

PACIFIC NORTHERN GAS LTD.

**IN THE MATTER OF THE UTILITIES COMMISSION ACT
R.S.B.C. 1996, CHAPTER 473**

and

**British Columbia Utilities Commission
2012 Generic Cost of Capital Proceeding**

AFFECTED UTILITY'S FINAL SUBMISSION (STAGE 1)

January 31, 2013

PACIFIC NORTHERN GAS LTD.
BCUC 2012 Generic Cost of Capital Proceeding
Affected Utility's Final Submission (Stage 1)
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INTRODUCTION

1. The following is the Final Submission of Pacific Northern Gas Ltd. (“PNG”) for Stage 1 of the British Columbia Utilities Commission (the “Commission”) 2012 Generic Cost of Capital Proceeding (“Proceeding”). While PNG was not an active participant in this stage of the Proceeding, PNG is an Affected Utility and has been monitoring the Proceeding and has a direct interest in its outcome.

2. In Stage 1 of this Proceeding, the Commission will establish the appropriate cost of capital for the benchmark utility, review the possible return to a Return on Equity Automatic Adjustment Mechanism (“ROE AAM”) for setting the return on common equity (“ROE”) for the benchmark utility, and review the establishment of a deemed capital structure and deemed cost of capital methodology. The Commission has determined that FortisBC Energy Inc. (“FEI”) in its present pre-amalgamation state, will serve as the benchmark utility and that Stage 1 will determine the appropriate ROE and deemed capital structure for FEI as well as whether the reintroduction of a ROE AAM is appropriate. Stage 2 will determine the appropriate ROE and capital structure for the Affected Utilities based on utility-specific evidence. The Commission’s findings in Stage 1 as they relate to the benchmark, particularly with respect to a number of business and industry risks, as well as market tone and financial risks, will also implicitly affect PNG. In addition, the underlying assumptions as well as the actual methodologies used to determine the benchmark ROE and capital structure will directly affect PNG. Further, in Stage 1, the Commission has reviewed possible approaches for determination of the cost of capital for small utilities, which may also have a direct bearing on PNG’s appropriate ROE and capital structure.

3. FEI and its various expert witnesses have presented substantive and compelling evidence that a benchmark ROE of 10.5%, based on a common equity ratio of 40%, is a reasonable estimation of the fair rate of return for the benchmark utility. PNG has generally relied upon and concurs with these findings, particularly in regards to the expert testimony.

4. The evidence in this Proceeding also demonstrates that the ROE AAM formulas typically do not produce a fair return on common equity for utilities. Such formulas, particularly one that relies solely on a single debt-related variable, namely changes in the long-term Government of Canada

bond yield, cannot accurately account for the myriad of factors that are relevant to the required returns for equity investors, particularly as equity markets can, and do, disconnect from bond markets for significant periods¹. This lack of an equity perspective was also one of the rationales used by the BCUC in its prior decision to eliminate the then current ROE AAM structure². In addition, given the consensus that current capital markets continue to be buffeted by extraordinary and unprecedented events, as evidenced by the unusual divergence among experts regarding the determination of the risk free rate in the application of equity risk premium tests³, PNG submits that this would be a particularly inapt time to return to any form of ROE AAM. To advise on any specific formulaic approach, while concurrently having a disagreement on how to determine one, the key elements of the formula such as the appropriate risk free rate, may have the impact of “locking-in” some of these extraordinary events. This is further reflected in the numerous adjustments recommended by the expert witnesses to the underlying formulas for calculating the cost of equity, including Dr. Booth, who felt it necessary to make a specific adjustment to his CAPM based ROE estimate for “Operation Twist”⁴.

