UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Natural Gas Pipeline Company of America Docket No. RP01-503-006

ORDER ON REHEARING

(Issued March 16, 2007)

1. This proceeding arises from an August 6, 2001, filing by Natural Gas Pipeline Company of America (Natural) to modify section 26.1(h) of its General Terms and Conditions (GT&C). Specifically, Natural proposed, from time to time, to post on its Internet website an upper Btu limit and/or a limit on the cricondentherm hydrocarbon dewpoint (CHDP) of gas receipts on specified segments or locations on its system. This order addresses requests for rehearing of the Commission's September 21, 2006, Order in this proceeding.[1]

2. That order denied requests for clarification and rehearing of the Commission's September 2003 Order[2] in this proceeding, which resolved a number of issues concerning Natural's proposal, and established a hearing on the appropriate level of Natural's permanent CHDP safe harbor. The September 2006 Order also affirmed an Initial Decision (ID) issued by the presiding administrative law judge (ALJ) following the hearing on the safe harbor issue.[3] Finally, the September 2006 Order established procedures to further examine the issue of Natural's need for an upper Btu limit

[1] *Natural Gas Pipeline Company of America*, 116 FERC ¶ 61,262 (2006) (September 2006 Order).

[2] *Natural Gas Pipeline Company of America*, 104 FERC ¶ 61,322 (2003) (September 2003 Order).

[3] *Natural Gas Pipeline Company of America*, 113 FERC ¶ 63,036 (2005) (ID).

consistent with the Gas Quality *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Pipeline Company Tariffs* (*Policy Statement*).[4] As discussed below, the Commission denies the requests for rehearing.

I. Background

3. The September 2006 Order included an extensive summary of the origins and history of this proceeding which we will not repeat in full here.[5]

A. Procedural History

4. This proceeding began on August 6, 2001, when Natural filed, pursuant to section 4 of the Natural Gas Act (NGA), revised tariff sheets to modify section 26.1(h) of its GT&C. Specifically, Natural proposed, from time to time, as operationally necessary, to post on its Internet website "an upper Btu limit and/or a limit on the [HDP] for gas receipts on specified segments or other specified locations on its system." The revised tariff language provided that Natural could post such limits for two purposes: (1) "to prevent hydrocarbon dropout, consistent with section 26.1," or (2) "to assure that gas will be accepted for delivery into interconnects with interstate pipelines, intrastate pipelines, end-users or directly connected local distribution companies."

5. After a technical conference, the Commission issued orders in February[6] and September 2003,[7] making a number of rulings concerning Natural's proposal. The Commission found that the proposal to post varying maximum HDP and/or Btu limits was reasonable, since on Natural's system the tendency of liquefiable hydrocarbons to dropout varies from day to day, from one segment of the system to another depending on the mix of lean gas vs. rich gas tendered over each segment, and depending on Natural's ability to deal with changes in the gas by making operational changes to its system. As a result, Natural needs some flexibility to deal with the threat of liquids dropout. The

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[4] *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Pipeline Company Tariffs*, 115 FERC ¶ 61,325 (2006) (*Policy Statement).*

[5] September 2006 Order, 116 FERC ¶ 61,262 at P 3-20.

[6] *Natural Gas Pipeline Company of America*, 102 FERC ¶ 61,234 (2003) (February 2003 Order).

[7] September 2003 Order, 104 FERC ¶ 61,322.

Commission also found that such flexibility benefits shippers by allowing Natural to accept more gas than it otherwise could if Natural had a single fixed standard that applied to all shippers.

6. However, to balance the flexibility provided Natural against the shippers' need for certainty as to the standards their gas must meet, the Commission required Natural to adopt various procedures for posting notices of changes in the varying maximum HDP and Btu limit and posting information concerning every receipt point HDP value it calculates and every blended HDP and Btu value it calculates for a line segment of its system. Finally, the Commission required Natural to establish "a safe harbor dewpoint, *i.e.*, a minimum system wide dewpoint for the gas tendered to Natural that guarantees that any gas with a dewpoint that does not exceed the safe harbor dewpoint will be allowed to flow on Natural's system.[8]

7. The September 2003 Order clarified that, if gas complies with the permanent HDP safe harbor, it may not be rejected for Btu content or changes in the requirements of downstream pipelines. The order also set the issue of the appropriate level of the HDP safe harbor for hearing before an ALJ, finding the existing record to be inadequate to resolve the protests of Indicated Shippers and others that the 15°F permanent HDP safe harbor, which Natural proposed in compliance with the February 2003 Order, was too low and should be 20ºF or 25ºF.

8. Natural, Indicated Shippers, and a number of other parties filed requests for rehearing focusing on the relationship between the permanent CHDP safe harbor and any separate maximum Btu limit Natural might post. On December 20, 2005, the ALJ issued an ID. The ALJ held that Natural's proposed 15ºF HDP safe harbor is just and reasonable. The ALJ first found that the only issue the Commission set for hearing is the appropriate level of Natural's permanent CHDP safe harbor.[9] The ALJ thus refused to consider various proposals by Indicated Shippers to modify Natural's procedures for determining and posting, from time to time, varying maximum CHDP limits on different segments.

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[8] February 2003 Order, 102 FERC ¶ 61,234 at P 43.

[9] Natural submitted an offer of settlement on November 14, 2003. Natural filed to withdraw its offer of settlement on February 16, 2005, which the ALJ confirmed in an order issued March 7, 2005.

9. On September 21, 2006, the Commission issued an order[10] addressing the requests for clarification and rehearing of the September 2003 Order and the ALJ's ID. With regard to the requests for rehearing concerning the relationship between the safe harbor and the posted varying Btu limits, the Commission stated that developments in the years since the filing of the rehearing requests may have altered Natural's need for the authority to post a varying upper Btu limit. Further, the Commission stated that if downstream entities refuse high Btu gas on the ground that such gas may cause problems for end-users, it raises a gas interchangeability issue, as opposed to a gas quality issue. Therefore, the Commission required Natural to make a new filing either changing its proposal concerning an upper Btu limit consistent with the *Policy Statement* or explaining how its current proposal is consistent with the *Policy Statement.* Accordingly, the Commission established procedures to further examine the issue of Natural's need for an upper Btu limit.

10. In the September 2006 Order the Commission also affirmed the ALJ's determination that the only issue the Commission set for hearing is the appropriate level of the CHDP safe harbor figure. The Commission also affirmed the ALJ's findings that: (1) Natural's 15ºF HDP safe harbor is reasonable and ensures safe and reliable operations under all conditions while also maximizing the gas supply available on its system; and (2) Natural has provided substantial evidence justifying its 15ºF CHDP safe harbor. Alliance Pipeline L.P. (Alliance) and Indicated Shippers[11] filed timely requests for rehearing of the September 2006 Order. The requests for rehearing are discussed below.[12]

II. Requests for Rehearing

A. CHDP Tariff Provisions

11. On rehearing, Indicated Shippers contend that that the Commission erred by finding that the CHDP tariff provisions are beyond the scope of the hearing and that, as a result, the Commission is allowing Natural to implement ambiguous and discriminatory gas quality tariff procedures that do not comply with the *Policy Statement.* Indicated

[10] September 2006 Order, 116 FERC ¶ 61,262.

[11] The Indicated Shippers consist of BP America Production Company, BP Energy Company, Chevron U.S.A. Inc. and Marathon Oil Company.

[12] On January 4, 2007, Natural filed to comply with the September 2006 Order. The compliance filing has been protested.

Shippers reiterate their claim that the September 2003 Order set Natural's proposed CHDP tariff procedures for hearing and did not limit the hearing to the CHDP permanent safe harbor. Indicated Shippers submit that the Commission found that the existing record did not provide an adequate basis to resolve the material issues of fact raised by the parties and, hence, the Commission set for hearing the lawfulness of all the proposed tariff revisions related to determining and implementing CHDP limits. Indicated Shippers assert that Natural's CHDP tariff provisions and safe harbor are inextricably linked and a low CHDP safe harbor such as 15ºF should only be adopted if the pipeline is required to adopt CHDP limits that will offset a low CHDP safe harbor. Indicated Shippers maintain that they raised issues related to Natural's CHDP provisions and gas quality in their request for rehearing and clarification of the February 2003 Order. Indicated Shippers state that they did not request rehearing on Natural's CHDP tariff provisions in their request for rehearing of the September 2003 Order because they believed the tariff provisions were set for hearing and the CHDP safe harbor and the tariff provisions are inextricably linked. Indicated Shippers contend that the CHDP tariff provisions have been extensively discussed, subjected to cross-examination, briefed, and are part of the record in this proceeding. Indicated Shippers conclude that the Commission should find that the CHDP tariff provisions are within the scope of the hearing and reject Natural's tariff provisions.

12. Indicated Shippers elaborate that the procedures the Commission previously approved in the proceeding for Natural to post varying CHDP limits gave Natural too much discretion because Natural may change the CHDP limits: for a variety of reasons; with no limit on frequency; for any duration; to any level equal to or greater than the CHDP safe harbor; and, upon any shipper(s). Indicated Shippers claim that Natural's tariff provisions do not require Natural to implement narrowly tailored CHDP limits or to take into account gas blending on its system despite the *Policy Statement's* requirement that a pipeline's CHDP tariff provisions address aggregation and blending.

13. To maximize the effect of blending, Indicated Shippers assert that the Commission should require Natural to revise its tariff provisions to explicitly allow all of its shippers to pair or contractually blend gas offsetting high and low CHDP gas to satisfy Natural's CHDP limits, where operationally feasible (including the pairing of an individual shipper's gas supplies as well as the pairing of one shipper's gas with another shipper's gas).

