

FASKEN

Fasken Martineau DuMoulin LLP
Barristers and Solicitors
Patent and Trade-mark Agents

550 Burrard Street, Suite 2900
Vancouver, British Columbia V6C 0A3
Canada

T +1 604 631 3131
+1 866 635 3131
F +1 604 631 3232
fasken.com

February 21, 2023
File No.: 240148.01027/14797

Matthew Ghikas
Direct +1 604 631 3191
Facsimile +1 604 632 3191
mghikas@fasken.com

By Electronic Filing

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Attention: Sara Hardgrave, Acting Commission Secretary

Dear Sirs/Mesdames:

**Re: British Columbia Utilities Commission Generic Cost of Capital Proceeding
FortisBC Energy Inc. and FortisBC Inc. Reply Submissions**

We enclose the Reply Submissions of FortisBC Energy Inc. and FortisBC Inc. in the above proceeding.

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP

[Original signed by]

Matthew Ghikas
Personal Law Corporation

MTG/lh
Enclosure



BRITISH COLUMBIA UTILITIES COMMISSION

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

AND

**BRITISH COLUMBIA UTILITIES COMMISSION GENERIC COST OF
CAPITAL PROCEEDING**

**REPLY SUBMISSIONS OF
FORTISBC ENERGY INC. AND FORTISBC INC.**

FEBRUARY 21, 2023

TABLE OF CONTENTS

PART ONE: INTRODUCTION AND OVERVIEW	1
A. INTRODUCTION	1
B. ORGANIZATION OF THESE FINAL SUBMISSIONS	2
PART TWO: THE FAIR RETURN STANDARD	3
PART THREE: GENERAL RESPONSE ON INTERVENER BUSINESS RISK SUBMISSIONS.....	5
A. RISK FACTORS AND CATEGORIZATION FACILITATE HOLISTIC REVIEW AND TRACKING.....	5
B. FEI’S CPCNS AND LONG-TERM PLANNING ARE PART OF MEETING ITS STATUTORY OBLIGATIONS, NOT ADMISSIONS OF A GUARANTEED PROSPEROUS FUTURE	6
C. RISK ASSESSMENT IS QUALITATIVE AND FROM AN INVESTOR’S PERSPECTIVE	7
D. ACHIEVING ALLOWED ROE IS NOT AN INDICATOR OF LONG-TERM RISK.....	10
E. FORTISBC’S RISK ASSESSMENT IS POST-MITIGATION	11
F. PROBATIVE VALUE OF FORTIS INC. INVESTOR PRESENTATIONS IS LIMITED	12
G. RISK IS EVALUATED BOTH OVER TIME AND RELATIVE TO PEER UTILITIES.....	15
PART FOUR: RESPONSE TO SPECIFIC INTERVENER ARGUMENTS ON FEI’S BUSINESS RISK	17
A. BUSINESS PROFILE RISK.....	17
B. ECONOMIC CONDITIONS.....	17
C. POLITICAL RISK	18
D. INDIGENOUS RIGHTS AND ENGAGEMENT	20
E. ENERGY PRICE RISK.....	21
F. DEMAND/MARKET RISK	22
(a) Response to BCOAPO.....	22
(b) Response to CEC	23
(c) Response to RCIA	24
G. ENERGY SUPPLY RISK.....	25
H. OPERATING RISK.....	25
I. REGULATORY RISK.....	26
PART FIVE: OTHER FACTORS SUPPORTING 45% COMMON EQUITY FOR FEI.....	29
PART SIX: RESPONSE TO SPECIFIC INTERVENER ARGUMENTS ON FBC’S BUSINESS RISK.....	31
A. BUSINESS PROFILE RISK.....	31
B. ECONOMIC CONDITIONS.....	32

C. POLITICAL RISK	32
D. INDIGENOUS RIGHTS AND ENGAGEMENT	33
E. ENERGY PRICE RISK.....	34
F. DEMAND/MARKET RISK	34
G. ENERGY SUPPLY RISK.....	35
H. OPERATING RISK.....	35
I. REGULATORY RISK	37
PART SEVEN: OTHER FACTORS DEMONSTRATING 40% EQUITY REMAINS REASONABLE FOR FBC.....	38
PART EIGHT: THE APPROPRIATE ROE FOR FEI AND FBC	41
A. GENERAL RESPONSE TO INTERVENERS ON ROE	41
(a) CEC Acknowledges the Evidence that Cost of Capital Has Increased, but Its ROE Proposals Are Still Understated.....	41
(b) BCOAPO Acknowledges the Evidence that Cost of Capital Has Increased, but Its ROE Proposals Are Still Understated	44
<i>Using Lesser CAPM Results as Starting Point Suppresses BCOAPO's ROE Results.....</i>	<i>44</i>
<i>BCOAPO's Mathematical Error When Averaging Understates Overall ROE.....</i>	<i>45</i>
<i>BCOAPO Incorporates Only a Fraction of the Hamada Adjustment.....</i>	<i>46</i>
<i>BCOAPO Miscalculates FBC's Size Premium and Correcting that Error Alone Yields an ROE of Over 10%</i>	<i>47</i>
(c) RCIA Ignores the Multi-Stage DCF Model, Introduces Unsupported CAPM Adjustments, Uses Stale Data and Omits Hamada and Size Adjustments.....	47
<i>RCIA Ignores the Multi-Stage DCF Model (and Those Higher Results) Altogether.....</i>	<i>48</i>
<i>RCIA's Downward Adjustments to Mr. Coyne's CAPM Calculations Are Inconsistent with the Expert Evidence</i>	<i>49</i>
<i>Updating RCIA's Calculations for October 2022 Data Significantly Increases RCIA's ROE Results.....</i>	<i>50</i>
<i>RCIA Has Not Adjusted its CAPM for Relative Financial Risk and Size Premium</i>	<i>51</i>
<i>Using October 2022 Data in RCIA's Risk Premium Calculations Significantly Increases the Results.....</i>	<i>51</i>
<i>Mr. Coyne's Analysis Was Balanced and Reasonable</i>	<i>53</i>
(d) Omissions and Inconsistencies in ICG's ROE Position.....	54