BUSINESS RISKS

5. The FEI recommended benchmark ROE and capital structure is in part based upon the Commission findings in 2009⁵ combined with an overview of the relative risks currently faced by B.C.’s gas distribution sector. FEI along with the other Affected Utilities (including PNG) have submitted extensive amounts of evidence in their respective Minimum Filing Requirements, responses to information requests, and the oral hearing with regard to reviewing the nature and relative level of a number of business risks currently faced by the benchmark utility⁶ and for the industry as a whole. Based on a thorough review of the evidence, PNG concurs with FEI’s submission that, on the whole, business risks remain the same as, if not slightly higher than, those experienced in 2009. However, based on the comments and questions raised during the oral

¹ Exhibit B1-9-6, Appendix I, pg. 1-2, and transcript pg. 798-800

² BCUC Decision, G-158-09

³ Exhibit C6-12, pg. 60, Coyne testimony pg. 825, Vander Weide testimony, pg. 1120

⁴ Exhibit C6-12, pg. 53-57, 75-80

⁵ Order G-20-12, Appendix B

⁶ Exhibit B1-9-6, Appendix H, pg. 5

hearings, there are a number of matters from the evidence relating to business risks that PNG wishes to comment on.

Commodity Price of Natural Gas

6. Throughout the Proceeding, the advent of shale gas was referred to as a “game changer”⁷, particularly as it has resulted in lower commodity natural gas prices over the past several years and the potential for continued low commodity natural gas prices for the foreseeable future⁸. Lower commodity natural gas prices can represent an improvement in the competitive position of natural gas versus electricity as it relates to water and space heating. However, as evidenced by FEI’s delivered prices⁹, after accounting for changes in mid-stream costs, carbon taxes and other charges, and after accounting for overall lower level of average usage, the actual change in the average consumer’s monthly bill, even with the lower commodity natural gas price, has been *de minimus* and unlikely to cause any significant change in consumers’ behavior, either in the consumption of gas or in the choice of gas versus electric appliances. As noted by FEI and as agreed to by Dr. Booth¹⁰, trends towards greater urban density and multiple family dwellings, particularly in the lower mainland, represent a much larger factor in appliance choice, as multi-family dwellings typically do not use natural gas as their primary water and space heating source. The lack of consumer response to the lower commodity natural gas prices is further evidenced by the overall lower levels of average residential usage for FEI¹¹, and as also experienced by PNG. This is contrary to the typical relationship between price and consumption. There has not been any evidence presented that suggests that consumers’ expectations around future natural gas prices are for long-term low prices or are influencing energy consumption choices in favour of natural gas. Furthermore, the considerable level of volatility in natural gas prices over the past decade may

⁷ Exhibit C6-12, pg. 41, line 12

⁸ Exhibit B1-9-6, Appendix H, pg. 51

⁹ Exhibit B1-37, pg. 3

¹⁰ Exhibit B1-9-6, Appendix H, Figure 19, pg. 30

¹¹ Exhibit B1-9-6, Appendix H, Figure 7, pg. 4

represent a larger impact in consumer choice as compared to the absolute level of commodity gas prices¹².

7. Lower commodity natural gas prices were also raised during the FEI panel as having a potential positive impact on industrial demand; however there was no evidence presented that any such future potential industrial demand has occurred and thus any revival remains speculative at best.

Security of Supply

8. As noted above, the advent of shale gas was described as a “game changer”, not only with respect to the commodity price of natural gas, but also as it relates to the security of supply for natural gas distributors. British Columbia is fortunate in that significant deposits of shale gas have been discovered; however there are a number of potential issues in economically accessing and developing these deposits. Due to the relatively remote location of some of these reserves and the lack of infrastructure in the region, many of the B.C. shale gas deposits are more costly to develop than some of the other sizeable shale gas plays in North America. The costs and the current lack of infrastructure represent a risk not only in the timing of the development of these reserves, but also in the nature of how they are developed. There is currently only one primary access point for FEI and the sole access point for PNG’s Western system with respect to the supply of natural gas, where all prices for natural gas received are based on the “Station 2” delivery point. There is no assurance that new shale gas fields developed in B.C. will necessarily tie-in to the existing infrastructure, or that an alternate delivery point will become accessible for either company. Thus, for B.C. based gas utilities, there may be no change on a relative or absolute basis in terms of supply diversity. This is in direct contrast to the experience of Ontario and Quebec based gas utilities, where the development of the relatively nearby Marcellus shale deposit, combined with other changes in the Eastern pipeline network, have led to an increase in effective delivery points and supply choices. As such, while the absolute risk of supply has not increased in B.C., the supply risk faced by B.C. gas utilities relative to Ontario and Quebec comparable gas utilities certainly is higher.