14. Indicated Shippers also complain that Natural's proposed CHDP tariff procedures do not include sufficiently detailed procedures or standards on how Natural will determine or change a CHDP limit; and (2) Natural's proposed CHDP posting procedures do not define the minimum number or location of receipt/delivery points along its system that Natural will use to monitor and post CHDP information.

15. The Commission denies Indicated Shippers' request for rehearing concerning the CHDP tariff provisions. The Commission again affirms the ALJ's determination that the only issue set for hearing is the appropriate level of the CHDP safe harbor figure. Paragraph 38 of the September 2003 Order stated, "The current record remains inadequate for the Commission to resolve the various factual issues raised by the parties *regarding the appropriate permanent safe harbor dewpoint figure* . . . In order to provide the parties an opportunity to develop the necessary record, we shall set *this issue* for hearing."[13] And in the order's conclusion, the Commission again stated, "The Commission will set *the issue of the appropriate permanent safe harbor dewpoint figure* for an evidentiary hearing before an administrative law judge."[14] The Commission affirms its prior finding that this language unambiguously limits the hearing to the issue of the level of the permanent safe harbor. Therefore, the other issues Indicated Shippers sought to raise at the hearing, including Natural's CHDP tariff provisions regarding the determining and posting of varying CHDP limits, were beyond the scope of the hearing. Indicated Shippers is the only party in the proceeding that argues that the appropriate level of the CHDP safe harbor figure is *not* the only issue set for hearing. Four parties specifically opposed Indicated Shippers' position in their briefs opposing exceptions, arguing that the September 2003 Order only set the safe harbor issue for hearing. These parties were entitled to rehearing on the clear language of the September 2003 Order concerning the extent of the issues set for hearing.

16. We continue to disagree with Indicated Shippers that the issue of the level of the CHDP safe harbor encompasses Natural's proposed tariff provisions governing the determining and posting of varying CHDP limits (safe harbors). The CHDP tariff provisions are distinct and separate from the CHDP safe harbor. The CHDP safe harbor is a single figure to be set forth in Natural's tariff and applies to Natural's entire system, not just a single segment or certain points. The CHDP safe harbor will not fluctuate based on changing operational conditions. In contrast, the CHDP tariff provisions involve the determining and posting of operational CHDP limits which are set based on the changing operational conditions on various segments or at certain points on Natural's system and may fluctuate.

17. In fact, as described in the September 2006 Order, the Commission previously gave all the parties, including Indicated Shippers, a full opportunity earlier in the proceeding to litigate their objections to Natural's section 4 proposal for determining and posting, from time to time, varying maximum CHDP limits, including the procedures

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[13] September 2003 Order, 104 FERC ¶ 61,322 at P 38 (emphasis supplied).

[14] *Id.* P 62 (emphasis supplied).

Natural would use for such postings and the relevant information that Natural must provide its shippers concerning its CHDP calculations. After that opportunity, the February and September 2003 Orders finally resolved on the merits all issues concerning Natural's proposed tariff provisions regarding the determination of CHDP limits. If Indicated Shippers were not satisfied with the Commission's resolution of those issues in the September 2003 Order, or believed the Commission should have set additional issues for hearing beyond the level of the permanent CHDP safe harbor, Indicated Shippers should have raised those matters in its request for rehearing of the September 2003 Order. Indicated Shippers admit in their request for rehearing that they "did not request rehearing on the HDP tariff provisions. . . ."[15] Thus, Indicated Shippers did not reserve the right to raise those issues later in this NGA section 4 tariff change proceeding. Instead, Indicated Shippers limited its rehearing request to the issue of Natural's proposal to establish upper Btu limits, as opposed to the establishment of upper CHDP limits.

18. Citing *Southern, Columbia* and *Tennessee*,[16] Indicated Shippers contend that the Commission has required other pipelines with ongoing gas quality proceedings to update their CHDP tariff provision to properly address the requirements of the *Policy Statement*, including the *Policy Statement's* principle regarding aggregation and blending. However, the proceedings in the cases cited by Indicated Shippers were at a different stage than the Natural proceeding. The February and September 2003 Orders resolved all issues concerning the justness and reasonableness of Natural's section 4 proposed CHDP tariff provisions prior to the Commission's commencement of industry-wide consideration of gas quality issues. In contrast, in *Southern*, *Columbia* and *Tennessee* the proceedings were held in abeyance pending the industry-wide efforts covering hydrocarbon liquids dropout.

19. In these circumstances, the Commission will not further consider in this proceeding initiated by Natural under NGA section 4, any issues raised by Indicated Shippers concerning Natural's proposed tariff provisions regarding determining and posting of CHDP limits, which the Commission has already finally resolved by its

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[15] Indicated Shippers' October 23, 2006, Request for Rehearing at 17.

[16] *Citing Southern Natural Gas Company*, 116 FERC ¶ 61,295, at P 60 (2006) (*Southern*); *Indicated Shippers v. Columbia Gulf Transmission Company*, 116 FERC ¶ 61,112, at P 32 (2006) (*Columbia*); and *Indicated Shippers v. Tennessee Gas Pipeline Company*, 116 FERC ¶ 61,113, at P 45 (2006) (*Tennessee*), *order on clarification*, 116 FERC ¶ 61,302 (2006).

September 2003 Order in this proceeding. Other parties, including the pipeline, have the right to rely on the finality of the Commission's determinations in a section 4 proceeding. Otherwise they could suffer adverse consequences. If Indicated Shippers believe that the HDP tariff provisions previously approved in this section 4 proceeding are unjust and unreasonable in light of the policies announced in the *Policy Statement*, Indicated Shippers may file a complaint pursuant to NGA section 5. Such a complaint proceeding would enable the development of a more current record, taking into account actual experiences with Natural's HDP tariff provisions, which have been in effect since the September 2003 Order accepting Natural's filing to comply with the February 2003 Order.

B. 15ºF CHDP Safe Harbor Level

1. Overview

20. In this and subsequent sections of this order, we consider the requests for rehearing of our approval of Natural's proposed 15º F CHDP safe harbor provision. Natural bears the burden under NGA section 4 to show that its proposed safe harbor is just and reasonable.[17] If Natural satisfies that burden, its proposal must be accepted, even if some other safe harbor level could also be found to be just and reasonable. As the Commission has explained: "[u]nder the statutory scheme set forth in the NGA, the pipeline has the initiative through a section 4 filing to propose how it will recover its costs. If the pipeline's proposal is just and reasonable, the Commission must accept it, regardless of whether other just and reasonable rates may exist."[18] Parties supporting alternative safe harbor levels in this proceeding bear the burden of proof under section 5 of the NGA to show that their proposal is just and reasonable.[19] Thus, we may not require Natural to adopt a different safe harbor unless we find (1) that Natural has not shown that its proposed 15°F CHDP Safe Harbor is just and reasonable and (2) that the alternative proposal is itself just and reasonable.

21. In the September 2006 Order, the Commission affirmed the ALJ's decision that Natural had satisfied its burden of showing that its proposed 15ºF CHDP safe harbor is just and reasonable. The Commission found that: (1) Natural's 15ºF CHDP safe harbor

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[17] *Williston Basin Interstate Pipeline Co.*, 71 FERC ¶ 61,372, at 62,461 (1995).

[18] *Tennessee Gas Pipeline Co.*, 80 FERC ¶ 61,070, at 61,223 (1997), *aff'd*, *Consolidated Edison Co. vs. FERC*, 165 F.3d 992 (D.C. Cir. 1999).

[19] *Western Resources, Inc. v. FERC*, 9 F.3d 1568, 1577-79 (D.C. Cir. 1993).

ensures safe and reliable operations under all conditions while also maximizing the gas supply available on its system; and, (2) Natural provided substantial evidence justifying its 15°F CHDP safe harbor. Both Indicated Shippers and Alliance request rehearing of the Commission's approval of Natural's proposed 15°F CHDP safe harbor. They contend that there were a number of flaws in the evidence presented by Natural in support of its proposed safe harbor. As a result, they argue, the Commission erred in finding that Natural based its safe harbor on a scientific, industry approved method for computing CHDP limits.

22. For the reasons discussed below, the Commission denies rehearing. The *Policy Statement*[20] encourages pipelines proposing tariff provisions for the control of hydrocarbon dropout to use one of the two methods the HDP White Paper found to be valid: the CHDP or C6+ GPM methodologies.[21] Natural proposed to use the CHDP method for its safe harbor. The Commission continues to find that Natural determined its proposed safe harbor consistent with the nine-step process set forth in Appendix B to the HDP White Paper (Appendix B process).[22]

23. Steps 1 through 3 of that process state that the pipeline should define the area for which the limit is to be applied, review the historical data of the area for composition, flowing gas temperature and pressure of delivered gas, and then, in Step 3, "select a candidate CHDP limit based on historical gas quality data."

24. Step 4 requires the pipeline to develop a phase diagram that represents the gas at the selected CHDP. Step 5 requires the pipeline to draw the JouleThomson (J-T) line, representing a 7°F drop in temperature for every pressure decrease of 100 psi, tangent to the HDP curve. In Step 6, the pipeline identifies "the lowest temperature and highest pressure of flowing gas at each place of pressure reduction and plot[s] the corresponding

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[20] *Policy Statement* at P 32.

[21] *Id.* P 34. C6+ GPM stands for hexanes and heavier hydrocarbons as measured in gallons per thousand cubic feet of natural gas. The C6+ GPM method consists of measuring and controlling for the amount of these heavier hydrocarbons in the natural gas stream. *Id.* P 19 n.20.