B.	INTERVENERS ARE OUT OF STEP WITH EXPERTS ON PROXY GROUPS AND US DATA	57
	(a) CEC’s Suggestion to Average Results for All Proxy Groups Is Unnecessary.....	57
	(b) BCOAPO’s Proposed Revisions to the North American Proxy Groups Are Unwarranted.....	57
	(c) RCIA’s Opposition to US Data Is Inconsistent with Consensus Expert Evidence and Regulatory Practice	58
C.	INTERVENERS ONLY IDENTIFY NARROW ISSUES ON MULTI-STAGE DCF MODEL	59
	(a) Using 90 Day Dividend Yields Is Reasonable but Skews the Results Downwards.....	59
	(b) Using Multiple Sources of Analyst Estimates Is Superior to Using One Source	61
D.	RESPONSE TO INTERVENER ARGUMENTS ON THE CAPM.....	61
	(a) Using Actual Bond Yields for the Risk Free Rate Will Increase CAPM Results.....	61
	<i>RCIA Is Incorrect About the Effect of Using Forecast Bond Yields</i>	<i>62</i>
	<i>Response to ICG on Risk Free Rate</i>	<i>63</i>
	(b) Response to RCIA’s Argument that Only Canadian MRP Should Be Used.....	64
	(c) Using the Constant Growth DCF, Moderated by 50% Historical Data Weighting, Produces a Reasonable MRP	68
	<i>ICG Has Misinterpreted the AUC’s Approach in 2018</i>	<i>68</i>
	<i>BCOAPO Implicitly Recognizes that Dr. Lesser’s MRP Is Incongruous</i>	<i>70</i>
	<i>RCIA’s Suggested 75% Weighting of Historical MRP Is Inconsistent with the Expert Evidence</i>	<i>71</i>
E.	RCIA’S ARGUMENTS REGARDING RISK PREMIUM MODEL	72
	(a) RCIA’s Proposed ROEs Are Far Below What the Risk Premium Model Suggests	73
	(b) Risk Premium Model Output Reinforces the CAPM and Multi-Stage DCF Results.....	73
F.	INTERVENERS HAVE NOT ACCOUNTED FOR DISPARITIES IN FINANCIAL RISK BETWEEN FEI/FBC AND PROXY GROUPS.....	74
G.	NOT INCLUDING A SIZE PREMIUM FOR FBC UNDERSTATES ITS COST OF CAPITAL	75
H.	INTERVENERS ACKNOWLEDGE THAT A FAIR RETURN MUST ACCOUNT FOR FLOTATION COSTS AND FINANCING FLEXIBILITY	75
I.	INTERVENERS HAVE NOT RECONCILED THEIR POSITIONS WITH BCUC AAM OUTPUT	77
	PART NINE: OTHER ISSUES	78
A.	RESPONSE TO ICG ON THE ROLE OF EXPERTS.....	78

B. AUTOMATIC ADJUSTMENT MECHANISM IS NOT WARRANTED	79
(a) Response to CEC	79
(b) Response to RCIA	80
C. TRIGGERS FOR FUTURE APPLICATIONS	82
D. IMPLEMENTATION OF ORDER	83
PART TEN: CONCLUSION AND ORDER SOUGHT	85

PART ONE: INTRODUCTION AND OVERVIEW

A. INTRODUCTION

1. There is a higher degree of alignment among the experts and parties in this proceeding than in past cost of capital proceedings, both in terms of capital structure and ROE.¹

2. All interveners who have commented on FEI's capital structure (BCOAPO, CEC and RCIA) agree that FEI is too thinly capitalized, with the only debate being the extent to which FEI's equity component needs to increase. CEC and RCIA advocate for 40%, while BCOAPO suggests 40% – 42%. FortisBC submits that the extent to which FEI's business risk has increased since the 2016 Proceeding—which is well established on the evidence discussed in FortisBC's Final Submissions—supports the proposed 45% common equity ratio. The arguments that interveners have raised to moderate the increase, discussed in Parts Two, Three, Four and Five below, are at odds with the Fair Return Standard and the BCUC's approach to business risk assessments. Their positions cannot be reconciled with the fact that FEI's equity ratio was 40% in 2009 – long before the Energy Transition really got underway – and it is telling that no intervener has sought to reconcile the inconsistency.²

3. There is also general alignment among most parties that 40% equity for FBC remains appropriate. As discussed in Parts Six and Seven below, ICG is the only intervener advocating for thinner equity for FBC and its arguments do not withstand scrutiny.

4. CEC and BCOAPO have acknowledged that FEI and FBC's cost of equity has increased since the BCUC's last determinations, and recommend ROEs well above the current ROEs. BCOAPO recommends 9.5% (on 40 – 42% equity)³ for FEI, and 9.5% (on 40% equity) for

¹ Abbreviations used in the FortisBC Final Submissions are also used in these Reply Submissions.

² FortisBC Final Submissions, paras. 47, 48.

³ BCOAPO Final Argument, pp. 54, 58. Inclusive of 50 bps flotation costs.

FBC.⁴ CEC advocates for 9.62% (on 40%) for FEI⁵ and 9.56% (on 40%) for FBC.⁶ However, their ROE estimates are still understated. BCOAPO has made a mathematical error in its calculations and has omitted upward adjustments that it concedes are reasonable. CEC has included a significant arbitrary deduction that is unsupported by any evidence. In the absence of these issues, their results would be much closer to Mr. Coyne's ROE recommendations.

5. RCIA's contention that FEI/FBC's cost of equity has decreased to 8.0% – 8.75% (on 40% equity)⁷ relies on stale (December 2021) data and deeply flawed analysis that is contrary to the consensus expert evidence and the BCUC's prior decisions. Simply substituting the most up to date (i.e., October 2022) data in RCIA's calculations, even before adjusting for factors it has overlooked, increases RCIA's ROE results dramatically. ICG's arguments that FBC's ROE should be reduced are similarly inconsistent with the evidence. The objective evidence discussed in FortisBC's Final Submissions and in Part Eight below demonstrates that the cost of equity has increased since the 2016 Proceeding (FEI) and the 2013 Proceeding (FBC).

6. FortisBC submits that intervenor recommendations would not meet the Fair Return Standard. The BCUC should approve FEI and FBC's proposed ROEs and capital structures.

B. ORGANIZATION OF THESE FINAL SUBMISSIONS

7. In these Reply Submissions, we have focused on the main issues where further response is necessary. They are organized to generally follow the organization of FortisBC's Final Submissions. FortisBC's silence on a particular issue should not be construed as agreement with intervenor submissions.

⁴ BCOAPO Final Argument, pp. 54, 58, 70. Inclusive of 50 bps flotation costs.

⁵ CEC Final Argument, para. 3. Inclusive of 50 bps flotation costs.

⁶ CEC Final Argument, para. 3. Inclusive of 50 bps flotation costs.

⁷ RCIA Final Argument, p. 3.

PART TWO: THE FAIR RETURN STANDARD

8. None of the intervener submissions identified any issues with FortisBC's description of the Fair Return Standard (FortisBC Final Submissions, Part Two) and how it has been applied by regulators. In response to BCOAPO's submission, FortisBC confirms it is not seeking to be able to attract capital on terms and conditions "materially more favourable than its peers".⁸

9. While CEC states that it "is generally in agreement with" the legal principles outlined by FEI, it nonetheless suggests that ". . . it would be appropriate for the Commission to take into consideration the link between ROE and customer rates . . .".⁹ MoveUP similarly urges the BCUC to consider the rate impacts of increases in FEI's rates of return, while still acknowledging that "It is vital that the utility is able to raise capital".¹⁰

10. Considering rate impacts is precisely what the law says cannot be done.¹¹ All rising costs, not just increasing cost of capital, affect a utility's competitiveness; all prudent costs of providing utility service, including cost of capital, must be recovered. Moreover, while CEC and MoveUp's expressed intent in making this proposal is to preserve the long-term viability of the utility, it would have the opposite effect. The Supreme Court of Canada's pronouncement of the law emphasizes its policy rationale:

The required return is one that is equivalent to what they could earn from an investment of comparable risk. Over the long run, unless a regulated utility is allowed to earn its cost of capital, further investment will be discouraged and it will be unable to expand its operations or even maintain existing ones. This will harm not only its shareholders, but also its customers¹² [Emphasis added.]

⁸ BCOAPO Final Argument, p. 4.

⁹ CEC Final Argument, para. 6.

¹⁰ MoveUP Final Argument, p. 3. FortisBC notes that at p. 3 of MoveUp's Final Submissions, it is FBC, not FEI, that has applied for reconsideration of BCUC Order G-382-22 (2023 Annual Review).

¹¹ FortisBC Final Submissions, Part 2, Section B.

¹² *Ontario (Energy Board) v. Ontario Power Generation Inc.*, 2015 SCC 44, para. 16.

