

**BEFORE THE
RÉGIE DE L'ÉNERGIE DU QUÉBEC**

**DIRECT TESTIMONY
OF
DYLAN W' D'ASCENDIS**

**For
Enbridge Gaz Québec**

Exhibit EGQ-4, Document 1

October 19, 2026

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1 GLOSSARY OF TERMS, ABBREVIATIONS AND UNITS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
AGA	American Gas Association
AGIF	American Gas Index Fund
AUC	Alberta Utility Commission
ATO	Atmos Energy Corporation
Beta or β	Beta coefficient
Bloomberg	Bloomberg Professional Services
<i>Blue Chip</i>	Blue Chip Financial Forecasts
Bluefield	Bluefield Water Works and Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679 (1923)
BoC	Bank of Canada
Brattle	The Brattle Group
B.C.	British Columbia
Canadian Utility Proxy Group	Proxy group of five publicly traded Canadian utility companies comparable in risk to EGQ
CAPM	Capital Asset Pricing Model
CUSMA	Canada-United States-Mexico Agreement
DCF	Discounted Cash Flow
DJIA	Dow Jones Industrial Average
ECAPM	Empirical Capital Asset Pricing Model
EGQ	Enbridge Gaz Québec
EPS	Earnings Per Share
ERP	Equity Risk Premium
Fama & French	Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence", <i>Journal of Economic Perspectives</i> , Vol. 18, No. 3, Summer 2004 at 33
FERC	Federal Energy Regulatory Commission
Fed	Federal Reserve
FTS	Fortis, Inc.
FTE	Full-time Equivalent Employee
Hope	Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944)
Kroll	Kroll's Cost of Capital Navigator: U.S. Cost of Capital Module
Moody's	Moody's Investors Service
Morin	Roger A. Morin, PhD, Modern Regulatory Finance, PUR books 2021
MRP	Market Risk Premium
NACVA	National Association of Certified Valuation Analysts
NASDAQ 100	NASDAQ 100 Index

<u>Acronym/Defined Term</u>	<u>Meaning</u>
NEB	National Energy Board
Northwestern	Northwestern Utilities Limited v. City of Edmonton, (1929) S.C.R. 186
NWN	Northwest Natural Gas
OEB	Ontario Energy Board
OLS	Ordinary Least Squares
PGIRE	Plan de gestion intégrée des ressources énergétiques
PRPM	Predictive Risk Premium Model
P/E	Price-to-earnings Ratio
Régie	Régie de l'énergie du Québec
RNG	Renewable Natural Gas
ROE	Return on common equity
RPM	Risk Premium Model
S&P	Standard and Poor's
SBBI	Kroll's <u>Stocks, Bonds, Bills, and Inflation Yearbook</u>
SBBI - 2023	Kroll's <u>Stocks, Bonds, Bills, and Inflation Yearbook 2023</u>
SML	Security Market Line
SURFA	Society of Utility and Regulatory Financial Analysts
SWX	Southwest Gas Holdings, Inc.
TransCanada	TransCanada Pipelines Ltd. v. National Energy Board, (2004) FCA 149
Utility Proxy Groups	Proxy groups of publicly traded utility companies comparable in risk to EGQ
U.S. Gas Utility Proxy Group	Proxy group of seven publicly traded U.S. natural gas distribution utility companies comparable in risk to EGQ
<i>Value Line</i>	Value Line Investment Survey
WACC	Weighted Average Cost of Capital

1 **I. INTRODUCTION AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Dylan W. D'Ascendis. My business address is 1820 Chapel Ave., W., Suite
4 300, Cherry Hill, NJ 08003.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am a Partner at ScottMadden, Inc.

7 **Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE AND**
8 **EDUCATIONAL BACKGROUND.**

9 A. I have offered expert testimony on behalf of investor-owned utilities before over 40 state
10 regulatory commissions in the United States, the Federal Energy Regulatory Commission
11 ("FERC"), the National Energy Regulator, the Alberta Utility Commission, one American
12 Arbitration Association panel, and the Superior Court of Rhode Island on issues including,
13 but not limited to, common equity cost rate, rate of return, valuation, capital structure, class
14 cost of service, and rate design.

15 On behalf of the American Gas Association ("AGA"), I calculate the AGA Gas
16 Index, which serves as the benchmark against which the performance of the American Gas
17 Index Fund ("AGIF") is measured on a monthly basis. The AGA Gas Index and AGIF are
18 a market capitalization-weighted index and mutual fund, respectively, comprised of the
19 common stocks of the publicly traded corporate members of the AGA.

20 I am a member of the Society of Utility and Regulatory Financial Analysts
21 ("SURFA"). In 2011, I was awarded the professional designation "Certified Rate of Return
22 Analyst" by SURFA, which is based on education, experience, and the successful
23 completion of a comprehensive written examination.

1 I am also a member of the National Association of Certified Valuation Analysts
2 (“NACVA”) and was awarded the professional designation “Certified Valuation Analyst”
3 by the NACVA in 2015.

4 I am a graduate of the University of Pennsylvania, where I received a Bachelor of
5 Arts degree in Economic History. I have also received a Master of Business Administration
6 with high honors and concentrations in Finance and International Business from Rutgers
7 University.

8 The details of my educational background and expert witness appearances are
9 included in Appendix A.

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

11 A. The purpose of my testimony is to present evidence on behalf of Enbridge Gaz Québec
12 (“EGQ” or the “Company”) before the Régie de l’énergie du Québec (“Régie”)
13 recommending the appropriate deemed capital structure and return on common equity
14 (“ROE”) the Company should be allowed to earn on their rate base for the 2027 period.

15 **Q. HAVE YOU PREPARED ANY DOCUMENTS IN SUPPORT OF YOUR**
16 **RECOMMENDATION?**

17 A. Yes. My testimony (Exhibit EGQ-4, Document 1) is supported by Exhibits EGQ-4
18 Document 2 through Document 9, which were prepared by me or under my direction.

19 **II. SUMMARY**

20 **Q. WHAT IS YOUR RECOMMENDED COST OF CAPITAL FOR EGQ?**

21 A. I recommend a deemed capital structure for the Company which consists of 60.00% total
22 debt and 40.00% common equity, and an ROE of 10.35% on the Company’s rate base. As

shown in Table 1, below, this results in a weighted average cost of capital (“WACC”) of 7.14%.

Table 1: Summary of the Weighted Average Cost of Capital

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Total Debt	60.00% ¹	4.99 %	3.00%
Common Equity	<u>40.00%</u>	10.35%	<u>4.14%</u>
Total	<u>100.00%</u>		<u>7.14%</u>

Q. PLEASE SUMMARIZE THE BASIS FOR YOUR RECOMMENDED COMMON EQUITY COST RATE FOR THE COMPANY.

A. My recommended common equity cost rate of 10.35% is summarized on page 2 of Exhibit EGQ-4, Document 2. I have assessed the market-based common equity cost rates of companies of relatively similar, but not necessarily identical, risk to the Company. Using companies of relatively comparable risk as proxies is consistent with the principles of fair rate of return established by the *Northwestern*² and *TransCanada*³ cases in Canada and in the *Hope*⁴ and *Bluefield*⁵ cases in the United States. No proxy group can be identical in risk to any single company, so there must be an evaluation of relative risk between the Company and a proxy group to see if it is appropriate to make adjustments to the proxy group’s indicated rate of return.

My recommended ROE results from the application of multiple cost of common equity models, specifically, the Discounted Cash Flow (“DCF”) model, the Risk Premium Model (“RPM”), and the Capital Asset Pricing Model (“CAPM”) to the market data of two

¹ The total debt ratio of 60.00% consists of 55.00% long-term debt and 5.00% short-term debt. The weighted average cost of debt is calculated using rates of 5.01% and 4.80%, respectively.

² *Northwestern Utilities Limited v. City of Edmonton*, (1929) S.C.R. 186, at 192-193. (“Northwestern”)

³ *TransCanada Pipelines Ltd. v. National Energy Board*, (2004) FCA 149 [6] [12] [13]. (“TransCanada”)

⁴ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). (“Hope”)

⁵ *Bluefield Water Works Improvement Co. v. Public Serv. Comm’n*, 262 U.S. 679 (1922). (“Bluefield”)

proxy groups of utility companies; one comprised of Canadian utility companies (“Canadian Utility Proxy Group”) and one comprised of U.S. natural gas distribution utility companies (“U.S. Gas Utility Proxy Group”) (collectively, the “Utility Proxy Groups”). The use of Canadian and U.S. utilities in an ROE analysis reflects the financial principles of risk and return and the fact that both economies are interdependent, as will be discussed in detail below. The results derived from my ROE analysis are as follows:

Table 2: Summary of Common Equity Cost Rate

	Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
Discounted Cash Flow Model	8.79%	10.86%
Capital Asset Pricing Model	8.79%	11.78%
Risk Premium Model	<u>11.10%</u>	<u>12.72%</u>
Indicated Cost of Common Equity before Adjustment	9.06% - 11.06%	
Business Risk Adjustment	0.40% - 0.60%	
Issuance Cost Adjustment	<u>0.30% - 0.50%</u>	
Indicated Cost of Common Equity before Adjustment	<u>9.76% - 12.16%</u>	
Recommended Cost of Common Equity	<u>10.35%</u>	

After analyzing the indicated common equity cost rates derived through these models, the indicated range of common equity cost rates applicable to the Utility Proxy Groups is between 9.06% and 11.06%. Understanding the Régie’s preference for the CAPM, with some consideration given to the DCF, I arrived at this range by averaging the results of the DCF and CAPM models applied to the Canadian Utility Proxy Group and U.S. Gas Utility Proxy Group (10.06%) and then adding a 100-basis point range. The RPM indicated results overlap the high end of the range set by the CAPM and DCF models and is used as a confirmatory method.

This indicated range of common equity cost rates was then adjusted upward by 0.40% and 0.60% to reflect EGQ’s greater business risk as compared to the Utility Proxy

Group, as well as by 0.30% and 0.50% to reflect an issuance cost adjustment. These adjustments are consistent with adjustments made by the Régie in prior findings. This results in an EGQ-specific range of common equity cost rates of 9.76% to 12.16%. Given this range of ROEs, I recommend a common equity cost rate of 10.35% for the Company.

Q. PLEASE SUMMARIZE THE BASIS FOR YOUR RECOMMENDATION WITH RESPECT TO THE COMPANY'S CAPITAL STRUCTURE.

A. As mentioned briefly above, I recommend a deemed capital structure including 60.00% total debt and 40.00% common equity. That capital structure is consistent with the Company's actual capital structure, the capital structures of the Proxy Groups, and the capital structure approved by the Régie in its last regulatory proceeding.⁶ As shown in Exhibit EGQ-4, Document 3, in 2025 the Canadian Utility Proxy Group had equity ratios ranging from 26.02% - 39.89%, and U.S. Gas Utility Proxy Group had equity ratios ranging from 36.15% - 60.32%.

Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

A. The remainder of my Direct testimony is organized as follows:

- Section III – Provides a summary of financial theory and regulatory principles pertinent to the development of the cost of capital;
- Section IV – Describes the integration and interdependence of the Canadian and United States economies;
- Section V – Explains my selection of the Utility Proxy Groups used to develop my cost of common equity analytical results;

⁶ Enbridge Gaz Québec., Demande d'approbation du plan d'approvisionnement et demandes de modification des tarifs d'Enbridge Gaz Québec à compter du 1^{er} janvier 2026., Docket No. R-4303-2025, Decision D-2026-068, ¶ 341-343 (Régie de l'Énergie Jul. 3, 2026) (translated from French).

- Section VI – Explains the proposed capital structure;
- Section VII – Describes the analyses on which my cost of common equity recommendation is based;
- Section VIII – Explains my adjustments to my common equity cost rate to reflect Company-specific factors; and
- Section IX – Presents my conclusions regarding the Company’s cost of capital.

III. GENERAL PRINCIPLES

Q. WHAT PRINCIPLES HAVE YOU CONSIDERED IN ARRIVING AT YOUR RECOMMENDATIONS?

A. In general terms, the ROE is the return investors require to make an equity investment in a firm. That is, investors will only provide funds if the return that they expect to receive is equal to, or greater than, the return that they require considering the risks assumed in making the investment. That required return, whether it is provided to debt or equity investors, is a cost to the utility. Individually, we speak of the “cost of debt” and the “cost of equity”; together, they are referred to as the “cost of capital.”

The cost of capital (including the costs of both debt and equity) is based on the economic principle of “opportunity costs.” Investing in any asset, whether debt or equity securities, implies a forgone opportunity to invest in alternative assets. For any investment to be sensible, its expected return must be at least equal to the return expected on alternative, comparable investment opportunities. Because investments with like risks should offer similar returns, the opportunity cost of an investment should equal the return available on an investment of comparable risk.

1 Although both debt and equity have required costs, they differ in certain
2 fundamental ways. Most noticeably, the cost of debt is contractually defined and can be
3 directly observed as the interest rate or yield on debt securities. The cost of equity, on the
4 other hand, is neither directly observable, nor a contractual obligation. Rather, equity
5 investors have a claim on cash flows only after debt holders are paid; the uncertainty (or
6 risk) associated with those residual cash flows determines the cost of equity. Because
7 equity investors bear the “residual risk”, they require higher returns than debt holders. In
8 that basic sense, equity and debt investors are distinct: they invest in different securities,
9 face different risks, and require different returns.

10 In unregulated industries, marketplace competition is the principal determinant of
11 the price of goods and services. For regulated public utilities, regulation must act as a
12 substitute, or surrogate, for competition. Assuring the utility can fulfill its obligations to
13 the public while providing safe and reliable service requires a level of earnings sufficient
14 to maintain its financial integrity, and to permit the attraction of capital at reasonable costs
15 and terms. Doing so is consistent with the fair rate of return standards established by the
16 *Northwestern* and *TransCanada* cases in Canada, and the *Hope* and *Bluefield* cases in the
17 U.S.

18 Those standards have informed the rate of return decision making of regulatory
19 commissions throughout Canada and the United States for nearly 100 years. In 1929, the
20 Supreme Court of Canada reinforced the fair rate of return standards in *Northwestern* when
21 it stated:

22 The duty of the Board was to fix fair and reasonable rates; rates which,
23 under the circumstances, would be fair to the consumer on the one hand,
24 and which, on the other hand, would secure to the company a fair return for
25 the capital invested. By a fair return is meant that the company will be

1 allowed as large a return on the capital invested in its enterprise (which will
2 be net to the company) as it would receive if it were investing the same
3 amount in other securities possessing an attractiveness, stability and
4 certainty equal to that of the company's enterprise. In fixing this net return
5 the Board should take into consideration the rate of interest which the
6 company is obliged to pay upon its bonds as a result of having to sell them
7 at a time when the rate of interest payable thereon exceeded that payable on
8 bonds issued at the time of the hearing. To properly fix a fair return the
9 Board must necessarily be informed of the rate of return which money
10 would yield in other fields of investment.⁷

11 In 2004, the Federal Court of Appeal (Canada) in 2004 FCA 149 reaffirmed the fair
12 rate of return standards when it stated:

13 [6] The cost of capital to a utility is equivalent to the aggregate return
14 on investment investors require in order to keep their capital invested in the
15 utility and to invest new capital in the utility. That return will be made in
16 the form of interest on debt and dividends and capital appreciation on
17 equity. Usually, that return is expressed as the rate of return investors
18 require on their debt or equity investments.

19 [12] Even though cost of capital may be more difficult to estimate than
20 some other costs, it is a real cost that the utility must be able to recover
21 through its revenues. If the Board does not permit the utility to recover its
22 cost of capital, the utility will be unable to raise new capital or engage in
23 refinancing as it will be unable to offer investors the same rate of return as
24 other investment of similar risk. As well, existing shareholders will insist
25 that retained earnings not be reinvested in the utility.

26 [13] In the long run, unless a regulated enterprise is allowed to earn its
27 cost of capital, both debt and equity, it will be unable to expand its
28 operations or even maintain existing ones. Eventually, it will go out of
29 business. This will harm not only its shareholders, but also the customers
30 it will no longer be able to service. The impact on customers and ultimately
31 consumers will be even more significant where there is insufficient
32 competition in the market to provide adequate alternative service.⁸

33 The fair return standard has been interpreted numerous times by both the Régie and
34 by the National Energy Board ("NEB").

35 The Régie specifically stated:

⁷ *Northwestern* (1929) S.C.R. 186, at 192-193.

⁸ *TransCanada*, 2004 FCA 149 [6] [12] [13].

1 A review of the relevant case law also revealed three criteria that have
2 historically been recognized by regulators as the basis for establishing the
3 standard of reasonable return, namely the criteria of comparable investment,
4 integrity finance and attracting capital.

5 Thus, to be reasonable, a rate of return on capital must meet the following
6 three criteria:

- 7 • Be comparable to that which the capital invested in another
8 company presenting a similar risk would yield (comparable
9 investment criterion);
- 10 • Allow the company to attract additional capital on favorable terms
11 reasonable (criterion of the capital attraction effect); and
- 12 • Allow the regulated company to preserve its financial integrity
13 (criterion of financial integrity)

14 In its decision D-2009-156, the Régie concluded that there is consensus on
15 these criteria and that they can serve as a guide in the exercise of its
16 jurisdiction with regard to setting a reasonable rate of return.⁹

17 The NEB specifically noted:

18 The Board is of the view that the fair return standard can be articulated by
19 having reference to three particular requirements. Specifically, a fair or
20 reasonable return on capital should:

- 21 • be comparable to the return available from the application of
22 the invested capital to other enterprises of like risk (the
23 comparable investment standard);
- 24 • enable the financial integrity of the regulated enterprise to be
25 maintained (the financial integrity standard); and
- 26 • permit incremental capital to be attracted to the enterprise on
27 reasonable terms and conditions (the capital attraction
28 standard).

29 Those findings are consistent with long-standing precedent in the United States. As
30 noted by the U.S. Supreme Court's decision in *Bluefield*:

⁹ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 29 - 31, (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 A public utility is entitled to such rates as will permit it to earn a return on
2 the value of the property which it employs for the convenience of the public
3 equal to that generally being made at the same time and in the same general
4 part of the country on investments in other business undertakings which are
5 attended by corresponding risks and uncertainties; but it has no
6 constitutional right to profits such as are realized or anticipated in highly
7 profitable enterprises of speculative ventures. The return should be
8 reasonably sufficient to assure confidence in the financial soundness of the
9 utility and should be adequate, under efficient and economical management,
10 to maintain and support its credit and enable it to raise the money necessary
11 for the proper discharge of its public duties. A rate of return may be
12 reasonable at one time and become too high or too low by changes affecting
13 opportunities for investment, the money market and business conditions
14 generally.¹⁰

15 The U.S. Supreme Court affirmed the fair rate of return standards in *Hope*, when it
16 stated:

17 The rate-making process under the Act, *i.e.*, the fixing of ‘just and
18 reasonable’ rates, involves a balancing of the investor and the consumer
19 interests. Thus we stated in the Natural Gas Pipeline Co. case that
20 ‘regulation does not insure that the business shall produce net revenues.’
21 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside,
22 the investor interest has a legitimate concern with the financial integrity of
23 the company whose rates are being regulated. From the investor or
24 company point of view it is important that there be enough revenue not only
25 for operating expenses but also for the capital costs of the business. These
26 include service on the debt and dividends on the stock. Cf. *Chicago &*
27 *Grand Trunk R. Co. v. Wellman*, 143 U.S. 339, 345, 346 12 S.Ct. 400,402.
28 By that standard the return to the equity owner should be commensurate
29 with returns on investments in other enterprises having corresponding risks.
30 That return, moreover, should be sufficient to assure confidence in the
31 financial integrity of the enterprise, so as to maintain its credit and to attract
32 capital.¹¹

33 In summary, Canadian and U.S. courts have found a return that is adequate to attract
34 capital at reasonable terms enables the utility to provide service while maintaining its
35 financial integrity. As discussed above, and in keeping with established regulatory
36 standards, that return should be commensurate with the returns expected elsewhere for

¹⁰ *Bluefield*, 262 U.S. 679 (1923), at 692-693.

¹¹ *Hope*, 320 U.S. 591 (1944), at 603.

1 investments of equivalent risk. The Company's return, therefore, should provide the
2 Company with the opportunity to earn a return that is: (1) adequate to attract capital at
3 reasonable cost and terms; (2) sufficient to ensure their financial integrity; and (3)
4 commensurate with returns on investments in enterprises having corresponding risks.

5 Investors see the principal regulatory guidelines establishing the fair rate of return
6 as the "comparable risk", "financial integrity", and "capital attraction" standards. Investors
7 also understand the long-standing regulatory principle that "[u]nder the statutory standard
8 of 'just and reasonable', it is the result reached not the method employed which is
9 controlling."¹² A reasonable ROE estimate therefore considers alternative methods,
10 quantitative and qualitative market data, and the reasonableness of empirical results
11 relative to relevant, observable benchmarks.

12 Whereas the "capital attraction" and "financial integrity" standards may be viewed,
13 to some extent, from the perspective of debt investors, the "comparable risk" standard
14 makes clear that the relevant assessment of equity risk, and the fair return on common
15 equity, relates to equity investors. Although observations and analyses regarding rating
16 agency actions (or inactions) and *pro forma* estimates of credit metrics are informative for
17 that purpose, they are not full measures of the risk assessments and return requirements of
18 equity investors. As discussed later in this Report, for example, because common equity
19 represents a perpetual claim on residual cash flows (that is, cash flows available after
20 debtholders are paid), equity investors are exposed to business risks whose probability and
21 effect may be difficult to quantify. That does not mean, however, that those risks are of no
22 consequence to equity investors, or that they should not be reflected in the authorized ROE.

¹² *Ibid.*, at 602.

1 Lastly, the required return for a regulated public utility is established on a stand-
2 alone basis. Parent entities, like other investors, have capital constraints and must look at
3 the attractiveness of the expected risk-adjusted return of each investment alternative in their
4 capital budgeting process. The opportunity cost concept applies regardless of the source
5 of the funding. When funding is provided by a parent entity, the return still must be
6 sufficient to provide an incentive to allocate equity capital to the subsidiary or business
7 unit rather than other internal or external investment opportunities. That is, the regulated
8 subsidiary must compete for capital with all the parent company's affiliates, similarly
9 situated utility companies, and non-regulated companies with comparable risk. In that
10 regard, investors value corporate entities on a sum-of-the-parts basis and expect each
11 division within the parent company to provide an appropriate risk-adjusted return. It
12 therefore is important that the authorized ROE reflects the risks and prospects of the
13 utility's operations and supports the utility's financial integrity from a stand-alone
14 perspective. Consequently, the ROE authorized in this proceeding should be sufficient to
15 support the Company's operations and financing of their utility operations on a stand-alone
16 basis. The Régie has previously acknowledged the stand-alone principle:

17 In its decision D-2014-034, the Régie noted the three criteria set out above,
18 but added that it must also take into consideration certain principles for
19 evaluating reasonable performance, including that of the independence of
20 the regulated company (*stand alone*), the principle of opportunity cost, as
21 well as the consideration of several valuation methods and models.¹³

¹³ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 33, (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 **a. Importance of Considering Multiple Cost of Common Equity Models**

2 **Q. IS IT IMPORTANT THAT COST OF COMMON EQUITY MODELS BE**
3 **MARKET BASED?**

4 A. Yes. As noted above, a public utility must compete for equity in capital markets along
5 with all other companies of comparable risk, which includes non-utilities. The cost of
6 common equity is thus determined based on equity market expectations for the returns of
7 those comparable risk companies. When individual investors choose to invest their capital
8 among companies of comparable risk, they will choose a company providing a higher
9 return over a company providing a lower return.

10 **Q. ARE YOUR COST OF COMMON EQUITY MODELS MARKET BASED?**

11 A. Yes. The DCF model is market-based because market prices are used in developing the
12 dividend yield component of the model. The CAPM is market-based for many of the same
13 reasons that the RPM is market-based (i.e., the use of expected bond yields and betas). In
14 addition, the use of Beta coefficients (“beta”) to determine the Equity Risk Premium
15 (“ERP”) reflects the market’s assessment of market/systematic risk, since betas are derived
16 from regression analyses of market prices. The RPM is market-based because the bond
17 ratings and expected bond yields used in the application of the RPM reflect the market’s
18 assessment of bond/credit risk. The Predictive Risk Premium Model (“PRPM”) uses
19 monthly market returns in addition to expectations of the risk-free rate. Selection of the
20 comparable risk non-price regulated companies is market-based because it is based on

1 statistics which result from regression analyses of market prices and reflect the market's
2 assessment of total risk.

3 **Q. WHAT ANALYTICAL APPROACHES DID YOU USE TO DETERMINE THE**
4 **COMPANY'S ROE?**

5 A. As discussed earlier, I have relied on the DCF model, the CAPM, and the RPM, which I
6 apply to the Utility Proxy Groups, whose selection is described below. I rely on these
7 models because reasonable investors use a variety of tools and do not rely exclusively on
8 a single source of information or single model. Moreover, the models on which I rely focus
9 on different aspects of return requirements and provide different insights to investors'
10 views of risk and return. The Constant Growth DCF model, for example, estimates the
11 investor-required return assuming a constant expected dividend yield and growth rate in
12 perpetuity, while Risk Premium-based methods (i.e., the CAPM and RPM approaches)
13 provide the ability to reflect investors' views of risk, future market returns, and the
14 relationship between interest rates and the cost of equity. Just as the use of market data for
15 the Utility Proxy Groups adds the reliability necessary to inform expert judgment in
16 arriving at a recommended common equity cost rate, the use of multiple generally accepted
17 common equity cost rate models also adds reliability and accuracy when arriving at a
18 recommended common equity cost rate.

Q. ARE THERE EXAMPLES FROM THE FINANCIAL LITERATURE WHICH SUPPORT THE USE OF MULTIPLE COST OF COMMON EQUITY MODELS IN DETERMINING THE INVESTOR-REQUIRED RETURN?

A. Yes. In one example, Morin¹⁴ states:

Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company. Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use.

No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data. (emphasis added)

* * *

There is ample academic support in the financial literature for the need to rely upon several financial models in arriving at a recommended common equity cost rate. Professor Eugene Brigham, a widely respected scholar and finance academician, asserts^(footnote omitted):

Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) method, and (3) the bond-yield-plus-risk-premium approach. **These methods are not mutually exclusive – no method dominates the others**, and all are subject to error when used in practice. Therefore, when faced with the task of estimating a company's cost of equity, we generally use all three methods and then choose among them on the basis of our confidence in

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the data used for each in the specific case at hand. (italics in original) (emphasis added)

Another prominent finance scholar, Professor Stewart Myers, in an early pioneering article on regulatory finance, stated^(footnote omitted):

*Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, **only a fool throws away useful information**. That means you should not use any one model or measure mechanically and exclusively. Beta is helpful as one tool in a kit, to be used in parallel with DCF models or other techniques for interpreting capital market data. (italics in original) (emphasis added)*

* * *

Reliance on multiple tests recognizes that no single methodology produces a precise definitive estimate of the cost of equity. As stated in Bonbright, Danielsén, and Kamerschen (1988), ‘*no single or group test or technique is conclusive.*’ (italics in original)

* * *

While it is certainly appropriate to use the DCF methodology to estimate the cost of equity, there is no proof that the DCF produces a more accurate estimate of the cost of equity than other methodologies. Sole reliance on the DCF model ignores the capital market evidence and financial theory formalized in the CAPM and other risk premium methods. The DCF model is one of many tools to be employed in conjunction with other methods to estimate the cost of equity. It is not a superior methodology that supplants other financial theory and market evidence. The broad usage of the DCF methodology in regulatory proceedings in contrast to its virtual disappearance in academic textbooks does not make it superior to other methods. The same comments are equally applicable to the Risk Premium and CAPM methodologies.¹⁵

Finally, Brigham and Gapenski note:

In practical work, *it is often best to use all three methods* – CAPM, bond yield plus risk premium, and DCF – and then apply judgment when the methods produce different results. People experienced in estimating equity capital costs recognize that both careful analysis and some very fine judgments are required. It would be nice to pretend that these judgments are unnecessary and to specify an easy, precise way of determining the exact cost of equity capital. Unfortunately, this is not possible. Finance is in large

¹⁵ Roger A. Morin, *Modern Regulatory Finance*, (Public Utilities Report, Inc. 2021), at 476-479 (“Morin”).

1 part a matter of judgment, and we simply must face this fact. (italics in
2 original)¹⁶

3 In addition, regulators throughout the U.S. and Canada frequently consider multiple
4 models in determining authorized returns. For example, the Ontario Energy Board (the
5 “OEB”) stated that “[t]he Board agrees that **the use of multiple tests to directly and**
6 **indirectly estimate the ERP is a superior approach to informing its judgment than**
7 **reliance on a single methodology.**”¹⁷ The Alberta Utility Commission (“AUC”) has also
8 relied on the results of multiple models, recently noting that:

9 In this section, the Commission determines the notional ROE of 9.0 per cent
10 using current market data and considering results of well-known and widely
11 accepted empirical models to estimate the required return such as the
12 CAPM, constant growth discounted cash flow (DCF), and multi-stage
13 DCF.¹⁸

14 In the Company’s last rate case, the Régie also noted:

15 However, a single model cannot on its own correctly represent
16 investors’ expectations in all circumstances and in all phases of the
17 economic and financial cycles, particularly in the present context of
18 high inflation.¹⁹

19 In the U.S., the Pennsylvania Public Utilities Commission for example has stated:

20 Based on the record, we agree with the ALJs that it is appropriate to
21 consider the CAPM results to account for economic changes such as
22 those occurring currently, in addition to the DCF results, to
23 determine Columbia’s ROE.²⁰

¹⁶ Eugene F. Brigham and Louis C. Gapenski, Financial Management – Theory and Practice, 4th Ed. (The Dryden Press, 1985), at 256.

¹⁷ Ontario Energy Board, EB-2009-0084, Report of the Board on the Cost of Capital for Ontario’s Regulated Utilities, December 11, 2009, at p. 36. [Emphasis in original] “ERP” is defined as equity risk premium.

¹⁸ Decision 27084-D02-2023, Determination of the Cost-of-Capital Parameters in 2024 and Beyond, at para. 115 (October 9, 2023)

¹⁹ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 231 (Régie de l’Énergie Oct. 26, 2022) (translated from French).

²⁰ PA PUC v. Columbia Water Company, R-2023-3040258, pp. 107-108 (Order entered January 18, 2024).

1 In the academic literature cited above, three methods are consistently mentioned:
2 the DCF, CAPM, and the RPM, all of which I used in my analyses. In summary, we should
3 not assume the many factors investors weigh in determining market prices may be distilled
4 to the few variables and strict relationships assumed in any single model. Rather, the Régie
5 should recognize limitations and modeling risks associated with focusing on a single
6 approach should be recognized and ROE determinations should be based on a thorough
7 review of multiple methods.