[22] *ANR Pipeline Company*, 117 FERC ¶ 61,286, at P 42 (2006) (December 2006 ANR Order) ("It was not the Commission's intent to require a pipeline to rigidly follow all of the parameters of the White Paper, but to set out the practical suggestions of the White Paper to be considered in conjunction with a pipeline's operating conditions to achieve the ultimate goal of safe, reliable service").

point on the phase diagram." In Steps 7 and 8, the pipeline then determines, based on the analysis in Steps 4 through 6, whether liquids dropout will occur at any of the relevant points. If not, the pipeline may approve the candidate CHDP limit. If so, the pipeline may either select a lower candidate CHDP limit for a similar analysis, or the pipeline may consider alternative methods for controlling liquids dropout at the problematic points, such as installing heaters.[23]

25. Below, we first address the rehearing applicants' contentions that Natural did not properly follow Steps 1 through 3 three of the Appendix B process in selecting its candidate 15° F Safe Harbor CHDP on the technical requirements of the White Paper. In subsequent sections, we address the rehearing applicants' contentions that: (1) Natural did not properly analyze its candidate safe harbor pursuant to Steps 4 through 8 of the nine-step process; (2) Natural did not properly consider its ability to blend gas; (3) Natural improperly based its safe harbor on the worst case downstream scenario; and, (4) the Commission erred in rejecting Alliance's proposed higher safe harbor.

2. Selection of Candidate Safe Harbor

a. September 2006 Order

26. Pursuant to Step 1 of the Appendix B process, Natural defined the relevant major market area of its system as the Chicago area. Natural then, in Step 2, reviewed historical CHDP data for the Chicago market area. Based on his experience, Mr. Miller, who is in charge of Natural's operations, testified that Natural's high-end CHDP levels during the crucial winter months are generally in the 18°F – 23°F range.[24] Another witness for Natural, Mr. McClain tested Mr. Miller's information by reviewing typical CHDP levels for two representative points in Natural's Chicago market area which received gas from the Amarillo and Gulf Coast lines during the 2003 – 2004 winter.[25] He testified that data for those two points validated Mr. Miller's observation.[26] Based on these winter CHDP

[23] Step 9 provides that the pipeline should review an established CHDP limit from time to time as more experience is gained.

[24] Tr. 130-131 (Mr. Miller).

[25] Ex. NGP-8.

[26] Tr. 1068 (Mr. McClain).

levels, Natural, in Step 3, chose a 15°F CHDP candidate safe harbor.[27] Natural believed that such a safe harbor would provide a margin of safety and reduce instances of liquids dropout to manageable levels.

27. In the September 2006 Order, the Commission found that Natural's historic operating conditions support its selection of a 15°F CHDP safe harbor value.[28] In addition, the Commission held that Natural adequately demonstrated that during the winter, the CHDP of gas delivered in Chicago generally ranges from 18°F – 23°F.[29] The Commission found that data provided by Mr. McClain concerning CHDP levels at Des Plains and Eola was representative of Natural's market area.

28. In the September 2006 Order, the Commission also found that Natural reasonably selected a safe harbor somewhat below the 18°F – 23°F winter range of CHDP levels in order to provide a reasonable safety margin. The Commission found it reasonable that in setting this safe harbor value, Natural would take a conservative approach and weigh in favor of those periods during the heart of the winter season, where conditions for liquids dropout are most critical. The Commission also found that the safe harbor value must be one that would not create operational problems under any operating condition on Natural's system.[30]

29. In the September 2006 Order, the Commission stated that the purpose of the safe harbor is to provide shippers a guarantee that gas satisfying that provision will be accepted, regardless of changing conditions on the system. The Commission found that the dynamic nature of the conditions on Natural's system requires some discretion to deal with the threat of liquids fallout.[31] Therefore, the Commission found that Natural's selection of a 15°F CHDP candidate safe harbor value for its system appropriate.[32]

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[27] Ex. NGP-7 at 14.

[28] September 2006 Order, 116 FERC ¶ 61,262 at P 72.

[29] *See* Ex. NGP-7

[30] September 2006 Order, 116 FERC ¶ 61,262 at P 73, *citing* ID, 113 FERC ¶ 63,036.

[31] *See Id.* P 74, *citing* February 2003 Order, 102 FERC ¶ 61,234.

[32] *See* September 2006, Order, 116 FERC ¶ 61,262 at P 74.

b. Rehearing Requests

30. On rehearing, Alliance attacks the Commission's finding that the high-end wintertime CHDP levels experienced in its Chicago market area have been in the $18^{o}F – 23^{o}F$ range.[33] Alliance contends that Natural's two witnesses, Mr. Miller and Mr. McClain, failed to provide any reliable evidence to support their assertions that wintertime CHDP levels were in that range. Alliance argues that Mr. Miller did not provide any substantive evidence to support the alleged $18^{o}F – 23^{o}F$ historic CHDP range and relied entirely on Mr. McClain for the technical support for that safe harbor level.[34]

31. Alliance argues that the two delivery points examined and relied upon by Mr. McClain were less than one percent of Natural's 240 market area delivery points, and Mr. McClain failed to show they were representative of the market area.[35] Alliance argues that based on a few bits of data, Mr. McClain validated Mr. Miller's suppositions and then stopped looking for more data.[36] Alliance states that the September 2006 Order supports its reliance on Mr. McClain's two points by simply noting that they are located within Natural's market area and the data obtained lies within the range of CHDP values historically experienced by Natural.[37] Alliance argues that this reasoning does not address Mr. McClain's admission that the points could differ dramatically from other points in the same geographic area and is circular because it confirms that data is representative only because it is consistent with other unsupported statements about historic CHDP levels. Alliance asserts that this flawed logic reflects Mr. McClain's own circular approach.

32. Alliance further claims that Mr. McClain did not ensure that the data he used was obtained through measurements that complied with the HDP White Paper's measurement directives, despite his own claim that he did follow the HDP White Paper. Alliance also claims that Natural does not conduct periodic evaluations of its assumed C6+ split as suggested by the HDP White Paper, and that the two delivery points Natural relied on for its review of historic winter-time levels did not have such extended analysis performed. Alliance argues that since Natural did not measure the C6+ split at the delivery points

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[33] *See Id.* P 54, 66, 72-74.

[34] *See* Ex. NGP-1, at 4:1-3.

[35] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 72.

[36] *See* Alliance's October 23, 2006, Request for Rehearing at 6.

[37] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 73.

using the most sophisticated equipment available, and since Natural does not have a schedule for periodic evaluation of the splits using such equipment, then Natural's CHDP values are flawed.[38]

33. Alliance also contends that the September 2006 Order failed to address the fact that, even if Natural based its alleged 18°F – 23°F wintertime CHDP range on reliable data, that range would actually demonstrate that Natural's proposed 15°F safe harbor is too low and that Natural operated safely with market area CHDP levels of up to 23°F. Alliance asserts that it is this upper end of historically experienced CHDP levels that would be relevant to setting a safe harbor level. Alliance states that the September 2006 Order acknowledges that Natural historically delivered gas with a CHDP at or above 20°F,[39] but dismisses it by finding that "the fact that Natural, on occasion, has delivered gas above a certain CHDP level should not form the basis for setting a safe harbor level".[40] Alliance however argues that the data shows that deliveries at or above 20°F occurred more frequently than "on occasion."[41]

34. Finally, Alliance states that the September 2006 Order justifies the use of a 15°F CHDP safe harbor as a "conservative" approach and states that the safe harbor should be set below operational values to provide an effective margin of safety.[42] Alliance argues that since Natural operated its system safely while regularly experiencing CHDP levels at or above 20°F for many years, there is no need to artificially interpose an additional "margin of safety" on top of those demonstrably safe operating conditions. Alliance similarly argues that the fact that Natural would "make more liquids" under a 25°F safe harbor than it would under a 15°F safe harbor,[43] while obviously true, does not justify imposing a lower safe harbor than operationally necessary to ensure safe operations. If this were the standard, the logical conclusion would be to impose a CHDP limit that produces zero liquids.

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[38] *Citing* Tr. 1061-1063 (Mr. McClain).

[39] *Id.* P 74, citing Ex. IS-7; *see also* Ex. IS-34.

[40] September 2006 Order, 116 FERC ¶ 61,262 at P 73.

[41] *See e.g.,* Ex. IS-34.

[42] September 2006 Order, 116 FERC ¶ 61,262 at P 73-74.

[43] *Id.* P 74.

c. Commission Determination

35. The Commission denies Alliance's request for rehearing on these issues, and reaffirms its holding that Natural properly selected a 15°F candidate safe harbor in Steps 1 through 3 of the Appendix B process.

36. Much of Alliance's argument on rehearing focuses on the sufficiency of Natural's evidence to support its assertion that the high-end wintertime CHDP levels experienced in its Chicago market area have been in the 18°F – 23°F range. The Commission continues to find that Natural's witnesses supported this assertion. The Commission recognizes that Natural's witness, Mr. Miller, did not personally, present any evidence of actual measurements of the CHDP levels in Natural's market area. However, Mr. Miller does have extensive experience managing Natural's system. From 1989 to 1995, he was Natural's operations manager for the eastern half of Iowa, where his responsibilities included maintaining acceptable gas quality and providing measurements to customers.[44] Since 1997, he has been responsible for all of Natural's system operations, including the quality of gas delivered to Natural's customers.[45] He testified that, based on his experience, "we manage our deliveries into our market area in a range that doesn't get out of the 18 to 23 degrees, 25 max, max, because I know from my experience that we're taking more liquids than we can manage when we start getting up towards 25 degrees."[46]

37. Mr. Miller further testified that Natural designed the system to handle small quantities of liquids dropout through facilities such as "drip pots." A drip pot is a small tank attached to the bottom of the pipeline in a low spot which will collect liquids as it runs down the pipeline. Mr. Miller testified that these facilities are only designed to handle a few gallons of liquids dropout per day. "Whenever the HDP of the gas stream in the winter begins to reach the upper limit of the 18 to 23 degrees range, it becomes difficult to empty these facilities fast enough. In other words, as drip production changes from gallons per day to gallons per hour, the small drip collection tank cannot be emptied

[44] Ex. NGP-1 at 2.