11. Adhering to CEC and MoveUp's logic would mean that, as the utility gets more risky, investors would receive a return that is progressively less commensurate with the risk they are assuming. FEI needs to be well financed to navigate the Energy Transition. Encouraging the flight of capital away from a capital-intensive business is a poor recipe for success.

PART THREE: GENERAL RESPONSE ON INTERVENER BUSINESS RISK SUBMISSIONS

12. This Part responds to several conceptual arguments related to business risk. Parts Four and Six of these Reply Submissions address factor-specific arguments related to FEI and FBC's business risk, respectively.

A. RISK FACTORS AND CATEGORIZATION FACILITATE HOLISTIC REVIEW AND TRACKING

13. RCIA characterizes FEI's business risk analysis as being duplicative and overlapping.¹³ BCOAPO similarly argues that the increase in risk is less than submitted by FEI because FEI has engaged in double counting underlying considerations.¹⁴ CEC would also limit consideration of individual risk factors to one category each.¹⁵ FortisBC submits that these arguments miss the mark.

14. Risk analysis is a holistic assessment of a complex matrix of factors affecting different aspects of FEI and FBC's businesses, and FortisBC has never suggested that the BCUC's role is to carry out a rote tallying of categories. Investors will inevitably approach risk assessment in different ways, but the ultimate objective will always be to assess the potential for not earning a return on and of invested capital. The risk categories that FortisBC has used are a useful presentation format for identifying the types of considerations that inform investment decisions. They are consistent with the categories and factors used in previous cost of capital proceedings, thus facilitating comparisons over time.

15. As described in FEI's evidence, in IR responses and again at the oral hearing, certain developments, conditions or events can impact multiple risk categories.¹⁶ For example, availability of energy supply, which is listed under the Energy Supply risk category, could also be included as a risk factor under Energy Price because the availability of supply of an energy form

¹³ RCIA Final Argument, p. 4.

¹⁴ BCOAPO Final Argument, pp. 15, 17, 22, 23, 32.

¹⁵ CEC Final Argument, paras. 39-42, 72, 81, 139, 155, 165.

¹⁶ FortisBC Final Submissions, para. 69.

can impact its price.¹⁷ The impact of the Energy Transition on FortisBC's business is similarly pervasive, as described in FortisBC's Final Submissions.¹⁸

16. CEC argues that the Indigenous Rights and Engagement risk category should be included in the Political category as it was previously.¹⁹ FortisBC submits that trying to recategorize risks at this point would be counterproductive. Regardless, FortisBC's current categorization mirrors the BCUC's approach in the 2016 GCOC Decision; the Panel organized its discussion of political risk under two separate headings: "Political risk – recent provincial and municipal activities" and "Political risk – First Nations".²⁰ Moreover, the increasing significance of Indigenous Rights and Engagement for FortisBC's business is well documented in the evidence, and it is appropriate to recognize that explicitly in the categorization.

B. FEI'S CPCNS AND LONG-TERM PLANNING ARE PART OF MEETING ITS STATUTORY OBLIGATIONS, NOT ADMISSIONS OF A GUARANTEED PROSPEROUS FUTURE

17. RCIA argues that FortisBC's pursuit of CPCNs and long-term planning activities are evidence of FortisBC's ability to cope with current business risks.²¹ Similarly, CEC appears to suggest FEI's pursuit of CPCNs and plans for long-term asset depreciation contradicts its evidence of stranded asset risk.²² In fact, those actions are evidence of the utilities complying with their statutory obligations. The UCA requires a utility to provide adequate, safe, efficient, just and reasonable service, and to maintain its property and equipment in a condition that enables it to do so.²³ FortisBC is also obligated to file long-term resource plans for acceptance by the BCUC.²⁴

¹⁷ Exhibit B1-8-1, Appendix A, FEI Business Risk Assessment, p. 1.

¹⁸ FortisBC Final Submissions, Part 3, Section A.

¹⁹ CEC Final Argument, para. 118.

²⁰ *In the Matter of FortisBC Energy Inc. Application for its Common Equity Component and Return on Equity for 2016*, Order and Decision G-129-16, August 10, 2016, ("2016 GCOC Decision"), sections 4.2.3.2 and 4.2.3.3.

²¹ RCIA Final Argument, pp. 4, 26-27.

²² CEC Final Argument, paras. 9-13.

²³ *Utilities Commission Act*, R.S.B.C. 1996, c. 473 ("UCA"), section 38.

²⁴ UCA, section 44.1.

Resource planning and capital investments mitigate some of the business risks considered in this proceeding. However, FortisBC's business risk assessments are post-mitigation.²⁵

18. The evidence is clear that, despite FEI's plans, the company faces significantly increased risk since the 2016 Proceeding. When the BCUC considered FEI's business risk in the 2016 Proceeding, the policy environment was such that FEI did not need the kind of dramatic initiatives that it is currently contemplating. The plans are now integral for the long-term prospects of the business, and FEI's ability to deliver on its plans are contingent on a number of factors coming to pass. As Mr. Slater put it:

We have strategies that, if successful, would see FEI preserving a role for itself in the Energy Transition. We hope our efforts succeed, and we think they can succeed if we have the right policy and regulatory support. But the risk that we won't succeed is real . . .²⁶

19. As urged by CEC, FortisBC recognizes the "vital stake customers have in [FEI's] long-term future",²⁷ and is planning for that future. However, in the context of the Energy Transition, even the best laid plans do not fully mitigate stranded asset risk.

C. RISK ASSESSMENT IS QUALITATIVE AND FROM AN INVESTOR'S PERSPECTIVE

20. RCIA's view of risk is inconsistent with past BCUC decisions and the expert evidence.

21. RCIA relies on the International Organization for Standardization (ISO) definition of risk,²⁸ which is an articulation that is irrelevant for the purpose of cost of capital proceedings. The perception that matters in cost of capital analysis is that of investors, not the ISO. The BCUC views risk as "the probability that future cash flows will not be realized or will be variable resulting

²⁵ Tr. 5B, p. 910, l. 19 – p. 911, l. 5 (Roy).

²⁶ Exhibit B1-30, FortisBC Opening Statement, p. 2.

²⁷ CEC Final Argument, para. 8.

²⁸ RCIA Final Argument, p. 22.

in a failure to meet investor expectations.”²⁹ In the 2013 GCOC Decision, the Panel similarly emphasized that, in the context of capital structure, long-term risks are of key importance to investors:

. . . long-term risk, which Ms. McShane outlines as being of primary importance to the utility investor, is primarily reflected in the equity structure determined for FEI considering the investors’ ability to recover their invested capital. This is because if the underlying risk decreases, more debt can be issued; if it increases, the common equity ratio would increase resulting in less debt.³⁰

22. RCIA provides no authority for its proposition that business risks “must be quantified to inform the conclusions of a Generic Cost of Capital hearing”.³¹ There is no objective evidence of the “probability of an adverse event occurring”, as RCIA would require.³² As Mr. Coyne observed, “Risk is inherently a qualitative assessment.”³³ RCIA’s position is also at odds with Dr. Lesser’s observation that:

Perceived risk is not necessarily the same thing as actuarial risk. Investors, for example, may perceive that sunspot activity affects corporate profitability, even though there may be no actuarial evidence of such. However, if perceived risks are commonly believed, then they will nevertheless be relevant to the calculation of expected returns.³⁴

23. FortisBC has provided the same type of information that investors have access to when making investment decisions. A cursory review of credit rating reports shows that credit rating agencies, which are sophisticated investment market analysts, provide similarly qualitative assessments of business risks.