¹² FEI panel testimony, pg. 141-142, pg. 156

Impact of Lower Loads

9. While FEI has experienced a moderate increase in residential customer count¹³ due to population growth in its core Lower Mainland market, there has been a downward trend in throughput. In PNG's case, it has seen a decline in customer counts, particularly for its Western system, over the recent years¹⁴. Customer capture rates have also been declining for both FEI and PNG due to a number of trends including the higher capital cost of natural gas appliances and the move to higher density housing, particularly in the Lower Mainland. In addition, due to the significantly lower average usage levels of new residences through the use of high efficiency appliances, the lost volume resulting from the conversion of an older, low(er) efficiency home requires almost two new customers to replace¹⁵. This trend to higher efficiency appliances for both residential and commercial usage is resulting in long term declines in overall loads. The overall net effect of these lower loads is to spread the largely fixed operating and capital costs associated with a utility's pipeline over a declining customer base. A continuous long term decline pattern has significant negative connotations: the requirement for higher rates to offset declines, the impact of consistent rate hikes on the long-term competitiveness of natural gas versus other heating sources, and the inability to grow or expand the utility's markets. In PNG's submission, continuously lower loads represent a substantial risk factor for a utility attempting to attract long term equity capital in order to maintain and upgrade their plant and equipment in the provision of safe and reliable service to their customers.

Deferral Accounts

10. As shown in the evidence presented by FEI¹⁶, there has been an increase in the number of deferral accounts over the past several years. Despite PNG's efforts to aggressively reduce its number of deferral accounts, the overall number of accounts has remained the same¹⁷, and similar to FEI, the majority of the new deferral accounts relate to either reclassifications or adjustments

¹³ Exhibit B1-11, IR 4.4, pg. 43

¹⁴ Exhibit B3-7, Tab 1, pg. 14

¹⁵ Exhibit B1-9-6, Appendix H, Figure 7, pg. 13 and pg. 33, and Exhibit B1-41, pg. 1-3

¹⁶ Exhibit B1-32, pg. 6

¹⁷ Exhibit B3-7, Appendix 8(b)

made at the behest of the Commission, with few changes related to managing underlying earnings volatility. As also noted by evidence submitted by FEI and its expert witnesses, the number of deferral accounts does not necessarily correlate with the relative level of short-term business risk to which the equity investors are exposed. Rather, it is the dollar value and inherent volatility of the remaining revenue and cost exposures that determines risk, and there has been no evidence for either FEI or PNG that these short term exposures have declined in any significant manner since 2005, and certainly not since 2009¹⁸.

Regulatory Risk

11. Throughout the oral proceedings, there were several discussions on the nature and level of regulatory risk and regulatory protection encountered by B.C. utilities. By the simple fact that the Commission has the ability to impact virtually every aspect of the utility's business, including capital structure, revenues, denial of cost items or even pension plan funding and documentation, regulatory risk almost by definition has to be considered the largest risk factor encountered by any given utility. While the potential for egregious Commission decisions is relatively low, even relatively small changes in the perceived regulatory environment can have a significant impact on the risk outlook from the perspective of an equity investor.

12. It should also be noted that many of the protections that are afforded to utilities aid in ensuring the overall level of viability of the utility to the benefit of the customer, and from a relative risk perspective, the debt investors/bondholders of the utility, rather than for the equity investors per se. Dr. Booth made specific mention of the "significant lengths"¹⁹ that were afforded to PNG to ensure its viability after the loss of several major industrial customers as an example of the relative munificence of the BCUC as compared to U.S. regulators. While PNG agrees with and is appreciative of the support from the Commission during this difficult time, as evidenced by the share price graph²⁰, equity investors still experienced considerable losses during this period. As such, while

¹⁸ Exhibit B1-20, IR 96.1.1, pg. 219-221

¹⁹ Booth testimony, pg. 1630

²⁰ Exhibit B3-7, Tab 4, pg. 340

there is certainly lower probability of significant losses for equity investors of utilities relative to equity investments in other sectors, the risk for significant loss still remains.

