Gulf South recommends, among other things, that the Commission (1) provide a safe harbor for interstate pipeline and storage operators that deliver gas to another interstate pipeline that meets the delivering pipeline's quality specifications, even when the specifications are different than those of the receiving

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<sup>28</sup> Citing, *inter alia*, proposed Article II, section III of the GT&C.

<sup>29</sup> The Tennessee Municipal Group consists of the Cities of Clarksville, Springfield, Portland, and Waynesboro, Tennessee; the Corinth Public Utilities Commission, Mississippi; the West Tennessee Public Utility District, the Greater Dickson Gas Authority and the Humphreys County Utility District, Tennessee.

<sup>30</sup> The TVA uses natural gas to run electric generators.

<sup>31</sup> Gulf South states that it does not currently have an HDP limit in its tariff, but, instead, regulates the individual components of the gas stream. Gulf South states that if it did adopt a CHDP safe harbor, it would probably be greater than 15° F.

pipeline and ( 2) clarify that the 15° F HDP is the specification applicable to a blended gas stream at specific locations along the pipeline rather than at specific receipt points.

**c. Producers**

28. The Producer Coalition,<sup>32</sup> Indicated Shippers,<sup>33</sup> and Superior Natural Gas Corporation and Walter Oil & Gas Corporation (Superior)<sup>34</sup> (collectively, Producers) assert Tennessee's filing should be rejected or set for hearing because it is not supported. They propose higher temperatures for a CHDP safe harbor.

**2. Reply Comments**

**a. Tennessee**

29. Tennessee's reply comments assert its proposal is a just and reasonable CHDP safe harbor that balances, to the extent possible, the interests of the producers against providing safe and reliable service and maintaining the operational integrity and reliability of Tennessee's system. Tennessee states that the safe harbor could result in customers receiving gas with a higher CHDP than the CHDP of the gas they have received in the last several decades. Tennessee contends a hearing is unnecessary and will not result in a more appropriate safe harbor limit. It asserts that "[s]pecific empirical operating data that can be used to calculate the 'correct' safe harbor number simply does not exist"<sup>35</sup> and that its proposal is based on its expertise in running its pipeline.

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<sup>32</sup> The Producer Coalition consists of Devon Energy Corporation, Dominion Exploration & Production, Inc., Forest Oil Corporation, The Houston Exploration Company, Kerr-McGee Oil & Gas Corporation, Newfield Exploration Company, Spinnaker Exploration Company, TOTAL E&P U.S.A., INC., and Westport Resources Corporation.

<sup>33</sup> Indicated Shippers consist of BP America Production Company and BP Energy Company; ChevronTexaco Natural Gas, a division of Chevron U.S.A. Inc.; ConocoPhillips Company; ExxonMobil Gas & Power Marketing Company, a Division of ExxonMobil Corporation; and Shell Offshore, Inc.

<sup>34</sup> Superior Natural Gas Corporation is a marketer; Walter Oil & Gas Corporation is a producer.

<sup>35</sup> Tennessee Reply Comments at 11.

30. In response to Gulf South, Tennessee states that it would support a provision that allows the establishment of an upper HDP limit to ensure that gas will be accepted into downstream interconnects.<sup>36</sup> Tennessee also supports Gulf South's request that Tennessee be allowed to waive its quality standards for interconnects with other interstate facilities, provided that there is some "operationally practicable" qualifier. However, Tennessee opposes Gulf South's request that the 15° F CHDP specification be applicable to a blended gas stream rather than at receipt points.

**b. LDCs**

31. The LDCs' reply comments assert that in assessing the reasonableness of the CHDP safe harbor, the Commission must consider the financial and operational effects on Tennessee's downstream customers. The KeySpan Delivery Companies oppose Gulf South's request for a different safe harbor for interstate pipeline and storage operators.

**c. Producers**

32. The Producers reply comments assert that all segments of the industry must share the cost of averting hydrocarbon liquids fallout when it is not economic to process gas. The Producers oppose the maximum 25° F HDP level put forward by PGC and assert it should be set for hearing. Indicated Shippers reply that Tennessee's tariff does not guarantee that no liquid fallout will occur on the LDCs' systems regardless of operating conditions on those systems, citing Article II, section 1(b).<sup>37</sup> The Producer Coalition asserts that a general requirement of merchantability does not take precedence over Tennessee's proposed safe harbor or specific HDP requirements in Tennessee's tariff and that Tennessee must make a section 4 filing defining merchantability if it is to be an independent requirement for acceptance of gas on Tennessee's system.