²⁹ *In the Matter of British Columbia Utilities Commission Generic Cost of Capital Proceeding (Stage 1)*, Order and Decision G-75-13, May 10, 2013 (“2013 GCOC Decision”), p. 24; 2016 GCOC Decision, p. 8.

³⁰ At p. 24.

³¹ RCIA Final Argument, p. 22.

³² RCIA Final Argument, p. 22.

³³ Tr. 4, p. 643, l. 20-21.

³⁴ Exhibit B1-41, Testimony of Dr. Lesser before the Illinois Commerce Commission, p. 13; Dr. Lesser confirmed this is still his view: Tr. 4, p. 474, l. 25 – p. 475, l. 11 (Lesser); Mr. Coyne also agreed with this statement at Tr. 5B, p. 914, l. 7 – p. 915, l. 13.

24. RCIA's argument that FortisBC did not demonstrate how its business risks will impact its ability to achieve its ROE³⁵ again reflects RCIA's misunderstanding of the nature of a cost of capital analysis. To use Dr. Lesser's distinction (quoted above), RCIA is incorrectly focused on "actuarial risk" instead of "perceived risk". FortisBC is not required to show that there will be an actual impact, only that investors would perceive that the long-term probability of not earning a return on their capital has increased.³⁶ As Mr. Coyne observed: "It doesn't have to be what actually happens, and this can be -- this is where I think this conversation can get off track, that you're not trying to determine what's going to happen in the future. What you're trying to determine is what investors expect is going to happen in the future"³⁷ [Emphasis added].

25. RCIA appears to say that the existence of periodic cost of capital proceedings reduces the relevance of long-term risk assessment.³⁸ While long term assessments will change as time passes, RCIA's position ignores the reality that investors will make use of current assessments, including long-term assessments, to inform their decisions today. As an example, credit rating agencies are well aware of the BCUC's practice of periodic cost of capital proceedings, yet continue to highlight long-term risks. RCIA's argument is at odds with how cost of capital analysis has been undertaken in this province for many, many years. The BCUC gives primary weight to long-term risk, notwithstanding the periodic nature of cost of capital reviews.³⁹

26. RCIA's submissions on the common equity ratio and risk are internally inconsistent. On one hand, RCIA says that FEI's ability to manage risk has not changed since 2016, and there is no acceptable evidence validating an increase in business risk. RCIA nonetheless

³⁵ RCIA Final Argument, p. 21.

³⁶ See Exhibit B1-9, BCUC IR1 1.1 for examples of risk events that the BCUC has recognized as posing a threat to FEI's ability to earn a future return on capital.

³⁷ Tr. 4, p. 686, ll. 12-17 (Coyne). See also Exhibit B1-13, RCIA IR1 23.4.

³⁸ RCIA Final Argument, pp. 25-26.

³⁹ FortisBC Final Submissions, para. 31.

agrees that FEI should have thicker equity,⁴⁰ and provides no other explanation for the recommended increase to FEI's equity thickness.

27. RCIA says FortisBC's risks "are simply operating conditions that may require changes to staffing levels, business planning or procedures. In most instances, these are effectively OM&A expenses that are passed on to and recovered from ratepayers. As such, they pose little or no risk to the utilities' reasonable ability to achieve their approved ROE or recover capital."⁴¹ RCIA's argument is inconsistent with how cost of capital is determined. The short-term risk associated with earning the allowed ROE in a given year flows from the potential that actual costs will exceed the forecast costs upon which rates have been set. Increasing O&M on a forecast basis still leaves residual risk that the forecast will be exceeded. Long-term risk is associated with stranded assets, which no amount of staffing, planning or procedures can eliminate. FEI's requested increase in equity thickness is supported by the increased long-term risk associated with the Energy Transition, developments in Indigenous Rights and Title and other factors.

D. ACHIEVING ALLOWED ROE IS NOT AN INDICATOR OF LONG-TERM RISK

28. CEC argues that the BCUC should give substantial weight to evidence that FEI and FBC have generally been able to earn their allowed ROEs, characterizing it as an indication of lower risk.⁴² The BCUC considered and rejected the same argument in the 2016 Proceeding. The BCUC found the attainment of ROE to be a short-term risk, which does not disappear in any given test year because of a utility's success in achieving it in prior years. FortisBC's business risk evidence is prospective and based primarily on long-term risk, as debt and equity investors take a long-term view of risk when determining where to invest.⁴³ The key developments affecting FEI

⁴⁰ RCIA Final Argument, p. 31.

⁴¹ RCIA Final Argument, p. 30.

⁴² CEC Final Argument, paras. 182-185, 242-244.

⁴³ FEI Final Submissions, paras. 28-31.

since the 2016 Proceeding and FBC since the 2013 Proceeding are all long-term risks that affect the companies' ability to recover costs.

E. FORTISBC'S RISK ASSESSMENT IS POST-MITIGATION

29. BCOAPO⁴⁴, CEC⁴⁵ and RCIA⁴⁶ all discount FortisBC's evidence on the basis that a risk FEI or FBC face is mitigatable. RCIA argues, for instance, that FortisBC "ignores its own track record" with respect to successfully managing business risks as they arise, and "there is no reason to believe FEI and FBC will be unable to adapt to the challenges to any lesser degree than in previous years".⁴⁷ However, FortisBC's business risk assessment already accounts for mitigation, which is appropriate. Investors are aware of publicly-available information, including plans, strategies and capital investments that would mitigate the utilities' risk.⁴⁸ Accordingly, mitigation options such as those suggested by RCIA, are already incorporated into an investor's perception of risk.⁴⁹

30. FEI's mitigation strategies involve their own risk, and are inherently more risky than traditional utility investments.⁵⁰ As Ms. Roy emphasized, FEI's plans to address policy changes will decrease competitiveness even if they are successful, ". . . so there's a lot to overcome".⁵¹

⁴⁴ BCOAPO Final Argument, pp. 18, 30, 32, 33.

⁴⁵ CEC Final Argument, paras. 65, 83, 96, 103, 127-129, 148-149, 229, 153-154, 164, 229, 233.

⁴⁶ RCIA Final Argument, p. 26.

⁴⁷ RCIA Final Argument, pp. 21, 26.

⁴⁸ Indeed, the efficient market hypothesis is premised on investors having access to all market information. See FortisBC Final Submissions, paras. 294, 301.

⁴⁹ Exhibit B1-13, RCIA IR1 5.3.

⁵⁰ Exhibit B1-9, BCUC IR1 11.4; Exhibit B1-11, CEC IR1 2.5; FortisBC Final Submissions, paras. 62-64.

⁵¹ Tr. 5A, p. 739, ll. 1-18 (Roy).

F. PROBATIVE VALUE OF FORTIS INC. INVESTOR PRESENTATIONS IS LIMITED

31. CEC refers to Fortis Inc.'s financial disclosure, sustainability reporting, and investor information⁵² as important evidence "to which the Commission should give significant weight" that investors are receiving "different, very positive" information respecting FEI's business risks.⁵³

32. FortisBC submits that this proceeding requires the BCUC to determine the capital structure and ROE for FEI and FBC on a standalone basis. In the words of the BCUC, "the utility must be assessed on the basis of the standalone principle. That is, it must be assessed as if FEI is a stand-alone entity, raising capital on the merits of its own economic, business and financial characteristics."⁵⁴

33. CEC is explicitly conflating Fortis Inc. and FEI in its submissions, despite the companies being separate legal entities with different business profiles. For instance, CEC says that "FEI has in fact significantly outperformed its peers" over the past five years,⁵⁵ and references Fortis Inc.'s long-term outlook to support its position on FEI's assessment of economic risk.⁵⁶ CEC ought to have referred to *Fortis Inc.*'s performance on the public market.⁵⁷ FEI has no publicly traded equity.

