DECISION

IN THE MATTER OF an application by Liberty Utilities (Gas New Brunswick) LP, as represented by its general partner, Liberty Utilities (Gas New Brunswick) Corp. for an order approving its return on equity, cost of debt and capital structure.

(Matter No. 491)

October 29, 2021

NEW BRUNSWICK ENERGY AND UTILITIES BOARD

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NEW BRUNSWICK ENERGY AND UTILITIES BOARD:

Acting Chairperson:	François Beaulieu
Members:	Patrick Ervin
	John Patrick Herron
Board Counsel:	Katherine McBrearty
Counsel for Board Staff:	Matthew Letson
Chief Clerk:	Kathleen Mitchell

APPLICANT:

Liberty Utilities (Gas New Brunswick) LP:	Len Hoyt, Q.C.

INTERVENERS:

J.D. Irving, Limited:	Christopher Stewart

PUBLIC INTERVENER:	Heather Black

A. Introduction

[1] Liberty Utilities (Gas New Brunswick) LP, as represented by its general partner, Liberty Utilities (Gas New Brunswick) Corp. (Liberty), applied to the New Brunswick Energy and Utilities Board (Board) for a review of its cost of capital.

[2] Liberty is the general franchisee for gas distribution in New Brunswick under an Amended and Restated General Franchise Agreement, dated October 1, 2019. Prior to this date, Enbridge Gas New Brunswick Limited Partnership, as represented by its general partner, Enbridge Gas New Brunswick Inc. (EGNB), held the general franchise.

[3] During EGNB's tenure as general franchise holder, the Board considered its cost of capital on two occasions:

(a) In its June 2000 decision, the Board approved a return on equity (ROE) of 13 percent; a cost of debt equal to the borrowing rate of Enbridge Inc. (Enbridge) plus 100 basis points; and an equity ratio not exceeding 50 percent; and

(b) In its November 2010 decision (2010 Decision), the Board approved an ROE of 10.9 percent; a cost of debt set at the Enbridge borrowing rate plus 100 basis points; and an equity ratio not exceeding 45 percent.

[4] In its decision dated January 13, 2021 (Matter 478), the Board directed Liberty to file an application by March 31 to allow the Board to evaluate the ROE, the appropriate capital structure, and cost of debt applicable to Liberty.

[5] The current matter is the Board's first cost of capital review for Liberty and it is seeking the approval of:

(a) An ROE of 11.5 percent;

(b) A cost of debt of 3.315 percent;

(c) A capital structure with an equity ratio of 50 percent; and

(d) Any additional orders, decisions, or directions as the Board may deem necessary or appropriate.

[6] A notice of application (Notice) was published in several daily newspapers. The Notice was provided to certified gas marketers, all parties involved in Matter 453 (EGNB's application for approval of its 2018 Regulatory Financial Statements and 2020 General Rate Application) and Matter 478 (Liberty's application for approval of its 2019 Regulatory Financial Statements and 2021 General Rate Application), and all parties who participated in the Board's above referenced 2010 cost of capital hearing.

[7] The Board held a pre-hearing conference by video conference on April 27, where J.D. Irving, Limited was granted intervener status. It did not file any evidence, nor did it make any submissions in this proceeding.

[8] A hearing was conducted by video conference on July 19, 20 and 22.

[9] Liberty presented a witness panel which included Mr. Gilles Volpé, Vice President/General Manager, and Mr. David Lavigne, Director, Finance and Regulatory, both from Liberty; and Mr. James Coyne, Senior Vice President, and Mr. John Trogonoski, Assistant Vice President, both from Concentric Energy Advisors, Inc. (Concentric). Mr. Coyne and Mr. Trogonoski were declared experts in the area of cost of capital for regulated utilities and associated financial, market and risk analysis.

[10] Ms. Heather Black, the Public Intervener, submitted the written evidence of Dr. Laurence Booth, a Professor of Finance and CIT Chair in Structured Finance at the Joseph L. Rotman School of Management, University of Toronto. Dr. Booth appeared as the Public Intervener's witness and was declared an expert in corporate financing and valuation.

B. Legislative Framework

[11] The following provisions of the *Gas Distribution Act*, *1999*, S.N.B. 1999, c. G-2.11 (Act) are relevant to this proceeding:

> **52**(3) The Board may make an order approving or fixing just and reasonable rates and tariffs that a gas distributor shall charge its customers for the distribution of gas or for supplier of last resort services.

52(5) In approving or fixing just and reasonable rates and tariffs, the Board

(a) may adopt any method or technique it considers appropriate, including an alternative form of regulation,

71(1) The Board shall supervise the activities of gas distributors, gas marketers, customers of gas distributors and other persons subject to this Act and has full jurisdiction to inquire into, hear and determine any matter

(b) where it appears to the Board that the circumstances may require it, in the public interest, to make any order or give any direction, leave or approval that by law it is authorized to make or give, or concerning any matter, act or thing that by this Act or any regulation, rule, certificate, order or direction is prohibited or required to be done.