[45] *Id*. at 3.

[46] Tr. 130-131 (Mr. Miller).

fast enough and flowing condensate begins to move down to the delivery meters as free liquids."[47] This can cause an immediate failure of the meter or reduced flow at the meter impeding deliveries to customers.[48]

38. Mr. McClain, Natural's vice president for engineering, analyzed actual CHDP levels at two of Natural's delivery points in the Chicago area during the winter of 2003-2004. This analysis confirmed that during the course of that winter the HDP at those points fluctuated from lows -10°F to highs of 18°F to 23°F.[49] He further testified that "an HDP level approaching 25°F in the market area is considered a "red flag." If the HDP begins to approach that level during the winter, Natural knows there will be serious problems with the fallout of liquid hydrocarbons and takes special steps to reduce the HDP and also deal with such fallout."[50]

39. The Commission concludes that Natural's analysis of actual HDP levels at two delivery points is sufficient to support the ALJ's finding that HDP in the market area generally peaks within the range of 18°F to 23°F, when combined with the testimony of Mr. Miller and Mr. McClain that Natural manages its system to avoid HDP levels in excess of that range because higher HDP levels cause operational problems. In addition, with regard to Alliance's concern that Mr. McClain only analyzed wintertime HDP levels at two delivery points, Natural relied on this data primarily for the purpose of selecting a "candidate" CHDP level at the Step 3 stage of the Appendix B process. Under that process, the selection of a candidate CHDP level is a matter of judgment on the part of the pipeline based on a general review of conditions on its pipeline. The remaining steps of the process are then used to verify whether the chosen "candidate" will in fact accomplish the goal of minimizing liquids dropout. Here, as discussed below, in Step 6 of the process, Natural analyzed a large number of points to determine whether liquids dropout would occur under its selected safe harbor. Thus, Natural has not relied solely on data from two delivery points to support its proposed safe harbor.

40. The Commission also finds unpersuasive Alliance's argument that Natural CHDP data are unreliable, because Natural fails to accurately measure the heavier hydrocarbons, especially the C6+ compounds. Alliance bases its argument on section 6.3 of the HDP

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[47] Ex. NGP-11 at 17.

[48] Ex. NGP-1 at 24.

[49] Ex. NGP-8.

[50] Ex. NGP-20 at 11.

White Paper where it recommends an extensive analysis of C6+ split values on a periodic basis.[51] The HDP White Paper in section 6.3 outlines a three-step process for indirect CHDP determination; sampling, analysis, and calculation. Regarding analysis and calculation, it states that the "most common" means of sampling and analysis is done by use of permanent sample probes (isokinetic) that are installed on the mainline, and the "most common" chromatograph found in field applications uses a combination of columns to analyze for methane through pentane (C1 through C5) and then treats all compounds with molecular weights greater than pentane as a C6+ fraction, generally using a fixed mole fraction average of C6, C7, and C8 (such as the Gas Processor's Association (GPA) standard of 60/30/10). As discussed above, it recommends that a periodic analysis of the actual splits should be performed to get a more accurate assumption.

41. The Commission notes that Natural does not have a schedule for determining the most accurate C6+ split configuration, nor does it use an actual C6+ split reading for the two delivery points, as the HDP White Paper suggests would be useful as parameters in delineating the CHDP. Natural has two portable chromatographs that can measure gas samples through C9, but did not use them to determine the actual splits for the two data points.[52] However, the Commission finds that the data and equipment Mr. McClain used for his analysis followed an established industry practice, and it satisfies the criteria in the HDP White Paper in determining the CHDP. While Natural did not use its most sophisticated equipment available to derive the most accurate C6+ split for its analysis, it did use the "most common" equipment for its analysis with an assumed split.[53]

42. Furthermore, according to testimony, Natural uses a more accurate C6+ split (referenced in the HDP White Paper as a 47/36/17 split)[54] as its assumption, rather than

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[51] Alliance is referring to the characterizations assumed in the applicable equation of state, where C6, C7, and C8 are assigned a weight distribution, or split. The White Paper recommends in paragraph 6.3.4 the "determination of the appropriate characterization for a given pipeline system may be more accurately derived from the weighted average compositions of the regional supply on that pipeline." Natural used a default split that came from a Columbia Gas study in the 1970's.

[52] *See* Tr. 1066 (Mr. McClain).

[53] *See* Ex. NGP-7 at 6.3.1

[54] *See* Ex. NGP-7, Appendix B, step 3.

the GPA standard split.[55] Natural states that "the assumed split is used by pipelines in billing, and in that context is accepted by shippers, producers, and consumers. In addition, gas is bought and sold on that assumption[.]" Also, shippers have an alternative to Natural's assumption. Natural states that shippers can provide their own extended analysis to Natural from a certified laboratory.[56] The Commission finds that while Natural's assumption may not be *the most* accurate, it is still based on a sound, scientific approach that is commonly used to determine the CHDP, as determined by the HDP White Paper. Also, the Commission notes that Natural's C6+ split is also used during the regular course of business relieving Natural of the burden of conducting expensive, periodic studies to find a more accurate split.[57]

43. Finally, Alliance contends that, even assuming the accuracy of Natural's data showing that its peak wintertime HDP levels are in the $18^{o}F – 23^{o}F$ range, that data shows that Natural can handle HDP levels in excess of $15^{o}F$, and therefore its proposed $15^{o}F$ CHDP safe harbor is too low. This contention ignores the fact that, while Natural has been able to manage liquids formation when CHDP levels have exceeded 20°F on a number of occasions, Natural also experienced significant and potentially unmanageable levels of liquids dropout when CHDP levels exceed 18°F.[58] A safe harbor should be set at a level that will accommodate "all conditions" on Natural's system, since the safe harbor requires Natural to accept gas up to the level of the safe harbor regardless of operating conditions on its pipeline. As Mr. McClain testified, "The concern must be with those periods during the heart of the winter season, particularly during an extended cold spell, when conditions for the fallout of liquid hydrocarbons are most critical."[59] For example,

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[55] *Citing* Gas Processor's Association Standard 2261, "*Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography*," 2000.

[56] *See* Ex. NGP-6 at p. 11-12.

[57] *See* Tr. 1063-1064 (Mr. McClain).

[58] Tr. 582 (Mr. Miller).

[59] Ex. NGP-20 at 17. As Mr. McClain further testified, "The simple fact that Natural has delivered gas above a certain HDP level on a number of days over the past five years tells little or nothing about the proper safe harbor level for HDP. It gives no consideration to the operating conditions prevailing on those days. It does not tell us whether the operating conditions on those days presented any significant threat of liquids fallout. Nor does it tell us whether dangerous fallout of liquid hydrocarbons had begun to occur on those days." *Id*. at 18.

Natural's market area may experience temperatures significantly colder than those experienced in the 2003-2004 winter.[60] Thus, a safe harbor limit should be set below a pipeline's operational limits to provide an effective margin of protection for the system.[61] It would be illogical to apply a margin of safety at the high end of the CHDP range under which Natural has been able to operate during the winter, because it would put the safe harbor limit above the low end of the range Natural experiences. As discussed in the next section, Natural has shown that a safe harbor limit above 15°F would expose the pipeline to the risk of unmanageable levels of liquids dropout in its system even if flowing gas meets the higher safe harbor limit.

3. Analysis of Candidate CHDP Safe Harbor

a. September 2006 Order

44. Once Natural selected a candidate CHDP safe harbor of 15°F, Steps 4 through 8 of the Appendix B process required that it evaluate whether such a safe harbor would enable it to keep liquids dropout to a manageable level. Liquids dropout is most likely to occur at those points on a system where there are pressure drops, for example at delivery points. This is because a decrease in pipeline pressure causes the temperature of gas to decrease, which in turn increases the possibility of liquids dropout. "The rule of thumb is that for every 100 pounds of pressure drop, the gas temperature will drop by 7°F."[62] This drop in temperature is represented by what is known as the J-T line. That line, which has a constant slope and is drawn tangent to a single point to the CHDP phase curve, enables an analyst to identify points where liquids dropout could potentially occur, depending upon the level of the pressure drop at or downstream of the delivery point.[63] The temperature/pressure points to the right of the J-T line will not experience liquids dropout no matter how large the decrease in pressure. The temperature/pressure points to the left of the J-T line will have the potential to experience liquids dropout.

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[60] Tr. 297 (Mr. Miller); Tr. 1049 (Mr. McClain).

[61] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 74.

[62] Section 2.4.5 of the HDP White Paper.

[63] Tr. 1175:7 – Tr. 1177:23 (Mr. Hereth).