34. Fortis Inc.'s risk profile reflects the businesses of ten utilities across North America, some of which are much larger than the FortisBC utilities and have very different business profiles. As stated by Mr. Lorimer, "FEI is a 15 percent part of this bigger entity".⁵⁸ Fortis Inc.'s decarbonization plans involve vastly different strategies, including retiring coal generation

⁵² Exhibit C6-13, Fortis Inc. 2nd Quarter 2022 Results and 2022 Sustainability Report (News Release); Exhibit C6-14, Fortis Inc. Investor Presentation Q4 2022.

⁵³ CEC Final Argument, paras. 23-31, 60-66, 84, 150-153.

⁵⁴ 2016 GCOC Decision, p. 4.

⁵⁵ CEC Final Argument, para. 63.

⁵⁶ CEC Final Argument, para. 84, referring to para. 24.

⁵⁷ Tr. 5B, p. 898, l. 23 – p. 901, l. 15 (Lorimer).

⁵⁸ Tr. 5B, p. 901, l. 9 (Lorimer).

plants.⁵⁹ Many of its other utility assets are located in non-Canadian jurisdictions that are not on the forefront of the Energy Transition.⁶⁰ CEC points to Fortis Inc.'s plans for direct cleaner energy investments, but the large majority of these investments are in other utilities. The Fortis Inc. disclosures are informative to the extent that they are speaking specifically to the business of FEI or FBC, but otherwise have limited relevance.

35. A more instructive disclosure would be one that is specific to FEI. FEI's 2020 Management Discussion and Analysis included the following commentary, all of which is entirely consistent with FEI's business risk evidence:

In the future, if natural gas becomes less competitive due to price or other factors, the Corporation's ability to add new customers could be impaired, and existing customers could reduce their consumption of natural gas or eliminate its usage altogether as furnaces, water heaters and other appliances are replaced. This may result in higher rates and, in an extreme case, could ultimately lead to an inability to fully recover the Corporation's cost of service in rates charged to customers.

Government policy has also impacted the competitiveness of natural gas in BC. The Government of BC has introduced changes to energy policy including GHG emission reduction targets and a tax on carbon-based fuels, which is expected to increase in the future. However, the Government of BC has yet to introduce carbon tax on imported electricity generated through the combustion of carbon-based fuels. The impact of these changes in energy policy may have a material impact on the competitiveness of natural gas relative to non-carbon based energy sources or other energy sources.

There are other competitive challenges that are impacting the penetration of natural gas into new housing stock such as green attributes of the energy source, and type of housing stock being built. In addition, as part of their own climate change policy plans, local governments may use various tools at their disposal such as franchise agreements, permits, building codes and zoning bylaws to impose limitations on energy sources permitted in new and existing developments. The municipalities can also provide incentives, such as higher density allowance, to builders to adopt carbon free options for their

⁵⁹ Exhibit C6-14, Fortis Inc. Investor Presentation Q4 2022, p. 7.

⁶⁰ Fortis Inc.'s utilities serve customers in five Canadian provinces, nine U.S. states and three Caribbean countries: Exhibit C6-13, Fortis Inc. 2nd Quarter 2022 Results and 2022 Sustainability Report (News Release), p. 7.

developments. These actions and policies may hinder the Corporation's ability to attract new customers or retain existing customers.⁶¹

36. With respect to economic conditions, the 2020 FEI MD&A provided:

A general and extended decline in BC's economy or in that of the Corporation's service area in particular, would be expected to have the effect of reducing demand for energy over time. Energy sales are influenced by economic factors such as changes in employment levels, personal disposable income, energy prices, housing starts and customer growth. New customer additions at the Corporation are typically a result of population growth and new housing starts, which are affected by the state of the provincial economy. The Corporation is also affected by changes in trends in housing starts from single family dwellings to multi-family dwellings, for which natural gas has a lower penetration rate. The growth of new multi-family housing starts continues to significantly outpace that of new single-family housing starts. Natural gas and crude oil prices are closely correlated with natural gas and crude oil exploration and production activity in certain of the Corporation's service territories. The level of these activities can influence energy demand which could have a material adverse effect on the Corporation.

A general and extended decline in BC's economy, such as what could occur with the COVID-19 pandemic, could lead to reductions in energy demand over time. The COVID-19 pandemic could materially affect the overall demand for energy supply, or revenues, for certain industrial and commercial customers for which the demand for their products or services have been impacted, or who have certain restrictions in place.⁶²

37. With respect to capital expenditures, the 2020 FEI MD&A provided:

The Corporation's assets require ongoing maintenance, replacement and expansion. Accordingly, to ensure the continued performance of the physical assets, the Corporation determines expenditures that should be made to maintain, replace and expand the assets. The Corporation could experience service disruptions and increased costs if it is unable to maintain, replace or expand its asset base. The inability to recover, through approved rates, the costs of capital expenditures that the Corporation believes are necessary to maintain, replace, expand and remove its assets, the failure by the Corporation to properly implement or complete approved capital expenditure programs or the occurrence

⁶¹ Exhibit B1-8-1, Appendix D-1, FEI Management Discussion and Analysis for the year ended December 31, 2020 ("2020 FEI MD&A"), p. 21.

⁶² 2020 FEI MD&A, pp. 20-21.

of significant unforeseen equipment failures could have a material adverse effect on the Corporation's results of operations and financial position.⁶³

38. FEI's investor-facing material supports FEI's proposed thicker equity.

G. RISK IS EVALUATED BOTH OVER TIME AND RELATIVE TO PEER UTILITIES

39. CEC argues in many cases that risk factors constitute "undiversifiable risk".⁶⁴ That is, in CEC's view, FEI has not experienced risk to a greater extent than other utilities. The BCUC's practice, which is consistent with Mr. Coyne's evidence, is to determine the Fair Return in consideration of both (a) changes in the utility's risk since the previous BCUC cost of capital proceeding; and (b) the utility's risk relative to a group of proxy companies with similar risk profiles. CEC is improperly minimizing the first part of the analysis.

40. On the second part of the analysis, proxy utilities are never going to be identical. In respect of FEI, for instance, Mr. Coyne's relative risk assessment shows there are a number of areas where FEI is experiencing heightened risk considerations related to a number of risk categories. The Energy Transition and Indigenous rights and title are two particularly notable areas where BC is markedly different, and these are the areas where FEI's risk has increased the most since the 2016 Proceeding. As Mr. Coyne noted:

Based on the business risk analysis, my conclusion is that FEI has comparable to higher business risk than the U.S. Gas proxy group. Factors contributing to this assessment include FEI's more challenging environment with regard to environmental regulations and the Energy Transition, and a higher degree of competition with electricity and alternate fuels. Partly offsetting these factors are FEI's protection against regulatory lag with a forecast test year and full revenue decoupling. From an investor's standpoint, I believe FEI would be considered comparable.⁶⁵

⁶³ 2020 FEI MD&A, p. 16.

⁶⁴ CEC Final Argument, para. 78.

⁶⁵ Exhibit B1-8-1, Appendix C, Concentric Report, p. 177. Relative risk analysis with proxy groups started at p. 106 for FEI and p. 125 for FBC.