8 **b. Business and Financial Risk**

9 **Q. PLEASE SUMMARIZE THE CONCEPTS OF BUSINESS AND FINANCIAL**
10 **RISK.**

11 A. The investor-required ROE reflects investors' assessment of the total investment risk of
12 the subject firm. Total investment risk often is considered in the context of business risk
13 and financial risk, both of which are discussed below.

14 Business risk reflects the uncertainty associated with owning the subject company's
15 common stock, without the use of debt and/or preferred capital. Examples of general
16 business risks generally faced by utilities include but are not limited to: Supply risk;
17 Demand (or Market) risk; Competitive risk; Operating risk; and Regulatory risk, all of
18 which have a direct bearing on earnings levels and volatility.

19 Financial risk, which is the additional risk that the subject company may not have
20 adequate cash flows to meet its financial obligations, is created by the introduction of senior
21 capital, i.e., debt and preferred stock, into the capital structure. Intuitively, as the degree
22 of financial leverage increases, the risk of financial distress also increases. Even if two
23 firms face the same business risks, the company with meaningfully higher levels of debt in
24 its capital structure is likely to have greater financial risk and, therefore, higher costs of

1 both debt and equity. As Brigham and Gapenski point out, "...the use of debt, or financial
2 leverage, concentrates the firm's business risk on its stockholders."²¹

3 Because the capital structure affects the subject company's overall level of risk, it
4 is an important consideration in establishing a fair rate of return: The higher the proportion
5 of senior debt capital in the capital structure, the higher the financial risk that must be
6 factored into the cost of equity.

7 **c. Credit Ratings as Measures of Business and Financial Risk**

8 A. The principal relevance of business and financial risk is how they are reflected in the credit
9 rating process. Standard & Poor's ("S&P") describes its overall process as follows:

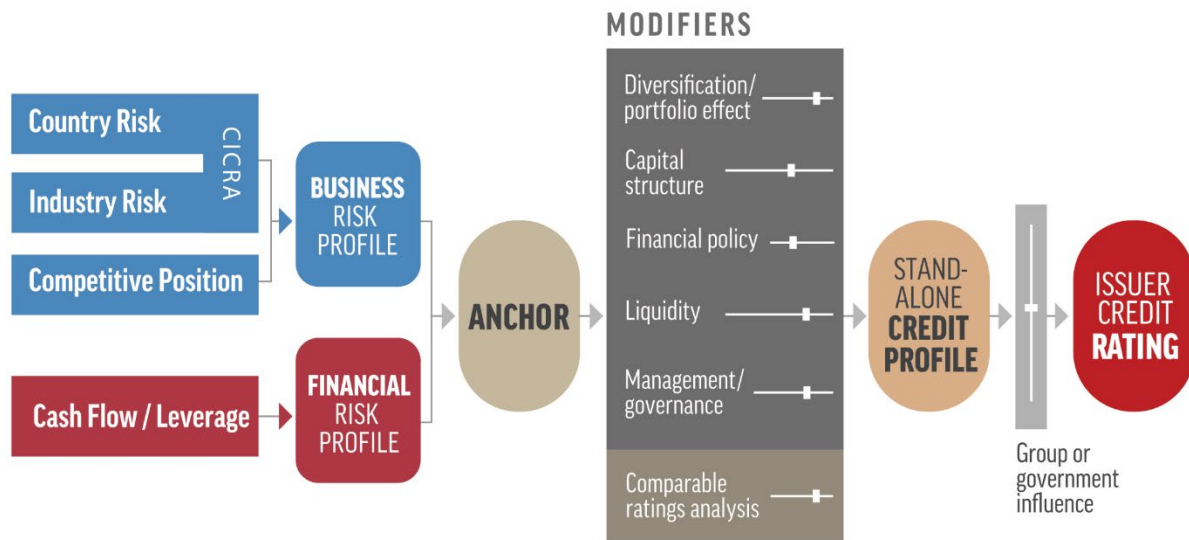
10 The corporate analytical methodology organizes the analytical process
11 according to a common framework, and it divides the task into several
12 factors so that Standard & Poor's considers all salient issues. First we
13 analyze the company's business risk profile, then evaluate its financial risk
14 profile, then combine those to determine an issuer's anchor. We then
15 analyze six factors that could potentially modify our anchor conclusion.

16 To determine that assessment for a corporate issuer's business risk profile,
17 the criteria combine our assessments of industry risk, country risk and
18 competitive position. Cash flow/leverage analysis determines a company's
19 financial risk profile assessment. The analysis then combines the corporate
20 issuer's business risk profile assessment and its financial risk profile
21 assessment to determine its anchor. In general, the analysis weighs the
22 business risk profile more heavily for investment-grade anchors, while the
23 financial risk profile carries more weight for speculative-grade anchors.²²

²¹ Eugene F. Brigham and Louis C. Gapenski, Financial Management, Theory and Practice, 7th Ed. (The Dryden Press, 1994), at 528.

²² Standard & Poor's Ratings Services, *Corporate Methodology*, November 19, 2013, at 4-5.

Chart 1: Standard & Poor's Corporate Criteria Framework²³



S&P determines stand-alone credit profiles for an issuer, then takes into account the influence of the parent company before determining a final issuer credit rating. The key observation is that S&P considers a variety of business and financial risks, and applies a variety of analyses to assess those risks.

Although they reflect business and financial risk, in the final analysis credit ratings are opinions regarding the subject company's financial capacity to pay its financial obligations as they come due. As S&P notes:

An S&P Global Ratings issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness. This opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they come due.²⁴

Credit ratings therefore speak to overall creditworthiness from the perspective of debtholders. The claims of equity holders, the subject of this Direct Testimony, are subordinate to those of debt holders. In short, the risks associated with common equity

²³ *Ibid.*, at 5.

²⁴ https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceId/504352

1 exceed the risks of owning bonds. The two have common considerations, but only to a
2 point.

3 **IV. INTEGRATION AND INTERDEPENDENCE OF THE CANADIAN AND UNITED**
4 **STATES ECONOMIES**

5 **Q. IS IT REASONABLE TO CONSIDER UNITED STATES COMPANIES AND**
6 **MARKET RETURNS IN THIS PROCEEDING?**

7 A. Yes, it is. Although there is significant interdependence between the U.S. and Canadian
8 economies and markets (as discussed below), it may be useful to separate Canadian and
9 U.S. utilities to gain insight into possible risk differentials for utilities in the two nations.

10 The Canadian and U.S. economies remain highly integrated and interdependent.
11 The significant amount of Canadian investment in the U.S. is particularly important as the
12 performance of Canadian investments in the U.S. is driven by U.S. capital market
13 conditions. Not only are the Canadian and U.S. economies integrated and interdependent,
14 their stock markets are intricately linked. David A. Bessler and Jian Yang studied the
15 dynamic structure of nine major stock markets, including those of Canada and the U.S.²⁵
16 The authors found "...the Canadian market follows the U.S. market in contemporaneous
17 time, which is consistent with the common notion on the relationship between the two
18 countries' economies."²⁶ As Bessler and Yang observed, "[t]he U.S. market is probably
19 the only market that has a consistently strong impact on price movements in other major
20 stock markets in the longer-run."²⁷

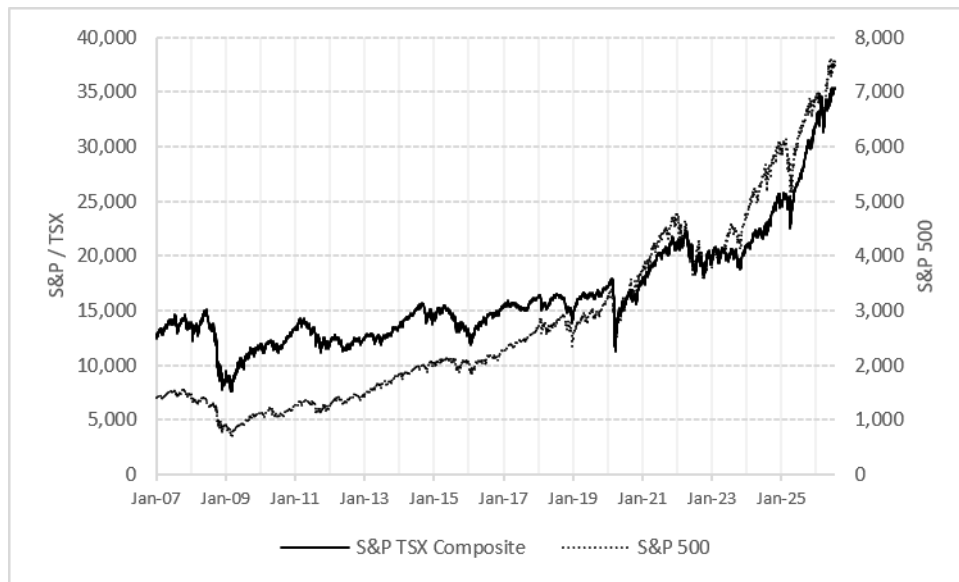
²⁵ David A. Bessler and Jian Yang, *The structure of interdependence in international stock markets*, Journal of International Money and Finance, 22 (2003), at 261-287.

²⁶ Bessler and Yang, at 277.

²⁷ Bessler and Yang, at 285.

Looking to the Canadian and U.S. markets, both the S&P TSX Composite and the S&P 500 Index, and the Canada 30-year bond yield and the U.S. 30-year Treasury bond yields have moved in tandem (*see* Charts 2 and 3, respectively, below). In fact, since 2007, the correlation between the equity and bond markets has been extremely high at approximately 96.93% and 94.55%, respectively. That degree of correlation is generally consistent with, although somewhat higher than, the relationship between the volatility of the respective Canadian and U.S. equity markets (correlation of 88.35% since 2017, *see* Chart 4, below). The data indicate that although they are not perfect substitutes, investors see the two capital markets as fundamentally related. As further evidence of this relationship, over 170 companies listed on the S&P TSX Composite Index are also listed on U.S. exchanges.²⁸

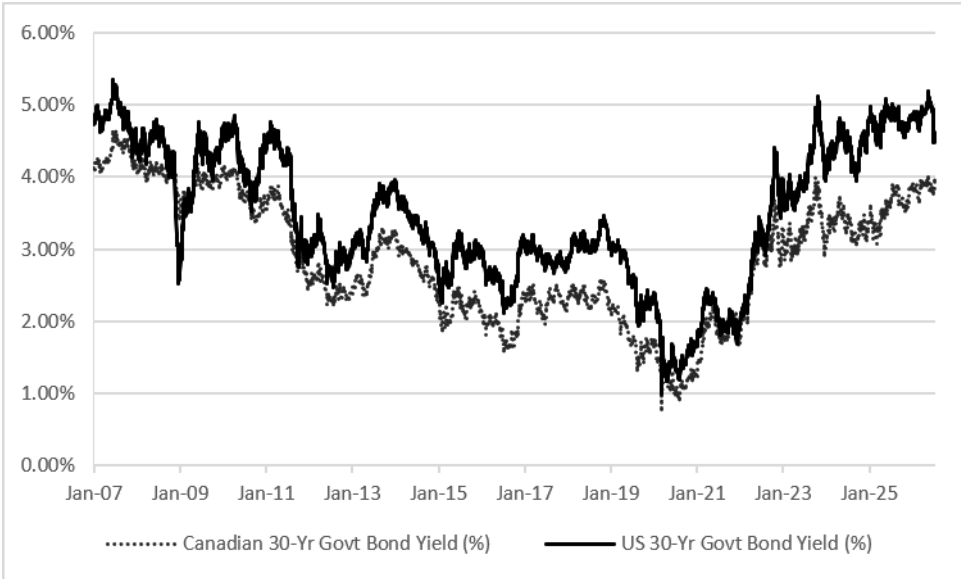
Chart 2: Relative Performance (S&P/TSX Composite Index and S&P 500 Index)²⁹



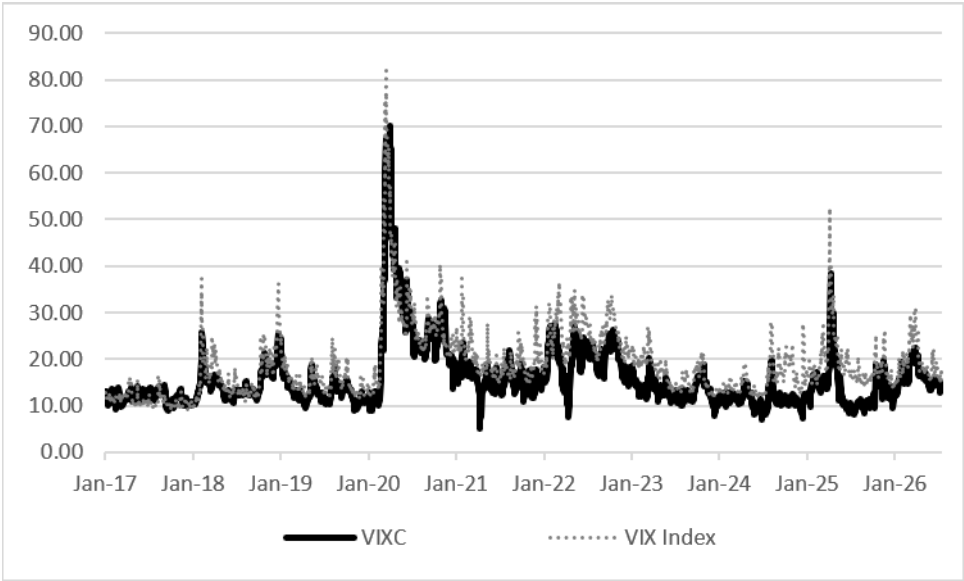
²⁸ Source: TMX Group, as of March 2026 – *see*, Melissa Strle, “Entering U.S. Markets? Your Disclosure Strategy Needs to Change,” *Newsfile*, April 23, 2026.

²⁹ Source: S&P Capital IQ.

1 **Chart 3: Thirty-Year Canadian and U.S. Government Bond Yields**³⁰



2
3
4 **Chart 4: Relative Performance (VIXC/VIX) 2017-2022**³¹

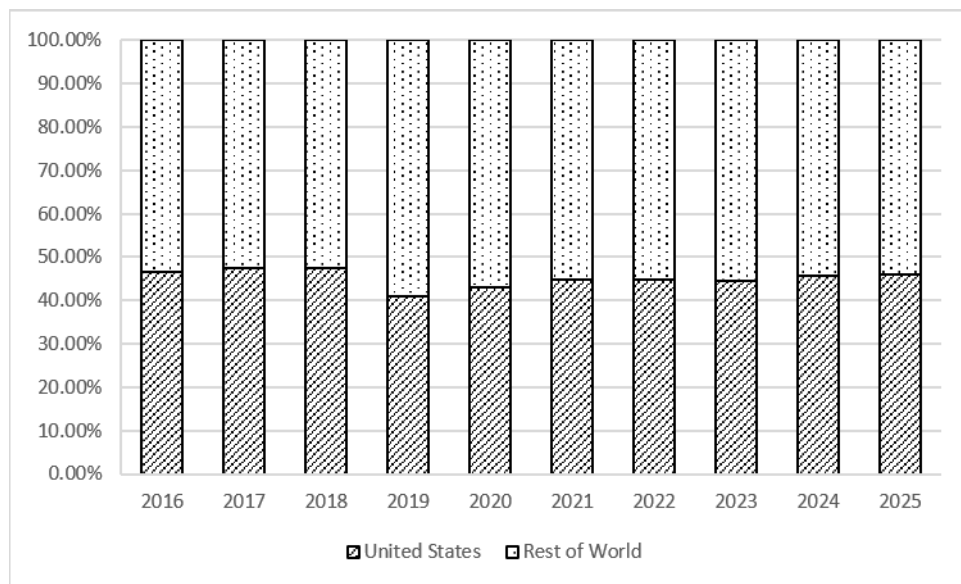


5
6 The capital market interdependence reflected in Charts 2 through 4 is reinforced
7 given the foreign direct investment between Canada and the U.S., which is also highly

³⁰ Source: Bloomberg Professional Services (“Bloomberg”).
³¹ Source: S&P Capital IQ.

linked. In *Canada and the United States: Trade, Investment, Integration and the Future*,³² Blayne Haggart noted that investment flows between Canada and the U.S. have become greatly liberalized, with U.S. investors being the largest foreign investor in Canada.³³ As Chart 5 below indicates, U.S. direct investment in Canada for the ten years ended 2025 averaged slightly more than 45.00% of total foreign direct investment in Canada.

Chart 5: Foreign Direct Investment in Canada (2016-2025)³⁴



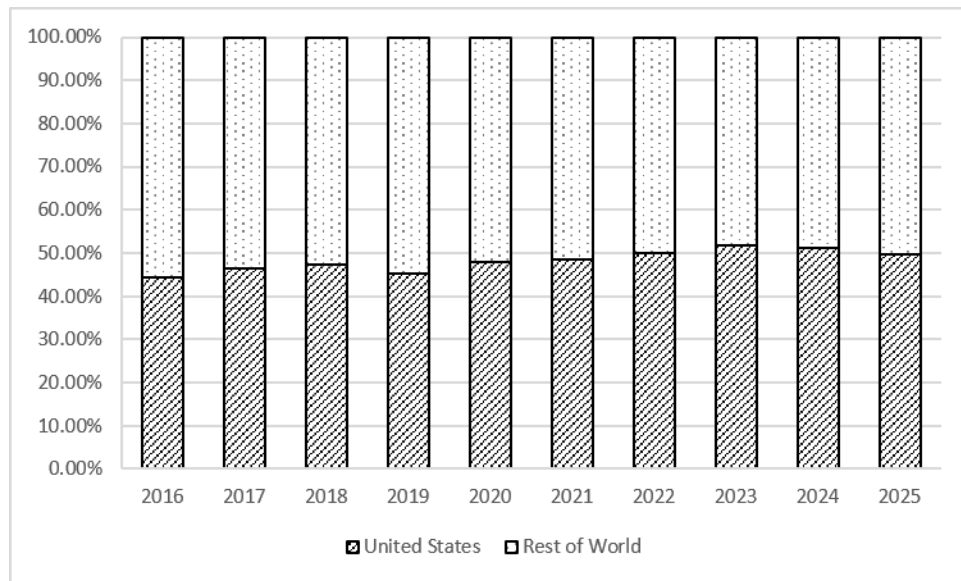
Likewise, Canadian direct investment in the U.S. constitutes a significant amount of total Canadian direct investment abroad, averaging approximately 48.00% for the ten years ended 2025.

³² Blayne Haggart, *Canada and the United States: Trade, Investment, Integration and the Future*, Economics Division, Library of Parliament, Parliamentary Research Branch, April 2, 2001 (revised August 28, 2001) PRB 01-3E. Please note that the recent data discussed in this section continues to support Haggart's perspective.

³³ *Haggart*, at 20.

³⁴ Source: Statistics Canada.

Chart 6: Canadian Direct Investment Abroad (2016-2021)³⁵



Given the level of direct investment between Canada and the U.S., it is not surprising that their capital markets continue to move in tandem. As such, it would be impractical to not consider U.S. comparator companies as U.S. capital market data, which is subsumed by the market data of U.S. companies, is considered by Canadian investors. Likewise, to the extent that investors in the Canadian comparator group are based in the U.S., which is a natural conclusion given Chart 5, those investors would consider U.S. companies as alternative investment opportunities.

It is impossible to discuss the interdependence of the Canadian and the U.S. economies without mentioning the recent trade dispute between the two economies. In late August 2026, the U.S. enacted 50% import tariffs on a variety of Canadian-made products, with Canada retaliating with similar measures in September 2026. Though the situation is constantly evolving, the majority of goods traded between the two countries are still protected by the existing Canada-United States-Mexico Agreement (“CUSMA”). As noted

³⁵

Source: Statistics Canada.

1 by TD Economics, U.S. direct investment in Canada in the first half of 2026 was four
2 billion dollars higher than the first half of 2025, and Canadian direct investment abroad
3 globally was 22 billion higher over the same period, with the U.S. leading that increase.
4 TD specifically notes that “Canadians continued to buy U.S. equities while net purchases
5 U.S. debt securities remained relatively healthy in Q2 but slowed compared with the first
6 half of last year.”³⁶ In other words, it appears as though capital flows between the two
7 countries remain in line with the historical levels presented above in Charts 5 and 6.

8 In view of the forgoing, the economies and capital markets of Canada and the U.S.
9 remain highly integrated and interdependent. Because the cost of equity represents an
10 opportunity cost, Canadian utility investors also consider U.S. utility investments in their
11 decisions. In my view, it therefore is reasonable to view U.S. utility companies as relevant
12 proxies for EGQ. The use of U.S. and Canadian utilities in an ROE analysis reflects the
13 financial principles of risk and return and the fact that both economies are interdependent.

14 **V. EGQ AND THE PROXY GROUP**

15 **Q. WHY IS IT NECESSARY TO DEVELOP A PROXY GROUP WHEN**
16 **ESTIMATING THE ROE FOR THE COMPANY?**

17 A. Because the Company is not publicly traded and does not have publicly traded equity
18 securities, it is necessary to develop groups of publicly traded, comparable companies to
19 serve as “proxies” for the Company. In addition to the analytical necessity of doing so, the
20 use of proxy companies is consistent comparable risk standard embodied in the
21 *Northwestern* and *TransCanada* cases in Canada and in the *Hope* and *Bluefield* cases in
22 the United States, as discussed above.

³⁶ Maria Solovieva, “FDI Flows Remain Moderate, While Foreign Flows into Canadian Debt Securities Hit a Record,” *TD Economics*, August 27, 2026.

1 Even when proxy groups are carefully selected, it is common for analytical results
2 to vary from company to company. Despite the care taken to ensure comparability, because
3 no two companies are identical, market expectations regarding future risks and prospects
4 will vary within the proxy group. It therefore is common for analytical results to reflect a
5 seemingly wide range, even for a group of similarly situated companies. At issue is how
6 to estimate the ROE from within that range. That determination will be best informed by
7 employing a variety of sound analyses and necessarily must consider the sort of
8 quantitative and qualitative information discussed throughout this Direct Testimony.
9 Additionally, a relative risk analysis between the Company and the Utility Proxy Groups
10 must be made to determine whether or not explicit Company-specific adjustments need to
11 be made to the indicated results of the Utility Proxy Groups.

12 My analyses are based on two proxy groups, the first containing publicly traded
13 Canadian utility companies, and the second containing publicly traded U.S. natural gas
14 utilities. The selection of a proxy group of natural gas utilities reflects the fact that EGQ
15 is primarily engaged in regulated natural gas distribution activities. Therefore, a proxy
16 group of natural gas utilities is comparable in risk to EGQ. Further, because there are no
17 publicly traded Canadian pure-play natural gas utilities, I relied on a proxy group of
18 publicly traded U.S. natural gas utilities. As discussed earlier, the use of U.S. proxy
19 companies is appropriate as all utilities, whether they operate in Canada or the U.S., must
20 compete for capital on a global basis, and to do so, must be provided the opportunity to
21 earn a fair and reasonable return. That said, there still may be factors that are pertinent to
22 companies based in Canada as opposed to the U.S. which require consideration. As a
23 result, it is appropriate to consider both groups in determining EGQ's ROE.

1 **Q. PLEASE SUMMARIZE THE COMPANY’S OPERATIONS.**

2 A. EGQ is a rate-regulated natural gas distribution utility under the jurisdiction of the Régie
3 de l’énergie. EGQ serves the Outaouais region of Québec, including the City of Gatineau
4 (sectors of Aylmer, Hull, Gatineau, Buckingham, and Masson-Angers) as well as the
5 municipality of Chelsea. As of December 31, 2025, EGQ serves approximately 41,600
6 residential customers (63 Mm3), 3,600 commercial and institutional customers (80 Mm3),
7 and 12 industrial customers (62 Mm3). EGQ’s distribution system comprises
8 approximately 1,000 km of pipelines, and the Company employs about 120 full-time
9 equivalent (“FTE”) employees.

10 **Q. PLEASE EXPLAIN HOW YOU CHOSE THE COMPANIES IN THE CANADIAN**
11 **UTILITY PROXY GROUP.**

12 A. To select the Canadian Utility Proxy Group, I began with all Canadian utilities identified
13 by Yahoo! Finance,³⁷ and applied the following screening criteria:

14 (i) I excluded companies that did not consistently pay quarterly cash dividends;³⁸

15 (ii) I excluded companies that do not have positive projections of earnings per share
16 (“EPS”) growth;³⁹

³⁷ Yahoo! Finance Canada is a widely available and credible source for investment information. Please note that the list of initial companies produced by Yahoo! Finance Canada included regulated electric, natural gas, and water utilities in addition to renewable generators and independent power producers.

³⁸ Because utility investors consider dividends in their investment decisions, if a utility company either cut or suspended regular dividend payments, it could be a signal of unusual risk, which would not be representative of a traditional utility company.

³⁹ The projected EPS growth rate would logically need to be positive, as rational investors would not invest in a company which is expected to experience a contraction of earnings in perpetuity.

(iii) I excluded companies with less than 60.00% of total net operating income or assets derived from regulated utility operations for the fiscal year 2025;⁴⁰ and

(iv) I excluded companies that are currently known to be party to a merger or other significant transaction, as such transactions can temporarily skew market data.

That screening process produced the proxy group summarized in Table 3, below:

Table 3: Canadian Utility Proxy Group Companies⁴¹

Company Name	Ticker Symbol
Algonquin Power & Utilities Corp.	AQN.TO
Canadian Utilities, Ltd.	CU.TO
Emera Inc.	EMA.TO
Fortis, Inc.	FTS.TO
Hydro One Limited	H.TO

Q. PLEASE EXPLAIN HOW YOU CHOSE THE COMPANIES IN THE U.S. GAS UTILITY PROXY GROUP.

A. To select the U.S. Gas Utility Proxy Group, I began with the companies listed in *Value Line Investment Survey's* ("Value Line")⁴² Standard Edition as Natural Gas Utilities, and applied the following screening criteria:

(i) I excluded companies that did not consistently pay quarterly cash dividends;

(ii) I excluded companies that do not have positive projections of EPS growth;

(iii) I excluded companies that do not have *Value Line* betas;

⁴⁰ In developing my proxy groups, my objective is to identify companies that, on balance are fundamentally risk comparable to EGQ. To that end, I selected proxy companies with a significant portion of operating income derived from utility operations. Although comparability is important, it is also important that the proxy group is sufficiently large in number that the analytical results may be seen as representative of the returns required for utilities comparable to EGQ. The threshold to eliminate companies with significant unregulated operations must balance the need to develop a group of companies that are fundamentally comparable to EGQ with the need to develop a proxy group of sufficient size.

⁴¹ ATCO Ltd., was excluded as its regulated operations consists solely of Canadian Utilities, Ltd., of which it is a majority shareholder.

⁴² *Value Line* is a widely available and credible source for investment information for U.S. companies.

- (iv) I excluded companies with less than 60.00% of total net operating income or assets derived from regulated utility operations for the fiscal year 2025;⁴³ and
- (v) I excluded companies that are currently known to be party to a merger or other significant transaction.

That screening process produced the proxy group summarized in Table 4, below:

Table 4: U.S. Gas Utility Proxy Group Companies

Company Name	Ticker Symbol
Atmos Energy Corporation	ATO
New Jersey Resources Corporation	NJR
NiSource Inc.	NI
Northwest Natural Holding Company	NWN
ONE Gas, Inc.	OGS
Southwest Gas Holdings, Inc.	SWX
Spire Inc.	SR

VI. CAPITAL STRUCTURE

Q. HOW DOES THE CAPITAL STRUCTURE AFFECT THE RATE OF RETURN?

A. As discussed above, there are two general categories of risk: business risk and financial risk. The capital structure relates to a company's financial risk, which represents the risk that a company may not have adequate cash flows to meet its financial obligations, and is a function of the percentage of debt (or financial leverage) in its capital structure. In that regard, as the percentage of debt in the capital structure increases, so do the fixed obligations for the repayment of that debt. Consequently, as the degree of financial

⁴³ In developing my proxy groups, my objective is to identify companies that, on balance are fundamentally risk comparable to EGQ. To that end, I selected proxy companies with a significant portion of operating income derived from utility operations. Although comparability is important, it is also important that the proxy group is sufficiently large in number that the analytical results may be seen as representative of the returns required for utilities comparable to EGQ. The threshold to eliminate companies with significant unregulated operations must balance the need to develop a group of companies that are fundamentally comparable to EGQ with the need to develop a proxy group of sufficient size.

1 leverage increases, the risk of financial distress (i.e., financial risk) also increases.⁴⁴ In
2 essence, even if two firms face the same business risks, a company with meaningfully
3 higher levels of debt in its capital structure is likely to have a higher cost of both debt and
4 equity. Since the capital structure can affect the subject company's overall level of risk, it
5 is an important consideration in establishing a fair return.

6 **Q. PLEASE SUMMARIZE THE COMPONENTS OF YOUR RECOMMENDED**
7 **DEEMED CAPITAL STRUCTURE FOR THE COMPANY.**

8 A. My recommended deemed capital structure consists of 60.00% total debt and 40.00%
9 common equity. This deemed capital structure approximates and is informed by the
10 Company's historical capital structure and is consistent with the Company's previously
11 authorized capital structure.⁴⁵

12 **Q. DOES THE COMPANY HAVE A SEPARATE CAPITAL STRUCTURE THAT IS**
13 **RECOGNIZED BY INVESTORS?**

14 A. Yes. The Company is a separate corporate entity that has its own capital structure and
15 issues its own debt.

16 **Q. WHY IS IT IMPORTANT THAT THE COMPANY'S DEEMED CAPITAL**
17 **STRUCTURE BE CONSISTENT WITH ITS ACTUAL CAPITAL STRUCTURE?**

18 A. As a preliminary matter, my recommended deemed capital structure approximates and is
19 informed by the Company's actual capital structure, which is known and measurable.
20 While it is a deemed capital structure, the use of an actual capital structure for ratemaking

⁴⁴ Morin, at 51-52.

⁴⁵ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 21 (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 purposes is consistent with FERC precedent, under which they use the applicant's actual
2 capital structure, where possible.⁴⁶

3 Importantly, in order to provide safe, reliable, and affordable service to its
4 customers, the Company must meet the needs and serve the interests of its various
5 stakeholders, including customers, shareholders, and bondholders. The interests of these
6 stakeholder groups are aligned when the Company maintains a healthy balance sheet,
7 strong credit ratings, and a supportive regulatory environment, ensuring it has access to
8 capital on reasonable terms in order to make necessary investments.

9 Safe and reliable service cannot be maintained at a reasonable cost if utilities do
10 not have the financial flexibility and strength to access competitive financing markets on
11 reasonable terms. The use of a deemed capital structure that understates the Company's
12 actual common equity will weaken the financial condition of its operations and adversely
13 impact the Company's ability to address expenses and investment, to the detriment of
14 customers and shareholders.