C. Issues

[12] Regulated utilities, such as Liberty, earn a return on their rate base. Such a return is referred to as their cost of capital.

[13] In evaluating Liberty's cost of capital, the Board is required to determine a fair ROE for Liberty, in satisfaction of the fair return standard, and establish its cost of debt and capital structure.

D. Analysis

1. Fair Return Standard

[14] Under the Act, the Board may make an order approving or fixing just and reasonable rates. In so doing, it may adopt any method or technique it considers appropriate in accordance with subsection 52(5) of the Act.

[15] In its seminal decision of *Northwestern Utilities Ltd. v. Edmonton (City)*, [1929] SCR 186, the Supreme Court of Canada stated:

> The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested.

[16] The decision further stated that a fair return means that a utility is allowed as large of a return on the capital invested as it would receive if it invested the same amount in other securities possessing an attractiveness, stability, and certainty equal to that of the utility.

[17] The determination of just and reasonable rates, as described above, requires a balance between the interests of both the utility and its customers. As part of its method for setting rates, the Board must exercise its judgment to determine a total return for the utility to establish rates that provide it a reasonable opportunity to earn a fair return on invested capital. It must do this while ensuring that rates are just and reasonable so that customers are not paying more than is required to maintain safe, reliable and economic service.

[18] The process of determining a fair return is referred to as the fair return standard. This standard is enshrined in numerous Canadian regulatory decisions. In their most recent decisions on cost of capital, both the Alberta Utilities Commission and the British Columbia Utilities Commission have applied the following requirements, as summarized by the National Energy Board (now Canada Energy Regulator) in *TransCanada PipeLines Ltd. (Re)*, 2013 LNCNEB 2, at paragraph 565:

> (a) be comparable to the return available from the application of the invested capital to other enterprises of like risk (comparable investment requirement);
>
> (b) enable the financial integrity of the regulated enterprise to be maintained (financial integrity requirement); and
>
> (c) permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (capital attraction requirement).

[19] In final argument, Mr. Len Hoyt, counsel for Liberty, submitted that all three requirements must be satisfied, and none is less important than the other. No party disputed this interpretation or the applicability of the fair return standard in this proceeding.

[20] The Board considers that the fair return standard is satisfied when these three requirements are met and that this is an appropriate component of setting just and reasonable rates in the context of a general rate application.

2. Preliminary Considerations

[21] Prior to submitting his final argument, Mr. Hoyt raised two "fundamental issues" concerning Dr. Booth's evidence related to an appropriate ROE and capital structure for Liberty. First, Mr. Hoyt argued that Dr. Booth did not rely on market data, but instead inserted his own judgment. Second, he submitted that Dr. Booth did not appear to understand the challenges of Liberty's gas distribution business in New Brunswick.

[22] In response, Ms. Black submitted that Concentric relied too heavily on forward-looking estimates that tended to overstate the ROE and which ignored the relevant historical evidence. She maintained that Dr. Booth grounded his future estimates in reality and that judgment was an important part of a cost of capital analysis.

[23] Accordingly, the Board will exercise judgment in determining the appropriate ROE and capital structure for Liberty.

3. Return on Equity

a. Methods for Determining ROE

[24] In satisfying that the fair return standard is met, the Board is required to determine a fair ROE for Liberty. In order to provide an opportunity for public utilities to earn a fair return, several methods have been used by regulatory agencies in the process of reaching a decision.

[25] In *Principles of Public Utility Rates*, 2nd ed., co-authors James Bonbright, Albert Danielsen and David Kamerschen noted that "[no] single or group test or technique is conclusive. Therefore, it is generally accepted that commissions may apply their own judgment in arriving at their decisions."

[26] Both Dr. Booth and Mr. Coyne commented on different methodologies that can be used to arrive at a just and reasonable ROE estimate for a regulated utility.

[27] Dr. Booth, in his written evidence, suggested that the Capital Asset Pricing Model (CAPM) is the most common model utilized. He also suggested that he has traditionally viewed the Discounted Cash Flow (DCF) model estimates as "checks" on his CAPM estimates.

[28] In Concentric's Cost of Capital Report dated March 31, Mr. Coyne stressed that each model has inherent weaknesses, and relies on assumptions. As a result, he concluded that regulatory agencies

must use multiple models and employ reasonable judgment to be assured of a reasonable estimate of the required ROE.

[29] Mr. Hoyt stated in his final submission that it is now common for Canadian regulators to consider and rely upon the results of multiple models. He submitted that Concentric's estimation of the cost of equity for Liberty was obtained using the DCF, CAPM, and equity risk premium models, with alternative inputs in model specifications designed to test the reasonable range of the results. In his evaluation, Mr. Coyne combined the results from each of the models into averages to arrive at a reasonable range.

[30] The Board does not accept Concentric's approach. To average the result assumes that the weaknesses and strengths of each model are equivalent. The Board is not convinced that such an equivalency is appropriate. As a result, the Board will not consider the different models in this fashion.

[31] Instead, the Board will rely primarily on the CAPM method, with limited use of the other models, as a reasonableness check, as described below.