41. The US proxy group has much thicker equity than FEI is proposing, such that a comparable business risk means that FEI is much too thinly capitalized. Mr. Coyne also characterized FEI as having higher risk relative to ATCO and Enbridge, which are both in jurisdictions that do not face the same challenges as FEI.⁶⁶ As such, the factors that FEI has described require a substantial increase in FEI's equity ratio.

⁶⁶ Exhibit B1-8-1, Appendix C, Concentric Report, p. 112.

PART FOUR: RESPONSE TO SPECIFIC INTERVENER ARGUMENTS ON FEI'S BUSINESS RISK

42. BCOAPO, CEC and RCIA provided submissions on FEI's business risk. CEC and BCOAPO addressed each risk factor, while RCIA's submissions were more general (and largely answered above). Significantly, all three interveners agree that investor perception points to higher business risk, and concede that FEI requires thicker equity. The only debate is the extent to which business risk has increased, and in that respect the interveners offer unpersuasive justification.

A. BUSINESS PROFILE RISK

43. BCOAPO and CEC agree that FEI's business profile risk is similar to that assessed in the 2016 Proceeding, although the CEC notes that FEI's rate base has grown since 2015.⁶⁷ CEC submits that the business profile risk factors are likely to be an important base of information for investors,⁶⁸ which FEI does not dispute. However, the evidence (discussed at length in FortisBC's Final Submissions) is that other considerations have taken on greater importance since the 2016 Proceeding. The Energy Transition, in particular, represents a fundamental change that has a pervasive impact on FEI's business. FEI's business profile risk would have had to improve dramatically to offset the increased risk in other categories, which has not occurred.

B. ECONOMIC CONDITIONS

44. BCOAPO agrees with FEI that there is greater economic uncertainty, especially in the short term, and lower prospects for longer term growth.⁶⁹

45. CEC submits that the BCUC should assign no weight to economic conditions as a risk factor,⁷⁰ as all the risk factors constitute "undiversifiable risk".⁷¹ That is, in CEC's view, there

⁶⁷ BCOAPO Final Argument, p. 14; CEC Final Argument, para. 70.

⁶⁸ CEC Final Argument, para. 76.

⁶⁹ BCOAPO Final Argument, p. 14.

⁷⁰ CEC Final Argument, para. 85.

⁷¹ CEC Final Argument, para. 78.

is little evidence supporting a finding that FEI experienced “economic woes” to a greater extent than other utilities.⁷² As discussed above, the BCUC’s practice, which is consistent with Mr. Coyne’s evidence, is to determine the Fair Return in consideration of both (a) changes in the utility’s risk since the previous BCUC cost of capital proceeding; and (b) the utility’s risk relative to a group of proxy companies with similar risk profiles. FEI has demonstrated that a reasonable investor would perceive its business risk from economic conditions has increased since 2016.⁷³ Similar macro economic conditions can still lead to different impacts on different utilities based on the particular characteristics of the utility and its jurisdiction. For example, while all four of BC, Alberta, Ontario and Quebec faced negative economic growth in 2020, BC experienced the lowest decline. With regards to the housing starts, which can translate into new customers, Ontario and Quebec’s 2020 housing starts were higher than the 2019 housing starts, while BC 2020 housing starts declined.⁷⁴

46. CEC suggests that Advanced Metering Infrastructure (“AMI”), if approved by the BCUC, will partially address FEI’s labour shortage risk.⁷⁵ In fact, AMI would only eliminate FEI’s reliance on third-party manual meter reading. The bulk of FEI’s requirements for skilled labour relate to the operation of the natural gas transmission and distribution system.⁷⁶

C. POLITICAL RISK

47. BCOAPO accepts that there is increased political risk associated with the “uncertainty regarding future policies and the impact they will have on FEI’s business”, and states that “governments are now clearly paying attention to and responding to climate change concerns and, indeed, more so than in 2015.”⁷⁷

⁷² CEC Final Argument, para. 84.

⁷³ FortisBC Final Submissions, paras. 76-80.

⁷⁴ Exhibit B1-8-1, Appendix A, FEI Business Risk Assessment.

⁷⁵ CEC Final Argument, para. 83.

⁷⁶ Exhibit B1-8-1, Appendix A, FEI Business Risk Assessment, Section 9.3. See also Exhibit B1-9, BCUC IR1 35.2.2, Attachment 35.2.2, p. 3: S&P Global recognizes that gas utilities are exposed to material risk across their value chain from recruiting and developing a diverse and skilled workforce.

⁷⁷ BCOAPO Final Argument, p. 15.

48. CEC agrees that there is a growing bias among policymakers against the use of natural gas, but makes three flawed arguments to downplay that fact:

- (a) CEC considers there is a reasonable likelihood that the concerns will be significantly mitigated over time.⁷⁸ The evidence shows that this optimism is premature, and that the policy context is challenging and uncertain. As described above, even successful mitigation of policy risk would give rise to other risks. Mitigating the policy risks requires taking steps that significantly impact FEI's cost of service (e.g., higher renewable gas costs, capital investments) and reduce its competitiveness.
- (b) CEC states that the BCUC should recognize that peer utilities face similar legislative challenges.⁷⁹ CEC's contention is contradicted by the evidence. FEI is at the forefront of climate change policy—Mr. Coyne's evidence was that "the rest of the industry has not yet been faced with the same degree of policy restriction as we see in B.C."⁸⁰ This factor alone represents a very significant difference between FEI and the proxy utilities used in the ROE analysis.
- (c) CEC notes that there are "other factors" to be considered in the political risk category. CEC does not provide suggestions of "other factors", besides references to materials that were not placed on the evidentiary record, including a reference to the January 2021 political upheaval in the United States.⁸¹ The BCUC should not consider the new and untested information. In any event, the link between political upheaval in the US and policies around the Energy Transition are not immediately apparent.

⁷⁸ CEC Final Argument, para. 103, referring to mitigating factors CEC describes at paras. 92-94, 96, 100-101.

⁷⁹ CEC Final Argument, paras. 104-105.

⁸⁰ FortisBC Final Submissions, para. 64.

⁸¹ CEC Final Argument, paras. 106, 107.

49. RCIA dismisses the issue of political risk associated with provincial government climate and energy policies as “not new”.⁸² FEI has not claimed that policy risk is new *per se*, but rather has demonstrated that the risk is significantly higher than at the time of the 2016 Proceeding. The evidence, discussed in FortisBC’s Final Submissions,⁸³ is overwhelming in that regard. It is impossible to reconcile CEC’s support for a 40% equity ratio with the fact that FEI had a 40% equity ratio until 2013, long before the Energy Transition became a pervasive force. The focus in the 2009 proceeding was on competitiveness challenges, not the potential for policies to preclude the use of gas altogether.⁸⁴

D. INDIGENOUS RIGHTS AND ENGAGEMENT

50. BCOAPO agrees that FEI faces higher business risk related to relationships with Indigenous groups in BC, relative to the time of the 2016 Proceeding. However, BCOAPO argues that the increase in risk is less than submitted by FEI because FEI has engaged in double counting underlying considerations and “FEI is actively addressing the risks associated with its increased duty to consult”.⁸⁵ FortisBC has answered these “double counting” arguments at Part Three, Section A of these submissions, and explained its risk assessment is post-mitigation at Part Three, Section E.