15 Consequently, my recommended deemed capital structure, which approximates and
16 is informed by EGQ's existing capital structure, should be adopted.

17 **Q. HOW DOES YOUR RECOMMENDED DEEMED CAPITAL STRUCTURE**
18 **COMPARE WITH THE COMPANY'S RECENT CAPITAL STRUCTURES?**

19 A. The deemed capital structure is highly consistent with EGQ's historical capital structures,
20 with common equity ratios for years 2021 through 2025 ranging from 32.97% to 39.60%.⁴⁷

⁴⁶ See, Transcontinental Gas Pipe Line Corp, 80 FERC ¶ 61,157 (1997) .

⁴⁷ Source of information: Company-provided.

1 **Q. HOW DOES THE DEEMED COMMON EQUITY RATIO OF 40.00% FOR EGQ**
2 **COMPARE WITH THE COMMON EQUITY RATIOS MAINTAINED BY THE**
3 **UTILITY PROXY GROUP?**

4 A. The deemed equity ratio of 40.00%, which is consistent with EGQ's actual capital structure
5 is in the lower end of the range of equity ratios maintained by the Canadian Utility Proxy
6 Group and U.S. Gas Utility Proxy Group. The 2025 equity ratios of the Canadian Utility
7 Proxy Group range from 26.02% to 39.89%, with an average of 35.65%,⁴⁸ and the 2025
8 equity ratios of the U.S. Gas Utility Proxy Group range from 36.75% to 60.32%, with an
9 average of 45.06%.⁴⁹

10 **VII. COMMON EQUITY COST RATE MODELS**

11 **a. Discounted Cash Flow Model**

12 **Q. PLEASE DESCRIBE THE SINGLE-STAGE CONSTANT GROWTH DCF**
13 **MODEL.**

14 A. The theoretical basis of the DCF model is that the value of an investment is measured by
15 the net present value of the cash flows derived from its ownership. As it relates to common
16 stock, the market price equals the present value of cash flows associated with the ownership
17 of that stock. Under that construct, the cost of common equity is the discount rate that sets
18 the stock's current market price equal to the present value of its expected cash flows:

19
$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad \text{Equation [1]}$$

⁴⁸ Page 1 of Exhibit EGQ-4, Document 3.

⁴⁹ Page 2 of Exhibit EGQ-4, Document 3.

where P_0 represents the current stock price, $D_1 \dots D_\infty$ represent expected future dividends, and k is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the familiar form:

$$k = \frac{D(1+g)}{P_0} + g \quad \text{Equation [2]}$$

Equation [2] often is referred to as the “constant growth DCF” model, in which the first term is the expected dividend yield and the second term is the expected long-term growth rate. The constant growth DCF model requires several assumptions, including:

- (1) Earnings, book value, and dividends all grow at the same, constant rate in perpetuity;
- (2) The dividend payout ratio remains constant in perpetuity;
- (3) The price-to-earnings (“P/E”) ratio remains constant in perpetuity;
- (4) The discount rate is greater than the expected growth rate; and
- (5) The estimated cost of common equity remains constant in perpetuity.

Because all assumptions are held constant in perpetuity, the market price at any point in the future is based on assumptions established in the present. Consequently, the holding period does not matter; the DCF result will be the same under any assumed horizon. The implication is that the model effectively assumes the market conditions in place when the stock is bought will remain in place in perpetuity

Q. PLEASE DESCRIBE THE DIVIDEND YIELD YOU USED IN YOUR APPLICATION OF THE DCF MODEL.

A. I calculated the dividend yield by dividing each proxy group company’s annualized dividend at July 17, 2026 by their 60-trading day average stock price ending July 17, 2026. It has been my practice to use an averaging period to avoid any biases that may arise from anomalous or transitory events. At the same time, the averaging period should be reasonably representative of expected capital market conditions over the long term. In my

1 view, the use of the 60-trading day averaging period reasonably balances those concerns.

2 As Morin notes:

3 Average stock prices are appropriate during volatile market periods,
4 when stock prices experience large random fluctuations. Visual
5 inspection of a chart of daily closing prices over the last few weeks
6 should reveal whether the current stock price...is an outlier.⁵⁰

7 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE DIVIDEND YIELD.**

8 A. Because dividends are paid periodically (quarterly), as opposed to continuously (daily), an
9 adjustment must be made to the dividend yield. This is often referred to as the discrete, or
10 the Gordon Periodic, version of the DCF model.

11 DCF theory calls for the use of the full growth rate, or D_1 , in calculating the
12 dividend yield component of the model. Since the various proxy group increase their
13 quarterly dividend at various times during the year, a reasonable assumption is to reflect
14 one-half the annual dividend growth rate in the dividend yield component, or $D_{1/2}$. Because
15 the dividend should be representative of the next 12-month period, my adjustment is a
16 conservative approach that does not overstate the dividend yield. Therefore, the actual
17 average dividend yields in Column 1 on pages 2 and 3 of Exhibit EGQ-4, Document 4 have
18 been adjusted upward to reflect one-half the average projected growth rate shown in
19 Column 5.

20 **Q. PLEASE EXPLAIN THE BASIS OF THE GROWTH RATES YOU APPLIED TO**
21 **THE UTILITY PROXY GROUP IN YOUR DCF MODEL.**

22 A. Investors with more limited resources than institutional investors are likely to rely on
23 widely available financial information services, such as *Value Line*, Zacks, and S&P

⁵⁰ Morin, at 356.

1 Capital IQ. Investors realize that analysts have significant insight into the dynamics of the
2 industries and individual companies they analyze, as well as companies' abilities to
3 effectively manage the effects of changing laws and regulations, and ever-changing
4 economic and market conditions. For these reasons, I used analysts' five-year forecasts of
5 EPS growth in my DCF analysis.

6 Over the long run, there can be no growth in dividends per share ("DPS") without
7 growth in EPS. Security analysts' earnings expectations have a more significant influence
8 on market prices than dividend expectations. Thus, using projected earnings growth rates
9 in a DCF analysis provides a better match between investors' market price appreciation
10 expectations and the growth rate component of the DCF.

11 **Q. IS THIS SUPPORTED IN THE ACADEMIC LITERATURE?**

12 A. Yes, it is. Regarding the use of analysts' growth rate projections, there is considerable
13 evidence they have significant influence on market prices.⁵¹ As noted by Morin:

14 Because of the dominance of institutional investors and their influence
15 on individual investors, analysts' forecasts of long-run growth rates
16 provide a sound basis for estimating required returns. Financial analysts
17 exert a strong influence on the expectations of many investors who do
18 not possess the resources to make their own forecasts, that is, they are a
19 cause of g.⁵²

20 The use of security analysts' EPS growth rate forecasts therefore provides the
21 proper match between investors' expectations of market price appreciation, and the growth
22 rate component of the DCF model.

⁵¹ Morin, at 371-380.

⁵² Morin, at 371.

The relationship between various growth rates and stock valuation metrics has been the subject of considerable academic research.⁵³ In a March 1990 speech before the Institute for Quantitative Research and Finance, Myron Gordon recognized the significance of analysts' EPS forecasts:

We have seen that earnings and growth estimates by security analysts were found by Malkiel and Cragg to be superior to data obtained from financial statements for the explanation of variation in price among common stocks[...] estimates by security analysts available from sources such as IBES are far superior to the data available to Malkiel and Cragg.

* * *

Eq (7) is not as elegant as Eq (4), but it has a good deal more intuitive appeal. It says that investors buy earnings, but what they will pay for a dollar of earnings increases with the extent to which the earnings are reflected in the dividend or in appreciation through growth.⁵⁴

Professor Gordon recognized that the total return is largely affected by the terminal price, which is mostly affected by earnings (for example, in the context of Price/Earnings multiples). Subsequent academic research clearly and consistently has indicated that measures of earnings and cash flow are strongly related to returns, and that analysts' forecasts are superior to other measures of growth in explaining stock prices.⁵⁵ For example, Vander Weide and Carleton state that, "[our] results...are consistent with the

⁵³ See, for example, Harris, Robert, Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return, *Financial Management*, Spring 1986.

⁵⁴ Myron J. Gordon, *The Pricing of Common Stocks*, Presented before the Spring 1990 Seminar, March 27, 1990 of the Institute for Quantitative Research in Finance, Palm Beach Fl., at 12, 14.

See, for example, Christofi, Christofi, Lori and Moliver, Evaluating Common Stocks Using Value Line's Projected Cash Flows and Implied Growth Rate, Journal of Investing (Spring 1999); Harris and Marston, Estimating Shareholder Risk Premia Using Analysts Growth Forecasts, Financial Management, 21 (Summer 1992); and Vander Weide and Carleton, Investor Growth Expectations: Analysts vs. History, The Journal of Portfolio Management, Spring 1988.

1 hypothesis that investors use analysts' forecasts, rather than historically oriented growth
2 calculations, in making stock buy-and-sell decisions.”⁵⁶

3 Other research specifically notes the importance of analysts' growth estimates in
4 determining the Cost of Equity, and in the valuation of equity securities. Dr. Robert Harris
5 noted that “a growing body of knowledge shows that analysts' earnings forecasts are indeed
6 reflected in stock prices.” Citing Cragg and Malkiel, Dr. Harris notes that those authors
7 “found that the evaluations of companies that analysts make are the sorts of ones on which
8 market valuation is based.”⁵⁷ Similarly, Brigham, Shome and Vinson noted that “evidence
9 in the current literature indicates that (i) analysts' forecasts are superior to forecasts based
10 solely on time series data, and (ii) investors do rely on analysts' forecasts.”⁵⁸

11 To that point, the research of Vander Weide and Carleton demonstrates that
12 whereas earnings growth projections have a statistically significant relationship to stock
13 valuation levels, dividend growth projections do not. Those findings indicate investors
14 form their investment decisions based on expectations of growth in earnings, not dividends.
15 Consequently, earnings growth, not dividend growth, is the appropriate estimate in the
16 Constant Growth DCF model.

17 Studies performed by Cragg and Malkiel⁵⁹ demonstrate that analysts' forecasts are
18 superior to historical growth rate extrapolations. Although some question the accuracy of
19 analysts' projections, it does not matter well after the fact whether those forecasts were

⁵⁶ Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81.

⁵⁷ Robert S. Harris, Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return, Financial Management, Spring 1986, at 59.

⁵⁸ Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, Spring 1985, at 36.

⁵⁹ John G. Cragg, and Burton G. Malkiel, Expectations and the Structure of Share Prices (University of Chicago Press, 1982) Chapter 4.

1 accurate, or not. What matters is the forecasts reflect widely held expectations influencing
2 investors at the time they make asset pricing decisions, i.e., the market prices investors are
3 willing to pay. In view of the above, projected EPS growth rates are the appropriate
4 measure of growth in the DCF model.

5 **Q. PLEASE ADDRESS CLAIMS THAT ANALYST GROWTH RATES ARE BIASED.**

6 A. I disagree. As a practical matter, the October 2003 Global Research Analyst Settlement
7 required financial institutions to insulate investment banking from analysis, prohibited
8 analysts from participating in “road shows,” and required the settling financial institutions
9 to fund independent third-party research.⁶⁰ I have reviewed the Letters of Acceptance,
10 Waiver, and Consent signed by financial institutions that were party to the Global
11 Settlement, and found no reference to misconduct by analysts following the utility sector.

12 Moreover, pursuant to Regulation AC, which became effective in April 2003,
13 analysts must certify that “. . . the views expressed in the report accurately reflect his or
14 her personal views, and disclose whether or not the analyst received compensation or other
15 payments in connection with his or her specific recommendations or views.”⁶¹ I further
16 understand industry practice is to avoid conflicts of interest by ensuring that compensation
17 is not directly or indirectly linked to the opinions contained in those reports. Considering
18 that The Regulation Fair Disclosure and Global Analysts Research Settlements were more
19 than 20 years ago, investors have been fully aware since then of the steps that have been
20 taken to eliminate and prevent analysts’ bias.

⁶⁰ The 2002 Global Financial Settlement resolved an investigation by the U.S. Securities and Exchange Commission and the New York Attorney General’s Office of a number of investment banks related to concerns about conflicts of interest that might influence the independence of investment research provided by equity analysts.

⁶¹ Securities and Exchange Commission, 17 CFR PART 242 [Release Nos. 33-8193; 34-47384; File No. S7-30-02], RIN 3235-A160 Regulation Analyst Certification.

1 In addition, there is no empirical evidence that investors would disregard analysts'
2 estimates of growth in EPS. *Do Analyst Conflicts Matter? Evidence from Stock*
3 *Recommendations* examines whether conflicts of interest with investment banking “IB”
4 and brokerage businesses induced sell-side analysts to issue optimistic stock
5 recommendations and whether investors were misled by such biases. They conclude:

6 Overall, our findings do not support the view that conflicted analysts
7 are able to systematically mislead investors with optimistic stock
8 recommendations.

9 Agrawal and Chen state:

10 Overall, our empirical findings suggest that while analysts do
11 respond to IB and brokerage conflicts by inflating their stock
12 recommendations, the market discounts these recommendations
13 after taking analysts’ conflicts into account. These findings are
14 reminiscent of the story of the nail soup told by Brealey and Myers
15 (1991), except that here analysts (rather than accountants) are the
16 ones who put the nail in the soup and investors (rather than analysts)
17 are the ones to take it out. Our finding that the market is not fooled
18 by biases stemming from conflicts of interest echoes similar
19 findings in the literature on conflicts of interest in universal banking
20 (for example, Kroszner and Rajan, 1994, 1997; Gompers and Lerner
21 1999) and on bias in the financial media (for examples,
22 Bhattacharya et al. forthcoming; Reuter and Zitzewitz 2006).
23 Finally, while we cannot rule out the possibility that some investors
24 may have been naïve, our findings do not support the notion that the
25 marginal investor was systematically misled over the last decade by
26 analysts’ recommendations.⁶²

27 Finally, while Easton and Sommers’ article, *Effect of Analysts’ Optimism on*
28 *Estimates of the Expected Rate of Return Implied by Earnings Forecasts*, does state that,
29 on average, the difference between the estimate of the expected rate of return based on
30 analysts’ earnings forecasts and the estimates based on current earnings realizations is

⁶² Anup Agrawal and Mark A. Chen, *Do Analysts’ Conflicts Matter? Evidence from Stock Recommendations*, *Journal of Law and Economics*, August 2008, Vol. 51.

2.84%, they also state that analysts' accuracy⁶³ and optimism⁶⁴ in the implied estimates of the expected rate of return differs with firm size:

...the mean scaled absolute forecast error, a measure of the accuracy of the forecasts, declines monotonically from 0.102 for the decile of smallest firms to 0.012 for the decile of largest firms. Similarly, the median absolute scaled forecast error declines monotonically from 0.042 to 0.006.

Analysts' optimism, measured as the mean (median) scaled forecast error, declines monotonically from -0.075 (-0.023) for the decile of the smallest firms to -0.005 (-0.002) for the decile of the largest firms.⁶⁵

In plain language, as firm size increases, analyst accuracy increases and analyst optimism (i.e., bias) diminishes.

Q. HAVE YOU DETERMINED THE LEVELS OF FORECAST ERROR AND BIAS IN ANALYST-PROJECTED EPS GROWTH RATES FOR COMPANIES COMPARABLE IN SIZE TO THE UTILITY PROXY GROUPS?

A. Yes, I have. Using market capitalizations as of July 17, 2026, my Canadian Utility and U.S. Gas Utility proxy groups fall into the eight and seventh deciles of market capitalizations, respectively, as shown on Table 3, Panel A of the Easton and Sommers article. Mean and median measures of forecast error (i.e., accuracy) of 0.017 and 0.008 for the eighth decile and 0.018 and 0.009 for the seventh decile indicate a high level of analyst accuracy. The bias of analyst-projected EPS growth rates for companies comparable in size to the average company in the Canadian Utility Proxy Group are -0.009

⁶³ As measured by the mean (median) absolute forecast error.

⁶⁴ As measured by the mean (median) forecast error.

⁶⁵ Peter D. Easton and Gregory A. Sommers, *Effect of Analysts' Optimism on Estimates of the Expected Rate of Return Implied by Earnings Forecasts*, Journal of Accounting Research, Vol. 45 No. 5 (December 2007), at 1007.

1 (mean) and -0.003 (median), and -0.009 (mean) and -0.004 (median) for the U.S. Gas
2 Utility Proxy Group indicating a low level of bias in analyst-projected EPS growth rates.

3 Furthermore, one of the MRPs used in my CAPM use projected market returns
4 which are derived by calculating a DCF for the component companies of the S&P TSX
5 Composite Index and S&P 500. The component companies of the S&P TSX Composite
6 and S&P 500 also average market capitalizations that corresponds with the sixth and ninth
7 deciles, respectively, as provided by Table 3 Panel A of the Easton and Sommers article.
8 Mean and median measures of forecast error (i.e., accuracy) of 0.023 and 0.010 for the
9 sixth decile and 0.015 and 0.007 for the ninth decile also indicate a high level of analyst
10 accuracy. The bias of analyst-projected EPS growth rates for companies comparable in
11 size to the average component company of the S&P TSX Composite Index are -0.013
12 (mean) and -0.004 (median), and -0.007 (mean) and -0.002 (median) for the S&P 500, also
13 indicating a low level of bias in analyst-projected EPS growth rates.⁶⁶

14 The analyst-projected EPS growth rates I used to derive my DCF results for my
15 proxy groups and my projected return on the market are confirmed to have high accuracy
16 and limited bias.

17 In view of the foregoing, the use of analysts' forecasts of EPS growth should be
18 used exclusively when estimating the cost rate of common equity capital, whether it be for
19 my Utility Proxy Groups or the market as a whole.

⁶⁶ Peter D. Easton and Gregory A. Sommers, *Effect of Analysts' Optimism on Estimates of the Expected Rate of Return Implied by Earnings Forecasts*, Journal of Accounting Research, Vol. 45 No. 5 (December 2007), at 1004. Table 3, Panel A: Descriptive statistics. Market capitalization deciles are assumed to be equivalent to the Kroll Cost of Capital Navigator.

1 **Q. PLEASE SUMMARIZE THE CONSTANT GROWTH DCF MODEL RESULTS.**

2 A. In arriving at a conclusion for the constant growth DCF-indicated common equity cost rate
3 for the two proxy groups, I relied on an average of the mean and the median results of the
4 DCF. This approach considers all the individual proxy utilities' results from within their
5 respective proxy groups, while mitigating the high and low outliers of those individual
6 results. The constant growth DCF results are summarized in Table 5, below (see also
7 Exhibit EGQ-4, Document 4).

8 **Table 5: Constant Growth DCF Results**

	Mean	Median	Average of Mean and Median
Canadian Utility Proxy Group	9.23%	8.35%	8.79%
U.S. Gas Utility Proxy Group	11.50%	10.22%	10.86%

9 As shown on Table 5, the average result of the constant growth DCF model, as
10 applied to the Canadian Utility Proxy Group results in mean and median cost rates of 9.23%
11 and 8.35%, respectively. The DCF model as applied to the U.S. Gas Utility Proxy Group,
12 is 11.50%, while the median result is 10.22%. My indicated ROE using the DCF model is
13 the average of the mean and median results, or 8.79% and 10.86% for the Canadian Utility
14 Proxy Group and U.S. Gas Utility Proxy Group, respectively.

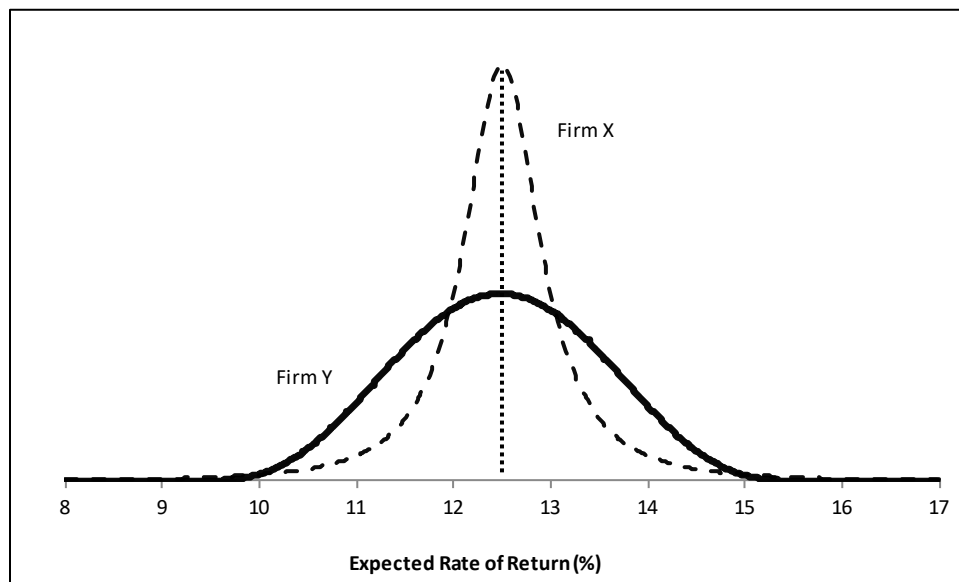
15 **b. Capital Asset Pricing Model**

16 **Q. PLEASE EXPLAIN THE THEORETICAL BASIS OF THE CAPM.**

17 A. CAPM theory defines risk as the co-variability of a security's returns with the market's
18 returns as measured by beta (β). A beta of less than 1.0 indicates lower variability than the
19 market as a whole, while a beta greater than 1.0 indicates greater variability than the
20 market.

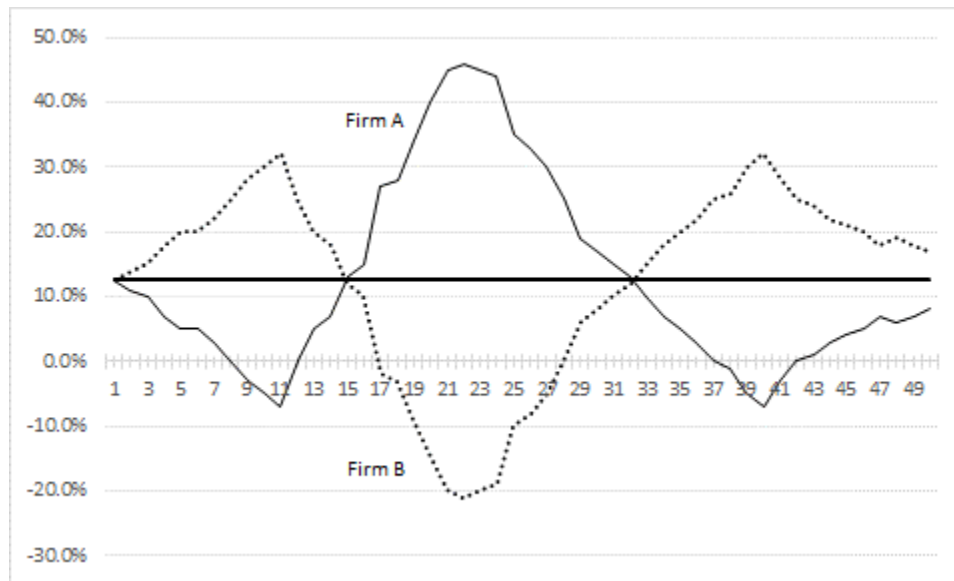
The CAPM assumes that all other risk (*i.e.*, all non-market or unsystematic risk) can be eliminated through diversification. For example, consider two firms, X and Y, with expected returns, and the expected variation in returns noted in Chart 7, below. Although the two have the same expected return (12.50%), Firm Y's are far more variable (*i.e.*, uncertain). As such, Firm Y would be considered the riskier investment.

Chart 7: Expected Return and Risk



Now consider two other firms, Firm A and Firm B. Both have expected returns of 12.50%, and both are equally risky as measured by their volatility. But as Firm A's returns go up, Firm B's returns go down. That is, the returns are negatively correlated.

1

Chart 8: Relative Risk

2

3

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If one were to combine Firms A and B into a portfolio, they would expect a 12.50% return with no uncertainty because their risk profiles counteract each other. That is, the risk can be diversified away. As long as two stocks are not perfectly correlated, the benefits of diversification can be achieved by combining them in a portfolio. The premise of the CAPM is because firms can be combined into a portfolio, the only risk that matters is the risk that remains after diversification, i.e., the “non-diversifiable” risk which is the result of macroeconomic and other events that affect the returns on all assets.

10

11

12

13

The model is applied by adding a risk-free rate of return to a market risk premium, which is adjusted proportionately to reflect the systematic risk of the individual security relative to the total market, as measured by beta. The traditional CAPM model is expressed as:

$$R_s = R_f + \beta(R_m - R_f)$$

Where:

R_s = Return rate on the common stock;

R_f = Risk-free rate of return;

R_m = Return rate on the market as a whole; and

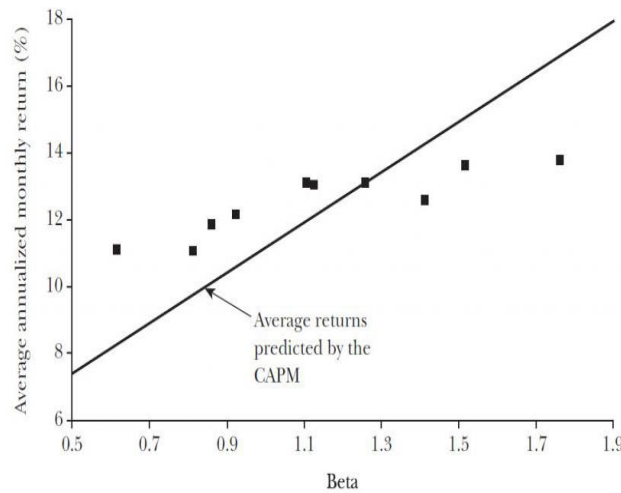
β = Adjusted beta (volatility of the security relative to the market as a whole).

Numerous tests of the CAPM have measured the extent to which security returns and beta are related as predicted by the CAPM, confirming its validity. The empirical CAPM ("ECAPM") reflects the reality that while the results of these tests support the notion that beta is related to security returns, the empirical Security Market Line ("SML") described by the CAPM formula is not as steeply sloped as the predicted SML.⁶⁷ The ECAPM reflects this empirical reality. Fama and French clearly state regarding Figure 2, below, that "[t]he returns on the low beta portfolios are too high, and the returns on the high beta portfolios are too low."⁶⁸

⁶⁷ Morin, at 220-226.

⁶⁸ Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence", *Journal of Economic Perspectives*, Vol. 18, No. 3, Summer 2004 at 33 ("Fama & French").

Figure 2 <http://pubs.aeaweb.org/doi/pdfplus/10.1257/0895330042162430>
Average Annualized Monthly Return versus Beta for Value Weight Portfolios
Formed on Prior Beta, 1928–2003



In addition, Morin observes that while the results of these tests support the notion that beta is related to security returns, the empirical SML described by the CAPM formula is not as steeply sloped as the predicted SML. Morin states:

With few exceptions, the empirical studies agree that ... low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.⁶⁹

* * *

Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:

$$K = R_F + x \beta(R_M - R_F) + (1-x) \beta(R_M - R_F)$$

where x is a fraction to be determined empirically. The value of x that best explains the observed relationship [is] $\text{Return} = 0.0829 + 0.0520 \beta$ is between 0.25 and 0.30. If $x = 0.25$, the equation becomes:

$$K = R_F + 0.25(R_M - R_F) + 0.75 \beta(R_M - R_F)^{70}$$

Fama and French provide similar support for the ECAPM when they state:

⁶⁹ Morin, at 207.

⁷⁰ Morin, at 221.

1 The early tests firmly reject the Sharpe-Lintner version of the CAPM. There
2 is a positive relation between beta and average return, but it is too 'flat.'...
3 The regressions consistently find that the intercept is greater than the
4 average risk-free rate... and the coefficient on beta is less than the average
5 excess market return... This is true in the early tests... as well as in more
6 recent cross-section regressions tests, like Fama and French (1992).⁷¹

7 Finally, Fama and French further note:

8 Confirming earlier evidence, the relation between beta and average return
9 for the ten portfolios is much flatter than the Sharpe-Linter CAPM predicts.
10 The returns on low beta portfolios are too high, and the returns on the high
11 beta portfolios are too low. For example, the predicted return on the
12 portfolio with the lowest beta is 8.3 percent per year; the actual return as
13 11.1 percent. The predicted return on the portfolio with the highest beta is
14 16.8 percent per year; the actual is 13.7 percent.⁷²

15 Clearly, the justification from Morin, Fama, and French along with their reviews
16 of other academic research on the CAPM, validate the use of the ECAPM. In view of
17 theory and practical research, I have applied both the traditional CAPM and the ECAPM
18 to the companies in the Utility Proxy Group and averaged the results.

19 **Q. IS THERE ANY ADDITIONAL EVIDENCE TO SUPPORT THE USE OF THE**
20 **ECAPM?**

21 A. Yes, there is. Dianna R. Harrington summarizes studies on the predicted results of the
22 CAPM versus the actual returns in her text Modern Portfolio Theory & the Capital Asset
23 Pricing Model:

24 So far we have learned some very interesting things about the CAPM and
25 reality. Some of the earliest work tested realized data (history) against data
26 generated by simulated portfolios. Early studies by Douglas (1969) and
27 Lintner (Douglas [1969]) showed discrepancies between what was expected
28 on the basis of the CAPM and the actual relationships that were apparent in
29 the capital markets. Theoretically, the minimal rate of return from the
30 portfolios (the intercept) and the actual risk-free rate for the period should
31 have been equal. They were not.

⁷¹ Fama & French, at 32.

⁷² Fama & French, at 33.