13. In addition, regulatory risk is typically measured holistically from a rating agency, bondholder or equity investor viewpoint, as it encompasses not only risks relating to Commission decisions, but all bodies that have the ability to impact the utility through various forms of legislation, permitting and taxation. PNG submits that whether it be a duty to consult with First Nations, more stringent and detailed environmental assessment processes, issues relating to carbon taxes or other commodity-based taxes, or issues relating to government and public perceptions vis-à-vis greenhouse gases, the overall level of complexity and the regulatory burden associated with safely developing, operating and maintaining natural gas pipelines has increased over the years.

Common Equity Ratio as a Reflection of Business Risk

14. During several instances throughout the Proceeding, Dr. Booth maintained that the business risks of a utility should be solely reflected through an adjustment of the common equity ratio. Furthermore, he stated several times that he has been “recommending a 35% common equity ratio for virtually all major utilities in Canada for the past 15 years”²¹. PNG would respectfully submit that Dr. Booth’s implied conclusion that virtually every major gas distribution utility in Canada has been exposed to the exact same level of business risk across the entire span of the past 15 years lacks credibility and is certainly not a reflection of the actual real world environments in which shareholder owned utilities have had to operate.

FAIR RETURN ON COMMON EQUITY

15. The technical arguments with regards to the underlying assumptions and methodologies for determining a fair return on common equity were set out in extensive detail in both the written and oral evidence of Ms. McShane and Dr. Vander Weide²². As an overall comment, PNG concurs with

²¹ Booth testimony, pg. 1637-1643

²² Exhibit B1-9-6, Appendix F and Appendix G

the analysis of Ms. McShane and Dr. Vander Weide. However, there are a number of specific matters from the evidence that PNG wishes to comment on.

Flotation Costs

16. PNG submits that all of the expert witnesses appeared to agree that equity flotation costs are a valid consideration in the determination of a fair rate of return. In addition, there appeared to be a relatively rare moment of consensus as to the general magnitude of these flotation costs, being, at a minimum, a 50 basis point (bps) adjustment to market-based cost of equity calculations²³. PNG would also submit that there is the potential for alteration based on the specific methodology in use, as well as the relative size and financing capacity of the utility in question.

Inclusion of U.S. Data

17. A significant point of contention amongst the expert witnesses is the use of U.S. based utilities data (whether it be for actual ROE estimations, Beta calculations, growth forecasts, etc.). As noted by Ms. McShane, Dr. Booth and Dr. Safir, there are relatively few publicly traded Canadian gas utilities that can be used in any form of comparable company analysis²⁴. Even amongst these few companies, there is a significant amount of non-rate regulated assets that can have the effect of skewing data, such as the impact of Enbridge's recent P/E ratio²⁵. While this presents some difficulties in the interpretation of the data, PNG submits that it is a valid comparable company list in that it is the only source of Canadian utility data. Nevertheless, this relative paucity of Canadian data in terms of number of companies, relative level of regulated operations and level of historical and forecast data, however, poses significant limitations to the analysis. This will become abundantly clear in Stage 2, where the Commission will be asked to make decisions and comparisons for the Affected Utilities that are of a substantially smaller size than the companies in the Canadian comparables group. PNG therefore submits that U.S. data should also be included in the analysis as there exists far more similarities than differences between Canadian and U.S. gas distribution utilities, and other cost of service regulated utilities as a whole. The broader economic

²³ Exhibit B1-9-6, Appendix F, pg. 38, Appendix G, pg. 6

²⁴ Exhibit B1-9-6, Appendix F, Schedule 14

²⁵ Engen testimony, pg. 928-929

issues of volatility and the aftermath of the 2008 financial crisis certainly represent matters of common experience, as does access to capital markets, based on the high level of financial integration between the two countries. Dr. Safir acknowledged that over the long term "...both the Canadian and U.S. utility sectors function in a very similar financial environment"²⁶ and used at least a 1/3 weighting of U.S. companies in the development of his recommendation. In discussing relative risks, Ms. McShane noted that U.S. utilities are not uniformly higher risk than Canadian utilities. The degree of regulatory support provided in the U.S. and how it impacts total equity risk needs to be considered on a case-by-case basis²⁷. Finally, Canadian regulators, including the Commission, have accepted the relevance and use of U.S. data in past assessments of the cost of equity²⁸. Having regard for the close integration of North American capital markets and the limited data set within Canada, PNG submits that it would be inappropriate to exclude the U.S. data from the assessment of the fair ROE for the benchmark B.C. utility.