51. CEC’s position is that the BCUC should find the Indigenous rights and engagement risk factors less risky than in 2016, and largely mitigatable. The risk, according to CEC, is “somewhat undiversifiable”,⁸⁶ FEI “should also be on its own learning curve as to how best address concerns of the Indigenous communities”, and “it is arguable that provincial policy has been made more clear” since 2016.⁸⁷ The evidence is that utilities in British Columbia are exposed to unique risks because, unlike in other provinces, most land is not subject to treaty (the

⁸² RCIA Final Argument, pp. 29-30.

⁸³ FortisBC Final Submissions, Part Three, Section A and Section B(d).

⁸⁴ FortisBC Final Submissions, para. 47.

⁸⁵ BCOAPO Final Argument, pp. 17-18.

⁸⁶ CEC Final Argument, para. 113.

⁸⁷ CEC Final Argument, para. 115.

land is unceded), and most Indigenous groups in BC are not signatories or adherents to a treaty (historic or modern).⁸⁸ FortisBC's commitment to developing meaningful relationships with Indigenous communities cannot fully mitigate risk, and FEI's risk assessment is post-mitigation.

52. CEC seems to suggest that the recent reconciliation movement may precipitate a transition to a positive reduction of risk.⁸⁹ CEC provides no rationale or basis for this submission. The evidence shows that business uncertainty associated with Indigenous rights and engagement has increased since the 2016 Proceeding.⁹⁰

E. ENERGY PRICE RISK

53. BCOAPO agrees that, overall, FEI's energy price risk has increased since the 2016 Proceeding. However, BCOAPO argues that FEI's energy price risk has not increased to the same degree as suggested by FEI.⁹¹ FortisBC submit that BCOAPO's attempt to downplay the risk is incongruous with: (a) BCOAPO's acknowledgement that current commodity prices are high relative to those in 2015;⁹² (b) BCOAPO's agreement with FEI's assessment that commodity cost volatility is greater than that presented in the 2016 Proceeding, and that updates using more recent forward market gas prices also support this conclusion;⁹³ and (c) its agreement that, on net, the competitiveness of natural gas versus electricity has deteriorated since the 2016 Proceeding.⁹⁴

54. CEC argues that the BCUC should find energy price risk to be similar to 2016, and should assign limited weight to energy price risk as a category, although CEC acknowledges that price competitiveness represents a higher risk. CEC's position is that higher natural gas prices do

⁸⁸ FortisBC Final Submissions, para. 90; Exhibit B1-8-1, Appendix A, FEI Business Risk Assessment, Section 5.1.

⁸⁹ CEC Final Argument, para. 116.

⁹⁰ FortisBC Final Submissions, Part Three, Section B(e).

⁹¹ BCOAPO Final Argument, p. 18.

⁹² BCOAPO Final Argument, p. 18.

⁹³ BCOAPO Final Argument, pp. 18-19.

⁹⁴ BCOAPO Final Argument, p. 19.

not increase the risk that FEI will not be able to recover its return on equity.⁹⁵ FortisBC points to its above submissions at Part Three, Section C, explaining that FEI is not required to demonstrate FEI will not recover its return on equity, but rather, in the long term, investors would perceive risk to the recoverability of their invested capital from an increase in the risk related to energy price. CEC, like RCIA, is conflating investor-perceived risk (the relevant consideration in cost of capital analysis) with actuarial risk (an irrelevant consideration).

55. CEC states that rather than increasing FEI's price risk, the purchase of higher-cost renewable gas likely serves to mitigate political, regulatory and "customer" risk,⁹⁶ but offers no support for this position, revealing CEC's misunderstanding of how underlying factors are considered in the risk categories. FEI is purchasing more renewable gas to mitigate its Energy Transition risk, but that does not mean its energy price risk is not higher because of it.

F. DEMAND/MARKET RISK

(a) Response to BCOAPO

56. While not disagreeing with FortisBC's assessment that demand/market risk is higher, BCOAPO submits that FEI has overstated the extent of the increased risk. BCOAPO's submission is based on: (i) FEI's assessment of market share based on REUS results from 2008, 2012 and 2017, which BCOAPO says "provide little insight into the change in market share over the relevant period"; (ii) recent trends in UPC that it says have been more favourable than the trends leading up to the 2016 Proceeding; and (iii) BCOAPO's argument that there is overlap and likely double counting of various factors assessed under the demand/market risk category.⁹⁷

57. FEI submits that in the context of the Energy Transition, the past is not the best predictor of the future. FEI provided evidence in this proceeding of several factors that are expected to impact FEI's market share and UPC. For instance, electric heat pumps are expected

⁹⁵ CEC Final Argument, para. 122.

⁹⁶ CEC Final Argument, paras. 127-129.

⁹⁷ BCOAPO Final Argument, pp. 21-22.

to reduce UPC and threaten FEI's thermal energy market share, and municipal policy is expected to reduce FEI's ability to connect to new customers.⁹⁸ The market penetration of electric heat pumps was so low at the time of the 2016 Proceeding that FEI and the BCUC did not even analyze the impact of electric heat pumps on FEI's business risk.⁹⁹

(b) Response to CEC

58. CEC says the BCUC should find FEI has similar demand/market risk as 2016 based on the Reference Case and Upper Bound scenarios in the FEI's 2022 Long Term Gas Resource Plan ("LTGRP") proceeding.¹⁰⁰ However, these two scenarios are not the basis for FEI's system planning. FEI developed a range of six alternate future scenarios to model different ways the future could potentially impact the amount of demand. The Diversified Energy (Planning) Scenario is FEI's planning scenario and is reflected in FEI's GCOC evidence. The Reference Case and Upper Bound Scenarios are implausible. The Reference Case Scenario assumed that "critical uncertainties", such as political policy and economic conditions, remain as they were in 2019, throughout the 20-year planning horizon. The Upper Bound Scenario assumes that the BC economy experiences higher-than-average growth, with the government moving away from its focus on climate policy and towards continued extraction infrastructure development in BC.¹⁰¹ FEI's evidence in this proceeding on demand/market risk is consistent with the LGTRP.

59. CEC also argues that FEI's declining market share does not necessarily represent declining revenues or an inability for the utility to achieve its ROE.¹⁰² FEI submits that a reasonable investor would perceive risk to their prospects of recovery in light of diminishing market share. Investors take a long-term view of risk, and would negatively perceive declining market share. A smaller customer base generally means that the revenue requirements are

⁹⁸ FortisBC Final Submissions, paras. 121-127.

⁹⁹ FortisBC Final Submissions, para. 118(c)(ii).

¹⁰⁰ CEC Final Argument, paras. 137, 140.

¹⁰¹ Tr. Vol. 5B, p. 916, l. 6 – p. 919, l. 8 (Mazza, Slater and Roy); Exhibit B1-49. See also Exhibit B-1, FEI 2022 Long Term Gas Resource Plan (May 9, 2022), p. 4-21, online at: https://docs.bcuc.com/Documents/Proceedings/2022/DOC_66503_B-1-FEI-2022-LongTermGasResourcePlan.pdf.

¹⁰² CEC Final Argument, para. 136.

recovered from fewer customers over fewer billing determinants. An investor considering long-term risk will realize that this pattern will increase the prospects of further loss of market share and even higher rates (i.e., a spiral).

(c) Response to RCIA

60. RCIA argues that FEI's revenues will be substantially higher, catalyzed by the rising global demand for Canadian LNG. RCIA says this "windfall opportunity" should substantially offset many of the business risks alleged by FEI.¹⁰³ RCIA fails to provide any evidentiary support for its position, besides references to materials that were not placed on the evidentiary record, and therefore should not be relied upon by the BCUC in this proceeding. The evidence is that FEI's primary business continues to be in serving space and water heating load in the residential and commercial sectors, not LNG export. FEI's risk assessment already accounts for forecast LNG demand, and RCIA's submission ignores the potential barriers to expanding British Columbia LNG exports to European and Asian markets.