* * *

Another study, now more famous than Lintner's was done by Black, Jensen, and Scholes (1972). Lintner had used what is called a cross-sectional method (looking at a number of stock returns during one time period), whereas Black, Jensen, and Scholes used a time-series method (using returns for a number of stocks over several time periods). To make their test, Black, Jensen, and Scholes assumed that what had happened in the past was a good proxy for the investor expectations (a frequent assumption in CAPM tests). Using historical data, they generated estimates using what we call the market model:

$$R_{jt} = \alpha_j + \beta_j (R_{mt}) + \varepsilon_j$$

Where:

R = total returns

β = the slope of the line (the incremental return for risk)

α = the intercept or a constant (expected to be 0 over time and across all firms)

ε = an error term (expected to be random, without information)

m = the market proxy

j = the firm or portfolio

t = the time period

Instead of using single stocks, they formed portfolios in an effort to wash out one source of error; because betas of single firms are quite unstable. On the basis of the CAPM, they expected to find

1. That the intercept was equal to the risk-free rate (their proxy was the Treasury bill rate)
2. That the capital market line had a positive slope and that riskier (higher beta) securities provided higher return

Instead they found

1. That the intercept was different from the risk-free rate
2. That high-risk securities earned less and low-risk securities earned more than predicted by the model
3. That the intercept seemed to depend on the beta of any asset: high-beta stocks had a different intercept than low-beta stocks

* * *

Fama and MacBeth (1974) criticized the Black, Jensen, and Scholes study (hereafter called BJS). In a reformation of the study, they supported the first of the BJS findings. They found that the intercept exceeded the risk-free proxy, but did not find the evidence to support the other BJS conclusions.⁷³

Harrington discusses Black's potential solution to this phenomenon:

Black's replacement for the risk-free asset was a portfolio that had no covariability with the market portfolio. Because the relevant risk in the CAPM is systematic risk, a risk-free asset would be the one with no volatility relative to the market – that is, a portfolio with a beta of zero. All investor-perceived levels of risk could be obtained from various linear combinations of Black's zero-beta portfolio and the market portfolio... Since R_z (the rate of return of the zero-beta asset) and R_m are uncorrelated (as R_f and R_m were assumed to be in the simple CAPM), the investor can choose from various combinations of R_z and R_m . On segment R_mY , R_z is sold short and proceeds are invested in R_m . On segment R_zR_m , portions of the zero-beta portfolio are purchased. At R_m , the investor is fully invested in the market portfolio. The equilibrium CAPM was rewritten by Black as follows:

$$E(R_i) = (1 - \beta_i) E(R_z) + \beta_i E(R_m)$$

Where:

E indicates expected,

$E(R_z)$ is less than $E(R_m)$, and

R_z holdings over the whole market must be in equilibrium. That is, the number of short sellers and lenders of securities must be equal.

Black's adaptation is intriguing. The result of using this model is a capital market line that has a less steep slope and a higher intercept than those of the simple CAPM. If Black's model is more correct in its description of investor behavior in the marketplace, then the use of the simple model would produce equity return predictions that would be too low for stocks with betas greater than one and too high for stocks with betas of less than one.⁷⁴

⁷³ Dianna R. Harrington, *Modern Portfolio Theory & the Capital Asset Pricing Model – A User's Guide*, Prentice-Hall, Inc. 1983, at 43-45.

⁷⁴ Dianna R. Harrington, *Modern Portfolio Theory & the Capital Asset Pricing Model – A User's Guide*, Prentice-Hall, Inc. 1983, at 30-31.

As discussed above, Harrington reviews the financial literature regarding the CAPM and determines that there is a general consensus that betas do not fully reflect the risk of stocks when they are significantly different than 1.0. A correction to this empirical phenomenon can be to employ the ECAPM with the CAPM, which corrects the SML.

Q. DOES THE USE OF ADJUSTED BETAS IN THE TRADITIONAL CAPM NEGATE THE NEED FOR THE ECAPM?

A. No, it does not. Some analysts argue that using adjusted betas addresses the empirical issues with the CAPM by increasing the expected returns for low beta stocks and decreasing the returns for high beta stocks, concluding that there is no need for the ECAPM approach. I disagree with that conclusion as the use of adjusted betas is not equivalent to the use of the ECAPM. As discussed above, betas are adjusted because of their general regression tendency to converge toward 1.00 over time, i.e., over successive calculations. As also noted earlier, numerous studies have determined that at any given point in time the SML described by the CAPM formula is not as steeply sloped as the predicted SML. To that point, Morin states that:

Some critics of the ECAPM argue that the use of Value Line adjusted betas in the traditional CAPM amounts to using an ECAPM. This is incorrect. The use of adjusted betas in CAPM analysis is not equivalent to the ECAPM. Betas are adjusted because of the regression tendency of betas to converge toward 1.0 over time. We have seen that numerous empirical studies have determined that the SML, described by the CAPM formula *at any given moment* in time is not as steeply sloped as the predicted SML. The slope of the SML should not be confused with beta.

* * *

The ECAPM corrects for the fact that the CAPM under-predicts observed returns when beta is less than one and over-predicts observed returns when

1 beta is greater than one... The two adjustments are not the same and there
2 is no-double counting.⁷⁵

3 Moreover, the slope of the SML should not be confused with beta. As Brigham
4 and Gapenski state:

5 The slope of the SML reflects the degree of risk aversion in the economy –
6 the greater the average investor's aversion to risk, then (1) the steeper is the
7 slope of the line, (2) the greater is the risk premium for any risky asset, and
8 (3) the higher is the required rate of return on risky assets.¹²

9 ¹²Students sometimes confuse beta with the slope of the SML. This is a
10 mistake. As we saw earlier in connection with Figure 6-8, and as is
11 developed further in Appendix 6A, beta does represent the slope of a line,
12 but *not* the Security Market Line. This confusion arises partly because the
13 SML equation is generally written, in this book and throughout the finance
14 literature, as $k_i = R_F + b_i(k_M - R_F)$, and in this form b_i looks like the slope
15 coefficient and $(k_M - R_F)$ the variable. It would perhaps be less confusing
16 if the second term were written $(k_M - R_F)b_i$, but this is not generally done.⁷⁶

17 Clearly, the justification from Morin, Fama, and French, and Harrington, along with
18 their reviews of other academic research on the CAPM, validate the use of the ECAPM.
19 In view of theory and practical research, I have applied both the traditional CAPM and the
20 ECAPM to the companies in the proxy groups and averaged the results.

21 **Q. WHAT BETAS DID YOU USE IN YOUR CAPM ANALYSIS?**

22 A. Typically, I rely on *Value Line* published adjusted betas. However, *Value Line* provides
23 beta for only two of the five Canadian proxy group companies. As a result, for each
24 Canadian Utility Proxy Group company and U.S. Gas Utility Proxy Group company, I

⁷⁵ Morin at 223-224.

⁷⁶ Eugene F. Brigham and Louis C. Gapenski, *Financial Management – Theory and Practice*, 4th Ed. (The Dryden Press, 1985) at 201-204.

1 calculated equivalent betas using the same parameters used by *Value Line* (i.e., five years
2 of weekly return data and the New York Stock Exchange as the market index.)⁷⁷

3 **Q. PLEASE EXPAND ON THE EXPECTATIONAL NATURE OF ADJUSTED**
4 **BETAS.**

5 A. Betas are measured using an Ordinary Least Squares (“OLS”) regression, in which the
6 dependent variable is the return of the subject security, and the independent variable is the
7 return on the market as measured by a given index (*Value Line*, for example, uses the New
8 York Stock Exchange Index). Beta is represented by the slope term of the regression
9 estimates. Intuitively, beta measures the change in the subject company’s returns relative
10 to the change in the market return.

11 The resulting beta is considered “raw” or unadjusted. Unadjusted betas are
12 historical in nature, as they use historical market data. Blume studied the stability of beta
13 over time and found that “[n]o economic variable including the beta coefficient is constant
14 over time.”⁷⁸ Consistent with that finding, Blume observed a tendency of raw betas to
15 change gradually over time. Blume further stated:

16 ...there is obviously some tendency for the estimated values of the risk
17 parameter [beta] to change gradually over time. This tendency is most
18 pronounced in the lowest risk portfolios, for which the estimated risk in the
19 second period is invariably higher than that estimated in the first period.
20 There is some tendency for the high risk portfolios to have lower estimated
21 risk coefficients in the second period than in those estimated in the first.
22 Therefore, the estimated values of the risk coefficients in one period are
23 biased assessments of the future values, and furthermore the values of the
24 risk coefficients as measured by the estimates of β_1 tend to regress towards
25 the means with this tendency stronger for the lower risk portfolios than the
26 higher risk portfolios. (emphasis added)⁷⁹

⁷⁷ Discussions with *Value Line* revealed that regardless of nationality of the stock, its returns are compared with the NYSE when their betas are calculated.

⁷⁸ Marshal E. Blume, “On the Assessment of Risk”, *The Journal of Finance*, Vol. XXVI, No. 1, March 1971.

⁷⁹ Marshal E. Blume, “On the Assessment of Risk”, *The Journal of Finance*, Vol. XXVI, No. 1, March 1971.

Blume proposed a correction for this tendency, also known as “regression bias”, which is inherent in the calculation of all betas. He stated:

In so far as the rate of regression towards the mean is stationary over time, one can in principle correct for this tendency in forming one's assessments.

* * *

For individual securities as well as portfolios of two or more securities, the assessments adjusted for the historical rate of regression are more accurate than the unadjusted or naïve assessments. Thus, an improvement in the accuracy of one's assessments of risk can be obtained by adjusting for the historical rate of regression even though the rate of regression over time is not strictly stationary.⁸⁰

Based on Blume's results, the typical adjustment is calculated based upon an approximate of the following formula:

$$\beta_{adjusted} = 0.35 + .67x\beta_{raw (unadjusted)}$$

This adjustment transforms the historical unadjusted beta into an expectational value, consistent with the expectational nature of the cost of capital.

As noted by Morin:

Several authors have investigated the regression tendency of beta and generally reached similar conclusions [as Blume]. High-beta portfolios have tended to decline over time toward unity, while low-beta portfolios have tended to increase over time toward unity...He demonstrated that the Value Line adjustment procedure anticipated differences between past and future betas.⁸¹

Morin further notes:

A comprehensive study of beta measurement methodology by Kryzanowski and Jalilvand (1983) concludes that raw unadjusted beta (OLS beta) is one of the poorest beta predictors, and is outperformed by the Blume-style Bayesian beta approach. Gombola and Kahl (1990) examine the time-series properties of utility betas and find strong support for the application of adjustment procedures such as the Value Line and Bloomberg procedures.

⁸⁰ Marshal E. Blume, "On the Assessment of Risk", *The Journal of Finance*, Vol. XXVI, No. 1, March 1971.

81 Morin, at 81.

Because of this observed regressive tendency, a company's raw unadjusted beta is not the appropriate measure of market risk to use. Current stock prices reflect expected risk, that is, expected beta, rather than historical risk or historical beta. Historical betas, whether raw or adjusted, are only surrogates for expected beta. The best of the two surrogates is adjusted beta.⁸²

Morin also provides economic and statistical justification for using adjusted betas to estimate the cost of equity for utilities. Relative to economic justification, he states:

Adjusted betas compensate for the tendency of regulated utilities to be extra interest-sensitive relative to industrials.^(footnote omitted) In the same way that bondholders get compensated for inflation through an inflation premium in the interest rate, utility shareholders receive compensation for inflation through an inflation premium in the allowed rate of return. Thus, utility company returns are sensitive to fluctuations in interest rates. Conventional betas do not capture this extra sensitivity to interest rates. This is because the market index typically used in estimating betas is a stock-only index, such as the S&P 500. A focus on stocks alone distorts the betas of regulated companies. The true risk of regulated utilities relative to other companies is understated because when interest rates change, the stocks of regulated companies react in the same way as bonds do. A nominal interest rate on the face value of a bond offers the same pattern of future cash flows as a nominal return applied on a book value rate base. Empirical studies of utility returns confirm that betas are higher when calculated in a way that captures interest rate sensitivity. *The use of adjusted betas compensates for the interest sensitivity of regulated companies. (italics added for emphasis)*⁸³

Relative to statistical justification, Morin states:

There is a statistical justification for the use of adjusted betas as well. High-estimated betas will tend to have positive error (overestimated) and low-estimated betas will tend to have negative error (underestimated). Therefore, it is necessary to squash the estimated betas in toward 1.00. One way to accomplish this is by measuring the extent to which estimated betas tend to regress toward the mean over time. As a result of this beta drift, several commercial beta producers adjust their forecasted betas toward 1.00 in an effort to improve their forecasts. This adjustment, which is commonly

⁸² Morin, at 81-82.

⁸³ Morin, at 82.

performed by investment services such as Value Line, and Bloomberg, uses the formula:

$$\beta_{adjusted} = 1.0 + a(\beta_{raw} - 1.0) \quad (4 - 3)$$

where “a” is an estimate of the extent to which estimated betas regress toward the mean based on past data. Value Line and Bloomberg betas are adjusted for their long-term tendency to regress toward 1.0 by giving approximately 66% weight to the measured beta and approximately 34% weight to the prior value of 1.0 for each stock, that is, $a = 0.66$ in the above equation:

$$\begin{aligned} \beta_{adjusted} &= 1.0 + 0.66 (\beta_{raw} - 1.0) \\ &= 0.33 + 0.66 \beta_{raw} \quad (4-4)^{84} \end{aligned}$$

As discussed previously, unadjusted betas are historical in nature, and the cost of capital is expectational in nature. Since that is the case, the Blume study, and his corresponding adjustment to historical betas to convert them to an expectational measure, are relevant and appropriate to use for cost of capital purposes. Further, this adjustment is also made by well-known data providers such as Bloomberg and *Value Line*, whose data is relied on by investors.

Q. PLEASE DESCRIBE YOUR RISK-FREE RATES USED IN YOUR CAPM.

A. I relied on two measures of the risk-free rate. The first measure is a projected 30-year Government of Canada bond yield, and the second measure is a projected 30-year Treasury bond yield. The Canadian projected risk-free rate of 3.84% is calculated using quarterly forecasts of the 30-year Government of Canada bonds from BMO Economics, CIBC Capital Markets, National Bank of Canada Financial Markets, RBC Capital Markets, Scotiabank Global Economics, and TD Economics from the third calendar quarter of 2026 through the fourth calendar quarter of 2027. The American risk-free rate of 4.83% is based

⁸⁴ Morin, at 82-83.

on the average of the *Blue Chip Financial Forecasts* (“*Blue Chip*”) consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the fourth calendar quarter of 2027, and long-term projections for the years 2028 to 2032 and 2033 to 2037.

Q. WHY DO YOU USE PROJECTED 30-YEAR GOVERNMENT BOND YIELDS IN YOUR ANALYSES?

A. The yield on long-term Canadian government and U.S. Treasury bonds are considered default-free, and their terms are consistent with the long-term cost of capital to public utilities as measured by yields on A2-rated public utility bonds, the long duration of utility equities, the perpetual horizon assumed in the constant growth DCF model, and the long-term life of the jurisdictional rate base to which the allowed fair rate of return will be applied. In contrast, short-term Government bond yields are more volatile, do not match the duration or life of utility equity and assets, and are greatly influenced by Bank of Canada (“BoC”) and Federal Reserve (“Fed”) monetary policy.

More specifically, the term of the risk-free rate used for cost of capital purposes should match the life (or duration) of the underlying investment (i.e., perpetuity). As noted by Morningstar:

The traditional thinking regarding the time horizon of the chosen Treasury security is that it should match the time horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury yield should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If an investor plans to hold stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years.⁸⁵

Morin also confirms this when he states:

⁸⁵ Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 44.

1 [b]ecause common stock is a long-term investment and because the cash
2 flows to investors in the form of dividends last indefinitely, the yield on
3 very long-term government bonds, namely, the yield on 30-year Treasury
4 bonds, is the best measure of the risk-free rate for use in the CAPM
5 (footnote omitted)... The expected common stock return is based on long-
6 term cash flows, regardless of an individual's holding time period.⁸⁶

7 Pratt and Grabowski recommend a similar approach to selecting the risk-free rate:
8 “[i]n theory, when determining the risk-free rate and the matching ERP you should be
9 matching the risk-free security and the ERP with the period in which the investment cash
10 flows are expected.”⁸⁷

11 As a practical matter, equity securities represent a perpetual claim on cash flows;
12 30-year Canadian Government and U.S. Treasury bonds are the longest-maturity securities
13 available to approximate that perpetual claim. The average life of the Company's utility
14 plant is approximately 25 years based on the composite depreciation rate of the components
15 of their utility plant.⁸⁸ Thus, the use of 30-year Canadian Government and U.S. Treasury
16 bond yields are an appropriate risk-free rate as they reflect the life of the assets they
17 finances.

18 **Q. HOW DID YOU DETERMINE THE MARKET RISK PREMIUMS USED IN YOUR**
19 **CAPM ANALYSIS?**

20 A. Given that the cost of common equity is inherently forward-looking, it is important to
21 ensure that the expected market return, and the associated market risk premiums (“MRPs”),
22 likewise are prospective. For the market risk premium, I use three measures using both
23 Canadian and U.S. data.

⁸⁶ Morin, at 169

⁸⁷ Shannon Pratt and Roger Grabowski, Cost of Capital: Applications and Examples, 3rd Ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2008), at 92. “ERP” is the Equity Risk Premium.

⁸⁸ Composite depreciation rate for EGQ is 4.08%; calculated as $1 / 4.08\% = 24.5$ years.

1 **Q. PLEASE DESCRIBE THE CALCULATION OF YOUR FIRST MARKET RISK**
2 **PREMIUM ESTIMATE.**

3 A. To derive a historical MRP, I used the most recent holding period returns for large company
4 common stocks from the S&P/TSX Composite Index and the S&P 500 Index less the
5 average historical yield on 30-year Government of Canada bond yields and U.S. Treasury
6 yields, respectively, for the period 1926 to 2025. The use of holding period returns over a
7 very long period of time is appropriate because it is consistent with the long-term
8 investment horizon presumed by investing in a going concern—i.e., a company expected
9 to operate in perpetuity.

10 The long-term arithmetic mean monthly total return⁸⁹ rate for large company
11 common stocks from the S&P/TSX Composite Index and S&P 500 Index were 10.88%
12 and 12.35%, respectively, and the long-term arithmetic mean monthly yield on 30-year
13 Government of Canada bond yields and U.S. Treasury yields were 5.71% and 4.99%,
14 respectively, from 1926 to 2025. As shown on line 1 of page 4 of Exhibit EGQ-4,
15 Document 5, subtracting the mean monthly bond yield from the total return on large
16 company stocks results in long-term Canadian and U.S. historical equity risk premiums of
17 5.17% and 7.37%, respectively.

18 I used the arithmetic mean monthly total return rates for the large company stocks
19 and yields (income returns) for Government of Canada bonds and U.S. Treasury bonds
20 because they are appropriate for the purpose of estimating the cost of capital as noted in
21 Kroll's Stocks, Bonds, Bills, and Inflation ("SBBI") Yearbook 2023 ("SBBI – 2023").⁹⁰
22 The use of the arithmetic mean return rates and yields is appropriate because historical total

⁸⁹ Total returns to investors are comprised of both income returns (dividends) and capital appreciation.
⁹⁰ SBBI – 2023, at 193–194.

returns and equity risk premiums provide insight into the variance and standard deviation of returns needed by investors in estimating future risk when making a current investment. If investors relied on the geometric mean of historical equity risk premiums, they would have no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a constant rate of change, thereby obviating the year-to-year fluctuations, or variance, which is critical to risk analysis.

Q. PLEASE DESCRIBE THE CALCULATION OF YOUR SECOND MARKET RISK PREMIUM ESTIMATE.

A. To derive the regression-based MRP, I used the historical monthly annualized returns of the large Canadian companies relative to long-term Government of Canada bonds and historical monthly annualized returns of large U.S. companies relative to long-term Treasury bonds from my previous MRP. I modelled the relationships between interest rates and the MRP using the observed monthly MRP as the dependant variable, and the monthly yield on the long-term government bond as the independent variable. I then used a linear OLS regression, in which the MRP is expressed as a function of the long-term government bond yield:

$$RP = \alpha + \beta (R_f)$$

Given projected Canadian and U.S long-term government bond yields of 3.84% and 4.83%, MRPs of 7.09% and 7.72% result.

1 **Q. PLEASE DESCRIBE THE CALCULATION OF YOUR FINAL MARKET RISK**
2 **PREMIUM ESTIMATE.**

3 A. Using data from *Value Line*, Bloomberg, and S&P Capital IQ, I calculated an expected
4 total return on the S&P/TSX Composite and the S&P 500 by applying the constant-growth
5 DCF model to the equal-weighted component companies of each index. Using dividend
6 yields as a proxy for income returns and long-term projected EPS growth rates as a proxy
7 for capital appreciation, I calculated expected total returns on the Canadian and U.S.
8 markets of 17.19% and 16.83%, respectively. Subtracting prospective Canadian and U.S.
9 long-term government bond yields of 3.84% and 4.83% result in Canadian and U.S.-
10 specific market risk premiums of 13.35% and 12.00%, respectively.

11 **Q. WHY DID YOU CALCULATE YOUR MARKET-DCF BASED MRPS USING AN**
12 **EQUAL WEIGHTING OF THE INDEX COMPONENT COMPANIES?**

13 A. As discussed previously in this section, in CAPM theory, a company's risk is measure its
14 beta, and beta measures the covariance of the company's returns relative to a market index.
15 The *Value Line*- based betas used in my CAPM are calculated relative to the NYSE index.
16 As the NYSE index used to calculate these betas is comprised of over 2,000 individual
17 stocks, it is not practical to calculate an NYSE-index based market DCF for the CAPM.

18 To identify an appropriate proxy for the NYSEX, I examined the correlations of the
19 NYSE index relative to several common U.S. market indices, including the S&P 500, the
20 S&P 500 Equal-Weight, the Dow Jones Industrial Average ("DJIA"), and the NASDAQ
21 100 Index ("NASDAQ 100"). Of these indices, returns of the S&P 500 Equal-Weight
22 showed the highest average correlation (approximately 98.00% over the past five years) to
23 the returns of the NYSE Index, indicating it to be the best proxy among major U.S. stock

market indices. Given the high degree of correlation between Canadian and U.S. equity markets, and for consistency, I also calculated the S&P/TSX Composite Index using a similar equal weighting of the component companies, instead of a market-cap weight.

Q. WHAT IS YOUR CONCLUSION REGARDING THE MARKET RISK PREMIUMS USED IN YOUR CAPM ANALYSES?

A. Averaging the three measures of the market risk premium discussed above results in Canadian and U.S. market risk premiums of 8.54% and 9.03%, respectively.

Q. WHAT ARE THE RESULTS OF YOUR APPLICATION OF THE TRADITIONAL AND EMPIRICAL CAPM TO THE UTILITY PROXY GROUP?

A. The indicated common equity cost rates for the proxy groups using the CAPM are shown on Tables 6 and 7, below:

Table 6: CAPM and ECAPM results for the Canadian Utility Proxy Group⁹¹

	CAPM	ECAPM	Average
Mean	8.44%	9.42%	8.93%
Median	8.12%	9.18%	8.65%
Average of Mean and Median	8.28%	9.30%	8.79%

Table 7: CAPM and ECAPM results for the U.S. Gas Utility Proxy Group⁹²

	CAPM	ECAPM	Average
Mean	11.53%	12.11%	11.82%
Median	11.43%	12.04%	11.73%
Average of Mean and Median	11.48%	12.08%	11.78%

⁹¹ See, Exhibit EGQ-4, Document 5, page 2.

⁹² See, Exhibit EGQ-4, Document 5, page 3.

1 **c. Risk Premium Model**

2 **Q. PLEASE DESCRIBE THE THEORETICAL BASIS OF THE RPM.**

3 A. The RPM is based on the fundamental financial principle of risk and return; namely, that
4 investors require greater returns for bearing greater risk. The RPM recognizes that
5 common equity capital has greater investment risk than debt capital, as common equity
6 shareholders are behind debt holders in any claim on a company's assets and earnings. As
7 a result, investors require higher returns from common stocks than from bonds to
8 compensate them for bearing the additional risk.

9 While it is possible to directly observe bond returns and yields, investors' required
10 common equity returns cannot be directly determined or observed. According to RPM
11 theory, one can estimate a common ERP over bonds (either historically or prospectively)
12 and use that premium to derive a cost rate of common equity. The cost of common equity
13 equals the expected cost rate for long-term debt capital, plus a risk premium over that cost
14 rate, to compensate common shareholders for the added risk of being unsecured and last-
15 in-line for any claim on the corporation's assets and earnings upon liquidation.

16 **Q. PLEASE EXPLAIN THE TOTAL MARKET APPROACH RPM YOU USED TO**
17 **DERIVE YOUR INDICATED COST OF COMMON EQUITY BASED ON THE**
18 **RPM.**

19 A. The total market approach RPM adds a prospective public utility bond yield to an average
20 of: 1) an equity risk premium that is derived from a beta-adjusted total market equity risk
21 premium, 2) an equity risk premium based on the S&P Utilities Index, and 3) an equity risk
22 premium based on authorized ROEs for pipeline utilities.

1 **Q. PLEASE EXPLAIN HOW YOU CALCULATED THE EXPECTED BOND YIELD**
2 **OF 4.94% APPLICABLE TO THE UTILITY PROXY GROUP USING CANADIAN**
3 **DATA.**

4 A. The first step in the total market approach RPM analysis is to determine the expected bond
5 yield. Because both ratemaking and the cost of capital, including the common equity cost
6 rate, are prospective in nature, a prospective yield on similarly-rated long-term debt is
7 essential. Because I am unaware of any publication that provides forecasted public utility
8 bond yields, I relied on a consensus forecast of about 50 economists of the expected yield
9 on Baa2-rated corporate bonds for the six calendar quarters ending with the fourth calendar
10 quarter of 2027, and *Blue Chip*'s long-term projections for 2028 to 2032, and 2033 to 2037.
11 As shown on line 1, page 3 of Exhibit EGQ-4, Document 6, the average expected yield on
12 Moody's Investor Service ("Moody's") Aaa-rated corporate bonds is 5.46%.

13 Because the 5.46% estimate represents an Aaa-rated U.S. corporate bond yield and
14 not an A/A2-rated utility bond yield,⁹³ I adjusted the expected Aaa-rated U.S. corporate
15 bond yield to an equivalent A/A2-rated utility bond yield. The recent spread between Aaa-
16 rated U.S. corporate bond yields and an A-rated Canadian bond yield is negative 0.60%
17 and the recent spread between Aaa-rated U.S. corporate bond yields and A2-rated U.S.
18 utility bond yields is 0.33%. Adding those spreads to the Aaa-rated U.S. corporate bond
19 yields results in a Canadian A-rated utility bond yield of 4.86% and a U.S. A2-rated utility
20 bond yield of 5.79%.

21 Since the average Moody's credit rating of the Canadian Utility Proxy Group is A3,
22 I need to reflect the difference in risk between A2-rated Canadian utility bonds and A3-

⁹³ For the purposes of this testimony, I am assuming equivalent credit ratings will also have equivalent bond yields.

rated Canadian utility bonds. To reflect that risk, I adjust the A2-rated Canadian utility bond yield to an A3-rated Canadian utility bond. The recent spread between BBB and A-rated Canadian utility bond yields is 0.23%. Taking one-third of that spread results in a prospective A3-rated Canadian public utility bond yield of 4.94%. Since the average credit rating of the U.S. Gas Utility Proxy Group is also A3, a similar adjustment needs to be made to their 5.79% prospective A2-rated bond yield. The recent spread between Baa2- and A2-rated U.S. utility bond yields is 0.17%. Applying one-third of that spread results in a prospective A3-rated U.S. utility bond yield of 5.85%. The summary of each proxy group's indicated bond yield is summarized in Table 8, below:

Table 8: Summary of the Calculation of the Each Proxy Group's Indicated Bond Yield⁹⁴

	Canadian Utility	U.S. Gas Utility
Prospective Yield on U.S. Aaa-Rated Corporate Bonds	5.46%	5.46%
Adjustment to Reflect Yield Spread Between Aaa-Rated Corporate Bonds and A/A2-Rated Corporate Bonds	<u>-0.60%</u>	<u>0.33%</u>
Prospective Yield on A/A2-Rated Public Utility Bonds	4.86%	5.79%
Adjustment to Reflect Bond Rating Difference of the Respective Utility Proxy Group	0.08%	<u>0.06%</u>
Prospective Bond Yield Applicable to the Respective Utility Proxy Group	<u>4.94%</u>	<u>5.85%</u>

To develop the total market approach RPM estimate of the ROE, these prospective bond yields are then added to the average of three different ERPs: (1) the beta-derived ERP; (2) the utility-specific ERP; and (3) the authorized return ERP, which I now discuss, in turn.

⁹⁴ As shown on page 3 of Exhibit EGQ-4, Document 6.

1 **Q. PLEASE EXPLAIN HOW THE BETA-DERIVED EQUITY RISK PREMIUM IS**
2 **DETERMINED.**

3 A. The components of the beta-derived risk premium model are: 1) an expected market equity
4 risk premium over corporate bonds, and 2) the beta. The derivation of the beta-derived
5 ERPs that I applied to the proxy groups is shown on lines 1 through 5, page 6 of Exhibit
6 EGQ-4, Document 6. The total beta-derived ERP uses projected returns on the S&P/TSX
7 Composite and the S&P 500, and projected Canadian and U.S. corporate bond yields to
8 determine a market ERP. That market ERP is then adjusted by the betas of each proxy
9 group to determine the prospective ERP applicable to the respective proxy groups.

10 **Q. PLEASE EXPLAIN THE DERIVATION OF THE ERP BASED ON PROJECTED**
11 **RETURNS OF THE S&P/TSX COMPOSITE AND S&P 500.**

12 A. Using data from Bloomberg, *Value Line*, and S&P Capital IQ I calculated expected total
13 returns for the equal weighted S&P/TSX Composite and the equal weighted S&P 500 using
14 expected dividend yields as a proxy for income returns and long-term growth estimates as
15 a proxy for capital appreciation, identical to the method described above. The expected
16 total returns for the S&P/TSX Composite and the S&P 500 are 17.19% and 16.83%,
17 respectively. Subtracting the prospective yields on Canadian and U.S. Aa/Aaa-rated
18 corporate bonds of 4.83%⁹⁵ and 5.46% result in 12.36% and 11.37% projected ERPs,
19 respectively.

20 After calculating average market ERPs of 12.36% and 11.37%, I adjusted them by
21 the betas of the proxy groups to account for the risk of the respective proxy groups. As
22 discussed above, beta is a meaningful measure of prospective relative risk to the market as

⁹⁵ Calculated as the forecasted U.S. Aaa-rated corporate bonds (5.46%) less the spread between U.S. Aaa-rated corporate bonds and Canadian Aa-rated corporate bonds (0.63%)

1 a whole, and is a logical way to allocate a company's, or proxy group's, share of the
2 market's total ERP relative to corporate bond yields. As shown on pages 1 and 2 of Exhibit
3 EGQ-4, Document 5, the averages of the mean and median beta for the Canadian Utility
4 Proxy Group and the U.S. Gas Utility Proxy Group are 0.52 and 0.74, respectively.
5 Multiplying the betas by their respective market ERPs of 12.36% and 11.37%, respectively,
6 result in a Canadian Proxy Group beta-adjusted ERP of 6.43% and a U.S. Gas Proxy Group
7 beta-adjusted ERP of 8.41%.

8 **Q. HOW DID YOU DERIVE THE EQUITY RISK PREMIUM BASED ON THE**
9 **S&P/TSX CAPPED UTILITIES INDEX AND S&P UTILITY INDEX?**

10 A. As I did for the S&P/TSX Composite Index and the S&P 500, using dividend and EPS
11 growth rate data from Bloomberg, *Value Line*, and S&P Capital IQ, I calculated projected
12 total returns of the S&P/TSX Capped Utilities Index and the S&P Utility Index of 11.76%
13 and 13.32%, respectively, and subtracted the prospective A/A2-rated Canadian/U.S. public
14 utility bond yields of 4.86% and 5.79% to derive ERPs of 6.90% and 7.53%, respectively.