(1) Equity Risk Premium Model

[32] The equity risk premium model, as presented by Concentric, relies on an analysis of the allowed ROE from 677 gas distribution utilities from the United States (U.S.). The analysis concluded that the equity risk premium was a function of the long-term government bond rate. Using the analysis and the forecasted long-term U.S. government bond rates, the resulting ROE for a U.S. utility was 9.71 percent.

[33] Regulatory agencies in Canada do not commonly use this model. Liberty acknowledged that Concentric had to rely on a large sample of U.S. gas distribution companies, as there was an insufficient number of Canadian ROE decisions to develop a statistically meaningful analysis. There was no evidence related to this model as it pertains to Canadian companies, nor did Dr. Booth develop an equity risk premium estimate.

[34] In light of the above, the Board will not rely on this model.

(2) Discounted Cash Flow Model

[35] The DCF model relies on estimates of earnings growth over the long term.

[36] Dr. Booth presented the Board with evidence on the DCF model of estimating the ROE for a regulated utility, but noted several limitations with this method. He recommended that the DCF model should only be used for "[…] low risk dividend paying stocks or the market as a whole, where the expected dividends can be assumed to grow at some long run average growth rate […]."

[37] In his evidence, Dr. Booth provided an ROE estimate based on the DCF model. In using the long run growth rate of 3.0 percent and the median inflation target of 2.0 percent, he estimated the DCF required return on the equity market to be between 8.21 percent and 8.87 percent. In his view, he stated that there was spare capacity in Canada, as confirmed by the unemployment rate, and judged the DCF estimate for the market as a whole to be in the range of 8.50 percent to 9.50 percent.

[38] Nonetheless, Dr. Booth testified that any estimate derived from DCF estimates can be expressed as a risk premium estimate. He used, however, these DCF estimates to "bracket" a reasonable rate of return in this evidence.

[39] To arrive at a DCF estimate for a proxy group of Canadian and American utilities, Mr. Coyne used both the constant growth DCF model and the multi-stage growth DCF model.

[40] Ms. Black argued that the weakness in the constant growth DCF model is the assumption of perpetual growth, and submitted that Canadian regulators have rejected this model for that reason.

[41] The constant growth DCF model takes predictions from market analysts for each of the proxy companies and assumes that those growth rates will continue in perpetuity. This assumption, however, is a weakness and the Board finds that it is unreasonable to consider these results.

[42] The second model Mr. Coyne utilized was the multi-stage growth DCF model, which tempers the assumption of constant growth in perpetuity. The multi-stage model transitions from near-term growth for the first five years of the analysis to the long-term forecast of Gross Domestic Product (GDP) growth for the final stage of the analysis (i.e., years 11 and beyond). The second stage connects the near-term growth with the long-term growth by changing the growth rate each year on a "pro rata basis." In the final stage, the dividend cash flow then grows at the same rate as GDP into perpetuity.

[43] The Board finds the results from the multi-stage growth DCF model to be optimistic. This is because it overstates the ROE. It is, however, more reasonable than considering results from the constant growth DCF model.

[44] Another factor to consider in evaluating the multi-stage growth DCF model is the inclusion of AltaGas Ltd. (AltaGas) and Enbridge in the Canadian proxy group. As discussed in the section below concerning the beta coefficient (beta), the Board does not consider these companies to be appropriate in this proxy group.

[45] The evidence related to the multi-stage growth DCF model provides a range of ROEs for the Canadian proxy group, excluding AltaGas and Enbridge, from 7.33 percent to 9.69 percent, plus flotation costs. Additionally, the range for ROEs for Concentric's U.S. proxy group was 7.83 percent to 9.25 percent, plus flotation costs.

[46] As stated above, the Board considers these estimates to be optimistic. Accordingly, the Board will use the results from Concentric's multi-stage growth DCF model as a reasonableness check for the upper range of the return, against the Board's preferred method, as described below.

(3) Capital Asset Pricing Model

[47] The CAPM is based on assumptions that investors are willing to take more risk, as ROE increases. The model works by evaluating different levels of risk, including risk-free investments and regulated utilities.

[48] The model is also based on the ROE for a "benchmark utility." A benchmark utility serves as a comparator within the regulatory construct. It is a starting point for determining the appropriate ROE.

[49] In CAPM, the ROE for a benchmark utility includes a risk-free rate, a market risk premium and a beta. To this, flotation costs are added and a company-specific risk premium is added to represent the relative risk of the utility.

[50] Each component of the formula is determined independently to arrive at a reasonable ROE. The Board will rely primarily on the CAPM model for this proceeding, as this model has been widely used, well-accepted, and thoroughly vetted by various regulatory agencies in Canada.

i. Risk-Free Rate

[51] The risk-free rate is the return that an investor can expect without any risk of losing the investment. In most jurisdictions, a long-term government bond serves as a proxy for a risk-free rate.

[52] Both Mr. Coyne and Dr. Booth recommended the Government of Canada 30-year bond as the appropriate proxy. The Board accepts this proxy, but it must establish a reasonable estimate of the risk-free rate.