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<sup>36</sup> Tennessee cites the following tariff provision of Natural Gas Pipeline Company of America: "Natural may, from time to time, as operationally necessary, establish and post . . . an upper Btu/cf limit and/or a limit on the dewpoint for receipts on specified segments . . . to prevent hydrocarbon fallout . . . or to assure that gas will be accepted for delivery into interconnects with interstate pipelines, intrastate pipelines, end-users or directly connected local distribution companies." Second Revised Sheet No. 343.

<sup>37</sup> "[N]atural gas delivered by [Tennessee] . . . shall be commercially free (at prevailing pressure and temperature in [Tennessee's] pipeline) from . . . matters which might interfere with its merchantability . . ." Fourth Revised Sheet No. 306, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

**B. Other Provisions of the Proposal****1. Lowering the Safe Harbor HDP Below 15° F****a. Initial Comments**

33. The LDCs assert Tennessee must be able to lower its safe harbor below 15° F by means of a flexible tariff standard and through OFOs if the 15° F limit does not prevent liquid drop out. Indicated Shippers seek clarification that Tennessee cannot use OFOs to set an HDP limit lower than the 15° F CHDP safe harbor for any period. The Producer Coalition and Indicated Shippers oppose permitting Tennessee to lower the CHDP safe harbor to ensure acceptance of gas for delivery into downstream interconnects or because a downstream pipeline has adopted a lower HDP limit. Superior urges that Tennessee not use the merchantability requirement in Article II, section 3 to impose HDP limits stricter than the 15° F safe harbor.<sup>38</sup>

**b. Reply Comments**

34. Tennessee asserts it has the right to invoke its OFO authority to impose a short term limitation below the safe harbor level if an HDP- related situation comes within its OFO provisions.

**2. Information and Enforcement of HDP Levels****a. Initial Comments**

35. The Producers contend Tennessee should provide more information on its website concerning HDP levels.<sup>39</sup> They ask that Tennessee be required to provide HDP

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<sup>38</sup> Proposed Article II, section 3 provides that gas delivered to Tennessee will be of merchantable quality and proposed Article II, section 3(b) provides that gas may not include hydrocarbon liquids or solid or liquid matter that might interfere with its merchantability. Fourth Revised Sheet No. 306, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

<sup>39</sup> Tennessee's proposed Article II, section 3(b)(iii) provides:

If a posting pursuant to section 3(b) contains a hydrocarbon Dewpoint limitation, Transporter shall make available on its Internet Website to the operator/producer of a point affected by such posting the Hydrocarbon Dewpoint at such point. Transporter shall make available each

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calculations for its system in the same manner as the Commission has required in *Natural Gas* orders,<sup>40</sup> which, they contend, provides that HDP information be posted for blending points and line segments, as well as for receipt points. Indicated Shippers and Superior propose that Tennessee establish checkpoints on its system, calculate HDP levels for the commingled gas stream at these checkpoints, monitor HDP levels at the checkpoints instead of at receipt points, and enforce the posted HDP limit against line segments upstream of a checkpoint where there is a problem. Indicated Shippers assert Tennessee should post information regarding the HDP levels at checkpoints on an ongoing basis, irrespective of whether an HDP limit is in effect and make the HDP information available to all producers at a receipt point that is subject to an HDP limit.

**b. Reply Comments**

36. Tennessee asserts that *Natural Gas I* only required the pipeline to post HDP information at each receipt point where it calculates a dewpoint value and that the information Tennessee is providing is consistent with *Natural Gas I*. Tennessee contends shippers need only know the HDP value of the gas at their receipt point in order to comply with an HDP limit and do not need to have continually updated information on the status of Tennessee's operations. Tennessee asserts that HDP information should only be provided to affected shippers and notes that several shippers have indicated that they do not want their information accessible by all other shippers. Tennessee rejects the Producers' request to apply the safe harbor limit to checkpoints along its system. It asserts it will apply the safe harbor to individual receipt points because this method is non-discriminatory, holds each shipper responsible for its own gas, and prevents liquid fallout problems.

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Hydrocarbon Dewpoint value calculated per the above within 24 hours after making the calculation.