15 **Q. HOW DID YOU DERIVE ERPS BASED ON AUTHORIZED RETURNS FOR**
16 **UTILITIES?**

17 A. The ERP based on authorized returns reflects the tendency of the ERP to change inversely
18 with interest rates as discussed in the financial literature on the subject.⁹⁶ That is, as interest
19 rates fall, the ERP increases; the converse also is true. A consequence of that relationship
20 is that although the cost of common equity generally is a positive function of interest rates,
21 the two do not move in lockstep. That finding is important, especially when interest rates

⁹⁶ See, e.g., Robert S. Harris and Felicia C. Marston, *The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts*, *Journal of Applied Finance*, Vol. 11, No. 1, 2001, at pages 11 to 12; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, *Financial Management*, Spring 1985, at pages 33 to 45.

1 have been volatile, reaching secular lows, then rebounding from them. The inverse
2 relationship between ERPs and interest rates has been acknowledged by the OEB⁹⁷ and the
3 AUC.⁹⁸

4 Although my analyses rely on authorized returns to estimate the relationship
5 between interest rates and the ERP, please note that I am not using U.S. authorized returns
6 as a benchmark in isolation – I use them as a proxy for required market returns to estimate
7 the relationship between the ERP and interest rates.

8 Used in that context, I believe authorized returns are a reasonable input. In my
9 practical experience investors consider a broad range of data, including returns authorized
10 in other jurisdictions, in establishing their return requirements.

11 As noted earlier, the practice of finance involves the efficient allocation of capital.
12 Equity investors have many options available to them, and allocate their capital based on
13 the expected risks and returns associated with those alternatives. The regulatory orders
14 establishing the cost of common equity, in addition to regulation being the substitute for
15 market competition, often discuss at length the issues surrounding the application and
16 interpretation of market-based models. Because authorized ROEs reflect prevailing market
17 conditions during each rate case and results of multiple market-based models, it is
18 reasonable to use authorized returns to estimate the relationship between interest rates and
19 the ERP. As Morin notes:

⁹⁷ Ontario Energy Board, EB-2009-0084, Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, December 11, 2009, at p. 36-37. The derivation of the OEB's ROE formula explicitly recognizes the inverse relationship as it contains an ROE adjustment factor based on 0.5 times the change in the Long Canada Bond from the base period.

⁹⁸ Decision 27084-D02-2023, Determination of the Cost-of-Capital Parameters in 2024 and Beyond, at para. 105 (October 9, 2023)

1 [a]llowed risk premiums are presumably based on the results of market-
2 based methodologies presented to regulators in rate hearings and on the
3 actions of objectives unbiased investors in a competitive marketplace.⁹⁹

4 With those points in mind, I defined the ERP as the difference between the
5 authorized ROE from fully litigated cases¹⁰⁰ and the then-prevailing level of long-term A2-
6 rated utility bond yields. I then gathered data for 2,146 U.S. electric and gas rate
7 proceedings between January 1980 and July 17, 2026, as reported by Regulatory Research
8 Associates, as well as 866 U.S. gas rate proceedings over the same period, also reported by
9 Regulatory Research Associates.

10 Note that a similar analysis could not be performed for Canadian returns because
11 Regulatory Research Associates only reports U.S. authorized returns. However, given the
12 integration of Canadian and U.S. markets,¹⁰¹ I believe the relationship between interest
13 rates and electric and natural gas industry ERPs using authorized ROEs can reasonably be
14 applied using Canadian utility bond yields to develop an estimate of the Canadian specific
15 cost of common equity.

16 I modeled the relationship between interest rates and the ERP using regression
17 analysis, in which the observed ERP is the dependent variable, and the average A-rated
18 Public Utility bond is the independent variable. That is, the analysis considers the
19 relationship between authorized returns and prevailing public utility bond yields at the time
20 of the decision.

⁹⁹ Morin, at 139.

¹⁰⁰ Please note I excluded returns associated with “Limited Issue Rate Riders”, such as those resulting from incentive returns provided in Virginia, and “Settled” cases.

¹⁰¹ As detailed in Section IV, above.

Chart 9: Equity Risk Premium Based on Authorized Returns for U.S. Electric and Gas Utilities

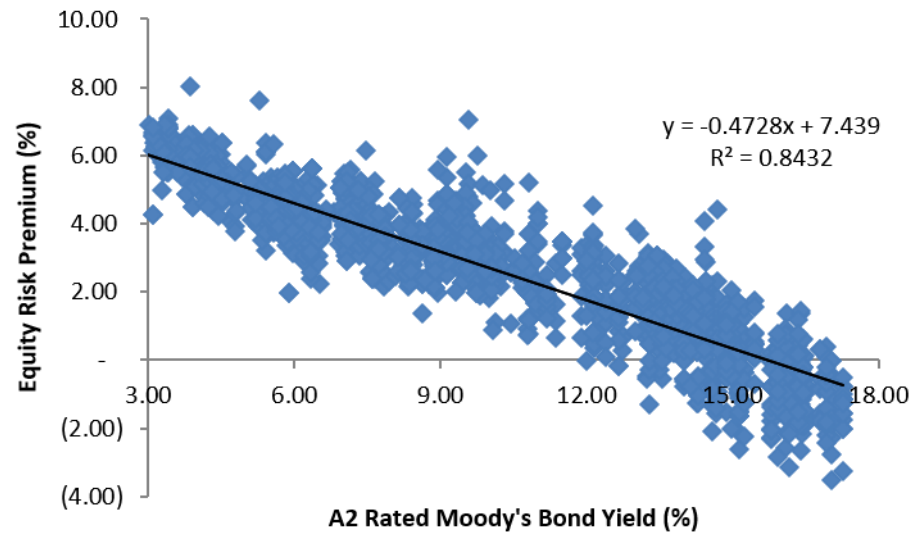
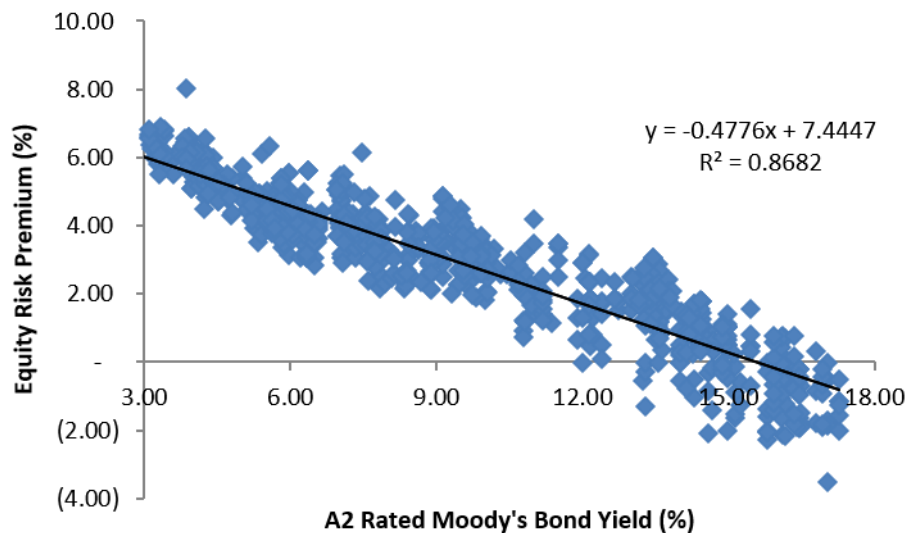


Chart 10: Equity Risk Premium Based on Authorized Returns for U.S. Gas Utilities



As Charts 9 and 10 demonstrate, it is discernible that there is an inverse relationship between the yield on A2-rated public utility bonds and equity risk premiums. I used the regression results to estimate the ERP applicable to the projected yield on A2-rated Canadian public utility bond yields and A2-rated U.S. public utility bonds. Given an expected A2-rated Canadian public utility bond yield of 4.86%, it can be calculated that

the indicated electric and gas ERP applicable to that bond yield is 5.14%. Given an A2-rated U.S. public utility bond of 5.79%, an indicated gas-only ERP of 4.68% results.

Q. WHAT IS YOUR CONCLUSION FOR YOUR EPRS TO USE IN YOUR TOTAL MARKET APPROACH RPM ANALYSES?

A. The ERPs I applied to the Utility Proxy Group are 6.16% (Canadian Utility Proxy Group) and 6.87% (U.S. Gas Utility Proxy Group), which averaged the beta-adjusted ERP, the utility-specific ERP, and the authorized return ERPs as shown on Table 9, below:

Table 9: Summary of the Indicated ERPs¹⁰²

Equity Risk Premium	Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
Beta-Adjusted ERP	6.43%	8.41%
Utility-Specific ERP	6.90%	7.53%
Authorize Return ERP	<u>5.14%</u>	<u>4.68%</u>
Average ERP	<u>6.16%</u>	<u>6.87%</u>

Q. WHAT ARE THE RESULTS OF YOUR RPM ANALYSES?

A. As shown on line 7, page 1 of Exhibit EGQ-4, Document 6 and shown on Table 10, below, I calculated indicated common equity cost rates of 11.10% and 12.72% for the Canadian and U.S. Gas Utility Proxy Groups, respectively, based on the total market approach RPM.

Table 10: Summary of the RPM¹⁰³

	Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
Prospective Utility Bond Applicable to the Utility Proxy Group	4.94%	5.85%
Prospective Equity Risk Premium	<u>6.16%</u>	<u>6.87%</u>
Indicated Cost of Common Equity	<u>11.10%</u>	<u>12.72%</u>

¹⁰² As shown on page 6 of Exhibit EGQ-4, Document 6.

¹⁰³ As shown on page 3 of Exhibit EGQ-4, Document 6.

VIII. CONCLUSION OF COMMON EQUITY COST RATE BEFORE ADJUSTMENTS

Q. WHAT IS THE RANGE OF INDICATED COMMON EQUITY COST RATES BEFORE ADJUSTMENT?

A. The results of the application of the constant growth DCF model, the traditional and empirical CAPM, and the total market PRM to the Canadian Utility Proxy Group and the U.S. Gas Utility Proxy Group are summarized in Table 11, below.

Table 11: Summary of ROE Model Results

	Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
Discounted Cash Flow Model	8.79%	10.86%
Capital Asset Pricing Model	8.79%	11.78%
Risk Premium Model	11.10%	12.72%

I used multiple cost of common equity models as tools in determining my recommended common equity cost rate, because no single model is so inherently precise that it can be relied on solely to the exclusion of other theoretically sound models. As discussed previously, the use of multiple models adds reliability to the estimation of the common equity cost rate, and the prudence of using multiple cost of common equity models is supported in both the financial literature and regulatory precedent. Based on the results of the ROE models applied to the Canadian and U.S. Gas Utility Proxy Groups shown on Table 11 above, I recommend a range of ROEs between 9.06% and 11.06% applicable to the proxy groups.

After determining the indicated range of ROEs attributable to the proxy groups, there must be an evaluation of relative risk between those groups and EGQ to determine whether it is appropriate to apply adjustments to the proxy groups' indicated ROE range to better reflect EGQ's unique risks.

1 IX. ADJUSTMENTS TO THE COMMON EQUITY COST RATE

2 a. Business Risk

3 i. *Decarbonization Policy Risk*

4 Q. PLEASE PROVIDE A SUMMARY OF ELECTRIFICATION AND
5 DECARBONIZATION EFFORTS IN QUÉBEC THAT IMPACT EGQ.

6 A. Québec’s *2030 Plan for a Green Economy*, introduced in 2020, sets the framework for the
7 province to transition to a carbon neutral economy by 2050.¹⁰⁴ As noted by former Premier
8 Legault, to “meet the climate challenge, we need to replace fossil fuels as much as possible
9 with our own clean electricity. That’s the best way to reduce our greenhouse gas
10 emissions.”¹⁰⁵ For natural gas utilities like EGQ, this represents a significant risk to their
11 business, as electrification and decarbonization will result in downwards pressure on
12 throughput volumes and revenues, and potentially the “death spiral”. The regulatory
13 uncertainty and the pace at which these policies evolve also represent a source of risk.

14 Since the Company’s last cost of capital proceeding, there have been several
15 regulatory and policy changes related to decarbonization that impact EGQ’s risk. One of
16 these changes was the adoption of Québec’s Bill 69 in June of 2025. Within Section 5 of
17 Bill 69, the mission of the Régie was explicitly updated to include a reference to the green
18 energy transition, with the new mission stating: “In the exercise of its functions and powers,
19 the Régie must promote the meeting of energy needs, **an orderly energy transition at the**
20 **lowest cost**, innovation, and the maximizing of the economic, social and environmental

¹⁰⁴ Gouvernement du Québec, *2030 Plan for a Green Economy: Electrification and Climate Change Policy Framework* (2020).

¹⁰⁵ Gouvernement du Québec, *2030 Plan for a Green Economy: Electrification and Climate Change Policy Framework* (2020), at II.

1 benefits of energy for Quebecers in compliance with the policy directions.”¹⁰⁶ Bill 69 also
2 expands upon the business activities a traditional natural gas distributor can participate in,
3 namely, by allowing for renewable natural gas (“RNG”) related infrastructure costs to be
4 included in rates.

5 Bill 69 also introduced the province’s first integrated resource plan, titled “Plan de
6 gestion intégrée des ressources énergétiques” (“PGIRE”) to act as a long-term roadmap for
7 the province’s energy sector. The PGIRE is intended to guide decisions related to “energy
8 efficiency, supply, production, and consumption” and has five major policy directives: 1)
9 to make Québec an exemplary energy consumer; 2) to ensure a safe, resilient energy system
10 that adapts to changing energy needs; 3) to support the development of renewable energy
11 pathways; 4) to place energy availability and the economic benefits of the energy transition
12 at the heart of decision-making; and 5) to carry out the energy transition at the best cost for
13 society.¹⁰⁷ While the current PGIRE¹⁰⁸ does not illustrate the elimination of natural gas
14 distribution as part of the province’s energy plan, it does show a changing role for gas
15 distribution utilities from more traditional utility activities like building heating towards
16 peak demand management and sectors that are more challenging to electrify.¹⁰⁹

17 Québec continues to remain one of the few jurisdictions in North America to have
18 a cap-and-trade system in place. Established in 2012, the system requires EGQ to acquire
19 and use carbon allowance credits to offset natural gas supplied to customers. The cost of
20 the allowance credits are passed on to end customers, and as discussed in the following

¹⁰⁶ Québec, *An Act to ensure the responsible governance of energy resources and to amend various legislative provisions*, Bill 69, 1st Sess., 43rd Leg., 2025, c. 24, s. 21. (emphasis added).

¹⁰⁷ <https://www.quebec.ca/en/gouvernement/ministeres-organismes/economie/publications/integrated-energy-resource-management-plan>

¹⁰⁸ Note: the PGIRE is set to be updated every six years.

¹⁰⁹ *Gouvernement du Québec, Ministère de l’Économie, de l’Innovation et de l’Énergie, Plan de gestion intégrée des ressources énergétiques du Québec 2026–2050*, June 2026.

1 section, contribute to the declining competitiveness of natural gas relative to electricity in
2 Quebec.

3 Concerningly for investors in a natural gas utility like EGQ, the PGIRE shows a
4 42% reduction in traditional (fossil-fuel) natural gas demand from 2022 to 2050.¹¹⁰ Though
5 the PGIRE anticipates increases in Bioenergies (including RNG) and hydrogen throughput,
6 being able to supply these products to customers requires substantial capital expenditures,
7 as discussed in detail, below. As discussed, the principal risk is not only about the energy
8 transition or decarbonization itself, but the uncertainty associated with the pace, scope and
9 implementation of rapidly evolving energy policies, and their resulting impacts on demand,
10 competitiveness and required investment.

11 **Q. HAS THE RÉGIE NOTED THE RISKS NATURAL GAS UTILITIES FACE IN**
12 **QUÉBEC?**

13 A. Yes, they have. As stated in the Company's last cost of capital proceeding:

14 The Régie recognized that the competitive position of natural gas, compared
15 to electricity in Québec, constitutes an inescapable element of the
16 Complainants' business risk and that the current energy transition adds
17 uncertainty to their business environment.¹¹¹

18 **Q. HOW DO THESE DECARBONIZATION EFFORTS COMPARE TO OTHERS**
19 **ACROSS THE CANADIAN UTILITY PROXY GROUP AND U.S. GAS UTILITY**
20 **PROXY GROUP?**

21 A. Decarbonization efforts are impacting natural gas distribution utilities across Canada and
22 the U.S, to varying degrees. Within Canada, British Columbia ("B.C.") has a

¹¹⁰ *Gouvernement du Québec, Ministère de l'Économie, de l'Innovation et de l'Énergie, Plan de gestion intégrée des ressources énergétiques du Québec 2026–2050*, June 2026, p. 20.

¹¹¹ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 128 (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 decarbonization plan that appears comparably aggressive to that in Québec, and targets net-
2 zero emissions by 2050. Within the Canadian Utility Proxy Group, Fortis (“FTS”) operates
3 within B.C. as FortisBC.

4 In the U.S., Colorado, California, and Washington all appear aggressive, with
5 similar net-zero emissions mandates and bans on new natural gas infrastructure. Within the
6 U.S. Gas Utility Proxy Group, Southwest Gas Holdings, Inc. (“SWX”) operates within
7 California as Southwest Gas Corp, Atmos Energy Corporation (“ATO”) operates within
8 Colorado as Atmos Energy, and Northwest Natural Gas (“NWN”) operates in Washington
9 state.

10 In summary, while some of the operating subsidiaries of the Canadian and U.S. Gas
11 Utility Proxy Group companies operate in jurisdictions with comparable decarbonization
12 policies, there are also some that operate in jurisdictions with limited decarbonization
13 policies. While Québec’s decarbonization policies may be more aggressive, and therefore
14 riskier, than many of the jurisdictions of the proxy group companies, it is difficult to
15 ascertain a specific adjustment to the Company’s ROE purely based on these policies.

16 *ii. Competitiveness of Natural Gas vs Electricity*

17 **Q. HAS THE RÉGIE PREVIOUSLY RECOGNIZED ELECTRICITY PRICES AS A**
18 **CONSIDERABLE BUSINESS RISK FOR QUÉBEC NATURAL GAS**
19 **DISTRIBUTORS?**

20 **A.** Yes, they have. As stated in the Company’s last cost of capital proceeding,

21 The Régie recognizes that the competitive position of natural gas, compared
22 to electricity in Québec, constitutes an inescapable element of the
23 Complainants' business risk and that the current energy transition context
24 adds uncertainty to their business environment.

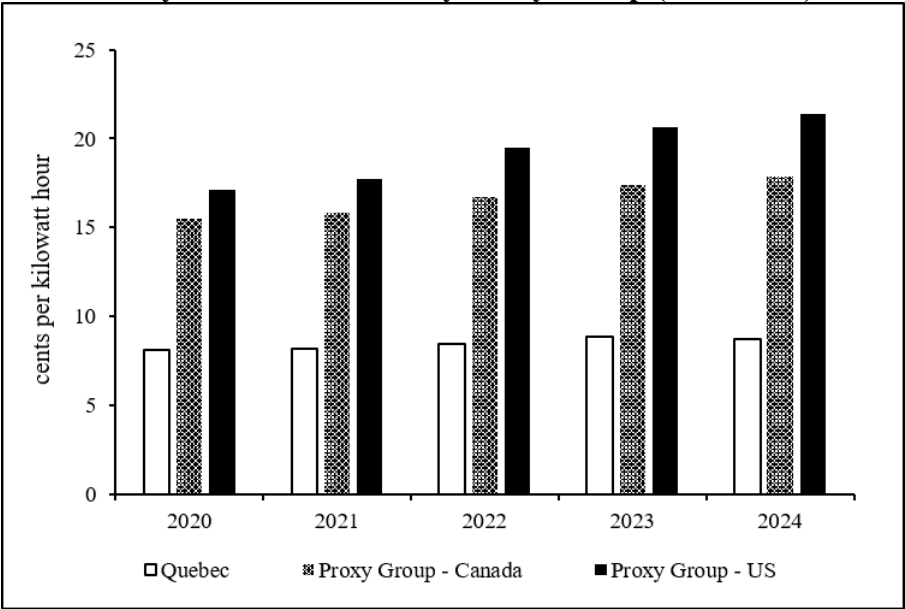
25 ***

1 The Régie agrees with Dr. Booth's assessment that Énergir's business risk
2 is higher than that of comparable Canadian natural gas distributors, mainly
3 given the low price of electricity in Québec. It also retains from Dr. Brown's
4 assessment that Gazifère's business risk is higher than that of Énergir, due
5 to a greater risk of its customers converting to electricity.¹¹²

6 **Q. HOW DOES QUÉBEC'S ELECTRICITY PRICE COMPARE TO OTHERS**
7 **ACROSS THE CANADIAN UTILITY PROXY GROUP AND U.S. GAS UTILITY**
8 **PROXY GROUP?**

9 A. To make a reasonable comparison, I calculated the average residential electricity cost for
10 the operating jurisdictions of the Canadian Utility Proxy Group and of the U.S. Gas Utility
11 Proxy Group. As shown in Chart 11 below, the average price of residential electricity
12 realized in Québec is unusually inexpensive compared to the operating jurisdictions of the
13 Canadian Utility Proxy Group and the U.S. Gas Utility Proxy Group.

14 **Chart 11: Average Residential Electricity Prices in Québec versus the Canadian**
15 **Utility and U.S. Gas Utility Proxy Group (2020-2024)**



¹¹² Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 128 (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 As shown, the price of electricity in Québec is approximately half the cost of
2 electricity realized in the operating jurisdictions of the Canadian Utility Proxy Group and
3 approximately a third of the cost of the U.S. Gas Utility Proxy Group.

4 **Q. DO QUÉBEC'S LOW ELECTRICITY PRICES IMPACT EGQ MORE THAN THE**
5 **COMPANIES IN THE PROXY GROUPS?**

6 A. Yes, they do. Due to the greater risk of customer conversions to electricity, EGQ's business
7 risk is higher than the Canadian Utility Proxy Group and the U.S. Gas Utility Proxy Group.
8 The competitive condition between natural gas and electricity is not that electricity
9 competes with natural gas. It is that EGQ in Québec competes against electricity that is
10 unusually inexpensive in comparison to the jurisdictions operated in by the Proxy Groups.

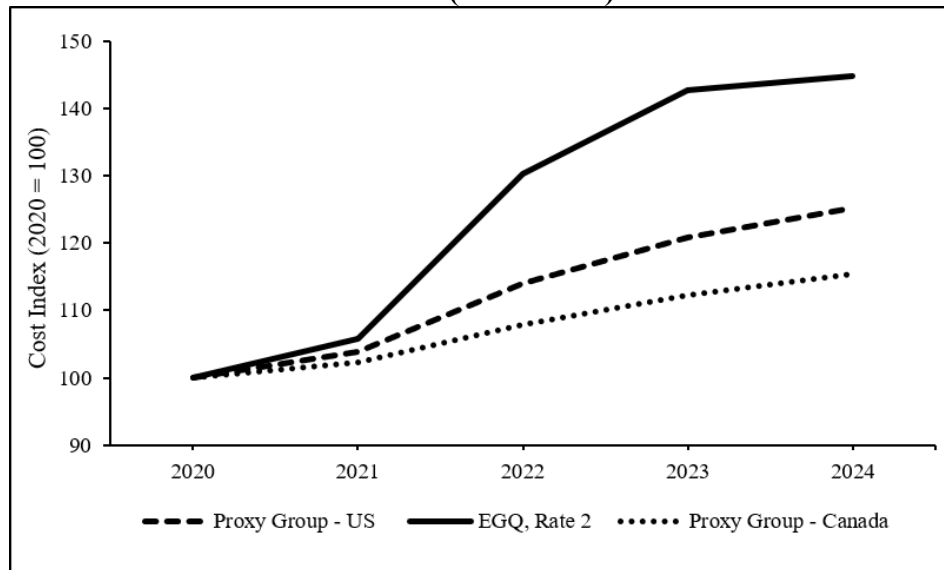
11 **Q. IN EGQ'S LAST COST OF CAPITAL PROCEEDING, THE RÉGIE**
12 **DETERMINED THE COMPETITIVENESS BETWEEN NATURAL GAS AND**
13 **ELECTRICITY HAD NOT DETERIORATED IN THE IMMEDIATE TERM AND**
14 **THERE WAS NO INDICATION OF A FURTHER DETERIORATION. DO YOU**
15 **AGREE?**

16 A. No. Over the last few years EGQ has experienced increasing competitive pressure resulting
17 from rising natural gas-related costs, and comparatively stable electricity prices as shown
18 above in Chart 11. As discussed in other areas of my testimony, EGQ's customer bills are
19 impacted by increasing RNG requirements, carbon pricing costs under Québec's cap-and-
20 trade system and increasing distribution costs.

21 To illustrate that the relative economic position of natural gas has weakened since
22 2020, I have compared the increase EGQ's residential natural gas bill with the
23 corresponding increase of electricity prices. As shown below in Chart 12, using 2020 as a

base year, indexed at 100, the annual cost for natural gas increased to 145 as of 2024, compared to 115 for the Canadian Utility Proxy Group and 125 for the U.S. Gas Utility Proxy Group.

**Chart 12: Progression of Proxy Groups Average Electricity Costs versus EGQ
(2020 = 100)**



As shown above, the relative price competitiveness of natural gas has deteriorated materially since 2020.

Q. WHAT DO YOU CONCLUDE ON THE RISK FACED BY EGQ REGARDING THE RELATIVE PRICE COMPETITIVENESS OF ELECTRICITY?

A. In summary, the competitive-price risk previously recognized by the Régie has increased. EGQ operates in Québec, where comparatively low electricity prices create a particularly challenging competitive environment for natural gas. This competitive disadvantage has become more pronounced since 2020, as EGQ's customer costs have increased substantially faster than comparable electricity costs.

This relative price pressure increases the uncertainty associated with EGQ's ability to maintain the competitiveness of its service compared with that of the companies of the

1 Proxy Groups, particularly those companies operating in jurisdictions where electricity
2 presents a less significant price-based competitive threat. Accordingly, EGQ's exposure to
3 electricity price competition represents an incremental source of business risk and supports
4 a higher overall assessment of EGQ's business risk.

5 **Q. DOES EGQ'S DUAL-FUEL AGREEMENT WITH HYRDO-QUÉBEC MITIGATE**
6 **EGQ'S RISK DUE TO THEIR UNCOMPETITIVE COST OF GAS?**

7 A. No, not entirely. Québec's dual-energy model encourages residential customers to replace
8 a traditional natural gas furnace with a hybrid electric and natural gas system, with
9 electricity providing the primary heat source and natural gas acting as a backup during peak
10 periods of cold. EGQ and Hydro-Québec currently operate under a revenue compensation
11 mechanism whereby EGQ receives compensation for approximately 80% of the decreased
12 variable distribution revenue for 15 years for each participating customer. While this
13 compensation does temporarily mitigate some of the risks associated with customers
14 switching their residential heating service to electricity, the current agreement only lasts
15 until December 2026. Additionally, it remains unclear what happens to those customers
16 after the 15-year period concludes. A significant amount of uncertainty regarding the future
17 of the program and compensation levels remain. If the program continues, it is likely
18 customer participation will continue, contributing to a further decrease in volumes and
19 revenues.

20 **iii. Capital Expenditures**

21 **Q. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL INVESTMENT**
22 **PLANS.**

23 A. EGQ currently plans to invest approximately \$255 million of additional capital over the
24 2026-2030 period, respectively, which represents approximately 164% of its 2025 net

1 utility plant, respectively.¹¹³ That amount includes investments required to maintain safe,
2 sufficient, and reliable service as well as to meet RNG requirements.

3 RNG-related investments required to meet the required target of 10% RNG of total
4 volumes supplied to residential and commercial buildings by 2030¹¹⁴ are driving the
5 Company's level of capital expenditures. These investments represent a significant amount
6 of capital that must be spent to comply with the province's ever evolving RNG
7 requirements. Based on my review, I understand that standards related to RNG
8 requirements have changed at least three times since the release of an initial building
9 decarbonization strategy in November 2024. Most recently, regulation was drafted to
10 increase this target to 16% of total volumes supplied by 2032, however the Québec Minister
11 of Economy, Innovation, and Energy decided not to adopt this change, and restarting a
12 consultation process for a new proposal in 2027.¹¹⁵ The uncertainty surrounding the
13 changing RNG-related requirements introduces additional investment risk for these capital
14 projects due to stranded asset risks. If RNG requirements are removed, the Company could
15 be left with RNG build-out costs, like connection infrastructure, transfer stations, or
16 compressors, that they cannot recover. Crucially, the frequently changing policies create
17 uncertainty regarding the timeline and amount of RNG required to comprise EGQ's supply.

18 EGQ will require continued access to the capital markets at reasonable terms to
19 finance its capital spending plan. As the Company moves forward with its capital spending

¹¹³ Source: Capital Expenditures as provided by Company.

¹¹⁴ [Règlement concernant le gaz de source renouvelable](#), RLRQ, R-6.01, a. 112, 1^{er} al., par 4 et 5.

¹¹⁵ Gouvernement du Québec, Ministère de l'Économie, de l'Innovation et de l'Énergie, "Gaz de source renouvelable : le gouvernement lance une démarche pour encadrer et propulser la filière locale," September 16, 2026 (translated from French).

1 plan, timely recovery of its capital costs is critical to mitigate the delay of capital recovery
2 and execute its capital spending program.

3 **Q. DO SUBSTANTIAL CAPITAL EXPENDITURES DIRECTLY RELATE TO A**
4 **UTILITY BEING ALLOWED THE OPPORTUNITY TO EARN A RETURN**
5 **ADEQUATE TO ATTRACT CAPITAL AT REASONABLE TERMS?**

6 A. Yes, they do. The allowed ROE should enable the subject utility to finance capital
7 expenditures and working capital requirements at reasonable rates and to maintain its
8 financial integrity in a variety of economic and capital market conditions. As discussed
9 throughout my direct testimony, a return adequate to attract capital at reasonable terms
10 enables the utility to provide safe, reliable service while maintaining its financial
11 soundness. To the extent a utility is provided the opportunity to earn its market-based cost
12 of capital, neither customers nor shareholders should be disadvantaged. These
13 requirements are of particular importance to a utility when it is engaged in a substantial
14 capital expenditure program.

15 The ratemaking process is predicated on the principle that, for investors and
16 companies to commit the capital needed to provide safe and reliable utility services, the
17 utility must have the opportunity to recover the return of, and the market-required return
18 on, invested capital. Regulatory commissions recognize that because utility operations are
19 capital intensive, regulatory decisions should enable the utility to attract capital at
20 reasonable terms; doing so balances the long-term interests of the utility and its ratepayers.