Equivalence of Debt Ratings versus Equity Risks

18. Throughout the oral hearings, there were numerous discussions as to the various bond rating agencies, their respective rating systems and the relative equivalencies between the various bond rating systems. As noted by Ms. McShane and Dr. Vander Weide²⁹, these ratings are focused entirely upon identifying risks to bond holders. This is a key distinction, specifically as equity investors have a subordinated claim on assets and may face additional risks even where the credit metrics are adequate to protect bondholders from default. As a result, PNG submits that, while bond ratings may serve as a useful proxy for relative levels of business risks between various utilities, there can be significant differences from an equity investor viewpoint and the risks must be viewed on a case by case basis.

²⁶ Testimony, pg. 1206-1208

²⁷ Exhibit B1-20, IR 1.54.4

²⁸ BCUC FEI 2009 ROE Decision, pg. 16

²⁹ Exhibit B1-32, McShane rebuttal, pg. 26, Vander Weide rebuttal pg. 8

Impact and Rationale for a Debt Rating Downgrade

19. There were numerous instances where the potential for and the impact of a debt downgrade for FEI as a result of a lower level of common equity (and thus higher levels of debt) or through lower allowed ROEs were discussed³⁰. In the context of debt financing, FEI's ability to attract capital and maintain its financial integrity is reflected in its credit rating. In 2009, the Commission determined that FEI's ROE and capital structure should be set at a level that would allow FEI to maintain an "A" rating³¹. As noted by the evidence presented by Mr. Engen³², a debt downgrade could have numerous negative consequences including an increased cost of debt, a smaller investor pool due to institutional investment limits, and decreased market access, particularly during times of market duress. Dr. Booth's evidence also confirmed the importance of maintaining credit ratings, as they were listed by CEOs and CFOs as the primary factor in assessing the appropriate level of debt³³.

20. On numerous occasions either during cross-examination or through the evidence presented by both Dr. Booth and Dr. Safir³⁴, it was posited that FEI would be able to issue additional debt (as a result of receiving a decision that deemed a lower common equity ratio) without risk of a ratings downgrade or have incentives to refinance debt in order to obtain financial advantages for its shareholders. These arguments and associated analysis were faulty on multiple levels:

- a) Dr. Booth assumed that no actions would be taken by the rating agencies. Simply because a company can issue debt under its indenture does not guarantee that it will keep its existing debt rating; all rating agencies review each issuance of debt and will only reaffirm ratings based on their respective analysis. As it currently stands, Moody's has noted that:

"...Notwithstanding FEI's low risk business profile, its financial profile is considered weak at the A3, senior unsecured rating level. Accordingly, a

³⁰ Exhibit C6-12, pg. 103-105, Exhibit B1-32, pg. 10

³¹ FEI 2009 ROE decision, pg. 15

³² Exhibit B1-9-6, Appendix E, pg. 38-39

³³ Exhibit C6-12, pg. 21-22

³⁴ Exhibit C6-12, pg. 103-105, Exhibit C4-9, pg. 39, Safir testimony pg. 1160-1162

sustained weakening of FEI's Cash Flow Interest Coverage below 2.3X and CFO pre-WC / Debt below 8% combined with a less supportive and predictable regulatory framework would likely result in a downgrade of FEI's rating..."³⁵

As a result, under Dr. Booth and Dr. Safir respective scenarios, there can be no assurance of maintaining FEI's "A" rating in advance of discussions with rating agencies;

- b) Dr. Booth's recommended combination of capital structure and ROE results, which, based on his erroneous calculations, met the current indenture covenants³⁶, effectively targets the minimum capital requirements and coverage ratios for the FEI's current rating category. This is contrary to most regulatory precedents in terms of avoiding the targeting of minimum safe capital levels in capital structure decisions. This also fails to meet the Fair Return Standard as the Commission stated in its 2006 decision:

"Contrary to what some parties advocated during the hearing, the Board is of the view that it is not appropriate to over-leverage a pipeline in order to identify the minimum acceptable deemed common equity ratio possible"³⁷;

- c) Dr. Safir implied that FEI could refinance at a current cheaper cost of debt³⁸ (even assuming a consequential rating downgrade), without accounting for significant early redemption/refinancing penalties³⁹, which would in fact negate most if not all of the spread differential between the embedded and presumed current cost of debt (due to the Canada call provisions which are common with the vast majority of Canadian public bond issuances); and
- d) Dr. Safir did not account for the need for BCUC approval in any such refinancing of long term debt.