First Revised Sheet No. 307, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

<sup>40</sup> *Natural Gas I* at P 33 and 48, *Natural Gas II* at P 58 .

### **3. Aggregation**

#### **a. Initial Comments**

37. The Producers support aggregation, but claim the aggregation provision in proposed section 3(b)(ii) should contain specific terms and procedures.<sup>41</sup> The Producer Coalition asks Tennessee to clarify that aggregation is not limited to volumes belonging only to one shipper. Indicated Shippers assert Tennessee must permit blending across the system upstream of a problem area.

#### **b. Reply Comments**

38. Tennessee asserts the aggregation provision should be left broad so that it has flexibility to allow gas onto its system. Tennessee states it is within its discretion whether and where to allow aggregation, provided that it does so on a non-discriminatory basis when operating conditions permit. Tennessee states it does allow for blending.

### **4. Other Comments**

39. PGC seeks a 30-day notice period for changes in HDP levels and a 30-day effectiveness period for each HDP level. Indicated Shippers would like Tennessee to use chromatographic analysis up to C10+ for CHDP calculations rather than using estimated percentages for the C6 and heavier hydrocarbons contending that it is more accurate. The Producer Coalition urges that the proposed portion of section 3(b) which provides that gas delivered to Tennessee shall be free of hydrocarbon liquids that could become

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<sup>41</sup> Proposed Article II, section 3(b)(ii) provides: “To the extent operationally practicable through aggregation or other reasonable means, [Tennessee] may accept gas with a higher Hydrocarbon Dewpoint than that established and posted pursuant to section 3(b).” First Revised Sheet No. 307, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

separated from the gas stream in the pipeline<sup>42</sup> be interpreted as assuring against liquid fallout only at the prevailing temperatures and pressures within the pipeline.

## **Discussion**

### **A. Policy Statement**

40. Tennessee filed its proposal in March 2004, well before the issuance of the NGC+ *White Paper* on liquid dropout and the Commission's *Policy Statement*. As a result, neither Tennessee's compliance filing nor the parties' comments address all the requirements and concerns of the *Policy Statement*. Consequently, the Commission requires Tennessee to update its compliance filing in light of the *Policy Statement*. In addition, the *Policy Statement* encourages pipelines, customers, and other interested parties to resolve gas quality issues on their own.<sup>43</sup> To this end, the Commission will not require Tennessee to file this compliance filing until sixty days after the date of this order. This will provide an opportunity for Tennessee to discuss with interested parties technical, engineering and scientific considerations of its proposal in order to resolve as many issues as possible before Tennessee makes its revised filing. Parties may file comments on Tennessee's revised proposal twenty days thereafter. In addition, the Commission directs staff to convene a technical conference, after the revised pleadings have been filed, to address technical, engineering, and operational issues raised by Tennessee's revised proposal.

41. In updating its filing, Tennessee should address the relevant procedures and guidelines set forth in the *Policy Statement*, including the following. First, the *Policy*

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<sup>42</sup> Article II, section 3(b) provides in part that gas delivered to Tennessee shall be of merchantable quality and

shall be commercially free from objectionable odors, dust, hydrocarbon liquids, water, and any other solid or liquid matter that might interfere with its merchantability or cause injury to, or interference with, proper operation of the equipment through which it flows and any substance that might become separated from the gas in [Tennessee's] facilities.

Fourth Revised Sheet No. 306, Tennessee Gas Pipeline Company, Pro Forma Fifth Revised Volume No. 1.

<sup>43</sup> *Policy Statement*, at P31, *ANR Pipeline Co.*, 116 FERC ¶ 61,002 at P 110 (2006).

*Statement* emphasizes that gas quality standards should be based upon “sound technical, engineering and scientific considerations.”<sup>44</sup> Accordingly, Tennessee should include in its revised compliance filing all the technical, engineering and operational information upon which it relies to support each of its proposed gas quality standards.

42. Second, the *Policy Statement* states that jurisdictional tariffs should contain provisions that govern the quality of gas received for transportation<sup>45</sup> when necessary to manage hydrocarbon liquid dropout within acceptable levels. The *Policy Statement* notes the *White Paper* identified two valid methods that might be used to control hydrocarbon liquid dropout--the cricondenthem HDP (CHDP) method and the C6+ GPM method—and strongly encourages the use of one of these two methods.<sup>46</sup> The *Policy Statement* requires a pipeline that wishes to propose a different method to explain how the proposed method differs from the CHDP method described in the *White Paper*.<sup>47</sup> In its March 5 filing, Tennessee proposed to use the CHDP method. If Tennessee proposes to use a different method in its updated filing, the Commission directs that Tennessee explain any differences between its updated proposal and the CHDP method.