45. Natural's witness, Mr. McClain developed three phase diagrams representing 10°F, 15°F, and 25°F cricondentherm levels based on data from the 2003-2004 winter.[64] Initially, Natural plotted the pressure and temperature for points where pressure reductions are made by Natural or by customers immediately downstream of the point of delivery.[65] Natural's methodology identified several points located to the left of the phase curve, indicating that liquids will fall out at the stated pressures and temperatures.[66] Later in rebuttal testimony, Mr. McClain prepared three phase diagrams which incorporate the J-T line into its existing analysis,[67] which indicates the J-T Effect. Mr. McClain added the J-T line because the HDP White Paper calls for its application. Natural identified the points to the left of the J-T line as potential problems which significantly increased the number of problematic points Natural originally identified.[68]

46. In the September 2006 Order, the Commission rejected contentions that the phase diagrams presented by Mr. McClain were unreliable. The Commission stated that the pressure and temperature data supplied by Natural is typical for Natural's market area and noted that Natural's low gas flow through certain meters is normal and such low flow points often represent interconnections with small municipalities particularly susceptible to the dangers of liquids fallout and without resources to cope with the liquids.[69] The Commission also stated that Natural has some obligation to protect the pipeline's captive customers[70] and to develop a CHDP safe harbor capable of accommodating all conditions on its system.[71] The Commission found that Natural met this obligation by using pressure

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[64] Ex. NGP-10 (Cricondentherm is a single point on the curve denoting the highest temperature at which two phases (liquid and vapor) will occur).

[65] Natural's Initial Br. at 19-20.

[66] Tr. 1175:7 – Tr. 1177:23 (Mr. Hereth).

[67] Ex. NGP-22, NGP-23, and NGP-24 apply the J-T line to the HDP curve.

[68] Natural's Initial Br. at 20-21.

[69] *Id.*, *citing* Tr. 99:1-12 (Mr. Miller) and Ex. NGP-11 at 44:18 – 45:2.

[70] September 2006 Order, 116 FERC ¶ 61,262 at P 101, *citing Natural Gas Pipeline Company of America*, 73 FERC ¶ 61,050, at 61,128 (1995).

[71] September 2006 Order, 116 FERC ¶ 61,262 at P 101, *citing* September 2003 Order, 104 FERC ¶ 61,322 at P 38.

and temperature data representative of its pipeline and its market area. The Commission also found that accommodating all conditions on Natural's system[72] necessitates consideration of low flow points as well as larger points.[73]

47. The Commission rejected claims that problematic points where line heaters are installed should not be taken into consideration when determining the appropriate CHDP safe harbor limit. The Commission found that line heaters are important devices which could be used to mitigate the potential of liquids dropout. However, the Commission stated that the HDP White Paper states that "while gas heaters do indeed provide immediate protection … gas heating alone should not be considered a system wide hydrocarbon dewpoint control."[74] The Commission agreed with Natural's witness, Mr. McClain, that the potential failures of line heaters must be considered when determining the CHDP safe harbor limit.[75] Thus, the Commission found that due to the potential failure of line heaters, the existence of line heaters does not provide an adequate basis to exclude delivery points with line heaters when determining where liquids dropout may occur on a pipeline's system.

b. Rehearing Requests

48. Alliance and Indicated Shippers state that the September 2006 Order erred in rejecting criticisms of Mr. McClain's evidence that intended to show that hydrocarbon liquids dropout would occur at certain pressure and temperature combinations occurring on Natural's system if CHDP was not controlled to 15°F. Alliance criticizes the pressure drop calculations and the anomalously low minimum temperatures used by Mr. McClain.[76]

49. Alliance states that the September 2006 Order further rejected arguments that the alleged problematic points in Mr. McClain's evidence at which line heaters are present should not be taken into account in determining the appropriate CHDP safe harbor. The

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[72] September 2006 Order, 116 FERC ¶ 61,262 at P 101.

[73] *Id., Citing* Tr. 98:19 – Tr. 99:12 (Mr. Miller); Tr. 99:25 – Tr. 100:3 (Mr. Miller).

[74] *See* Ex. NGP-7 § 2.4.9.

[75] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 102, *citing* Ex. NGP-29 at 14:16-21.

[76] Alliance's October 23, 2006, Request for Rehearing at 10-11, *citing* Tr. 1111 (Mr. McClain); Tr. 1115-1136 (Mr. McClain).

September 2006 Order agreed that "line heaters are important devices which could be used to mitigate the potential of liquid fallout," but rejected consideration of line heaters on the basis of the HDP White Paper's statement that gas line heaters alone should not be considered as a system wide dewpoint control, and on Mr. McClain's concerns about line heater failure.[77]

50. Alliance claims that no party to this case has suggested that line heaters serve as a system wide CHDP control, but Alliance and others have simply argued that alleged problematic points, many based on extreme data points, can be managed with line heaters during those alleged extreme circumstances, in lieu of imposing an unnecessarily low CHDP safe harbor. Alliance states that in rejecting those arguments, the September 2006 Order contradicts the Commission's finding in its recent ANR Pipeline Company (ANR)[78] order (July 2006 ANR Order) where the Commission held that "there are methods for preventing liquid fallout once gas has been processed to a pipeline's HDP or CHDP Safe harbor limits. For example, heaters may be installed to ensure that the temperature of the gas stream in those parts of the system that experience low ambient temperatures remains high enough to control liquid fallout."[79] The July 2006 ANR Order further held that "it may well be more efficient to address the special needs of a few downstream entities through such strategies as the installation of heaters, rather than requiring all gas entering the upstream pipeline's system to be subject to more expensive processing than is necessary for the safe operation of the vast bulk of the interstate systems through which the gas will flow."[80]

51. Indicated Shippers submit that according to the HDP White Paper, Natural's analysis should not have ended after Natural identified the potentially problematic delivery points; instead, Natural should then have examined each potentially problematic delivery point and determined whether and to what extent the delivery point would experience actual hydrocarbon liquids dropout. Indicated Shippers argue that this step is necessary because for all temperature/pressure points to the right of the J-T line (and thus not problematic), the temperature/pressure point will follow the slope of the J-T line and will always remain to the right of the J-T line when pressure is reduced because there is

[77] September 2006 Order, 116 FERC ¶ 61,262 at P 102.

[78] *ANR Pipeline Company*, 116 FERC ¶ 61,002 (2006) (July 2006 ANR Order).

[79] *Id.* P 58.

[80] *Id.* P 59.

sufficient heat in the gas stream to prevent hydrocarbon liquid formation.[81] Thus, as a result of the J-T line, delivery points to the right of the J-T line will not experience hydrocarbon liquids dropout and will not become problematic delivery points, regardless of the magnitude of the pressure drop(s). Indicated Shippers however state that the temperature/pressure points to the left of the J-T line are potentially problematic and, thus, should have been further examined by Natural.

52. Indicated Shippers contend that by ending its analysis prematurely and not following the process set forth in the HDP White Paper,[82] Natural erroneously concluded that the potentially problematic delivery points are actual problematic delivery points and did not take into account that a delivery point may never experience hydrocarbon liquids dropout problems even if it is initially identified as a potentially problematic delivery point.[83] Indicated Shippers assert that the "potential instances of liquid formation" or potentially problematic delivery points are not actual problematic delivery points, but are potentially problematic points that Natural should have further examined.

53. Indicated Shippers submit that based on a delivery point by delivery point analysis of Natural's system consistent with the HDP White Paper, Indicated Shippers identified 17 additional potentially problematic delivery points at a CHDP of 20°F, compared to a CHDP of 15°F.[84] Of these 17 delivery points, 15 have line heaters.[85] Indicated Shippers state that although the Commission downplayed the importance of line heaters in its September 2006 Order, Natural has historically treated delivery points with line heaters as not problematic.[86] Indicated Shippers assert that in fact, as part of Natural's analysis

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[81] Ex. IS-1 at 17:11-13.

[82] *cf.* ID, 113 FERC ¶ 63,036 at P 28.

[83] Indicated Shippers claim that the HDP White Paper indicates that several factors determine whether there will be actual hydrocarbon liquids dropout at a potentially problematic delivery point. The relevant factors include: (1) the existence of equipment, such as line heaters and pressure reduction facilities, at the delivery point; (2) the magnitude of pressure reductions at the delivery point; (3) the way in which pressure reductions occur at the delivery point; (4) the volume of gas at the delivery point; and, (5) whether deliveries are made intermittently. (Ex. IS-1 at 18:1-4).

[84] Tr. 896:15-23 (Mr. McClain); Ex. IS-37; Tr. 1178:17 – Tr. 1179:3 (Mr. Hereth).

[85] Ex. IS-37.

[86] Tr. 897:1-14 (Mr. McClain); Ex. IS-37.

in this proceeding, Natural assumed that the delivery points where line heaters currently exist would not have problems with hydrocarbon liquids dropout.[87] Indicated Shippers further assert that Natural also conceded that its line heaters rarely fail and that line heaters can eliminate potential hydrocarbon liquids dropout problems.[88]

54. Indicated Shippers state that according to the process defined in the HDP White Paper, with line heaters at 15 of the 17 additional potentially problematic delivery points, Natural should have reviewed the two additional potentially problematic delivery points at a CHDP of 20ºF. Indicated Shippers submit that in order to determine whether the two additional delivery points are actual problematic delivery problems at a CHDP of 20°F, the pressure drops at the two delivery points must be considered, because temperature is directly impacted by pressure drop, according to the J-T line. Indicated Shippers claim that given the actual temperature and pressure combinations at the two additional potentially problematic delivery points before any pressure drop, the maximum pressure drop experienced at these two delivery points would result in a flowing gas temperature greater than 20ºF for both delivery points.[89] Thus, continues Indicated Shippers, both delivery points will remain to the right of the J-T line and, thus, are not problematic delivery points at a CHDP of 20°F.[90] Indicated Shippers assert that an application of all of the steps in the HDP White Paper process demonstrates that Natural's system experiences no additional problematic delivery points at a CHDP of 20°F, compared to a CHDP of 15°F.[91] For that reason, Indicated Shippers claim that a CHDP safe harbor of 15ºF is too low for Natural's system and Natural's CHDP safe harbor should be no lower than 20ºF.

c. Commission Determination

55. The Commission finds no merit in Alliance's and Indicated Shippers' arguments. Mr. McClain's phase diagrams, using data from the 2003-2004 winter, showed that with

[87] Ex. IS-36.