[53] Mr. Coyne and Dr. Booth agreed that the Board should begin with a forecast for the 10-year government bond, which is readily available. To this, the Board should then add the historical difference between 10-year and 30-year bonds.

[54] Mr. Coyne recommended using the 2022 through 2024 forecast produced by Consensus Economics Inc. He then added the average difference between the 10-year and the 30-year government bonds for February 2021, which was noted as the most recent data available at the time. Mr. Coyne concluded that a risk-free rate of 2.57 percent was reasonable.

[55] Dr. Booth proposed using the 10-year bond forecast of 2.70 percent by 2025, as found in the Government of Canada's 2021 budget. He added the average difference between the interest rates of the 10-year and 30-year bonds since 1987 to arrive at a base value of 3.07 percent. He recommended two adjustments to this base value.

[56] The first adjustment was for bond-buying by central banks, which he suggested lowered returns. The second was for an unusual decrease in long-term bond returns, as investors sell corporate bonds and buy government bonds during times of uncertainty. In combining these two adjustments, the risk-free rate would increase by up to 115 basis points. While Mr. Coyne acknowledged that returns on long-term government bonds were low, he made no adjustment on that basis.

[57] In final argument, Mr. Hoyt submitted that the use of the 2022 to 2024 forecast, as opposed to the current risk-free rate, reflected the current market reality that near-term bond yields remained near all-time lows. He further submitted that investors factor higher interest rate levels into their forward-looking return expectations.

[58] Ms. Black submitted that while she accepted Concentric's use of the 2022 to 2024 forecast as a basis for its risk-free rate estimate, its approach of adding the current spread between 10-year and 30-year government bonds was inappropriate. In her view, the method used by Dr. Booth, using the long-term average spread, resulted in a more appropriate estimate.

[59] Despite the differences in the forecasts and approaches regarding the spread used by Mr. Coyne and Dr. Booth, Ms. Black noted that other regulatory agencies had accepted both approaches in the past. As such, Ms. Black submitted that it would be reasonable for the Board to consider a risk-free rate between 2.57 percent and 3.07 percent.

[60] The Board acknowledges that interest rates on long-term bonds are lower than long-term historical levels. Rates have been low for a considerable amount of time, and no evidence was presented that this is likely to change.

[61] The Board accepts the range as submitted by Ms. Black. Considering the concerns about low interest rates, the Board sets the risk-free rate at 3.07 percent. The Board will not apply Dr. Booth's two recommended adjustments, which increases the risk-free rate by 115 basis points.

ii. Market Risk Premium

[62] The second component of CAPM is the market risk premium. This represents the extra return an investor can expect by investing in equities rather than bonds.

[63] Concentric submitted it was appropriate to develop a market risk premium based on forecasts. Using analysts' forecasts of returns and the constant growth DCF method, Concentric arrived at a forecasted market risk premium for North American companies of 9.84 percent.

[64] Dr. Booth, however, used a historical average of the difference between market returns and long-term government bond returns. This was calculated using roughly a century's worth of data. He also considered surveys of experts forecasting the market risk premium. Dr. Booth concluded that a range between 5.0 percent and 6.0 percent was reasonable.

[65] During final argument, Mr. Hoyt argued that using historical data to estimate the market risk premium was not appropriate under current market conditions. This is due to the historical data not accounting for the current low interest rate environment. Accordingly, its use in estimating the market risk premium resulted in an understated value.

[66] Additionally, Mr. Hoyt submitted that current interest rates are substantially lower than the Canadian government bond yields used to calculate the historical market risk premium presented by Dr. Booth. Under such circumstances, the market risk premium should be higher than the long-term historical average to reflect the current low interest rate environment.

[67] Ms. Black argued that if the Board uses a forward-looking estimate, as suggested by Liberty's expert witnesses, it should not use an estimate that relies on the constant growth DCF model, which depends on excessively high growth rates. Instead, she submitted that the Board could consider the results of a multi-stage DCF calculation, which, while still flawed, is more reasonable. Ms. Black further submitted that this forward-looking estimate should be combined with historical calculations to arrive at a reasonable market risk premium. The Board agrees with Ms. Black.

[68] The Board concludes that a forward-looking estimate should be combined with historical calculations to arrive at a reasonable market risk premium. The combination of the market risk premium that comes out of the multi-stage DCF calculations and the historical information supplied by Liberty will be used in this proceeding.

[69] This combined approach provides for a market risk premium of 6.23 percent, which the Board finds to be reasonable.

iii. Beta Coefficient

[70] The third component in the CAPM calculation is the beta, which captures the riskiness of a company or group of companies, compared to the market as a whole.

[71] Mr. Coyne and Mr. Trogonoski arrived at an average beta of 0.86, while Dr. Booth recommended a beta between 0.45 and 0.55.

[72] The Board must resolve several methodological issues to arrive at an estimate of the beta. The first issue deals with the proxy group. Concentric arrived at its beta based on a Canadian proxy group that included six companies and an American proxy group that used four companies.