³⁵ Moody's October 2012 credit opinion for FEI

³⁶ Exhibit C6-12, pg. 103-105, McShane testimony pg. 632-636

³⁷ BCUC 2006 Decision, pg. 8

³⁸ Exhibit C4-9, pg. 39, McShane testimony pg. 632-636, Safir testimony pg. 1160-1162

³⁹ Exhibit B1-9-6, pg. 24, Safir testimony pg. 1160-1162

21. The above noted faults create considerable doubt with respect to Dr. Booth's and Dr. Safir's level of familiarity with real-world (versus academic) financing considerations, as well as their familiarity with the benchmark utility itself. In order to be able to reliably comment on an important factor affecting capital structure such as a refinancing proposal, PNG would submit the need for familiarity with Canadian capital markets, familiarity with standard bond rating agency processes, familiarity with Canadian and B.C. regulatory precedents and filing requirements, and familiarity with FEI and its associated business risks, including the standard refinancing provisions which can be easily found through a review of FEI's public statements.

Standalone Principle and Small Company Effects

22. Ms. Ahern presented detailed information regarding the financial theory and empirical evidence backing the relationship between the relative size of utilities and investor expectations with regards to return on equity⁴⁰.

23. The testimony and evidence addressed multiple issues, first and foremost being a reconfirmation of the standalone principle: Just as a utility customer should not be effectively penalized through issues relating to double leverage at a parent holding company, neither should they benefit due to strategic asset diversification initiatives undertaken by the parent holding company. Whether or not the utility in question is publicly listed, or held by a holding company, should not affect customer rates. The fair rate of return standard should be based on business and financial risks that are specific to the utility in question, not the happenstance of ownership.

24. Secondly, Ms. Ahern presented a number of empirical studies into evidence that would indicate the size premiums for a small utility, while varying in a broad range from 305-436 bps, are certainly of a higher magnitude than have been previously granted by the Commission⁴¹. In addition, Ms. Ahern discussed the Florida Utility precedent⁴², which while complex, would seem to indicate a number of adjustments to the calculated ROE in order to address the risks and costs faced by smaller utilities, including a 50 bps size specific factor, a 50 bps bond yield adjustment factor and

⁴⁰ Exhibit B2-7, B2-9

⁴¹ Exhibit B2-7, PMA-8 and PMA-9, Attachment 43.4

⁴² Exhibit B2-7, PMA-10, pg. 5

a 50 bps private placement factor, totaling a 150 bps adjustment factor to the calculated ROE for a small utility. Ms. McShane cautioned that for any method that involves employing credit ratings of proxy companies, care should be taken to employ reasonable credit ratings. An appropriate credit rating for small utilities would be BBB to BBB(low), as the inherent risks of small size would preclude them from achieving higher ratings⁴³. Ms. Ahern also testified that it would not be logically consistent to disallow a size-related ROE adjustment while contemporaneously allowing an adjustment in a deemed cost of debt for small utilities due solely to the size factor in credit rating impacts⁴⁴. While the purpose of Stage 1 is to set the ROE and capital structure for the benchmark, it was also to provide some guidelines for the process to be followed in Stage 2. There was little to no evidence submitted that suggested or countered that size was not a significant factor, and while precedents and empirical studies exhibit a broad range of explicit company size adjustments (150-436 bps), which introduces a degree of subjectivity in determining the proper adjustment, PNG submits that Stage 1 evidence concerning size as an independent factor was relatively uncontested.