21 Further, the financial community carefully monitors the current and expected
22 financial conditions of utility companies, as well as the regulatory environment in which
23 those companies operate. In that respect, the regulatory environment is one of the most

important factors considered in both debt and equity investors' assessments of risk. That is especially important during periods in which the utility expects to make significant capital investments and, therefore, may require access to capital markets.

Q. DO CREDIT RATING AGENCIES RECOGNIZE RISK ASSOCIATED WITH INCREASED CAPITAL EXPENDITURES?

A. Yes, they do. From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. Specifically, S&P notes, "Given our expectations for continued increasing capital spending over the next decade, we expect financial performance and credit quality will continue to be pressured."¹¹⁶

The rating agency views noted above also are consistent with certain observations discussed in my direct testimony: (1) the benefits of maintaining a strong financial profile are significant when capital access is required and become particularly acute during periods of market instability; and (2) the Régie's decision in this proceeding will have a direct bearing on the Company's credit profile and its ability to access the capital needed to fund its investments.

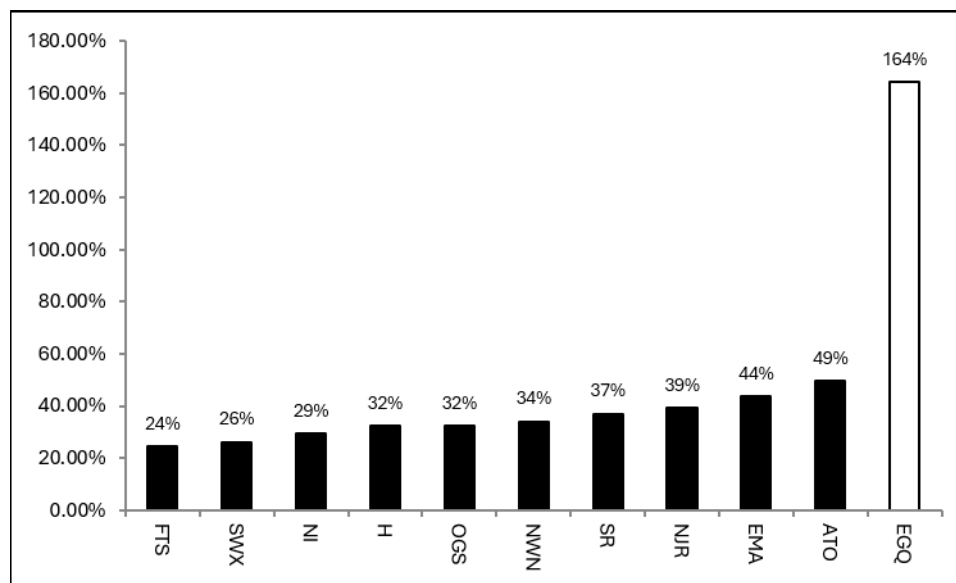
Q. HOW DO THE COMPANY'S EXPECTED CAPITAL EXPENDITURES COMPARE TO THE CANADIAN PROXY GROUP AND U.S. GAS UTILITY PROXY GROUP?

A. To reasonably make that comparison, I calculated the ratio of expected capital expenditures to net plant for each company in both proxy groups. I performed that calculation using EGQ's projected capital expenditures during 2026 through 2030 relative to its net plant for

¹¹⁶ S&P Global Ratings, Industry Credit Outlook 2025: North America Regulated Utilities, January 14, 2025, at 10.

the year ended December 31, 2025. As shown in Exhibit EGQ-4, Document 7 and Chart 13, below, the Company has a greater ratio of projected capital expenditures to net plant relative to companies of the Canadian and U.S. Gas Utility Proxy Groups, approximately 4.94 times higher than the median of the proxy companies.

Chart 13: Capital Expenditures to Net Plant¹¹⁷



iv. Adjustment Mechanisms

Q. DOES EGQ’S UTILIZATION OF A DECOUPLING MECHANISM AFFECT ITS RELATIVE RISK TO THE CANADIAN UTILITY PROXY GROUP OR U.S. GAS UTILITY PROXY GROUP?

A. No. The *Hope* and *Bluefield* “Comparable Earnings” standard requires the allowed ROE to be commensurate with the returns on investments of similar risk. The cost of capital is a comparative exercise, so if mechanisms are common throughout the companies on which one bases their analyses, the comparative risk is zero, because any effect of the perceived reduced risk of the mechanism(s) by investors would be reflected in the market data of the

¹¹⁷ Source: *Value Line*. Note that *Value Line* reports are unavailable for AQN and CU.

1 proxy group. To the extent the proxy companies have mechanisms in place to address
2 revenue shortfalls and cost recovery, the Companies' mechanisms only serve to make it
3 more comparable to its peers and have no impact on comparative risk.

4 To that point, Exhibit EGQ-4, Document 8 provides a summary of rate stabilization
5 mechanisms currently in effect at each subsidiary within the companies in the Canadian
6 Utility Proxy Group and U.S. Gas Utility Proxy Group. As Exhibit EGQ-4, Document 8
7 demonstrates, recovery mechanisms are common among the Canadian and U.S. Gas Utility
8 Proxy Group.

9 **Q. ARE YOU AWARE OF ANY STUDIES THAT HAVE ADDRESSED THE**
10 **RELATIONSHIP BETWEEN RATE STABILIZATION MECHANISMS,**
11 **GENERALLY, AND ROE?**

12 A. Yes. In March 2014, The Brattle Group ("Brattle") published a study addressing the effect
13 of revenue decoupling structures on the cost of capital for electric utilities. In its report,
14 which extended a prior analysis focused on natural gas distribution utilities, Brattle pointed
15 out that although decoupling structures may affect revenue, net income still can
16 vary. Brattle further noted that the distinction between diversifiable and non-diversifiable
17 risk is important to equity investors, and the relationship between decoupling and the cost
18 of equity should be examined in that context. Further to that point, Brattle noted that
19 although reductions in total risk may be important to bondholders, only reductions in non-
20 diversifiable business risk would justify a reduction to the ROE. In November 2016, the
21 Brattle study was updated based on data through the fourth quarter of 2015.

22 Brattle's empirical analysis examined the relationship between decoupling and the
23 After-Tax Weighted Average Cost of Capital for a group of electric utilities that had

1 implemented decoupling structures in various jurisdictions throughout the United
2 States. As with Brattle's 2014 study, the updated study found no statistically significant
3 link between the cost of capital and revenue decoupling structures.

4 In addition, I co-authored a peer-reviewed article in Energy Policy with Dr. Richard
5 A. Michelfelder and my colleague Pauline M. Ahern which examines the relationship
6 between decoupling and ROE among electric, gas, and water utilities. Using the
7 generalized consumption asset pricing model, they found decoupling to have no
8 statistically significant effect on investor perceived risk and the ROE.

9 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF THE**
10 **COMPANY'S REVENUE STABILIZATION MECHANISMS ON ROE?**

11 A. The presence of EGQ's revenue stabilization mechanisms does not affect the Company's
12 ROE. The decoupling mechanisms does not affect the ROE because the operating
13 companies of the Canadian Utility Proxy Group and U.S. Gas Utility Proxy Group utilize
14 a wide range of revenue stabilization mechanisms. Since this is the case, the lower risk of
15 having such mechanisms (if any) would already be subsumed in the market data for the
16 Utility Proxy Groups.

17 Furthermore, several studies show that rate stabilization mechanisms do not
18 materially affect the investor-required return for those companies. Given that, the EGQ's
19 mechanisms does not lower the comparative risk of the Company relative to the Utility
20 Proxy Groups and therefore, the ROE should not be adjusted due to EGQ's mechanism.

1 v. ***Size Risk***

2 **Q. DOES EGQ’S SMALLER SIZE RELATIVE TO THE CANADIAN UTILITY AND**
3 **U.S. GAS UTILITY PROXY GROUP COMPANIES INCREASE ITS BUSINESS**
4 **RISK?**

5 A. Yes. EGQ’s smaller size relative to the Canadian Utility and U.S. Gas Utility Proxy Group
6 companies indicates greater relative business risk for the Company because, all else being
7 equal, size has a material bearing on risk.

8 Size affects business risk because smaller companies generally are less able to cope
9 with significant events that affect sales, revenues, and earnings. For example, smaller
10 companies face more risk exposure to business cycles and economic conditions, both
11 nationally and locally. Additionally, the loss of revenues from a few larger customers
12 would have a greater effect on a small company than on a bigger company with a larger,
13 more diverse, customer base.

14 As further evidence that smaller firms are riskier, investors generally demand
15 greater returns from smaller firms to compensate for less marketability and liquidity of
16 their securities. Kroll’s Cost of Capital Navigator: U.S. Cost of Capital Module (“Kroll”)
17 discusses the nature of the small-size phenomenon, providing an indication of the
18 magnitude of the size premium based on several measures of size. In discussing “Size as
19 a Predictor of Equity Premiums,” Kroll states:

20 The size effect is based on the empirical observation that companies of
21 smaller size are associated with greater risk and, therefore, have greater cost
22 of capital [sic]. The “size” of a company is one of the most important risk
23 elements to consider when developing cost of equity capital estimates for
24 use in valuing a business simply because size has been shown to be a
25 *predictor* of equity returns. In other words, there is a significant (negative)

relationship between size and historical equity returns - as size *decreases*, returns tend to *increase*, and vice versa.¹¹⁸

Furthermore, in “The Capital Asset Pricing Model: Theory and Evidence,” Fama and French note size is indeed a risk factor which must be reflected when estimating the cost of common equity. On page 38, they note:

the higher average returns on small stocks and high book-to-market stocks reflect unidentified state variables that produce undiversifiable risks (covariances) in returns that are not captured by the market return and are priced separately from market betas.¹¹⁹

Based on this evidence, Fama and French proposed their three-factor model which includes a size variable in recognition of the effect size has on the cost of common equity.

Also, it is a basic financial principle that the use of funds invested, and not the source of funds, is what gives rise to the risk of any investment.¹²⁰ Eugene Brigham, a well-known authority, states:

A number of researchers have observed that portfolios of small-firms (sic) have earned consistently higher average returns than those of large-firm stocks; this is called the “small-firm effect.” On the surface, it would seem to be advantageous to the small firms to provide average returns in a stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; **what the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms.**¹²¹

Consistent with the financial principle of risk and return discussed above, increased relative risk due to small size must be considered in the allowed rate of return on common equity. Therefore, the Company’s cost rate of common equity must appropriately reflect

¹¹⁸ Kroll, Cost of Capital Navigator: U.S. Cost of Capital Module, Size as a Predictor of Equity Returns, at 1 (footnote omitted) (emphasis in original).

¹¹⁹ Eugene F. Fama and Kenneth R. French, “The Capital Asset Pricing Model: Theory and Evidence,” *Journal of Economic Perspectives*, Volume 18, Number 3, Summer 2004, at 25-43.

¹²⁰ Brealey, Richard A. and Myers, Stewart C., Principles of Corporate Finance (McGraw-Hill Book Company, 1996), at 204-205, 229.

¹²¹ Brigham, Eugene F., Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623 (emphasis added).

1 the unique risks of EGQ, including its small size, which is justified and supported above
2 by evidence in the financial literature. As stated above, the Régie has also noted the stand-
3 alone principle in previous cost of capital proceedings.

4 **Q. DID THE RÉGIE RECOGNIZE EGQ'S HIGHER BUSINESS RISK IN THE**
5 **COMPANY'S LAST COST OF CAPITAL PROCEEDING?**

6 A. Yes, they did. As noted in the order:

7 The Régie considers that the higher business risk of Gazifère compares to
8 that of Énergir justifies an adjustment of 15 additional basis points to the
9 range established for Énergir. Consequently, the Régie sets the new range
10 for Gazifère's business risk adjustment at 40 to 60 basis points rather than
11 25 to 50 basis points, as estimated at the last review.¹²²

12 **Q. IS THERE A WAY TO QUANTIFY A RELATIVE RISK ADJUSTMENT DUE TO**
13 **EGQ'S BUSINESS RISK RELATIVE TO THE UTILITY PROXY GROUPS?**

14 A. Yes. As discussed above, EGQ has greater relative business risk than both Utility Proxy
15 Groups. In absence of other empirical methods, I compared EGQ's and the Utility Proxy
16 Groups as measured by an estimated market capitalization of common equity for EGQ's
17 operations.

¹²² Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 135 (Régie de l'Énergie Oct. 26, 2022) (translated from French).

Table 12: Size as Measured by Market Capitalization for EGQ and the Utility Proxy Groups

	Market Capitalization*	Times Greater than The Company
	(\$ Millions of USD) ¹²³	
EGQ	\$90.762	
Canadian Utility Proxy Group	\$16,829.457	185.4x
EGQ	\$78.275	
U.S. Gas Utility Proxy Group	\$5,903.589	75.4x
*From page 1 of Exhibit EGQ-4, Document 9.		

EGQ's estimated market capitalization was \$90.76 million as of July 17, 2025,¹²⁴ compared with the market capitalization of the median company in the Canadian Utility Proxy Group of \$16.83 billion as of July 17, 2025 (market capitalization values in USD). The average company in the Canadian Utility Proxy Group has a market capitalization 185.4 times the size of EGQ's estimated market capitalization.

Similarly, EGQ's estimated market capitalization was \$78.28 million as of July 17, 2025,¹²⁵ compared with the market capitalization of the median company in the U.S. Gas Utility Proxy Group of \$5.90 billion as of July 17, 2025. The average company in the U.S. Gas Utility Proxy Group has a market capitalization 75.4 times the size of EGQ's estimated market capitalization.

As a result, it is necessary to upwardly adjust the range of indicated common equity cost rates to reflect EGQ's greater risk due to its smaller relative size. The determination is based on the size premiums for portfolios of New York Stock Exchange, American Stock

¹²³ Note: values for EGQ and the Canadian Utility Proxy Group were converted to USD using the 2025 average USD/CAD FX Ratio as the data from Kroll is provided in USD.

¹²⁴ \$161,233,901 requested rate base * 40.00% requested common equity ratio * 194.8% (market-to-book ratio of the Canadian Utility Proxy Group) as demonstrated on page 2 of Exhibit EGQ-4, Document 9.

¹²⁵ \$161,233,901 requested rate base * 40.00% requested common equity ratio * 168.0% (market-to-book ratio of the Utility Proxy Group) Ratio as demonstrated on page 3 of Exhibit EGQ-4, Document 9.

Exchange, and NASDAQ listed companies ranked by deciles for the 1926 to 2025 period. The size premium for the Canadian Utility Proxy Group with a median market capitalization of \$16.829 billion falls in the third decile, while the Company's estimated market capitalization of \$88.379 million places it in the tenth decile. Similarly, the size premium for the U.S. Gas Utility Proxy Group with a median market capitalization of \$5.904 billion falls in the fifth decile, while the Company's estimated market capitalization of \$76.220 million places it in the tenth decile. The size premium spread between the third decile and the tenth decile is 3.98%, and the size premium spread between the fifth and tenth decile is 3.73%.

Ultimately, I chose to apply a business risk adjustment range of 40 to 60 basis points to EGQ, consistent with the Régie's range set in the Company's previous cost of capital proceeding.

b. Issuance Cost Adjustment

Q. WHAT ARE ISSUANCE (OR FLOTATION) COSTS?

A. Flotation costs are part of capital costs, which are properly reflected on the balance sheet under "paid in capital" rather than current expenses on the income statement. Flotation costs are incurred over time, just as investments in rate base or debt issuance costs. As a result, the great majority of flotation costs are incurred prior to the test year, but remain part of the cost structure during the test year and beyond.

Q. WHY IS IT IMPORTANT TO RECOGNIZE FLOTATION COSTS IN THE AUTHORIZED ROE?

A. It is important to recognize flotation costs in the authorized ROE because there is no other mechanism in the ratemaking paradigm through which such costs can be recovered. Because these costs are real and legitimate, recovery of these costs should be permitted.

Moreover, models such as the RPM, DCF, and CAPM assume no transaction costs. Brigham and Daves confirm that point, providing the method used to calculate the flotation adjustment.¹²⁶ Morin also confirms the need for a flotation cost adjustment, even when no new issue is imminent.¹²⁷

In EGQ's last cost of capital proceeding, the Régie acknowledged that "the costs of issuance and other capital market access costs were authorized in several previous decisions¹²⁸ relating to Énergir and Gazifère, such an adjustment being in accordance with the principle of isolation, compatible with the practice applied by several regulators and not disputed in this case."¹²⁹ Ultimately, the Régie authorized "a range for the provision for costs of issuance and other capital market access costs of 30 to 50 basis points."¹²⁹

Q. WHAT IS THE INDICATED COST OF COMMON EQUITY AFTER YOUR COMPANY-SPECIFIC ADJUSTMENTS?

A. Applying the 40 to 60-basis point business risk adjustment and 30 to 50-basis point flotation cost adjustment to the indicated range of ROEs attributable to the U.S. and Canadian Utility Proxy Groups of 9.06% to 11.06% results in a range of ROEs attributable to EGQ of 9.76% to 12.16%. From this indicated range, I recommend an ROE of 10.35%.

¹²⁶ Brigham, Eugene F. and Daves, Phillip R., Intermediate Financial Management, (Thomson-Southwestern, 2007), at 342.

¹²⁷ Morin, at 330-339.

¹²⁸ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 307 (Régie de l'Énergie Oct. 26, 2022) (translated from French) (footnote omitted).

¹²⁹ Énergir, s.e.c., Gazifère Inc. & Intragaz, s.e.c., Demande conjointe relative à la fixation de taux de rendement et de structures de capital, Docket No. R-4156-2021, Phase 2, Decision D-2022-119, ¶ 308 (Régie de l'Énergie Oct. 26, 2022) (translated from French).

1 **X. CONCLUSIONS REGARDING THE COST OF CAPITAL**

2 **Q. WHAT IS YOUR RECOMMENDED ROE FOR THE COMPANY?**

3 A. Given the discussion above and the results from the analyses, I recommend that an ROE
4 of 10.35% is appropriate for the Company.

5 **Q. IN YOUR OPINION, IS YOUR PROPOSED ROE OF 10.35% FAIR AND**
6 **REASONABLE TO EGQ AND ITS CUSTOMERS?**

7 A. Yes, it is.

8 **Q. IN YOUR OPINION, IS A DEEMED CAPITAL STRUCTURE FOR EGQ**
9 **CONSISTING OF 60.00% TOTAL DEBT AND 40.00% COMMON EQUITY FAIR**
10 **AND REASONABLE?**

11 A. Yes, it is.

Summary

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). Dylan joined ScottMadden in 2016 and is a leading expert witness with respect to cost of capital, capital structure, and valuation. He has served as a consultant for investor-owned and municipal utilities and authorities for 18 years. Dylan has testified as an expert witness on over 200 occasions regarding rate of return, cost of service, rate design, and valuation before more than 40 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

Areas of Specialization

- Expert Witness Testimony
- Rates and Regulation
- Return on Equity
- Valuation
- Utility Regulations
- Rate Case Planning, Management, and Support
- Utility Benchmarking

Recent Articles and Speeches

- "Decoupling, Risk Impacts, and the Cost of Capital." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal. March 2020
- "Decoupling Impact and Public Utility Conservation Investment." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal. 130 (2019), 311-319
- "Establishing Alternative Proxy Groups." Presentation before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum. April 4, 2019. New Orleans, LA
- "Past Is Prologue: Future Test Year." Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit. May 2, 2017. Savannah, GA
- "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley. The Electricity Journal. May 2013
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks." Presentation before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum. April 17-18, 2013. Indianapolis, IN

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the city
- Co-authored a valuation report on behalf of a large investor-owned utility in response to a new state regulation which allowed the appraised value of acquired assets into rate base

Sponsor	Date	Case/Applicant	Docket No.	Subject
Regulatory Commission of Alaska				
Goat Lake Hydro, Inc.	12/24	Goat Lake Hydro, Inc.	Docket No. TA7-521	Rate of Return
Alaska Power Company	08/23	Alaska Power Company	Docket No. TA 909-2 / U-23-054	Capital Structure
ENSTAR Natural Gas Company	08/22	ENSTAR Natural Gas Company	Docket No. TA334-4	Rate of Return
Cook Inlet Natural Gas Storage Alaska, LLC	07/21	Cook Inlet Natural Gas Storage Alaska, LLC	Docket No. TA45-733	Capital Structure
Alaska Power Company	09/20	Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc.	Tariff Nos. TA886-2; TA6-521; TA4-573	Capital Structure
Alaska Power Company	07/16	Alaska Power Company	Docket No. TA857-2	Rate of Return
Alberta Utilities Commission				
City of Red Deer	02/26	City of Red Deer Wastewater Utility	Proceeding ID 30345	Use of Cost of Capital Formula for Rate Setting
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	02/23	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	Proceeding ID. 27084	Determination of Cost-of-Capital Parameters
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	01/20	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	2021 Generic Cost of Capital, Proceeding ID. 24110	Rate of Return
Arizona Corporation Commission				
EPCOR Water Arizona, Inc.	06/26	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-26-0110	Rate of Return
Arizona Water Company	03/26	Arizona Water Company – Western & Eastern Groups	Docket No. W-01445A -26-0044	Rate of Return
EPCOR Water Arizona, Inc.	09/25	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-24-0130	Annual Formula Rate Adjustment Mechanism
EPCOR Water Arizona, Inc.	06/24	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-24-0130	Rate of Return
Arizona Water Company	05/24	Arizona Water Company – Northern Group	Docket No. W-01445A-24-0117	Rate of Return
Foothills Water & Sewer, LLC	10/23	Foothills Water & Sewer, LLC	Docket No. WS-21182A-23-0292	Rate of Return and Fair Value Rate Base
Arizona Water Company	12/22	Arizona Water Company – Eastern Group	Docket No. W-01445A-22-0286	Rate of Return
EPCOR Water Arizona, Inc.	08/22	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-22-0236	Rate of Return
EPCOR Water Arizona, Inc.	06/20	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-20-0177	Rate of Return
Arizona Water Company	12/19	Arizona Water Company – Western Group	Docket No. W-01445A-19-0278	Rate of Return
Arizona Water Company	08/18	Arizona Water Company – Northern Group	Docket No. W-01445A-18-0164	Rate of Return
Arkansas Public Service Commission				
Summit Utilities Arkansas, Inc.	01/24	Summit Utilities Arkansas, Inc.	Docket No. 23-079-U	Rate of Return
Southwestern Electric Power Co.	07/21	Southwestern Electric Power Co.	Docket No. 21-070-U	Return on Equity
CenterPoint Energy Resources Corp.	05/21	CenterPoint Arkansas Gas	Docket No. 21-004-U	Return on Equity
California Public Utilities Commission				

Sponsor	Date	Case/Applicant	Docket No.	Subject
Bear Valley Electric Service, Inc.	01/26	Bear Valley Electric Service, Inc.	Docket No. A-26-01-022	Return on Equity
Union Pacific Railroad Co – dba Keene Water System	03/25	Union Pacific Railroad Co – dba Keene Water System	Docket No. A25-03-016	Rate of Return
Southwest Gas Corporation	07/24	Southwest Gas Corporation	Docket No. A24-09-001	Return on Equity
San Gabriel Valley Water Company	05/23	San Gabriel Valley Water Company	Docket No. A23-05-001	Return on Equity
City of Edmonton, Canada				
EPCOR Water Services, Inc.	05/24	EPCOR Water Services, Inc.	Performance Based Regulation Application	Cost of Capital
Colorado Public Utilities Commission				
Atmos Energy Corporation	08/22	Atmos Energy Corporation	Docket No. 22AL-0348G	Rate of Return
Summit Utilities, Inc.	04/18	Colorado Natural Gas Company	Docket No. 18AL-0305G	Rate of Return
Atmos Energy Corporation	06/17	Atmos Energy Corporation	Docket No. 17AL-0429G	Rate of Return
Connecticut Public Utilities Regulatory Authority				
Connecticut Water Company	05/26	Connecticut Water Company	Docket No. 26-03-15	Rate of Return
Commission of the Canada Energy Regulator				
Trans-Northern Pipelines Inc.	11/22	Trans-Northern Pipelines Inc.	Docket No. C-22197	Cost of Capital
Delaware Public Service Commission				
Delmarva Power & Light Co.	12/25	Delmarva Power & Light Co.	Docket No. 25-1555	Return on Equity
Artesian Water Company, Inc.	04/25	Artesian Water Company, Inc.	Docket No. 25-0436	Rate of Return
Delmarva Power & Light Co.	09/24	Delmarva Power & Light Co.	Docket No. 24-1044 (Gas)	Return on Equity
Tidewater Utilities, Inc.	08/24	Tidewater Utilities, Inc.	Docket No. 24-0991	Rate of Return
Delmarva Power & Light Co.	07/24	Delmarva Power & Light Co.	Docket No. 24-0868	Alternative Forms of Rate Regulation
Artesian Water Company, Inc.	04/23	Artesian Water Company, Inc.	Docket No. 23-0601	Rate of Return
Delmarva Power & Light Co.	12/22	Delmarva Power & Light Co.	Docket No. 22-0897 (Electric)	Return on Equity
Delmarva Power & Light Co.	01/22	Delmarva Power & Light Co.	Docket No. 22-002 (Gas)	Return on Equity
Delmarva Power & Light Co.	11/20	Delmarva Power & Light Co.	Docket No. 20-0149 (Electric)	Return on Equity
Delmarva Power & Light Co.	10/20	Delmarva Power & Light Co.	Docket No. 20-0150 (Gas)	Return on Equity
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure
Public Service Commission of the District of Columbia				
Washington Gas Light Company	08/24	Washington Gas Light Company	Formal Case No. 1180	Rate of Return
Washington Gas Light Company	04/22	Washington Gas Light Company	Formal Case No. 1169	Rate of Return
Washington Gas Light Company	09/20	Washington Gas Light Company	Formal Case No. 1162	Rate of Return
Federal Energy Regulatory Commission				
LS Power Grid California, LLC	10/20	LS Power Grid California, LLC	Docket No. ER21-195-000	Rate of Return
Florida Public Service Commission				
Peoples Gas System, Inc.	03/25	Peoples Gas System, Inc.	Docket No. 20250029-GU	Return on Equity
Tampa Electric Company	04/24	Tampa Electric Company	Docket No. 20240025-EI	Return on Equity
Peoples Gas System, Inc.	04/23	Peoples Gas System, Inc.	Docket No. 20230023-GU	Rate of Return
Tampa Electric Company	04/21	Tampa Electric Company	Docket No. 20210034-EI	Return on Equity
Peoples Gas System, Inc.	09/20	Peoples Gas System, Inc.	Docket No. 20200051-GU	Rate of Return
Utilities, Inc. of Florida	06/20	Utilities, Inc. of Florida	Docket No. 20200139-WS	Rate of Return
Hawaii Public Utilities Commission				
Kaupulehu Waste Water Company	02/25	Kaupulehu Waste Water Company	Docket No. 2023-0456	Rate of Return
Launiupoko Irrigation Company, Inc.	12/20	Launiupoko Irrigation Company, Inc.	Docket No. 2020-0217 / Transferred to 2020-0089	Capital Structure