[73] During cross-examination, Dr. Booth questioned the inclusion of AltaGas and Enbridge in the Canadian proxy group. He suggested that changes in both companies in recent years meant that they were no longer reasonably representative of Canadian utilities.

[74] The Board is satisfied that excluding AltaGas and Enbridge from the Canadian proxy group results in a more appropriate beta. The Board is not convinced that these two companies are reasonably representative of Canadian utilities. AltaGas' utility operations are no longer primarily based in Canada. As a company with significant pipeline assets, Enbridge has a much different risk profile than that of a regulated utility, such as Liberty. The Board finds that the appropriate beta is one that reasonably represents the relative risk of Canadian utilities.

[75] A second issue is whether the beta should be calculated on a weekly or monthly basis. While Concentric used a beta calculated weekly, Dr. Booth submitted that this introduces a bias into the calculation, and suggested that a monthly beta calculation is more appropriate.

[76] The Board has previously used a beta calculated monthly, and is not persuaded that a shift in calculating beta values to a weekly basis is required. Accordingly, the Board will use monthly beta values.

[77] During the hearing, the use of the Blume adjustment was raised. Mr. Coyne testified that the Blume adjustment was used in every regulatory proceeding where CAPM was involved across 50 U.S. states and the U.S.-based Federal Energy Regulatory Commission. He submitted that this adjustment corrects the tendency for a beta to revert towards the market mean of one over time.

[78] Dr. Booth, however, submitted that the adjustment was meant for an evaluation for specific stocks. He further submitted that there was no justification for the Blume adjustment in the context of utilities.

[79] The Board is not convinced that the Blume adjustment is appropriate, since an adjustment is not warranted for the betas of regulated utilities.

[80] In addition, Mr. Hoyt submitted that Dr. Booth's beta estimates failed to reflect current market conditions. He stated that both raw and adjusted betas for regulatory utilities in the last five years in Canada and the U.S. have increased substantially. He argued that utility companies were experiencing pressures that they had not in the past. He submitted that this could be explained by the shift in public policy towards decarbonization.

[81] Mr. Hoyt argued that the risks associated with decarbonization call into question the future growth prospects for gas distributors such as Liberty. This greater risk concerning the overall market translated to higher betas. He stated that even raw unadjusted betas were 0.79 and 0.77 for the Canadian and U.S. proxy groups based on the last five years.

[82] In final argument, Ms. Black pointed to the range of betas found in Concentric's Canadian proxy group. While the information is still adjusted, the weekly betas show an average beta for Canadian companies of 0.87, and if AltaGas and Enbridge were removed, the average would be lower. Referring to monthly betas contained in Concentric's interrogatory responses, Ms. Black noted

that the Canadian companies, excluding AltaGas and Enbridge, would have an average beta of approximately 0.50. She submitted that a range of 0.50 to 0.87 was reasonable.

[83] While the Board recognizes that Liberty is facing risks related to decarbonization and electrification, it notes that beta estimates become overstated by relying too heavily on the short-term data. Beta estimates must be viewed in the context of historical data to avoid getting caught up in daily volatility, which is reflected when the beta is set in the short term.

[84] Therefore, in reviewing the monthly betas as presented, excluding the values for AltaGas and Enbridge, the Board finds that a beta within the range of 0.34 and 0.66 is reasonable. The Board is not persuaded that a change to the beta is warranted from 2010 and will maintain the value at 0.55.

iv. Flotation Costs

[85] Another component in CAPM is an allowance for flotation costs which represent the costs associated with issuing equities.

[86] Both Mr. Coyne and Dr. Booth agreed that a flotation allowance of 0.50 percent was reasonable. The Board agrees with this assessment and will add 0.50 percent to the resulting calculation.

v. Benchmark ROE

[87] As mentioned above, the primary model for arriving at a benchmark ROE is CAPM. The Board, however, has used in its analysis the multi-stage growth DCF model as a reasonableness check.

[88] Considering the above components, CAPM indicates that the appropriate ROE, before adding Liberty's risk premium, is 7.0 percent. The calculation is summarized below:

CAPM Components	Percentage	Total
Risk-Free Rate	3.07 %	3.07 %
(Market Risk Premium * Beta)	(6.23 % * 0.55)	3.43 %
Flotation Costs	0.50 %	0.50 %
Total ROE, not including Company-Specific Risk Premium		7.0 %

[89] Comparing the above result to the multi-stage growth DCF model, which represents the optimistic upper end of the range of reasonableness, the Board concludes the result from CAPM to be a reasonable estimate of a benchmark utility.

[90] Some adjustments to the ROE for a benchmark utility must be made to account for the specific risks facing Liberty's New Brunswick operation. These risks are reviewed below.

b. Company-Specific Risk Premium

[91] The final component for determining the ROE is Liberty's company-specific risk premium. It is the difference between the risk premium for a benchmark utility and the premium that Liberty requires to attract investment capital.