[88] Tr. 902:11-23 (Mr. McClain); Tr. 681:11-13 (Mr. McClain); Tr. 894:5-6 (Mr. McClain); Tr. 456:21-22 (Mr. Miller); Tr. 486:23-25 (Mr. Miller); Tr. 1052:2-5 (Mr. McClain); Tr. 1052:24 – Tr. 1053:3 (Mr. McClain).

[89] Based on Natural's data, the two delivery points are subjected to a maximum pressure drop, if any, of 150 psig or less. (Tr. 909:10 – Tr. 910:5) (Mr. McClain).

[90] Tr. 911:3-11 (Mr. McClain); Ex. IS-37.

[91] Ex. IS-37.

CHDP at 15ºF Natural could experience up to 135 potential instances of liquids formation, at 20ºF it could experience up to 161 instances of liquids formation, and at 25ºF it could experience up to 193 instances of liquids formation.[92] Indicated Shippers' own witness, Mr. Hereth performed a similar analysis based on data for the year 2000 to determine the potential for liquids dropout with a 20ºF CHDP.[93] He found that Natural made large volume deliveries at 86 points during that year. Of these, 31 points (or approximately 36 percent) had temperature and pressure combinations that could contribute to liquids dropout, including at least 13 points without line heaters. Moreover, 966 of the 13,567 temperature and pressure readings he studied were to the left of the J-T line, indicating a problem with liquids dropout. While Mr. Hereth's direct testimony referred to the problems at the points without heaters as occurring "infrequently,"[94] he admitted on cross-examination that the problems occur on a weekly basis in the depths of winter during January and February.[95] The Commission finds that the evidence provided by both Mr. McClain and Mr. Hereth supports Natural's choice of a 15ºF CHDP safe harbor in order to minimize problems with liquids dropout.

56. Alliance asserts that in determining how many points could experience liquids formation, Mr. McClain improperly used anomalously low, one-time minimum temperatures and maximum pressure drops, instead of using average temperatures and pressure drops over the course of a winter. The Commission finds that the pressure and temperature data used by Natural in developing these phase diagrams is consistent with directions set forth in the HDP White Paper. Appendix B of the HDP White Paper states that, in Step 6 the pipeline should "Identify the lowest temperature and coinciding highest pressure of flowing gas at each place of pressure reduction and plot the corresponding point on the phase diagram." Thus, it was appropriate to use minimum temperatures and high pressure drops. Moreover, as Mr. McClain testified, "We believed when we were trying to look at where these points operate relative to a safe harbor, we would look at our minimum. We did have a discussion which to use, and given the nature that it's about a safe harbor, we believe that this is a minimum flowing temperature when it really occurred."[96]

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[92] Ex. NGP-20 at 16.

[93] Ex. IS-11 at 24.

[94] *Id*.

[95] Tr. 1297 (Mr. Hereth).

[96] Tr. 1106 (Mr. McClain).

57. The Commission notes that Natural contends that low gas flow through certain meters is normal and such low flow points often represent interconnections with small municipalities particularly susceptible to the dangers of liquids dropout and without resources to cope with the liquids.[97] The Commission also finds merit in Natural's argument that Natural has some obligation to protect the pipeline's captive customers[98] and to develop a CHDP safe harbor capable of accommodating all conditions on its system.[99] Natural has met this obligation by using pressure and temperature data representative of its pipeline and its market area. The Commission finds that accommodating all conditions on Natural's system[100] necessitates consideration of low flow points as well as larger points.[101]

58. In addition, the Commission affirms the September 2006 Order's conclusion that in determining a safe harbor limit a pipeline may reasonably consider the potential failure of line heaters. As stated in the September 2006 Order, line heaters are important devices which could be used to mitigate the potential for liquids dropout. However, the HDP White Paper states that "while gas heaters do indeed provide immediate protection … gas heating alone should not be considered a system wide hydrocarbon dewpoint control."[102] The Commission concurred with Natural's witness, Mr. McClain, that the potential failure of line heaters may be considered when determining the CHDP safe harbor limit on Natural's interstate system.[103] Indicated Shippers' witness, Mr. Hereth, acknowledged that under the right circumstances existing separators and pre-heaters could be overwhelmed, causing unmanageable hydrocarbon liquids dropout on Natural's system.[104] Furthermore, Mr. Hereth acknowledged that new or retrofit gas heaters will be problematic to install due to air quality permitting, space availability, and noise.[105] Due

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[97] *Citing* Tr. 99:1-12 (Mr. Miller) and Ex. NGP-11 at 44:18 – 45:2.

[98] *Citing Natural*, 73 FERC ¶ 61,050, at 61,128 (1995).

[99] September 2003 Order, 104 FERC ¶ 61,322 at P 38.

[100] *Id*.

[101] *Citing* Tr. 98:19 – Tr. 99:12 (Mr. Miller); Tr. 99:25 – Tr. 100:3 (Mr. Miller).

[102] *See* Ex. NGP-7 § 2.4.9.

[103] *See* Ex. NGP-29 at 14:16-21.

[104] *See* Tr. 1201:23-25 (Mr. Hereth).

[105] *See* Tr. 1285:19-23 (Mr. Hereth).

to the potential failure of line heaters, the Commission still finds that a pipeline may reasonably take into account the possible failure of line heaters in developing a CHDP safe harbor due to potential safety hazards in the event of heater failure. A failure of line heaters on Natural's interstate system could adversely affect its pipeline system while making it impossible to meet its delivery obligations to its customers.

59. Alliance claims that in rejecting arguments regarding the efficacy of line heaters in preventing liquids dropout at points Natural determined to be problematic, the September 2006 Order[106] contradicted the Commission's finding in the July 2006 ANR Order that it would be inappropriate to base upstream gas quality standards on the worst case downstream scenario. Alliance's statement is in error because the referenced statements in the July 2006 ANR Order were not related to operational requirements on ANR, but were related to operational requirements for a downstream LDC, Michigan Consolidated Gas Company (MichCon) which filed a request for rehearing of July 2006 ANR Order, which was denied in the December 11, 2006 ANR Order (December 2006 ANR Order).[107]

60. In the December 2006 ANR Order, the pipeline proposed a 15°F CHDP safe harbor, just as Natural has proposed here. MichCon requested that the Commission require ANR to establish a lower safe harbor, based on conditions at MichCon's own delivery points to its own customers. These conditions were not relevant to the operating conditions on ANR's pipeline system. MichCon discussed the probability of liquids dropout at unheated farm taps on its system. The Commission found that the farm taps on MichCon's system represented the most extreme conditions faced by an ANR customer, that is, they represented a worst case scenario.[108] Further, the Commission found that liquids dropout might occur once gas was processed to meet ANR's CHDP safe harbor limit, and hence could be addressed by equipment such as heaters, drips, filtration or separation equipment, and knockout vessels, all of which are intended to remove small accumulations of liquids.[109] The Commission found that this type of equipment was a reasonable remedy for liquids dropout that might occur on MichCon's system. The Commission determined that, in those particular circumstances, it would be inappropriate for conditions at MichCon's farm taps to dictate the gas quality

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[106] September 2006 Order, 116 FERC ¶ 61,262.

[107] December 2006 ANR Order, 117 FERC ¶ 61,286 at P 61.

[108] *Id*. P 59.

[109] *Id*. P 58, *citing* White Paper, sections 1.4.6-1.4.8 [MC-2].

requirements that all shippers on the ANR system must meet, and the Commission would not require ANR to establish a lower safe harbor than it had proposed in order to guarantee there would never by liquid fallout problems on any downstream entity.[110]

61. Here, by contrast, Natural proposes to take into account the potential failure of its own line heaters in determining the level of its CHDP safe harbor. For the reasons already discussed, we find this to be reasonable.[111]

4. Gas Blending

a. September 2006 Order

62. In the September 21, 2006, Order, the Commission found no merit in the arguments that the setting of a CHDP safe harbor below 20°F does not take into account gas blending on Natural's system.[112] The Commission stated that Natural has been able to maintain the 18°F – 23°F CHDP range in its market area during the winter months through the combination of blending, gas processing at its cryogenic processing plant at Searcy, Arkansas, and also by posting 60°F – 70°F CHDP limits on production area receipts in the Gulf Coast area.[113] However, the Commission found that Natural's blending capability is limited due to the fact that the Searcy plant can only process a portion of the gas supplies from the Gulf Coast area and cannot affect upstream gas deliveries.[114] In addition, the Commission found that Natural's ability to blend is also limited if the Searcy plant has to be taken offline due to maintenance, operational considerations, or emergencies. Therefore, the Commission concluded that Natural's ability to utilize the Searcy plant to manage liquids dropout through blending operations cannot be assured at all times and that Natural correctly considered the possible loss of some blending capabilities in determining a CHDP safe harbor.

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[110] *Id*. P 27, 61.

[111] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 101-102.

[112] *Id.* P 65.

[113] *Id.* P 66; *citing* Ex. NGP-6 at 21:12-22.

[114] September 2006 Order, 116 FERC ¶ 61,262 at P 66; *citing* Ex. NGP-1 at 38:22-23, and 39:1-5.

b. Rehearing Requests

63. Indicated Shippers claim that a 15ºF CHDP safe harbor is unreasonably low for Natural's system because neither Natural nor the Commission took into account the true effect of blending. Indicated Shippers assert that the Commission focused on Natural's Searcy Plant and its processing capabilities, but blending of gas on Natural's system would occur irrespective of whether the Searcy Plant is operating.[115] Indicated Shippers claim that because of the different CHDP levels of different sources of gas, if a CHDP limit is set at the permanent safe harbor CHDP, then blended gas flowing through the pipeline system will be much lower than the permanent safe harbor CHDP level. If the permanent safe harbor CHDP is 20°F, no gas will be able to enter the pipeline system if it has a CHDP higher than 20°F; however, lower CHDP gas (whether as a result of processing or as a result of naturally occurring low CHDP gas) also would enter the pipeline system and all of the gas would blend, such that the CHDP of the gas would be significantly below the CHDP limit.