Sponsor	Date	Case/Applicant	Docket No.	Subject
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	08/19	Manele Water Resources, LLC	Docket No. 2019-0311	Cost of Service / Rate Design
Kaupulehu Water Company	02/18	Kaupulehu Water Company	Docket No. 2016-0363	Rate of Return
Aqua Engineers, LLC	05/17	Puhi Sewer & Water Company	Docket No. 2017-0118	Cost of Service / Rate Design
Hawaii Resources, Inc.	09/16	Laie Water Company	Docket No. 2016-0229	Cost of Service / Rate Design
Illinois Commerce Commission				
Ameren Illinois Company d/b/a Ameren Illinois	01/25	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 25-0084 (Gas)	Return on Equity
Aqua Illinois, Inc.	01/24	Aqua Illinois, Inc.	Docket No. 24-0044	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0082 (Electric)	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0067 (Gas)	Return on Equity
Utility Services of Illinois, Inc.	02/21	Utility Services of Illinois, Inc.	Docket No. 21-0198	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	07/20	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 20-0308	Return on Equity
Utility Services of Illinois, Inc.	11/17	Utility Services of Illinois, Inc.	Docket No. 17-1106	Cost of Service / Rate Design
Aqua Illinois, Inc.	04/17	Aqua Illinois, Inc.	Docket No. 17-0259	Rate of Return
Utility Services of Illinois, Inc.	04/15	Utility Services of Illinois, Inc.	Docket No. 14-0741	Rate of Return
Indiana Utility Regulatory Commission				
Aqua Indiana, Inc.	03/16	Aqua Indiana, Inc. Aboite Wastewater Division	Docket No. 44752	Rate of Return
Twin Lakes, Utilities, Inc.	08/13	Twin Lakes, Utilities, Inc.	Docket No. 44388	Rate of Return
Kansas Corporation Commission				
Atmos Energy Corporation	07/25	Atmos Energy Corporation	26-ATMG-026-RTS	Rate of Return
Atmos Energy Corporation	07/19	Atmos Energy Corporation	19-ATMG-525-RTS	Rate of Return
Kentucky Public Service Commission				
PPL Corporation	05/25	Kentucky Utilities Company / Louisville Gas & Electric Company	2025-00113 / 00114	Rate of Return
Atmos Energy Corporation	09/24	Atmos Energy Corporation	2024-00276	Rate of Return
Bluegrass Water Utility Operating Company	02/23	Bluegrass Water Utility Operating Company	2022-00432	Return on Equity
Atmos Energy Corporation	07/22	Atmos Energy Corporation	2022-00222	PRP Rider Rate
Water Service Corporation of KY	06/22	Water Service Corporation of KY	2022-00147	Rate of Return
Atmos Energy Corporation	07/21	Atmos Energy Corporation	2021-00304	PRP Rider Rate
Atmos Energy Corporation	06/21	Atmos Energy Corporation	2021-00214	Rate of Return
Duke Energy Kentucky, Inc.	06/21	Duke Energy Kentucky, Inc.	2021-00190	Return on Equity
Bluegrass Water Utility Operating Company	10/20	Bluegrass Water Utility Operating Company	2020-00290	Return on Equity
Louisiana Public Service Commission				
Utilities, Inc. of Louisiana	05/21	Utilities, Inc. of Louisiana	Docket No. U-36003	Rate of Return
Southwestern Electric Power Company	12/20	Southwestern Electric Power Company	Docket No. U-35441	Return on Equity
Atmos Energy Corporation	04/20	Atmos Energy Corporation	Docket No. U-35535	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
Louisiana Water Service, Inc.	06/13	Louisiana Water Service, Inc.	Docket No. U-32848	Rate of Return
Maine Public Utilities Commission				
Northern Utilities, Inc. d/b/a Unitil	06/26	Northern Utilities, Inc. d/b/a Unitil	Docket No. 2026-00049	Return on Equity
Northern Utilities, Inc. d/b/a Unitil	05/23	Northern Utilities, Inc. d/b/a Unitil	Docket No. 2023-00051	Return on Equity
Summit Natural Gas of Maine, Inc.	03/22	Summit Natural Gas of Maine, Inc.	Docket No. 2022-00025	Rate of Return
The Maine Water Company	09/21	The Maine Water Company	Docket No. 2021-00053	Rate of Return
Maryland Public Service Commission				
Washington Gas Light Company	05/23	Washington Gas Light Company	Case No. 9704	Rate of Return
FirstEnergy Service Company	03/23	Potomac Edison Company	Case No. 9695	Rate of Return
Washington Gas Light Company	08/20	Washington Gas Light Company	Case No. 9651	Rate of Return
FirstEnergy Corporation	08/18	Potomac Edison Company	Case No. 9490	Rate of Return
Massachusetts Department of Public Utilities				
Unitil Corporation	09/23	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 23-80	Rate of Return
Unitil Corporation	09/23	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 23-81	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 19-130	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 19-131	Rate of Return
Liberty Utilities	07/15	Liberty Utilities d/b/a New England Natural Gas Company	D.P.U. 15-75	Rate of Return
Michigan Public Service Commission				
SEMCO Energy Gas Company	02/26	SEMCO Energy Gas Company	Case No. U-22002	Return on Equity
Minnesota Public Utilities Commission				
Northern States Power Company	11/01	Northern States Power Company	Docket No. G002/GR-21-678	Return on Equity
Northern States Power Company	10/21	Northern States Power Company	Docket No. E002/GR-21-630	Return on Equity
Northern States Power Company	11/20	Northern States Power Company	Docket No. E002/GR-20-723	Return on Equity
Mississippi Public Service Commission				
Atmos Energy Corporation	06/25	Atmos Energy Corporation	Docket No. 2025-UN-59	Rate of Return
Great River Utility Operating Co.	07/22	Great River Utility Operating Co.	Docket No. 2022-UN-86	Rate of Return
Atmos Energy Corporation	03/19	Atmos Energy Corporation	Docket No. 2015-UN-049	Capital Structure
Atmos Energy Corporation	07/18	Atmos Energy Corporation	Docket No. 2015-UN-049	Capital Structure
Missouri Public Service Commission				
Confluence Rivers Utility Operating Company, Inc.	01/23	Confluence Rivers Utility Operating Company, Inc.	Case No. WR-2023-0006/SR-2023-0007	Rate of Return
Spire Missouri, Inc.	12/20	Spire Missouri, Inc.	Case No. GR-2021-0108	Return on Equity
Indian Hills Utility Operating Company, Inc.	10/17	Indian Hills Utility Operating Company, Inc.	Case No. SR-2017-0259	Rate of Return
Raccoon Creek Utility Operating Company, Inc.	09/16	Raccoon Creek Utility Operating Company, Inc.	Case No. SR-2016-0202	Rate of Return
Public Utilities Commission of Nevada				
Southwest Gas Corporation	09/23	Southwest Gas Corporation	Docket No. 23-09012	Return on Equity
Southwest Gas Corporation	09/21	Southwest Gas Corporation	Docket No. 21-09001	Return on Equity
Southwest Gas Corporation	08/20	Southwest Gas Corporation	Docket No. 20-02023	Return on Equity
New Hampshire Public Utilities Commission				
Northern Utilities, Inc.	04/26	Northern Utilities, Inc.	Docket No. DG-26-008	Return on Equity
Unitil Energy Systems, Inc.	05/25	Unitil Corporation	Docket No. DE 25-025	Return on Equity
Aquarion Water Company of New Hampshire, Inc.	12/20	Aquarion Water Company of New Hampshire, Inc.	Docket No. DW 20-184	Rate of Return
New Jersey Board of Public Utilities				

Sponsor	Date	Case/Applicant	Docket No.	Subject
New Jersey Natural Gas Company	06/26	New Jersey Natural Gas Company	Docket No. GR26060278	Rate of Return
Aqua New Jersey, Inc.	01/26	Aqua New Jersey, Inc.	Docket No. WR26010017	Rate of Return
Veolia Water New Jersey, Inc.	12/25	Veolia Water New Jersey, Inc.	Docket No. WR25120633	Rate of Return
Middlesex Water Company	06/25	Middlesex Water Company	Docket No. WR25060372	Rate of Return
Atlantic City Electric Company	11/24	Atlantic City Electric Company	Docket No. ER24110854	Rate of Return
New Jersey Natural Gas Company	01/24	New Jersey Natural Gas Company	Docket No. GR24010071	Rate of Return
Middlesex Water Company	05/23	Middlesex Water Company	Docket No. WR23050292	Rate of Return
FirstEnergy Service Company	03/23	Jersey Central Power & Light Co.	Docket No. ER23030144	Rate of Return
Atlantic City Electric Company	02/23	Atlantic City Electric Company	Docket No. ER23020091	Return on Equity
Middlesex Water Company	05/21	Middlesex Water Company	Docket No. WR21050813	Rate of Return
Atlantic City Electric Company	12/20	Atlantic City Electric Company	Docket No. ER20120746	Return on Equity
FirstEnergy Service Company	02/20	Jersey Central Power & Light Co.	Docket No. ER20020146	Rate of Return
Aqua New Jersey, Inc.	12/18	Aqua New Jersey, Inc.	Docket No. WR18121351	Rate of Return
Middlesex Water Company	10/17	Middlesex Water Company	Docket No. WR17101049	Rate of Return
Middlesex Water Company	03/15	Middlesex Water Company	Docket No. WR15030391	Rate of Return
The Atlantic City Sewerage Company	10/14	The Atlantic City Sewerage Company	Docket No. WR14101263	Cost of Service / Rate Design
Middlesex Water Company	11/13	Middlesex Water Company	Docket No. WR1311059	Capital Structure
New Mexico Public Regulation Commission				
New Mexico Gas Company	09/23	New Mexico Gas Company	Case No. 23-00255-UT	Return on Equity
Southwestern Public Service Co.	11/22	Southwestern Public Service Co.	Case No. 22-00286-UT	Return on Equity
Southwestern Public Service Co.	01/21	Southwestern Public Service Co.	Case No. 20-00238-UT	Return on Equity
North Carolina Utilities Commission				
Carolina Water Service, Inc.	07/25	Carolina Water Service, Inc.	Docket No. W-354, SUB 450	Rate of Return
Aqua North Carolina Inc.	04/25	Aqua North Carolina Inc.	Docket No. W-218, Sub 629	Rate of Return
Pluris Hampstead, LLC	09/24	Pluris Hampstead, LLC	Docket No. W-1305, Sub 38	Rate of Return
Old North State Water Co., Inc.	06/24	Old North State Water Co., Inc.	Docket No. W-1300, Sub 100	Rate of Return
Carolina Water Service, Inc.	07/22	Carolina Water Service, Inc.	Docket No. W-354 Sub 400	Rate of Return
Aqua North Carolina, Inc.	06/22	Aqua North Carolina, Inc.	Docket No. W-218 Sub 573	Rate of Return
Carolina Water Service, Inc.	07/21	Carolina Water Service, Inc.	Docket No. W-354 Sub 384	Rate of Return
Piedmont Natural Gas Co., Inc.	03/21	Piedmont Natural Gas Co., Inc.	Docket No. G-9, Sub 781	Return on Equity
Duke Energy Carolinas, LLC	07/20	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1214	Return on Equity
Duke Energy Progress, LLC	07/20	Duke Energy Progress, LLC	Docket No. E-2, Sub 1219	Return on Equity
Aqua North Carolina, Inc.	12/19	Aqua North Carolina, Inc.	Docket No. W-218 Sub 526	Rate of Return
Carolina Water Service, Inc.	06/19	Carolina Water Service, Inc.	Docket No. W-354 Sub 364	Rate of Return
Carolina Water Service, Inc.	09/18	Carolina Water Service, Inc.	Docket No. W-354 Sub 360	Rate of Return
Aqua North Carolina, Inc.	07/18	Aqua North Carolina, Inc.	Docket No. W-218 Sub 497	Rate of Return
North Dakota Public Service Commission				
Northern States Power Company	09/21	Northern States Power Company	Case No. PU-21-381	Rate of Return
Northern States Power Company	11/20	Northern States Power Company	Case No. PU-20-441	Rate of Return
Public Utilities Commission of Ohio				
Aqua Ohio, Inc.	07/25	Aqua Ohio, Inc.	Case No. 25-0594-WW-AIR	Rate of Return
FirstEnergy	06/24	Ohio Edison Co., Cleveland Electric Illuminating Co., Toledo Edison Co.	Case No. 24-0468-EL-AIR	Rate of Return
Aqua Ohio, Inc.	11/22	Aqua Ohio, Inc.	Case No. 22-1094-WW-AIR	Rate of Return
Duke Energy Ohio, Inc.	10/21	Duke Energy Ohio, Inc.	Case No. 21-887-EL-AIR	Return on Equity
Aqua Ohio, Inc.	07/21	Aqua Ohio, Inc.	Case No. 21-0595-WW-AIR	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
Aqua Ohio, Inc.	05/16	Aqua Ohio, Inc.	Case No. 16-0907-WW-AIR	Rate of Return
Oklahoma Corporation Commission				
Summit Utilities Oklahoma, Inc.	6/25	Summit Utilities Oklahoma, Inc.	Docket No. PUD25-000028	Return on Equity
Pennsylvania Public Utility Commission				
UGI Utilities, Inc.	03/26	UGI Utilities, Inc. – Electric Division	Docket No. R-2025-3059430	Return on Equity
UGI Utilities, Inc.	01/26	UGI Utilities, Inc. – Gas Division	Docket No. R-2025-3059523	Return on Equity
The York Water Company	05/25	The York Water Company	Docket Nos. R-2025-3053442 & R-2025-3053573	Rate of Return
Valley Energy, Inc.	04/25	C&T Enterprises	Docket No. R-2025-3054393	Rate of Return
Wellsboro Electric Company	04/25	C&T Enterprises	Docket No. R-2025-3054392	Rate of Return
Citizens' Electric Company of Lewisburg	04/25	C&T Enterprises	Docket No. R-2025-3054394	Rate of Return
FirstEnergy	04/24	Pennsylvania Electric Company	Docket No. R-2024-3047068	Rate of Return
Columbia Water Company	05/23	Columbia Water Company	Docket No. R-2023-3040258	Rate of Return
Borough of Ambler	06/22	Borough of Ambler – Bureau of Water	Docket No. R-2022-3031704	Rate of Return
Citizens' Electric Company of Lewisburg	05/22	C&T Enterprises	Docket No. R-2022-3032369	Rate of Return
Valley Energy Company	05/22	C&T Enterprises	Docket No. R-2022-3032300	Rate of Return
Community Utilities of Pennsylvania, Inc.	04/21	Community Utilities of Pennsylvania, Inc.	Docket No. R-2021-3025207	Rate of Return
Vicinity Energy Philadelphia, Inc.	04/21	Vicinity Energy Philadelphia, Inc.	Docket No. R-2021-3024060	Rate of Return
Delaware County Regional Water Control Authority	02/20	Delaware County Regional Water Control Authority	Docket No. A-2019-3015173	Valuation
Valley Energy, Inc.	07/19	C&T Enterprises	Docket No. R-2019-3008209	Rate of Return
Wellsboro Electric Company	07/19	C&T Enterprises	Docket No. R-2019-3008208	Rate of Return
Citizens' Electric Company of Lewisburg	07/19	C&T Enterprises	Docket No. R-2019-3008212	Rate of Return
Steelton Borough Authority	01/19	Steelton Borough Authority	Docket No. A-2019-3006880	Valuation
Mahoning Township, PA	08/18	Mahoning Township, PA	Docket No. A-2018-3003519	Valuation
SUEZ Water Pennsylvania Inc.	04/18	SUEZ Water Pennsylvania Inc.	Docket No. R-2018-000834	Rate of Return
Columbia Water Company	09/17	Columbia Water Company	Docket No. R-2017-2598203	Rate of Return
Veolia Energy Philadelphia, Inc.	06/17	Veolia Energy Philadelphia, Inc.	Docket No. R-2017-2593142	Rate of Return
Emporium Water Company	07/14	Emporium Water Company	Docket No. R-2014-2402324	Rate of Return
Columbia Water Company	07/13	Columbia Water Company	Docket No. R-2013-2360798	Rate of Return
Penn Estates Utilities, Inc.	12/11	Penn Estates, Utilities, Inc.	Docket No. R-2011-2255159	Capital Structure / Long-Term Debt Cost Rate
South Carolina Public Service Commission				
Blue Granite Water Co.	12/19	Blue Granite Water Company	Docket No. 2019-292-WS	Rate of Return
Carolina Water Service, Inc.	02/18	Carolina Water Service, Inc.	Docket No. 2017-292-WS	Rate of Return
Carolina Water Service, Inc.	06/15	Carolina Water Service, Inc.	Docket No. 2015-199-WS	Rate of Return
Carolina Water Service, Inc.	11/13	Carolina Water Service, Inc.	Docket No. 2013-275-WS	Rate of Return
United Utility Companies, Inc.	09/13	United Utility Companies, Inc.	Docket No. 2013-199-WS	Rate of Return
Utility Services of South Carolina, Inc.	09/13	Utility Services of South Carolina, Inc.	Docket No. 2013-201-WS	Rate of Return
Tega Cay Water Services, Inc.	11/12	Tega Cay Water Services, Inc.	Docket No. 2012-177-WS	Capital Structure
South Dakota Public Service Commission				

Sponsor	Date	Case/Applicant	Docket No.	Subject
Northern States Power Company	06/22	Northern States Power Company	Docket No. EL22-017	Rate of Return
Tennessee Public Utility Commission				
CSWR – Limestone Water Utility Operating Company	07/24	CSWR – Limestone Water Utility Operating Company	Docket No. 24-00044	Capital Structure, Cost of Debt, Return on Equity
Piedmont Natural Gas Company	07/20	Piedmont Natural Gas Company	Docket No. 20-00086	Return on Equity
Public Utility Commission of Texas				
Lone Star Transmission, LLC	02/26	Lone Star Transmission, LLC	Docket No. 59245	Rate of Return
Oncor Electric Delivery Co. LLC	06/25	Oncor Electric Delivery Co. LLC	Docket No. 58306	Return on Equity
Aqua Texas, Inc.	06/25	Aqua Texas, Inc.	Docket No. 58124	Rate of Return
CSWR TX Utility Operating Co, LLC	12/24	CSWR TX Utility Operating Co, LLC	Docket No. 57386	Rate of Return
BVRT Utility Holding Co., LLC	07/24	Texas Water Utilities, LP	Docket No. 56664	Rate of Return
Texas Water Utilities, LP	06/24	Texas Water Utilities, LP	Docket No. 56665	Rate of Return
Southwestern Public Service Co.	02/23	Southwestern Public Service Co.	Docket No. 54634	Return on Equity
CSWR – Texas Utility Operating Company, LLC	02/23	CSWR – Texas Utility Operating Company, LLC	Docket No. 54565	Rate of Return
Oncor Electric Delivery Co. LLC	05/22	Oncor Electric Delivery Co. LLC	Docket No. 53601	Return on Equity
Southwestern Public Service Co.	02/21	Southwestern Public Service Co.	Docket No. 51802	Return on Equity
Southwestern Electric Power Co.	10/20	Southwestern Electric Power Co.	Docket No. 51415	Rate of Return
Texas Railroad Commission				
SiEnergy Gas, LLC	05/26	SiEnergy Gas LLC, Pines Gas Development, Inc. & Pines Gas, Inc.	Case No. 00031317	Rate of Return
Atmos Energy Corporation – Mid-Texas Division	11/24	Atmos Energy Corporation – Mid-Texas Division	Docket No. OS-24-00019196	Return on Equity
Atmos Energy Corporation – West Texas Division	10/24	Atmos Energy Corporation – West Texas Division	Docket No. OS-24-00018879	Return on Equity
Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	05/23	Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	Docket No. OS-23-00013758	Return on Equity
Virginia State Corporation Commission				
Kentucky Utilities Company d/b/a Old Dominion Power Company	04/26	Kentucky Utilities Company d/b/a Old Dominion Power Company	PUR-2026-00051	Return on Equity
Washington Gas Light Company	07/25	Washington Gas Light Company	PUR-2025-00091	Return on Equity
Aqua Virginia, Inc.	07/25	Aqua Virginia, Inc.	PUR-2025-00071	Rate of Return
Aqua Virginia, Inc.	07/23	Aqua Virginia, Inc.	PUR-2023-00073	Rate of Return
Washington Gas Light Company	06/22	Washington Gas Light Company	PUR-2022-00054	Return on Equity
Virginia Natural Gas, Inc.	04/21	Virginia Natural Gas, Inc.	PUR-2020-00095	Return on Equity
Massanutten Public Service Corp.	12/20	Massanutten Public Service Corp.	PUE-2020-00039	Return on Equity
Aqua Virginia, Inc.	07/20	Aqua Virginia, Inc.	PUR-2020-00106	Rate of Return
WGL Holdings, Inc.	07/18	Washington Gas Light Company	PUR-2018-00080	Rate of Return
Atmos Energy Corporation	05/18	Atmos Energy Corporation	PUR-2018-00014	Rate of Return
Aqua Virginia, Inc.	07/17	Aqua Virginia, Inc.	PUR-2017-00082	Rate of Return
Massanutten Public Service Corp.	08/14	Massanutten Public Service Corp.	PUE-2014-00035	Rate of Return / Rate Design
Public Service Commission of West Virginia				
FirstEnergy Service Company	05/23	Monongahela Power Company and The Potomac Edison Company	Case No. 23-0460-E-42T	Return on Equity
FirstEnergy Service Company	12/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0857-E-CN (ELG)	Return on Equity

Sponsor	Date	Case/Applicant	Docket No.	Subject
FirstEnergy Service Company	11/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0813-E-P (Solar)	Return on Equity

Enbridge Gaz Quebec
Recommended Capital Structure and Cost Rates
for Ratemaking Purposes

<u>Type Of Capital</u>	<u>Ratios (1)</u>	<u>Cost Rate</u>		<u>Weighted Cost Rate</u>
Total Debt	60.00%	4.99%	(1)	3.00%
Common Equity	<u>40.00%</u>	10.35%	(2)	<u>4.14%</u>
Total	<u>100.00%</u>			<u>7.14%</u>

Notes:

- (1) Company provided.
- (2) From page 2 of this Document.

Enbridge Gaz Quebec
Brief Summary of Common Equity Cost Rate Ranges

<u>Line No.</u>	<u>Principal Methods</u>	<u>Results based on Canadian Utility Proxy Group</u>	<u>Results based on U.S. Gas Utility Proxy Group</u>
1.	Discounted Cash Flow Model (DCF) (1)	8.79%	10.86%
2.	Capital Asset Pricing Model (CAPM) (2)	8.79%	11.78%
3.	Risk Premium Model (RPM) (3)	<u>11.10%</u>	<u>12.72%</u>
4.	Indicated Common Equity Cost Rates before Adjustment for Unique Risk	9.06% - 11.06%	
5.	Business Risk Adjustment (4)	0.40%	- 0.60%
6.	Flotation Cost Adjustment (5)	<u>0.30%</u>	<u>- 0.50%</u>
7.	Indicated Common Equity Cost Rates after Adjustment	<u>9.76% - 12.16%</u>	
8.	Recommended Common Equity Cost Rate	<u>10.35%</u>	

Notes:

- (1) From page 1 of Document 4.
- (2) From page 1 of Document 5.
- (3) From page 1 of Document 6.
- (4) Adjustment to reflect the Utility's greater business risk relative to the Canadian and U.S. Gas Utility Proxy Groups as detailed in Mr. D'Ascendis' Direct Testimony.
- (5) Consistent with past Régie practice.

Enbridge Gaz Quebec
Capital Structures for Fiscal Year 2025
for the Canadian Utility Proxy Group

2025

Algonquin Power & Utilities Corporation

Total Debt	58.47 %
Preferred Stock	1.65
Common Equity	39.89
Total Capital	<u>100.00 %</u>

Canadian Utilities Ltd.

Total Debt	65.83 %
Preferred Stock	8.15
Common Equity	26.02
Total Capital	<u>100.00 %</u>

Emera Incorporated

Total Debt	61.59 %
Preferred Stock	4.08
Common Equity	34.33
Total Capital	<u>100.00 %</u>

Fortis, Inc.

Total Debt	59.01
Preferred Stock	2.79
Common Equity	38.19
Total Capital	<u>100.00 %</u>

Hydro One Ltd.

Total Debt	60.18 %
Preferred Stock	0.00
Common Equity	39.82
Total Capital	<u>100.00 %</u>

Average

Total Debt	61.02 %
Preferred Stock	3.33
Common Equity	35.65
Total Capital	<u>100.00 %</u>

Source of Information
Annual Forms 10-K

Enbridge Gaz Quebec
Capital Structures for Fiscal Year 2025
for the U.S. Gas Utility Proxy Group

2025

Atmos Energy Corporation

Total Debt	39.68 %
Preferred Stock	0.00
Common Equity	<u>60.32</u>
Total Capital	<u><u>100.00 %</u></u>

New Jersey Resources Corporation

Total Debt	60.11 %
Preferred Stock	0.00
Common Equity	<u>39.89</u>
Total Capital	<u><u>100.00 %</u></u>

NiSource Inc.

Total Debt	63.18 %
Preferred Stock	0.00
Common Equity	<u>36.82</u>
Total Capital	<u><u>100.00 %</u></u>

Northwest Natural Holding Company

Total Debt	63.85 %
Preferred Stock	0.00
Common Equity	<u>36.15</u>
Total Capital	<u><u>100.00 %</u></u>

ONE Gas, Inc.

Total Debt	47.56 %
Preferred Stock	0.00
Common Equity	<u>52.44</u>
Total Capital	<u><u>100.00 %</u></u>

Southwest Gas Holdings, Inc.

Total Debt	46.97 %
Preferred Stock	0.00
Common Equity	<u>53.03</u>
Total Capital	<u><u>100.00 %</u></u>

Spire Inc.

Total Debt	60.42 %
Preferred Stock	2.83
Common Equity	<u>36.75</u>
Total Capital	<u><u>100.00 %</u></u>

Average

Total Debt	54.54 %
Preferred Stock	0.40
Common Equity	<u>45.06</u>
Total Capital	<u><u>100.00 %</u></u>

Source of Information
Annual Forms 10-K

Enbridge Gaz Quebec
Summary of DCF Models for the
Proxy Groups

	Results based on Canadian Utility Proxy Group (1)	Results based on U.S. Gas Utility Proxy Group (2)
DCF Result	<u>8.79 %</u>	<u>10.86 %</u>

Notes:

- (1) From page 2 of this Document.
- (2) From page 3 of this Document.

Enbridge Gaz Quebec
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Canadian Utility Proxy Group

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Canadian Utility Proxy Group	Average Dividend Yield (1)	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	S&P Capital IQ Five Year Growth in EPS	Average Projected Five Year Growth in EPS (2)	Adjusted Dividend Yield (3)	Indicated Common Equity Cost Rate (4)
Algonquin Power & Utilities Corporation	3.14 %	NA %	NA %	5.13 %	5.13 %	3.22 %	8.35 %
Canadian Utilities Ltd.	3.66	NA	NA	6.40	6.40	3.78	10.18
Emera Incorporated	4.01	9.00	NA	5.15	7.08	4.15	11.23
Fortis, Inc.	3.26	5.00	NA	4.90	4.95	3.34	8.29
Hydro One Ltd.	2.44	5.50	NA	5.70	5.60	2.51	8.11
						Average	<u>9.23 %</u>
						Median	<u>8.35 %</u>
						Average of Mean and Median	<u>8.79 %</u>

NA= Not Available

Notes:

- (1) Indicated dividend at 07/17/2026 divided by the average closing price of the last 60 trading days ending 07/17/2026 for each company.
- (2) Average of columns 2 through 4 excluding negative growth rates.
- (3) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Algonquin Power & Utilities Corporation, $3.14\% \times (1 + (1/2 \times 5.13\%)) = 3.22\%$.
- (4) Column 5 + column 6.

Source of Information:

Value Line Investment Survey
www.zacks.com Downloaded on 07/17/2026
S&P Capital IQ

Enbridge Gaz Quebec
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
U.S. Gas Utility Proxy Group

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
U.S. Gas Utility Proxy Group	Average Dividend Yield (1)	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	S&P Capital IQ Five Year Growth in EPS	Average Projected Five Year Growth in EPS (2)	Adjusted Dividend Yield (3)	Indicated Common Equity Cost Rate (4)
Atmos Energy Corporation	2.27 %	8.50 %	6.80 %	8.02 %	7.77 %	2.36 %	10.13 %
New Jersey Resources Corporation	3.37	6.00	NA	7.33	6.67	3.48	10.15
NiSource Inc.	2.55	9.00	6.60	10.04	8.55	2.66	11.21
Northwest Natural Holding Company	3.92	6.50	NA	5.87	6.18	4.04	10.22
ONE Gas, Inc.	3.36	7.00	6.20	5.94	6.38	3.47	9.85
Southwest Gas Holdings, Inc.	2.88	NA	9.90	13.17	11.54	3.05	14.59
Spire Inc.	3.96	8.50	11.20	10.86	10.19	4.16	14.35
						Average	<u>11.50 %</u>
						Median	<u>10.22 %</u>
					Average of Mean and Median		<u>10.86 %</u>

NA= Not Available

Notes:

- (1) Indicated dividend at 07/17/2026 divided by the average closing price of the last 60 trading days ending 07/17/2026 for each company.
- (2) Average of columns 2 through 4 excluding negative growth rates.
- (3) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Atmos Energy Corporation, $2.27\% \times (1 + (1/2 \times 7.77\%)) = 2.36\%$.
- (4) Column 5 + column 6.

Source of Information:

Value Line Investment Survey
www.zacks.com Downloaded on 07/17/2026
S&P Capital IQ

Enbridge Gaz Quebec
Summary of CAPM Models for the
Proxy Groups

	<u>Results based on Canadian Utility Proxy Group (1)</u>	<u>Results based on U.S. Utility Proxy Group (2)</u>
CAPM Result	8.28 %	11.48 %
ECAPM Result	<u>9.30 %</u>	<u>12.08 %</u>
CAPM/ECAPM Average Result	<u><u>8.79 %</u></u>	<u><u>11.78 %</u></u>

Notes:

(1) From page 2 of this Document.

(2) From page 3 of this Document.

Enbridge Gaz Quebec
Indicated Common Equity Cost Rate Through Use
of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

Canadian Utility Proxy Group	[1] Value Line Adjusted Beta	[2] Market Risk Premium (1)	[3] Risk-Free Rate (2)	[4] Traditional CAPM Cost Rate	[5] ECAPM Cost Rate	[6] Indicated Common Equity Cost Rate (3)
Algonquin Power & Utilities Corporation	0.72	8.54 %	3.84 %	10.02 %	10.61 %	10.31 %
Canadian Utilities Ltd.	0.50	8.54	3.84	8.12	9.19	8.66
Emera Incorporated	0.50	8.54	3.84	8.12	9.18	8.65
Fortis, Inc.	0.49	8.54	3.84	8.00	9.09	8.54
Hydro One Ltd.	0.48	8.54	3.84	7.93	9.05	8.49
Mean	<u>0.54</u>			<u>8.44 %</u>	<u>9.42 %</u>	<u>8.93 %</u>
Median	<u>0.50</u>			<u>8.12 %</u>	<u>9.18 %</u>	<u>8.65 %</u>
Average of Mean and Median	<u>0.52</u>			<u>8.28 %</u>	<u>9.30 %</u>	<u>8.79 %</u>

Notes on page 4 of this Document.

Enbridge Gaz. Quebec
Indicated Common Equity Cost Rate Through Use
of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

	[1]	[2]	[3]	[4]	[5]	[6]
U.S. Gas Utility Proxy Group	Value Line Adjusted Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Atmos Energy Corporation	0.73	9.03 %	4.83 %	11.40 %	12.02 %	11.71 %
New Jersey Resources Corporation	0.73	9.03	4.83	11.43	12.04	11.73
NiSource Inc.	0.80	9.03	4.83	12.03	12.49	12.26
Northwest Natural Holding Company	0.71	9.03	4.83	11.25	11.90	11.58
ONE Gas, Inc.	0.70	9.03	4.83	11.16	11.84	11.50
Southwest Gas Holdings, Inc.	0.77	9.03	4.83	11.74	12.27	12.01
Spire Inc.	0.76	9.03	4.83	11.70	12.24	11.97
Mean	<u>0.74</u>			<u>11.53 %</u>	<u>12.11 %</u>	<u>11.82 %</u>
Median	<u>0.73</u>			<u>11.43 %</u>	<u>12.04 %</u>	<u>11.73 %</u>
Average of Mean and Median	<u>0.74</u>			<u>11.48 %</u>	<u>12.08 %</u>	<u>11.78 %</u>

Notes on page 4 of this Document.

Enbridge Gaz Quebec
Notes to Accompany the Application of the CAPM and ECAPM

Notes:

	<u>Canada</u>	<u>U.S.</u>
(1) The market risk premium (MRP) is derived by using three different measures as illustrated below:		
Measure 1: Long-Term Arithmetic Mean MRP (1926-2025)		
Arithmetic Mean Monthly Returns for Large Stocks 1926-2025:	10.88 %	12.35 %
Arithmetic Mean Income Returns on Long-Term Government Bonds:	<u>5.71</u>	<u>4.99</u>
MRP based on Historical Data:	<u>5.17 %</u>	<u>7.37 %</u>
Measure 2: Application of a Regression Analysis to Historical Data (1926-2025)	<u>7.09 %</u>	<u>7.72 %</u>
Measure 3: Bloomberg, Value Line, and S&P Global Market Intelligence Projected MRP		
Total return on the Market based on the S&P/TSX (Canada) and S&P 500 (U.S.):	17.19 %	16.83 %
Projected Risk-Free Rate (see note 2):	<u>3.84</u>	<u>4.83</u>
	<u>13.35 %</u>	<u>12.00 %</u>
Average MRP:	<u>8.54 %</u>	<u>9.03 %</u>

(3) For reasons explained in Mr. D'Ascendis' Direct Testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Government of Canada Bonds and U.S. Treasury Bonds. The projection of the risk-free rate is illustrated below:

									<u>Canada</u>	<u>U.S.</u>
	<u>BMO</u>	<u>CIBC</u>	<u>National Bank</u>	<u>RBC</u>	<u>Scotia</u>	<u>TD</u>	<u>Average</u>			
2026Q3	3.95	3.85	3.95	3.85	3.85	3.70	3.86 %	Third Quarter 2026		5.00 %
2026Q4	3.90	3.80	4.00	3.85	3.90	3.60	3.84	Fourth Quarter 2026		4.90
2027Q1	3.90	3.90	4.00	3.80	4.00	3.55	3.86	First Quarter 2027		4.90
2027Q2	3.85	3.85	3.95	3.80	4.00	3.55	3.83	Second Quarter 2027		4.90
2027Q3	3.85	3.90	3.90	3.75	4.00	3.55	3.83	Third Quarter 2027		4.80
2027Q4	3.90	4.00	3.90	3.75	4.00	3.55	3.85	Fourth Quarter 2027		4.80
							<u>3.84 %</u>	2028-2032		4.70
								2033-2037		4.60
										<u>4.83 %</u>

(4) Average of Column 4 and Column 5.