[92] In its 2010 Decision, the Board examined five categories of risk for EGNB, which included: (a) market risk; (b) competitive risk; (c) supply risk; (d) regulatory risk; and (e) deferral account recovery risk. The Board stated that, while the relative risk in most categories had remained stable or declined, EGNB's "large and growing" deferral account made the utility far riskier than other mature utilities. This was because its ability to pay the debt in the deferral account was "[…] dependent on market forces which are out of EGNB's control." Considering the evidence and risk factors, the Board determined that a company-specific risk premium of 2.75 percent was appropriate.

[93] As it relates to this proceeding, the Board will examine the same five categories of risks as in 2010, as well as a new category relating to Liberty's peer group risk. All of these categories have been factored in the Board's determination of Liberty's company-specific risk premium.

(1) Market Risk

[94] Mr. Coyne submitted that Liberty has greater market risk than in 2010 and had not added as many customers as it had forecasted.

[95] Liberty argued that the size and nature of the New Brunswick market continue to restrict its ability to expand its customer base and increase its average throughput per customer. Specifically, Liberty noted that its growth has been limited to new home construction in areas currently served by natural gas pipeline.

[96] Liberty submitted that approximately 60 percent of the home heating market currently served by electricity is no longer a viable expansion target for Liberty. This is because the availability of heat pumps has saturated the market, further encouraging customers to adopt electricity as the primary heating source for new homes. It further submitted that New Brunswick consumers' rapid adoption of heat pumps has contributed to a reduction in the consumption of all fossil fuels. As a result, 2014 remains the high point in terms of customers and throughput for Liberty.

[97] Additionally, Liberty argued that the political and environmental trends towards decarbonization make it increasingly difficult for the utility to expand its operations in New Brunswick.

[98] Liberty also argued that the existence of Single End-Use Franchises (SEUFs), which it estimates represent as much as 80 percent of the natural gas consumed in New Brunswick, exposes Liberty to greater market risk than would otherwise be the case.

[99] The Board finds that the conditions identified above do not represent a material change from the market conditions in 2010, but notes that the risk associated with the SEUFs has decreased since 2010. Liberty now receives per-GJ payments from SEUF customers, which had been unavailable in the 2010 proceeding.

[100] While Mr. Lavigne suggested that the revenue from SEUF fees would roughly cover the cost of taxes that Liberty will now start paying as a profitable company, these are not related. Liberty's tax burden exists regardless of the SEUF fees and is the same as other profitable utilities.

(2) Competitive Risk

[101] Mr. Coyne submitted that Liberty has greater competitive risk than it had in 2010. He further submitted that the relative differential between natural gas and electricity prices had been lower than anticipated.

[102] Liberty identified challenges to growing its operations in New Brunswick, namely, the greater efficiency of heat pumps, and competition from the propane and fuel oil markets.

[103] With respect to heat pumps, Liberty noted that their greater efficiency has not only made it difficult to attract new customers but has also reduced demand for gas in non-peak winter months when they are cost-competitive against natural gas.

[104] Falling prices for propane, beginning in 2014, caused some natural gas customers to switch over, leading to a reduction in natural gas customers for Liberty. This switch-over from natural gas to propane remains an ongoing challenge.

[105] As for the fuel oil market, Liberty submitted that price fluctuations have led to a reduction in throughput for Liberty, as some Contract General Service and Industrial Contract General Service customers retain the ability to "fuel switch" when market prices make it advantageous.

[106] The Board therefore finds that Liberty's competitive risk has increased since the 2010 Decision due to greater competition.

(3) Supply Risk

[107] In 2010, EGNB identified the acquisition of sufficient natural gas supplies as a potential risk for the utility, as the Sable Offshore Energy Project (Sable Project), had an uncertain production life. The Sable Project has since closed and Liberty currently sources its natural gas mainly from Ontario and Western Canada.

[108] Mr. Volpé testified that Liberty's supply risk has moderated "to some degree" since 2010 because natural gas supply is being provided from more stable markets. He further testified that this has resulted in more stable pricing and lower overall prices than in 2010.

[109] The Board finds that Liberty's supply risk is now lower than in 2010.

(4) Regulatory Risk

[110] Mr. Coyne submitted that Liberty's risk related to regulation had not materially changed since 2010. He noted that Liberty incurs a higher regulatory risk than the other gas distribution utilities in its North American proxy group, as it lacks protection against volumetric risk.

[111] During cross-examination, Mr. Coyne testified that Liberty lacks revenue decoupling or weather normalization mechanisms, which are common for other gas distribution utilities. In final argument, Mr. Hoyt noted that the utility had applied for a revenue smoothing mechanism in 2014, but that this request had been denied.

[112] Ms. Black took issue with Liberty's alleged lack of regulatory options to address volumetric risk. She submitted that Liberty comes before the Board annually and is not precluded from requesting further regulatory tools to address volumetric risk.

[113] The Board finds that the regulatory risk has remained unchanged since 2010.