64. Indicated Shippers state that as an example of blending on Natural's system, Natural has applied a 25°F CHDP limit on market area receipts.[116] Natural considers that its pipeline system has enough blending capability, even in the market area, to allow 25°F CHDP gas to be introduced into the commingled gas stream in the market area while maintaining manageable levels of hydrocarbon liquids dropout and CHDP temperatures within any operational targets.

65. Indicated Shippers also state that as a second example of the effects of blending across Natural's system, Indicated Shippers have reviewed the CHDP on Natural's system after Natural implemented new CHDP limits of 45°F and 60°F, effective January 14, 2006.[117] From January 14, 2006, through February 2, 2006, the market area CHDPs ranged from 2.407°F to 8.505°F, with even the highest CHDP level substantially below any of the permanent safe harbor CHDP levels proposed in this proceeding.[118] For the more upstream points, the CHDP temperatures ranged from -6.432°F to 23.644°F.[119]

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[115] *Citing Id.* P 66.

[116] *Citing* Ex. IS-38 at 1.

[117] *Citing* Attachment C to Indicated Shippers' Brief on Exceptions.

[118] *Citing* Attachment B to Indicated Shippers' Brief on Exceptions.

[119] *Id.*

Indicated Shippers state that as an additional example of blending on Natural's system, as reported on Natural's gas quality posting dated March 9, 2005, when Natural's market area had C6+ values as low as 0.03, which equates to a CHDP of approximately -7°F,[120] Natural's more upstream points experienced C6+ levels as high as 0.690, which is a CHDP of approximately 80°F.[121] Although some of the upstream points had "high" CHDPs, the "high" CHDP upstream gas blended with "low" CHDP gas to result in low CHDP gas in the market area.

66. Indicated Shippers state that the above examples illustrate the significant impact of blending on Natural's system. Thus, the Commission should take into account blending when it determines the appropriate CHDP safe harbor for Natural's system.

c. Commission Determination

67. The Commission reaffirms its earlier finding in the September 2006 Order and finds no merit in Indicated Shippers' argument that the 15°F CHDP safe harbor limit does not take into account gas blending on Natural's system.[122] We reiterate that Natural's blending capabilities are limited by the gas composition, volume and location of the gas supplies tendered onto its system by Natural's shippers. Since the 15°F CHDP safe harbor level limit must be one that ensures liquids dropout does not create operational problems under *any* operating conditions on Natural's system, we find that Natural's proposed 15°F CHDP safe harbor limit properly takes into consideration blending capabilities on Natural's system and provides a limited margin of safety when compared to Natural's actual winter supply experience.

68. Furthermore, the Commission finds that Indicated Shippers conflate the distinct concepts of CHDP operational limits with the CHDP safe harbor. It is simple, if a shipper tenders natural gas on Natural's system with a composition that yields a safe harbor limit of 15°F CHDP, or below, by measurement described in the tariff, then that natural gas will be accepted. If the CHDP level of the natural gas is higher than the safe harbor limit, then Natural's CHDP operational limits will determine whether that gas can be accepted onto its system. While it may be operationally feasible during most times of the year to have operational levels higher than 15°F CHDP, as shown by Indicated

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[120] Ex. IS-18.

[121] *Id.*

[122] September 2006 Order, 116 FERC ¶ 61,262 at P 65-67.

Shippers,[123] it has no relevant consequence on the safe harbor limit of 15°F CHDP set in its tariff. Indicated Shippers misrepresent this concept by presenting examples of Natural's operations involving its blending of natural gas in certain times of 2006, as evidence that Natural's "safe harbor" CHDP limit of 15°F is too low. While Natural may operate safely at operational CHDP levels significantly above its safe harbor limit during most of the year, it doesn't mean that the safe harbor limit itself is too low.

5. Consideration of Downstream Entities

a. September 2006 Order

69. In the September 2006 Order, the Commission stated that in selecting the CHDP safe harbor level for its system, Natural may consider the gas quality restrictions imposed by downstream entities. The Commission noted that the September 2003 Order stated that, "[t]he purpose of the permanent safe harbor dewpoint is to provide an outer limit to the flexibility we have permitted Natural to vary its gas quality standards to ensure that no liquids fallout in the gas stream. This also enables Natural to meet downstream gas quality requirements while giving shippers at least some degree of certainty that Natural will accept their gas."[124]

70. The Commission clarified that the September 2003 Order did not intend to mandate that upstream pipelines' gas quality standards require that all gas received on their system meet whatever gas quality standards any downstream entity may establish.[125] The Commission found that Natural's CHDP safe harbor may reasonably take into consideration Natural's ability to make deliveries to downstream interconnects, but Natural is not required to base its CHDP safe harbor on operating conditions on downstream systems. Therefore, the Commission affirmed the ID and found that the 15°F safe harbor is just and reasonable.

b. Rehearing Requests

71. Alliance states that the September 2006 Order diverged from the Commission's recent precedent.[126] In the July 2006 ANR Order, the Commission stated that "an

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[123] *See supra* P 51.

[124] *Id.* P 110, *citing* September 2003 Order, 104 FERC ¶ 61,322 at P 24.

[125] *See* July 2006 ANR Order, 116 FERC ¶ 61,002 at P 47.

[126] *See Id*.

approach of basing upstream gas quality standards on the worst case downstream scenario could lead to adverse consequences, contrary to the Commission's fundamental goal of encouraging the development of a seamless interstate pipeline grid, so that 'willing buyers and sellers can meet in a competitive national gas market to transact the most efficient deals possible.'"[127] Alliance contends that such an unjustified glossing over of the July 2006 ANR Order, resulting in an unexplained swerve in Commission policy cannot withstand review.

72. Moreover, Alliance contends that the July 2006 ANR Order recognized that a worst case downstream scenario approach could result in less gas available for the interstate market. Alliance argues that in the July 2006 ANR Order, the Commission found that the additional costs of processing all gas supplies to meet a least-common denominator CHDP standard would reduce total supplies available to market, decrease the total heating value of processed gas, and increase producers' marginal cost of production leading to economic decisions to stop production from low-productivity, high-cost supplies.[128] Alliance asserts that this holding directly contradicts the September 2006 Order, which declined to consider the risk of reduced gas supply in approving Natural's 15°F safe harbor.[129]

c. Commission Determination

73. The Commission finds no merit in Alliance's arguments. In the September 2006, Order the Commission points out that the September 2003 Order stated that the permanent safe harbor dewpoint provides an outer limit to the flexibility the Commission has permitted Natural to vary its gas quality standards ensuring that no liquids dropout in the gas stream and enabling Natural to meet downstream gas quality requirements while giving shippers some degree of certainty that Natural will accept their gas.[130] However, the September 2003 Order did not intend to mandate that upstream pipelines' gas quality standards require that all gas received on their system meet whatever gas quality standards any downstream entity may establish.[131]

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[127] July 2006 ANR Order, 116 FERC 61,002 at P 59, *citing* Order No. 636.

[128] July 2006 ANR Order, 116 FERC ¶ 61,002 at P 60.

[129] September 2006 Order, 116 FERC ¶ 61,262.

[130] *Id.* P 110, *citing* September 2003 Order, 104 FERC ¶ 61,322 at P 24.

[131] July 2006 ANR Order, 116 FERC ¶ 61,002 at P 47.

74. The September 2006 Order's statement that, in selecting the CHDP safe harbor level for its system, Natural may reasonably take into consideration Natural's ability to make deliveries to downstream interconnects is entirely consistent with ANR.[132] Alliance forgets that later in July 2006 ANR Order[133] the Commission stated:

> The Commission accordingly finds that in setting a Safe Harbor CHDP, ANR must choose a level that assures that it can make deliveries to downstream customers and that gas will be accepted for delivery at the interconnects with those customers. ANR must consider conditions at those interconnects when setting the Safe Harbor CHDP. ANR's tariff requires as much.[134] However, the Commission agrees with ANR and the producers that LDCs and other downstream systems are responsible for the operating conditions on their systems.

Stating that a pipeline may take into account its ability to make deliveries downstream is not the same as approving the use of a worst case downstream scenario which could unnecessarily impede the production and flow of natural gas supplies, contrary to the Commission's fundamental goal of a robust and seamless interstate market. The Commission has never lost sight of that goal, and realizes it must balance potential economic risk to producers with the need to ensure adequate interstate supplies based on the soundest operational practices.

75. As the Commission points out in its February and September 2003 Orders, Natural's ability to address a liquids dropout problem caused by the injection of rich gas is neither uniformly distributed over its system or static in nature.[135] Permitting Natural to post varying upper CHDP limits allows it to accept high CHDP gas on parts of the system where it can be blended with low CHDP gas before it reaches an area where there is a danger of liquids dropout, but reject high CHDP gas where this is not possible. This enables Natural to safely operate its system, while maximizing gas flow over its system for the benefit of its customers. In fact, the parties have presented no evidence of any

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[132] September 2006 Order, 116 FERC ¶ 61,262 at P 111.

[133] *Citing* July 2006 ANR Order, 116 FERC ¶ 61,002 at P 62.

[134] Pro forma section 13.3, Third Revised Sheet No. 131, Appendix A, Stipulation and Agreement. Similar language is also located in the currently effective section 13.2(a) on Second Revised Sheet No. 130.