Sources of Information:

BMO Rates Scenario, July 2026. Q3 and Q4 2026 uses the average of each month's forecast.
CIBC Capital Markets Economics and FICC Strategy Forecast Update.
National Bank of Canada Monthly Economic Monitor, June 2026.
RBC Monthly Forecast Update, July 2026.
Scotiabank Forecast Tables, July 2026.
TD Economics Latest Forecast Tables July 2026.
Blue Chip Financial Forecasts June 1, 2026 and July 1, 2026.
Kroll; Bloomberg Professional Services
Bloomberg Professional Services, Value Line, and S&P Global Market Intelligence Projected MRP.

Enbridge Gaz Quebec
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

<u>Line No.</u>		<u>Canadian Utility Proxy Group</u>	<u>U.S. Gas Utility Proxy Group</u>
1.	Prospective Yield on U.S. Aaa Rated Corporate Bonds (1)	5.46 %	5.46 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A/A2 Rated Public Utility Bonds	<u>(0.60) (2)</u>	<u>0.33 (3)</u>
3.	Adjusted Prospective Yield on A/A2 Rated Public Utility Bonds	4.86 %	5.79 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	<u>0.08 (4)</u>	<u>0.06 (5)</u>
5.	Adjusted Prospective Bond Yield	4.94 %	5.85 %
6.	Equity Risk Premium (6)	<u>6.16</u>	<u>6.87</u>
7.	Risk Premium Derived Common Equity Cost Rate	<u><u>11.10 %</u></u>	<u><u>12.72 %</u></u>

- Notes:
- (1) Consensus forecast of Moody's Aaa Rated U.S. Corporate bonds from Blue Chip Financial Forecasts.
 - (2) The average yield spread of A rated Canadian Public Utility Bonds over Aaa rated U.S. corporate bonds of -0.60% from page 2 of this Document.
 - (3) The average yield spread of A2 rated U.S. Public Utility Bonds over Aaa rated U.S. corporate bonds of 0.33% from page 2 of this Document.
 - (4) Adjustment to reflect the A3 Moody's LT issuer rating of the Canadian Utility Proxy Group as shown on page 3 of this Document. The upward adjustment is derived by taking 1/3 of the spread between Canadian A and BBB Public Utility Bonds of 0.23% from page 2 of this Document.
 - (5) Adjustment to reflect the A3 Moody's LT issuer rating of the US Natural Gas Utility Proxy Group as shown on page 4 of this Document. The upward adjustment is derived by taking 1/3 of the spread between A2 and Baa2 Public Utility Bonds of 0.17% from page 2 of this Document.
 - (6) From page 6 of this Document.

Enbridge Gaz Quebec
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

<u>Selected Bond Yields</u>							
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
	BBB Rated Canadian Public Utility Bond	A Rated Canadian Public Utility Bond	A Rated Canadian Corporate Bond	AA Rated Canadian Corporate Bond	Baa2 Rated U.S. Public Utility Bond	A2 Rated U.S. Public Utility Bond	Aaa Rated U.S. Corporate Bond
Jun-2026	5.08 %	4.86 %	4.88 %	4.83 %	5.96 %	5.79 %	5.52 %
May-2026	5.15	4.92	4.94	4.90	6.06	5.88	5.56
Apr-2026	5.15	4.91	4.92	4.89	5.99	5.81	5.42
Average	5.13 %	4.90 %	4.92 %	4.87 %	6.00 %	5.83 %	5.50 %

Selected Bond Spreads

Canadian A Rated Public Utility Bonds Over U.S. Aaa Rated Corporate Bonds:
(0.60) % (1)

U.S. A2 Rated Public Utility Bonds Over U.S. Aaa Rated Corporate Bonds:
0.33 % (2)

Canadian BBB Rated Public Utility Bonds Over Canadian A Rated Public Utility Bonds:
0.23 % (3)

U.S. Baa2 Rated Public Utility Bonds Over U.S. A2 Rated Public Utility Bonds:
0.17 % (4)

Canadian A Rated Corporate Bonds Over U.S. Aaa Rated Corporate Bonds:
(0.58) % (5)

Canadian AA Rated Corporate Bonds Over U.S. Aaa Rated Corporate Bonds:
(0.63) % (6)

Notes:

- (1) Column [2] - Column [7].
- (2) Column [6] - Column [7].
- (3) Column [1] - Column [2].
- (4) Column [5] - Column [6].
- (5) Column [3] - Column [7].
- (6) Column [4] - Column [7].

Source of Information:
Bloomberg Professional Service

Enbridge Gaz Quebec
Comparison of Long-Term Issuer Ratings for
Canadian Utility Proxy Group

	Moody's		Standard & Poor's	
	Long-Term Issuer Rating		Long-Term Issuer Rating	
	July 2026		July 2026	
<u>Canadian Utility Proxy Group</u>	Long-Term Issuer Rating (1)	Numerical Weighting (2)	Long-Term Issuer Rating (1)	Numerical Weighting (2)
Algonquin Power & Utilities Corporation	NR	--	BBB	9.0
Canadian Utilities Ltd.	NR	--	A-	7.0
Emera Incorporated	A3	7.0	BBB	9.0
Fortis, Inc.	A3	7.0	A-	7.0
Hydro One Ltd.	A3	7.0	A	6.0
Average	<u>A3</u>	<u>7.0</u>	<u>BBB+</u>	<u>7.6</u>

Notes:

- (1) Ratings are that of the average of each company's regulated operating subsidiaries.
(2) From page 5 of this Document.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Enbridge Gaz Quebec
Comparison of Long-Term Issuer Ratings for
U.S. Gas Utility Proxy Group

	Moody's		Standard & Poor's	
	Long-Term Issuer Rating		Long-Term Issuer Rating	
	July 2026		July 2026	
<u>U.S. Gas Utility Proxy Group</u>	Long-Term Issuer Rating (1)	Numerical Weighting (2)	Long-Term Issuer Rating (1)	Numerical Weighting (2)
Atmos Energy Corporation	A2	6.0	A-	7.0
New Jersey Resources Corporation	A1	5.0	NR	- -
NiSource Inc.	Baa1	8.0	BBB+	8.0
Northwest Natural Holding Company	Baa1	8.0	A/A-	6.5
ONE Gas, Inc.	A3	7.0	A-	7.0
Southwest Gas Holdings, Inc.	Baa1	8.0	BBB+	8.0
Spire Inc.	A2	6.0	BBB+	8.0
Average	<u>A3</u>	<u>6.9</u>	<u>A-</u>	<u>7.4</u>

Notes:

- (1) Ratings are that of the average of each company's regulated operating subsidiaries.
(2) From page 5 of this Document.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond Rating
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-
B1	14	B+
B2	15	B
B3	16	B-

Enbridge Gaz Quebec
Judgment of Equity Risk Premium for the
Proxy Groups

Line No.		Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
1.	Calculated equity risk premium based on the total market using the beta approach (1)	6.43 %	8.41 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A/A2 rated bonds (2)	6.90	7.53
3.	Predicted Equity Risk Premium Based on Regression Analysis of Past Fully-Litigated Gas and Electric Cases using Canadian Prospective A Rated Utility Bond (3)	5.14	NA
4.	Predicted Equity Risk Premium Based on Regression Analysis of Past Fully Litigated Water Cases using U.S. Prospective A2 Rated Utility Bond (4)	NA	4.68
5.	Average equity risk premium	6.16 %	6.87 %

Notes: (1) From page 7 of this Document.
(2) From page 8 of this Document.
(3) From page 9 of this Document.
(4) From page 10 of this Document.

Enbridge Gaz Quebec
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the Proxy Groups

Line No.	Equity Risk Premium Measure	Canadian Utility Proxy Group	U.S. Gas Utility Proxy Group
1.	Projected Total Return - TSX and S&P 500 (1)	17.19 %	16.83 %
2.	Consensus Forecast Aa/Aaa Corporate Bonds	<u>4.83 % (2)</u>	<u>5.46 % (3)</u>
3.	Equity Risk Premium Based on Bloomberg TSX and S&P 500 Companies	12.36 %	11.37 %
4.	Adjusted Beta (4)	<u>0.52</u>	<u>0.74</u>
5.	Forecasted Equity Risk Premium (5)	<u><u>6.43 %</u></u>	<u><u>8.41 %</u></u>

Notes:

- (1) Source: Bloomberg Professional Service, Value Line, and S&P Global Market Intelligence.
- (2) Calculated as the Prospective Yield on U.S. Aaa Rated Corporate Bonds from page 1 of this Schedule less the spread between U.S. Aaa Rated Corporate Bonds and Canadian Aa Rated Corporate Bonds from Page 2 of this Document.
- (3) From line 1 of page 1 of this Document.
- (4) Average of mean and median beta from Document 5, pages 2 and 3, respectively.
- (5) Line 3 x Line 4.

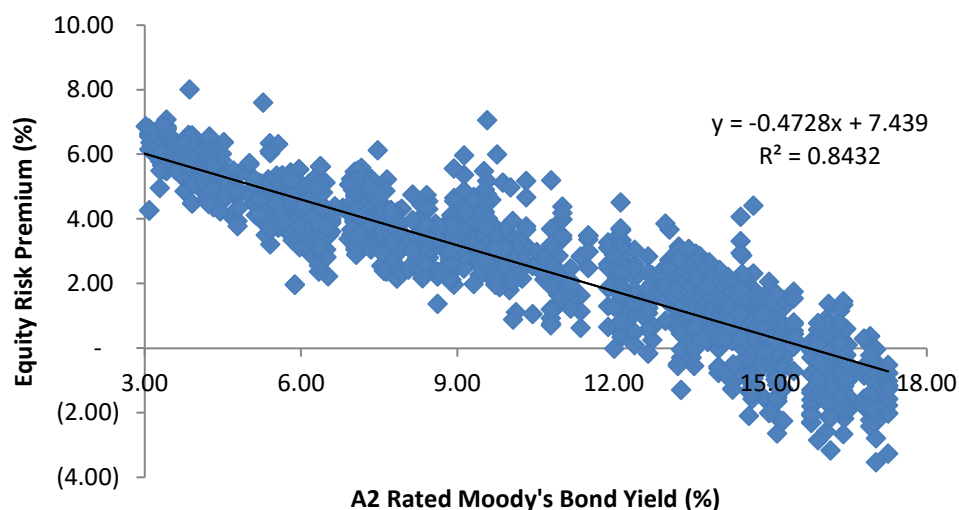
Enbridge Gaz Quebec
Derivation of Mean Equity Risk Premium Based Studies
Using Holding Period Returns and
Projected Market Appreciation of the S&P Utility Index

<u>Line No.</u>		<u>Results based on Canadian Inputs</u>	<u>Results based on U.S. Inputs</u>
1.	Projected Total Return on the S&P/TSX Capped Utilities Index and S&P Utilities Index (1)	11.76 %	13.32 %
2.	Expected A/A2 rated public utility bond yield (2)	<u>4.86</u>	<u>5.79</u>
3.	Forecasted Equity Risk Premium	<u><u>6.90</u></u> %	<u><u>7.53</u></u> %

Notes:

- (1) Source: Bloomberg Professional Service, Value Line, and S&P Global Market Intelligence.
- (2) Calculated on line 3 of page 1 of this Document.

Enbridge Gaz Quebec
Prediction of Equity Risk Premiums Relative to
Moody's A2 Rated Utility Bond Yields - Electric and Gas Utilities



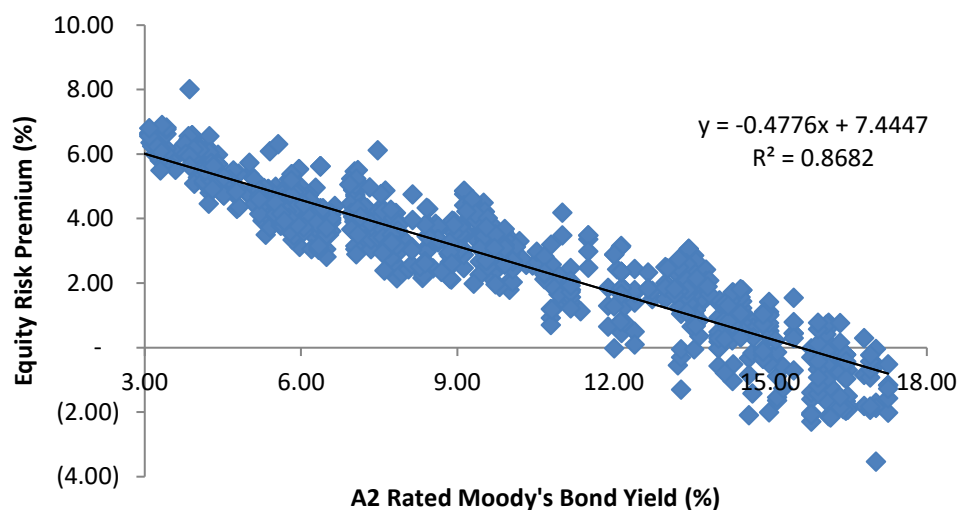
Constant	Slope	Canadian Prospective A Rated Utility Bond (1)	Canadian Prospective Equity Risk Premium
7.4390 %	-0.4728 %	4.86 %	5.14 %

Notes:

(1) From line 3 of page 1 of this Document.

Source of Information: Regulatory Research Associates.

Enbridge Gaz Quebec
Prediction of Equity Risk Premiums Relative to
Moody's A2 Rated Utility Bond Yields - Gas Utilities



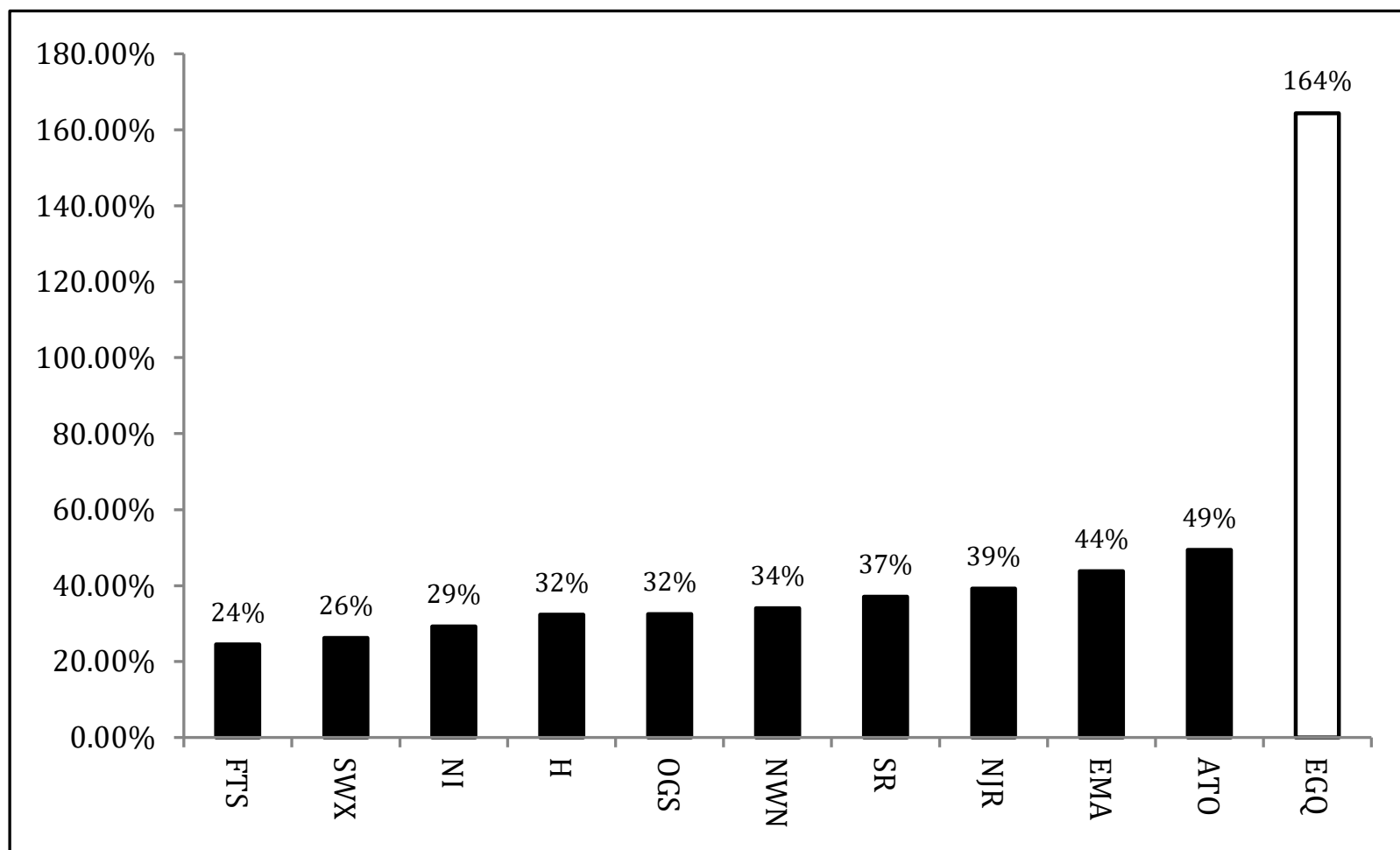
		U.S. Prospective A2 Rated Utility Bond (1)	Canadian Prospective Equity Risk Premium
<u>Constant</u>	<u>Slope</u>		
7.4447 %	-0.4776 %	5.79 %	4.68 %

Notes:

(1) From line 3 of page 1 of this Document.

Source of Information: Regulatory Research Associates.

Enbridge Gaz Quebec
Comparison of Projected Capital Expenditures Relative to Net Plant



Sources of Information: *Value Line Investment Survey*

Enbridge Gaz Quebec
Summary of Decoupling Mechanisms
Canadian Utility Proxy Group

Company	Utility Type	Parent	State/Province	Decoupling [1]
Algonquin Power & Utilities				
Liberty Utilities Co.				
Liberty Utilities (CalPeco Electric) LLC	Electric	AQN.TO	California	✓
Liberty Utilities (Granite State Electric) Corp.	Electric	AQN.TO	New Hampshire	✓
Liberty Utilities (EnergyNorth Natural Gas) Corp.	Gas	AQN.TO	New Hampshire	✓
Liberty Utilities (Midstates Natural Gas) Corp.	Gas	AQN.TO	Illinois	✓
Liberty Utilities (Midstates Natural Gas) Corp.	Gas	AQN.TO	Iowa	
Liberty Utilities (Midstates Natural Gas) Corp.	Gas	AQN.TO	Missouri	✓
Liberty Utilities (Peach State Natural Gas) Corp.	Gas	AQN.TO	Georgia	✓
Liberty Utilities (New England Natural Gas Company) Corp.	Gas	AQN.TO	Massachusetts	✓
Liberty Utilities (St. Lawrence Gas) Corp.	Gas	AQN.TO	New York	✓
The Empire District Electric Company	Electric	AQN.TO	Arkansas	✓
The Empire District Electric Company	Electric	AQN.TO	Kansas	
The Empire District Electric Company	Electric	AQN.TO	Missouri	✓
The Empire District Electric Company	Electric	AQN.TO	Oklahoma	
The Empire District Gas Company ("EDG")	Gas	AQN.TO	Missouri	✓
Liberty Utilities (Canada) LP ("Liberty Utilities Canada")		AQN.TO		
Liberty Utilities (Gas New Brunswick) LP	Gas	AQN.TO	New Brunswick	✓
Canadian Utilities Limited				
ATCO Electric Ltd.	Electric	CU.TO	Alberta	
ATCO Electric Ltd.	Electric	CU.TO	Yukon	
Northland Utilities	Electric	CU.TO	NWT	
ATCO Gas and Pipelines Ltd. (Alberta)	Gas	CU.TO	Alberta	✓
Emera Inc.				
Tampa Electric Company	Electric	EMA.TO	Florida	
Nova Scotia Power	Electric	EMA.TO	Nova Scotia	
New Mexico Gas Company	Gas	EMA.TO	New Mexico	✓
People's Gas System	Gas	EMA.TO	Florida	
Fortis Inc.				
ITC	Electric	FTS.TO	FERC	
UNS Energy (Holding Company)		FTS.TO		
Tucson Electric Power	Electric	FTS.TO	Arizona	✓
UNS Electric	Electric	FTS.TO	Arizona	✓
UNS Gas	Gas	FTS.TO	Arizona	✓
Central Hudson	Elec./Gas	FTS.TO	New York	✓
FortisBC	Elec./Gas	FTS.TO	British Columbia	✓
FortisAlberta	Electric	FTS.TO	Alberta	
Eastern Canadian		FTS.TO		
Newfoundland Power	Electric	FTS.TO	NL	✓
Maritime Electric	Electric	FTS.TO	PEI	✓
FortisOntario				
Canadian Niagra Power Inc.	Electric	FTS.TO	Ontario	✓
Hydro One Limited				
Hydro One Inc				
Hydro One Remote Communities	Electric	H.TO	Ontario	
Hydro One Networks	Electric	H.TO	Ontario	

Notes:

Note: A mechanism may cover one or more cost categories; therefore, designations may not indicate separate mechanisms

[1] Full or partial decoupling (such as Fixed Variable rate design, weather normalization clauses, and recovery of lost revenues as a result of Energy Efficiency programs). All full or partial decoupling mechanisms include weather normalization adjustments.

Sources: Company SEC Form 10-Ks; Operating company tariffs; Regulatory Research Associates.

Enbridge Gaz Quebec
Summary of Decoupling Mechanisms
U.S. Gas Utility Proxy Group

Company	Utility Type	Parent	State	Decoupling [1]
Atmos Energy Corporation				
Atmos Colorado	Gas	ATO	Colorado	
Atmos Kansas	Gas	ATO	Kansas	✓
Atmos Kentucky	Gas	ATO	Kentucky	✓
Atmos Louisiana	Gas	ATO	Louisiana	✓
Atmos Mississippi	Gas	ATO	Mississippi	✓
Atmos Tennessee	Gas	ATO	Tennessee	✓
Atmos Texas	Gas	ATO	Texas	✓
Atmos Virginia	Gas	ATO	Virginia	✓
New Jersey Resources Corporation				
New Jersey Natural Gas Company	Gas	NJR	New Jersey	✓
NiSource Inc.				
Northern Indiana Public Service	Gas	NI	Indiana	✓
Columbia Gas of Kentucky, Inc.	Gas	NI	Kentucky	✓
Columbia Gas of Maryland, Inc.	Gas	NI	Maryland	✓
Columbia Gas of Ohio, Inc.	Gas	NI	Ohio	✓
Columbia Gas of Pennsylvania, Inc.	Gas	NI	Pennsylvania	✓
Columbia Gas of Virginia, Inc.	Gas	NI	Virginia	✓
Northwest Natural Holding Company				
Northwest Natural Gas Company	Gas	NWN	Oregon	✓
Northwest Natural Gas Company	Gas	NWN	Washington	
ONE Gas, Inc.				
Kansas Gas Service Company, Inc.	Gas	OGS	Kansas	✓
Oklahoma Natural Gas Company	Gas	OGS	Oklahoma	✓
Texas Gas Service Company, Inc.	Gas	OGS	Texas	✓
Southwest Gas Holdings, Inc.				
Southwest Gas Corporation	Gas	SWX	Arizona	✓
Southwest Gas Corporation	Gas	SWX	California	✓
Southwest Gas Corporation	Gas	SWX	Nevada	✓
Spire Inc.				
Spire Alabama Inc.	Gas	SR	Alabama	✓
Spire Mississippi Inc.	Gas	SR	Mississippi	✓
Spire Missouri Inc.	Gas	SR	Missouri	✓
Spire Tennessee Inc.	Gas	SR	Tennessee	✓

Notes:

Note: A mechanism may cover one or more cost categories; therefore, designations may not indicate separate
[1] Full or partial decoupling (such as Fixed Variable rate design, weather normalization clauses, and recovery of lost revenues as a result of Energy Efficiency programs). All full or partial decoupling mechanisms include weather normalization adjustments.

Sources: Company SEC Form 10-Ks; Operating company tariffs; Regulatory Research Associates.

Enbridge Gaz Quebec
Derivation of Investment Risk Adjustment Based upon
Kroll Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

	[1]	[2]	[3]	[4]
	Market Capitalization on July 17, 2026 (1) (millions)	Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	Applicable Size Premium (3)	Spread from Applicable Size Premium (4)
Enbridge Gaz Quebec	\$ 90.762	10	4.37%	
Canadian Utility Proxy Group	\$ 16,829,457	185.4 x	0.40%	3.98%
Enbridge Gaz Quebec	\$ 78.275	10	4.37%	
U.S. Gas Utility Proxy Group	\$ 5,903,589	75.4 x	0.65%	3.73%
	[A]	[B]	[C]	[D]
	Decile	Market Capitalization of Smallest Company (millions)	Market Capitalization of Largest Company (millions)	Size Premium (Return in Excess of CAPM)*
	Largest	1 \$ 53,677,496	\$ 4,542,663,305	0.01%
	2	20,547,627	53,647,975	0.27%
	3	10,784,341	20,493,885	0.40%
	4	6,449,090	10,707,825	0.37%
	5	4,237,161	6,442,608	0.65%
	6	2,522,120	4,232,272	0.88%
	7	1,472,350	2,518,431	1.05%
	8	782,513	1,472,329	0.77%
	9	351,125	782,173	1.68%
	Smallest	10 3,747	351,051	4.37%
		*From 2026 Kroll Cost of Capital Navigator		

Notes:

- (1) From pages 2 through 3 of this Document.
- (2) Gleaned from Columns [B] and [C] on the bottom of this page. The appropriate decile (Column [A]) corresponds to the market capitalization of the proxy group, which is found in Column [1].
- (3) Corresponding risk premium to the decile is provided in Column [D] on the bottom of this page.
- (4) Line No. 1 Column [3] - Line No. 2 Column [3]. For example, the 3.73% in Column [4], Line No. 2 is derived as follows 3.73% = 4.37% - 0.65%.

Enbridge Gaz Quebec
Market Capitalization of Enbridge Gaz Quebec and the
Canadian Utility Proxy Group and U.S. Gas Utility Proxy Group

Company	[1] Common Stock Shares Outstanding at Fiscal Year End 2025 (1) (millions)	[2] Book Value per Share at Fiscal Year End 2025 (2)	[3] Total Common Equity at Test-Year End 2025 (1) (millions)	[4] Closing Stock Market Price on July 17, 2026	[5] Market-to-Book Ratio on July 17, 2026 (3)	[6] Market Capitalization on July 17, 2026 (4) (millions)
Enbridge Gaz Quebec	NA	NA	46,592	NA		
Based upon Canadian Utility Proxy Group					194.8	\$ 90,762
Canadian Utility Proxy Group					(6)	(7)
Algonquin Power & Utilities Corporation	TSX 768.35	\$ 5.80	\$ 4,456.80	\$ 5.80	100.0 %	\$ 4,457,331
Canadian Utilities Ltd.	TSX 272.09	12.91	3,511.76	39.61	306.9	10,777,626
Emera Incorporated	TSX 301.75	28.63	8,640.33	55.77	194.8	16,829,457
Fortis, Inc.	TSX 507.30	31.60	16,028.69	59.54	188.5	30,206,254
Hydro One Ltd.	TSX 599.78	15.23	9,137.37	43.19	283.5	25,907,246
Median	507.300	\$ 15.234	\$ 8,640.335	\$ 43.194	194.8 %	\$ 16,829,457

NA= Not Available

Notes: (1) Company Annual Report Data

(2) Column 3 / Column 1.

(3) Column 4 / Column 2.

(4) Column 1 * Column 4.

(5) Company Provided.

(6) The market-to-book ratio of the Enbridge Gaz Quebec on July 17, 2026 is assumed to be equal to the market-to-book ratio of the Canadian Utility Proxy Group on July 17, 2026 as appropriate.

(7) Column [3] multiplied by Column [5].

Source of Information: 2025 Annual Forms 10K

Bloomberg Professional Services

Enbridge Gaz Quebec
Market Capitalization of Enbridge Gaz Quebec and the
Canadian Utility Proxy Group and U.S. Gas Utility Proxy Group

Company	[1] Common Stock Shares Outstanding at Fiscal Year End 2025 (1) (millions)	[2] Book Value per Share at Fiscal Year End 2025 (2)	[3] Total Common Equity at Test-Year End 2025 (1) (millions)	[4] Closing Stock Market Price on July 17, 2026	[5] Market-to-Book Ratio on July 17, 2026 (3)	[6] Market Capitalization on July 17, 2026 (4) (millions)
Enbridge Gaz Quebec	NA	NA	46,592	NA		
Based upon U.S. Gas Utility Proxy Group					168.0	\$ 78,275
U.S. Gas Utility Proxy Group						
Atmos Energy Corporation	161.69	\$ 83.86	\$ 13,558.89	\$ 177.68	211.9 %	\$ 28,729,672
New Jersey Resources Corporation	100.74	23.74	2,391.67	58.60	246.8	5,903,589
NiSource Inc.	478.53	19.75	9,450.10	45.98	232.8	22,002,955
Northwest Natural Holding Company	41.56	35.49	1,475.08	51.20	144.3	2,128,069
ONE Gas, Inc.	62.69	54.87	3,440.12	79.74	145.3	4,999,099
Southwest Gas Holdings, Inc.	72.27	54.81	3,961.12	92.06	168.0	6,653,096
Spire Inc.	59.03	53.32	3,147.40	81.41	152.7	4,805,303
Median	72.269	\$ 53.322	\$ 3,440.123	\$ 79,740	168.0 %	\$ 5,903,589

NA= Not Available

- Notes: (1) Company Annual Report Data
(2) Column 3 / Column 1.
(3) Column 4 / Column 2.
(4) Column 1 * Column 4.
(5) Company Provided.
(6) The market-to-book ratio of the Enbridge Gaz Quebec on July 17, 2026 is assumed to be equal to the market-to-book ratio of the U.S. Gas Utility Proxy Group on July 17, 2026 as appropriate.
(7) Column [3] multiplied by Column [5].

Source of Information: 2025 Annual Forms 10K
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