Reasonableness of CAPM Results

25. PNG would also like to comment on the dangers of relying on strict formulaic interpretations of limited data sets and stress the need to examine the reliability of results. Specifically, PNG submits that the CAPM methodologies used by both Dr. Booth and Dr. Safir produce patently unreasonable results. The intervener witnesses determined a 6.15% to 6.5% return on equity figure respectively using their interpretation of the CAPM methodology prior to any subsequent adjustments. This is particularly disturbing when then combined with Dr. Booth's recommended 35% common equity ratio as relevant data points in meeting the Fair Return Standard. Based on FEI's after-tax embedded cost of debt of 5.1%⁴⁵, the recommended formula would result in a Weighted Average Cost of Capital of 5.6%. If an assumed 4.0% current cost of debt (3.0% after-tax) is used, as was presented by Dr. Booth⁴⁶, the effective WACC would be 4.2%. Based on their recommendations, this would be the basis for an allowed return on capital for a regulated utility,

⁴³ Exhibit B1-20, IR 1.141.12

⁴⁴ Testimony, pg. 1339-1343

⁴⁵ Based on embedded cost of debt of 6.8% (Exhibit B1-32, pg. 10) and a 25% tax rate

⁴⁶ Exhibit C6-12, pg. 103-105

and thus the effective hurdle rate that a utility could expect to earn on newly invested capital. As noted in Dr. Booth's testimony, the CAPM methodology is used by a vast bulk of CEOs and Boards, particularly with respect to setting hurdle rates for investing new capital⁴⁷. PNG submits that no Board of Directors, for a utility or otherwise, with a fiduciary duty would reasonably conclude that a 4.2% (or even 5.6%) hurdle rate would be sufficient when determining whether or not to allocate and invest capital for the next 30 years. This is further evidenced by Ms. McShane, where a survey found that, where used, the results of the CAPM only accounted for a relatively small portion of the eventual targeted hurdle rates identified by corporations⁴⁸. In addition, any company that does use a 4.2% (or 5.6%) hurdle rate would certainly have great difficulties in attracting the required capital to safely operate and maintain a complex pipeline system on behalf of their customers⁴⁹. Dr. Booth essentially recognized the unreasonableness of his result through the judgmental adjustments that he then makes to produce his ROE recommendation⁵⁰.

26. The unreasonableness of their CAPM results further identifies the need to consider other methodologies. As noted by Ms. McShane, the CAPM underestimates the return for utility stocks and that empirical studies have shown that stocks with low betas have achieved higher returns than predicted by the CAPM. The Brattle group also concurred, saying "...perhaps the most fundamental challenge to the CAPM has been the consistent empirical observation that the model does not explain stock performance well in a statistical sense"⁵¹. As such, PNG submits that the Commission should continue its approach of applying multiple tests in the estimation of a fair ROE.

⁴⁷ Booth testimony, pg. 1647

⁴⁸ Exhibit B1-32, McShane rebuttal, pg. 14

⁴⁹ Exhibit B1-32, McShane Rebuttal, pg. 13-15

⁵⁰ Exhibit C6-12, pg. 75-85

⁵¹ Exhibit B1-9-6, Exhibit F, pg. 97

CONCLUSIONS

27. PNG concurs with the recommendation of FEI's expert witnesses that a 10.5% ROE, based on a 40% common equity ratio, represents a reasonable estimation of the Fair Return Standard.

28. PNG concurs with FEI's assessment that business risks are at the same level, if not slightly higher than what existed during the last Commission decision in 2009. PNG would also note that as a smaller, less diversified utility, it experienced many, if not all, of these same business risks on a magnified level.

29. PNG adopts and generally concurs with the technical arguments, underlying assumptions and methodologies used to determine the fair return on equity for the benchmark utility as presented by Ms. McShane and Dr. Vander Weide.

30. PNG concurs with FEI's conclusion that a ROE AAM typically does not meet the Fair Return Standard and further considers that current market conditions would represent a particularly inapt time to reintroduce such a mechanism.

31. While reserving more detailed arguments for Stage 2, PNG would concur with Ms. Ahern's conclusions with regards to the financial theory and empirical evidence that backs the relationship between the relative size of utilities and investor expectations with regards to return on equity and that a significant adjustment from the benchmark return for a small utility can be appropriate.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

DATED at Vancouver, British Columbia this 31st day of January 2013.

PACIFIC NORTHERN GAS LTD.



Janet P. Kennedy

Vice President, Regulatory Affairs and Gas Supply