(5) Deferral Account Recovery Risk

[114] In the 2010 Decision, the Board viewed the risk of EGNB being unable to recover its large deferral account to be the utility's most pressing risk, and set the company-specific risk premium at 2.75 percent, largely to address this issue. Mr. Coyne submitted that this was Liberty's most important risk at that time.

[115] Liberty submitted that in 2016, EGNB and the Province of New Brunswick negotiated a settlement that included a 25-year extension of the gas distribution franchise and a settlement of the deferral account, of which $100 million will be recovered over the duration of the franchise agreement. In its evidence, Liberty stated that, while the deferral account recovery risk is lower in absolute terms, there remains a danger that some portion of Liberty's deferral account will not be recovered.

[116] The Board finds that the deferral account recovery risk has decreased substantially since 2010, as some issues around a large deferral account balance were settled in 2016.

(6) Peer Group Risk

[117] While the Board did not consider the issue of peer group risk in 2010, both Liberty and the Public Intervener raised this issue in this proceeding.

[118] Liberty characterized the New Brunswick marketplace as one with a small population and industrial base spread over a broad area, compared to other natural gas markets. It stated that New Brunswick's dispersed population makes it more expensive or even uneconomic to serve a significant portion of the franchise area, limiting further growth into communities not already served by Liberty.

[119] Liberty submitted that it would not be appropriate to treat small, regional gas distribution utilities as if they were large mature utilities that serve a much larger customer base. Accordingly, it argued that the Board should assess Liberty's ROE against the ROEs of similar local gas distributors in terms of customers and throughput.

[120] In his view, Dr. Booth stated that Pacific Northern Gas (PNG) was the riskiest gas distribution utility in Canada, and that Liberty's peer group risk premium should not be greater than PNG's.

[121] Mr. Hoyt argued that it was "troubling" to hear Dr. Booth state that PNG is the riskiest gas distribution utility in Canada, based on information he has not revisited in 10 years. He added that there was no comparison provided of Liberty to risky gas distribution companies in Canada.

[122] In the Board's view, assessing risk against a peer group is an appropriate step to take in this proceeding. Liberty's risk will be assessed against Heritage Gas Limited and PNG.

[123] The lack of population density found within the New Brunswick marketplace magnifies Liberty's risk. Further, the dispersed population and relatively small industrial market present significant challenges for growth. The Board concludes that Liberty's smaller annual throughput and less diverse and smaller customer base cause Liberty to be a riskier utility than its peer group.

(7) Conclusion – Company-Specific Risk Premium

[124] Dr. Booth submitted that Liberty's company-specific risk premium should be 0.75 percent. Concentric recommended a premium reduction from 2.75 percent to 1.60 percent.

[125] Ms. Black argued that an additional reduction to this risk premium to 0.80 percent was warranted and reasonable. She stated that Concentric has vastly overstated Liberty's regulatory risk, and the Board's 2010 risk premium would have been based on its small size.

[126] The Board has considered the various risks, including that Liberty has more competitive risk since 2010. The Board finds that an appropriate company-specific risk premium for Liberty lies between 0.75 percent and 1.60 percent.

[127] As noted above, the Board finds the lack of population density within the New Brunswick marketplace magnifies Liberty's risk compared to its peer group. Its dispersed franchise area impacts Liberty's growth. Given the challenges presented above, the Board sets Liberty's company-specific risk premium at 1.50 percent.

c. Board Conclusion on ROE

[128] In closing argument, Mr. Hoyt submitted that an ROE of 8.25 percent, as recommended by Dr. Booth was "simply untenable" for Liberty. He further submitted that this would be the lowest

authorized ROE for a regulated gas utility in both Canada and the U.S. and would not meet the fair return standard.

[129] In her view, Ms. Black submitted that while it is tempting to look at other ROEs from other Canadian utilities, it is important for the Board to apply its own judgment.

[130] Considering the foregoing, Liberty's ROE is set at 8.50 percent, to be effective as of January 1, 2022, as detailed below:

CAPM Components	Percentage	Total
Risk-Free Rate	3.07 %	3.07 %
(Market Risk Premium * Beta)	(6.23 % * 0.55)	3.43 %
Flotation Costs	0.50 %	0.50 %
Total ROE, not including Company-Specific Risk Premium		7.0 %
Company-Specific Risk Premium	1.50 %	1.50 %
Total ROE		8.50 %

4. Cost of Debt

[131] Liberty proposes that the Board approve a cost of debt of 3.315 percent.

[132] The Board last approved the cost of debt in its 2010 Decision. In that Matter, EGNB, now Liberty, had proposed that the cost of debt be limited to the actual borrowing rate of its parent, Enbridge, plus 100 basis points.

[133] Mr. Coyne submitted that the current cost of debt is based on a 30-year debt issuance by Liberty's parent company, Liberty Utilities (Canada) LP, of $200 million in February 2020, with a 3.315 percent interest rate. This issuance is the lowest of the average embedded cost for the North American proxy group of 4.06 percent.

[134] Dr. Booth testified that Liberty is financed with a very favourable rate and took no issue. Ms. Black had no comments on the proposed cost of debt.