[135] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 59.

instance where Natural unreasonably refused to accept gas based on its gas quality. [136] The Commission affirms that Natural's proposed CHDP safe harbor will ensure safe and reliable operations under all conditions while also maximizing the gas supply available on its system, consistent with the *Policy Statement*.[137]

6. Alliance's Evidence to Support a 25°F CHDP Safe Harbor

a. September 2006 Order

76. In the September 2006 Order, the Commission affirmed the ID's rejection of Alliance's 25°F CHDP safe harbor proposal.[138] The Commission found that Alliance's proposal is flawed because it uses a methodology that is different from the Commission's directed methodology for determining CHDP limits, and is not based on Natural's operations. The Commission also found that Alliance's proposal did not follow the Commission's directive to "accommodate all conditions"[139] on Natural's system and, therefore, dismissed pertinent information for determining the proper CHDP safe harbor. In addition, the Commission noted that Alliance did not account for pressure drops in excess of 150 psig, [140] ignored above-ground facilities and did not focus on the coldest ground temperature readings. Therefore, the Commission rejected Alliance's proposal and found that it did not allow an appropriate margin for error.

77. In addition, in the September 2006 Order, the Commission affirmed the ID's rejection of Indicated Shipper's 20°F CHDP safe harbor proposal.[141] The ALJ stated that the safe harbor must be set somewhat below the outer operational target to provide a margin of safety,[142] and therefore, Indicated Shippers' proposed 20°F CHDP safe harbor

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[136] Natural stated that it had never declined to take gas from Alliance based on the HDP level of that gas. Ex. NGP-11 at 40.

[137] *Policy Statement,* 115 FERC ¶ 61,325 at P 30.

[138] *Citing* ID, 113 FERC ¶ 63,036.

[139] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 129, *citing Id.* P 19.

[140] *Citing* Ex. NGP-19, Natural states that Mr. Janzen conceded that Natural experiences numerous pressure drops of greater than 150 psig. Tr. 1462:15-19 (Mr. Janzen).

[141] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 73-74.

[142] *Citing* Ex. NGP-20 at 18:15-23.

level does not provide an acceptable safety margin and leaves Natural "at the mercy of the nomination process."[143] The Commission found that based on the 18°F – 23°F CHDP range that Natural currently experiences in its market area, a 15°F CHDP safe harbor provides a reasonable safety margin.[144] In addition, the Commission stated that although a 20°F CHDP value may provide, in favorable seasonal conditions, greater flexibility in the processing of gas delivered to Natural's system, it is reasonable to defer to Natural's need to maintain responsible management of its pipeline system. The safe harbor value should be set below the operational values to provide an effective margin of protection for the system.[145] Therefore, the Commission rejected Indicated Shippers' 20°F CHDP level and found that it did not provide an appropriate margin of safety.

b. Rehearing Requests

78. Alliance states that the September 2006 Order rejected Indicated Shippers' proposed 20°F safe harbor level primarily on the basis that it did not provide an adequate "margin of safety" for Natural's system, based on Natural's asserted 18°F – 23°F historical wintertime market area CHDP levels.[146] Alliance asserts that the alleged 18°F – 23°F historical CHDP experience is unsupported and based on seriously flawed data. Alliance argues that the proposed 20°F safe harbor is fully supported by the testimony of Indicated Shipper's witness Mr. Hereth – who played a prominent role in development of the HDP White Paper – and should not have been dismissed solely to accommodate concerns based on Natural's unsupported "experience." Moreover, continues Alliance, the higher levels in Natural's asserted historical CHDP "range," as well as the evidence showing frequent CHDP levels at or above 20°F in Natural's market area demonstrate that Natural has operated safely with CHDP levels at or above 20°F. Alliance argues that requiring a safe harbor level below 20°F in the face of the evidence reflects the use of a least-common denominator approach, which is contrary to the policy adopted in the July 2006 ANR Order.

79. Alliance states that the September 2006 Order also rejected Alliance's proposed 25°F safe harbor as supported by the testimony of Mr. Janzen by stating that Mr. Janzen

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[143] *Citing* Ex. NGP-20 at 20.

[144] *See* September 2006 Order, 116 FERC ¶ 61,262 at P 73.

[145] *Citing Id.* P 74.

[146] *Citing Id.*

did not use the "Commission's directed" HDP White Paper methodology.[147] First, Alliance argues that the Commission's September 2003 Order[148] setting this matter for hearing was issued prior to release of the HDP White Paper and the parties were never "directed" to use the HDP White Paper methodology. Second, Alliance argues that while Mr. Janzen did not expressly adopt the HDP White Paper methodology, his presentation did take into account a number of the recommended factors listed on the Appendix of the HDP White Paper. Alliance asserts that Mr. Janzen's methodology obviously considered minimum flowing gas temperatures and minimum ambient ground temperatures as well as operating pressure requirements and pressure reductions. The September 2006 Order further criticizes Mr. Janzen's approach as not "accommodat[ing] all conditions" on Natural's system.[149] Alliance argues that this criticism again reflects the discredited worst case scenario approach. The criticism of Mr. Janzen's approach for allegedly ignoring above-ground facilities ignores the fact that Natural never quantified the alleged disabling impact of those facilities.

c. Commission Determination

80. As stated earlier,[150] under the statutory scheme set forth in the NGA, the pipeline has the initiative through a section 4 filing to propose how it will recover its costs. If the pipeline's proposal is just and reasonable, the Commission must accept it, regardless of whether other just and reasonable rates may exist. The selection of a safe harbor necessarily entails some degree of judgment, since the safe harbor represents, in essence, a prediction by the pipeline of what level it can guarantee it can accept gas under various assumptions concerning future operating conditions.[151] As a result, there may be a range of reasonable safe harbors for a pipeline. If the safe harbor proposed by the pipeline is reasonable, the Commission will accept it, even if there may be other safe harbor levels that would also be just and reasonable. Here for the reasons discussed above, the Commission has found Natural's proposed 15^{o}F CHDP safe harbor to be just and reasonable. Thus, even if Alliance and Indicated Shippers had shown their proposed higher safe harbors were just and reasonable, the Commission would reject them.

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[147] *Citing Id.* P 129.

[148] September 2003 Order, 104 FERC ¶ 61,322.

[149] September 2006 Order, 116 FERC ¶ 61,262 at P 129.

[150] *See supra* P 47.

[151] *See* Ex. NGP-1 at 45-46.

81. In any event, Alliance did not satisfy its burden of showing that its proposed 25°F CHDP safe harbor was just and reasonable. Alliance's proposal is not based on Natural's operations, did not follow the Commission's directive to "accommodate all conditions"[152] on Natural's system, did not account for pressure drops in excess of 150 psig,[153] ignored above-ground facilities, and did not focus on the coldest ground temperature readings. As Natural's witness, Mr. Miller, testified, Natural has approximately 100 delivery points with pressure drops in excess of 150 psig, and 75 delivery points with pressure drops of about 450 psig.[154] Moreover, Alliance assumed that Natural's flowing gas temperatures equal underground temperatures. However, Natural has a substantial number of above ground facilities that are exposed to very cold atmospheric temperature during the winter, including 2,300 feet of pipe where Natural's system crosses the Mississippi River at Grand Tower Illinois.[155] Therefore, Alliance's proposal does not allow an appropriate margin for error and is rejected.

82. The Commission also affirms the September 2006 Order's rejection of Indicated Shipper's 20°F CHDP safe harbor proposal.[156] We agree that Indicated Shipper's proposed 20°F CHDP safe harbor does not provide an acceptable safety margin and leaves Natural "at the mercy of the nomination process."[157] We reiterate that the CHDP safe harbor level must be one that would make sure liquids dropout does not create operational problems under any operating conditions on Natural's system.[158] However, the testimony of Indicated Shippers' witness, Mr. Hereth, suggests that its proposed safe harbor could cause significant operational problems. Mr. Hereth conducted an analysis of the effect of a 20°F HDP limit during the conditions Natural experienced in the winter of 2000. That analysis showed that Natural could have experienced 977 instances of

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[152] *Citing* ID, 113 FERC ¶ 63,036 at P 19.

[153] *See* Ex. NGP-19. Natural states that Mr. Janzen conceded that Natural experiences numerous pressure drops of greater than 150 psig. Tr. 1462:15-19 (Mr. Janzen).

[154] Ex. NGP-11 at 36; Ex. NGP-20 at 3.

[155] Ex. NGP-11 at 34.

[156] September 2006 Order, 116 FERC ¶ 61,262 at P 73.

[157] *See* Ex. NGP-20 at 18:15-23; 20.

[158] ID, 113 FERC ¶ 63,036.

liquids formation at 36 percent of its active delivery points with HDP levels at 20°F.[159] At the hearing, he admitted that this could mean Natural would experience problems on a weekly basis during the winter.[160] In addition, we also find that, although a 20°F CHDP value may provide, in favorable seasonal conditions, greater flexibility in the processing of gas delivered to Natural's system, it is reasonable to defer to Natural's need to maintain responsible management of its pipeline system.[161]

83. The Commission finds that the safe harbor value should be set below the operational values to provide an effective margin of protection for Natural's system. We affirm the September 2006 Order that Indicated Shippers' 20°F CHDP level and Alliance's 25°F CHDP level are both flawed because they fail to provide a margin of safety.[162]

The Commission orders:

The requests for rehearing are denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Philis J. Posey,
Acting Secretary.

[159] Ex. IS-11 at 24.

[160] Tr. 1295 (Mr. Hereth).

[161] September 2006 Order, 116 FERC ¶ 61,262 at P 73.

[162] *Id.* P 74.