43. Third, the *Policy Statement* also requires a pipeline filing to revise its gas quality standards to include a comparison, in equivalent terms, of its proposed gas quality specifications and those of each interconnecting pipeline.<sup>48</sup> The purpose of this requirement is to enable the Commission to examine the appropriate circumstances in each individual case and give appropriate weight to the gas quality requirements of interconnecting pipelines, as well as the requirements of markets directly served.<sup>49</sup> Accordingly, the Commission requires that Tennessee include the required information in its revised compliance filing.

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<sup>44</sup> *Policy Statement*, at P 31.

<sup>45</sup> *Id.* at P 34.

<sup>46</sup> *Id.* For a technical description of these methods, see *White Paper*, especially sections 4 through 6.

<sup>47</sup> *Policy Statement* at P 34.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* at P 35.

44. Fourth, the *Policy Statement* states that a pipeline's tariff should state the natural gas quality specifications for gas that the pipeline will deliver to its customers.<sup>50</sup> There is no statement in Tennessee's proposal concerning existing or proposed gas quality specifications for gas that Tennessee delivers to its customers. Accordingly, Tennessee must explain or propose gas quality specifications for gas to be delivered to customers.

45. Finally, the *Policy Statement* addresses blending, pairing, and similar strategies. These strategies consist of the mixing together of different gas streams. They may allow gas with a higher HDP (rich gas) to be received on a pipeline's system because it will be mixed with gas of a lower HDP (lean gas) and will ultimately meet a pipeline's HDP limits. The *Policy Statement* encourages the use of blending, pairing, and other strategies to combine rich gas supplies with lean gas supplies in order to accommodate more production when these actions can be undertaken on a non-discriminatory basis and in a manner that is consistent with safe and reliable operations.<sup>51</sup> Consistent with the *Policy Statement*, Tennessee has proposed a provision in Article II, section 3(b)(ii) that permits accepting gas with a higher CHDP than the posted limit through aggregation or other reasonable means, to the extent operationally practicable. In its revised proposal, Tennessee should propose specific procedures for aggregation and blending in its tariff.

46. Accordingly, the Commission requires that, within sixty days, Tennessee update its compliance filing to address the concerns and requirements of the *Policy Statement* discussed above. In accordance with the *Policy Statement*, Tennessee must include tariff provisions in its new proposal that provide the technical specifications required of gas quality delivered to the pipeline for transportation. These new tariff provisions must use the CHDP method or the C6+ GPM method described in the *White Paper*, or, if they do not, Tennessee must explain how its proposed method differs from the CHDP method described in the *White Paper*. In accordance with the *Policy Statement*, Tennessee must also provide a comparison, in equivalent terms, of its proposed gas quality specifications with those of each interconnecting pipeline.

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<sup>50</sup> *Id.*

<sup>51</sup> *Policy Statement* at P 41. The *Policy Statement* states that "safe harbor" provisions and informational posting requirements are means of minimizing the potential for undue discrimination when a pipeline permits blending. *Id.* at P 77 citing *Natural Gas I* at P 43 and 48.

The Commission orders:

(A) The Commission requires Tennessee to make a filing with actual tariff sheets that addresses the requirements and concerns of the *Policy Statement* as discussed in the body of this order within sixty days of the date this order issues.

(B) Parties must file any comments on Tennessee's revised compliance filing within twenty days of the date Tennessee makes that filing.

(C) The Commission's staff is directed to convene a technical conference to address the issues raised by Tennessee's filing and the parties' comments and report the results of the conference to the Commission within 180 days of the issuance of this order.

By the Commission. Commissioner Moeller not participating.  
Commissioner Wellinghoff voted present.

( S E A L )

Magalie R. Salas,  
Secretary.

## **APPENDIX**

Tennessee Gas Pipeline Company

*Pro Forma* Tariff Sheets

FERC Gas Tariff  
Fifth Revised Volume No. 1

### List of Tariff Sheets

Second Revised Sheet No. 305A  
Fourth Revised Sheet No. 306  
First Revised Sheet No. 307  
Third Revised Sheet No. 308