[135] Liberty is not seeking a premium above the cost of debt of its parent company. Liberty's proposal represents the actual cost of debt related to its acquisition by Liberty Utilities (Canada) LP.

[136] The Board finds that the cost of debt is favorable to ratepayers and is reflective of interest rates in current capital markets. Based on the foregoing, the Board concludes that the proposed cost of debt of 3.315 percent is reasonable, and is approved.

5. Capital Structure

[137] To satisfy the fair return standard, the Board must also establish Liberty's capital structure. The capital structure of a business includes both its debt and equity. The debt-to-equity ratio caps the equity percentage upon which Liberty may earn a return.

[138] In its 2010 Decision, the Board approved a capital structure with an equity ratio not exceeding 45 percent. As stated earlier, Liberty is seeking the approval of a capital structure with an equity ratio of 50 percent.

[139] Mr. Coyne recommended an equity ratio of a minimum of 45 percent, noting that 50 percent was "not an unreasonable target." His analysis was based on a comparison of the equity ratios of other investor-owned gas distributors in both Canada and the U.S., in addition to assessing Liberty's risk compared to 2010.

[140] Mr. Coyne submitted that Liberty's risk should be evaluated through two principal sources: business risk and financial risk. Both risks need to be considered in setting the capital structure. Concentric's evidence characterized business risk as the risk inherent in the company's operations, regardless of how the company is financed. Financial risk exists to the extent that a company incurs fixed obligations in financing its operations.

[141] The Concentric report stated that Liberty is at a higher risk than most other investor-owned gas distributors in Canada and the Canadian and North American proxy group companies. It further stated that:

> […] Liberty is significantly smaller both in terms of customer count and implied market capitalization than its peer group; Liberty has greater volumetric risk and declining average use per customer; and Liberty's competitive risk and supply risk both have increased since 2010.

[142] Accordingly, Mr. Coyne recommended that it was reasonable for Liberty to have an above-average deemed equity ratio.

[143] Dr. Booth, on the other hand, recommended that the Board approve a capital structure with an equity ratio of 40 percent. In his view, evaluating the business risk was important because "[…] it is the primary driver of any company's overall risk, that is financial risk, and how much debt a firm uses, is layered on top of its business risk."

[144] Dr. Booth argued that, for regulated utilities, the underlying business risks were extremely low since they are regulated. In Liberty's case, he stated that "[…] its small size is more than offset by the amortisations in [its] revenue requirement that increase its credit worthiness." He also stated that short and long-term business risks could largely be managed by regulatory tools.

[145] In final argument, Mr. Hoyt noted that, while some risks had diminished since 2010, others had increased. In particular, the risk associated with environmental regulations on carbon emissions and the political desire to achieve decarbonization targets had since become significant risks.

[146] Mr. Hoyt argued that, not only was Liberty's overall business risk not much different than in 2010, but it was also higher in comparison to most of the operating utilities held by the Canadian, the U.S. and the North American proxy groups of companies.

[147] Ms. Black submitted that Liberty's equity ratio should remain at 45 percent. She argued that, in determining the capital structure, the Board must consider the relationship between the ROE and the equity ratio. A utility with a higher equity ratio requires a lower ROE to be compensated equally for the same risk.

[148] Ms. Black argued that an equity ratio of 50 percent was not justified and not consistent with the above concept. She submitted that Mr. Coyne relied on an increased business risk that could not be demonstrated, either compared to 2010 or to its peers. There was no evidence of any other risk which warranted an increased ratio that was not already considered in the ROE analysis.

[149] Ms. Black further argued that the Board should disregard the U.S. comparators offered by Concentric to evaluate the reasonableness of Concentrics's recommended equity ratio for Liberty, since it was lower than all the U.S. comparators. She submitted that in its 2018 Decision, the Alberta Utilities Commission found that allowed capital structures for U.S. utilities should not be held up as representative of the capital structures required by Canadian utilities to satisfy the fair

return standard. She explained that U.S. equity ratios are higher than Canadian equity ratios, due to differences in the U.S. regulatory process, which relies more on actual capital structures compared to peers versus the Canadian regulatory process that uses deemed ratios.

[150] The Board agrees with Ms. Black. It is not satisfied that there is sufficient evidence of a change in circumstances, including Liberty's business and financial risks, which would justify a change in the equity ratio. As a result, the Board approves a capital structure with an equity portion of 45 percent.

E. Conclusion

[151] The following table summarizes Liberty's ROE, cost of debt, and capital structure of Liberty's debt to equity ratio, prior to this hearing, and reflects the approved adjustments made in this proceeding. These adjustments are to be effective as of January 1, 2022.

	As of January 1, 2011	**Approved**
Return on Equity	10.9 %	**8.50 %**
Cost of Debt	Enbridge Inc. borrowing rate plus 100 basis points	**3.315 %**
Capital Structure	45 %	**45 %**

Dated at Saint John, New Brunswick, this 29th day of October 2021.

François Beaulieu
Acting Chairperson

Patrick Ervin
Member

John Patrick Herron
Member