61. RCIA also notes that FEI's annual demand forecast indicates demand over the next 3–5 years will be strong, based on FEI's Diversified Energy (Planning) Scenario forecast in the 2022 LTGRP, discussed above.¹⁰⁴ While FEI is planning to the Diversified Energy (Planning) Scenario that preserves a role for the gas system, there is substantial risk that policymakers will not support a diversified energy future. Long-term scenario forecasts are based on just that—scenarios. There is no guarantee that FEI's scenario forecasts will occur and there is uncertainty regarding the necessary support for FEI's planned initiatives for its planning scenario.¹⁰⁵

62. Focusing only on overall units of energy demand from FEI distracts from the other risk factors affecting the demand/market risk category, including downward changes in end-use market share, downward trends in net customer additions and increased gas supply costs. These trends are indicative of longer-term risk, which is the focus of risk assessment, not 3–5 year

¹⁰³ RCIA Final Argument, p. 26.

¹⁰⁴ RCIA Final Argument, pp. 27-28.

¹⁰⁵ FortisBC Final Submissions, paras. 62-64.

forecasts. In addition, adding load from LNG to mitigate load losses in the core residential and commercial sectors exposes FEI to higher revenue (and potentially earnings) volatility.¹⁰⁶

G. ENERGY SUPPLY RISK

63. BCOAPO and CEC agree with FEI's assessment that its energy supply risk is similar overall to that of 2016.¹⁰⁷

H. OPERATING RISK

64. BCOAPO agrees that FEI's operating risk has increased since the 2016 Proceeding, but not to the same degree assessed by FEI. BCOAPO expresses a concern that certain operating risk factors were already considered under other risk categories, and questions the validity of FEI's cybersecurity risk given that FEI's operations have not yet been impacted by cyberattacks.¹⁰⁸ FortisBC has answered these "double counting" arguments more generally above. And as BCOAPO itself acknowledges, lack of a previous occurrence does not mean a risk does not exist. The recent ransomware attack on Colonial Pipeline, a major pipeline in the U.S., and its impact on energy security in multiple U.S. states, demonstrates that utilities such as FEI are vulnerable to cyberattacks and the consequences may be severe.¹⁰⁹

65. CEC argues that FEI's operating risk is at least similar, but likely improved, to that assessed in the 2016 proceeding. Its position is based on flawed reasoning:

- (a) CEC cites "new capital projects likely to be undertaken to enhance reliability and resiliency";¹¹⁰ however, FEI's risk assessment is post-mitigation, and some of these projects have not yet been approved and implemented.

¹⁰⁶ FortisBC Final Submissions, paras. 73, 75; Exhibit B1-8-1, Appendix A, FEI Business Risk, Section 2.3.

¹⁰⁷ BCOAPO Final Argument, pp. 22-23; CEC Final Argument, para. 142.

¹⁰⁸ BCOAPO Final Argument, p. 23.

¹⁰⁹ FortisBC Final Submissions, para. 137.

¹¹⁰ CEC Final Argument, paras. 149, 157.

- (b) CEC states that public attitudes towards the fossil fuel industry and municipal operating challenges arising from the Energy Transition are already covered under the political risk category;¹¹¹ in fact, FEI's discussion of operating risk focusses on distinct implications of the change in attitudes – e.g., direct action, protests. Recategorizing these impacts as political risks wouldn't make those risks any less real.
- (c) Enterprise level cybersecurity risk is new since the 2016 Proceeding and is increasingly gaining weight in investors' perception of risk.

66. RCIA submits that it is not clear that extreme weather events will impede FEI's ability to achieve its ROE or that associated costs will not be recoverable through rates or government funding, and "Emergency response has always been part of utility services".¹¹² Again, FortisBC is not required to demonstrate each risk factor will impede FEI's ability to achieve its ROE, only that investors would perceive a long-term risk of recovering their investment. Considering FEI's recent experience with a high volume of high-impact weather events, FortisBC submits a reasonable investor would perceive an elevated level of risk.

I. REGULATORY RISK

67. While BCOAPO agrees that FEI's evidence tends to support an increase in regulatory lag, BCOAPO appears to suggest FEI has overstated its risk from regulatory uncertainty. With respect to the BCUC's decision to review deferral account financing, BCOAPO essentially argues that the BCUC can be trusted to be reasonable.¹¹³ BCOAPO misses the point—the fact a BCUC decision is well-reasoned does not mean the decision will be favourable from an investor's perspective. Similarly, just because the BCUC approved FBC's proposed approach to EV charging rate setting, which was a demonstration of regulatory flexibility, does not guarantee the BCUC will adopt flexible approaches to cost recovery and design in the context of other

¹¹¹ CEC Final Argument, para. 155.

¹¹² RCIA Final Argument, p. 30.

¹¹³ BCOAPO Final Argument, p. 25.

applications. Finally, BCOAPO submits that the requirement to seek consent of Indigenous peoples before proceeding with an application for regulatory approval was considered under the Indigenous Rights and Engagement risk category and should not be double counted under the regulatory risk category.¹¹⁴ FortisBC's submissions with respect to "double counting" are provided above at Part Three, Section A; simply put, recategorizing these distinct impacts does not make the risk any less real to investors.

68. CEC recommends that the BCUC find the regulatory environment to be generally favourable and the risk similar to that in 2016.¹¹⁵ The primary basis for CEC's position appears to be that there is no risk to the utility of being unable to earn a fair return, given the BCUC's rate-setting powers under section 59 of the UCA. There are four answers to this argument:

- (a) The fact that regulated entities tend to be lower risk than the average company in the market is already reflected in utilities having lower overall returns (combined equity ratio and ROE) relative to the market.¹¹⁶
- (b) Regulatory risk for utilities relates in part to the rate regulator having discretion, and the BCUC has broad discretion under the UCA over setting the allowed ROE and other decisions that can have a material impact on the long-term success of the utility.¹¹⁷
- (c) Short-term regulatory risk also arises from rates being set on a forecast basis. As the BCUC has recognized, that risk exists in every test period, irrespective of a utility's past track record.¹¹⁸
- (d) CEC's argument also ignores the fact that FEI is subject to a number of other regulatory regimes. Not all sources of regulatory lag and uncertainty relate to

¹¹⁴ BCOAPO Final Argument, p. 25.

¹¹⁵ CEC Final Argument, para. 179.

¹¹⁶ E.g., in the CAPM, beta is less than 1.0 for the utility sector, indicating lower risk than the MRP.

¹¹⁷ FortisBC Final Submissions, paras. 138, 146-149.

¹¹⁸ 2016 GCOC Decision, pp. 11-12.

BCUC approval processes.¹¹⁹ Environmental Assessment processes, municipal requirements, and the requirements and processes of Indigenous communities, have all become more complex over time.¹²⁰

¹¹⁹ Exhibit B1-8-1, Appendix A, FEI Business Risk Assessment, sections 10.1.2.3 and 10.2.

¹²⁰ FortisBC Final Submissions, para. 139.

PART FIVE: OTHER FACTORS SUPPORTING 45% COMMON EQUITY FOR FEI

69. BCOAPO and RCIA's justification for limiting FEI to a relatively small increase in equity thickness includes questioning the impact of ESG considerations and the importance of credit ratings.

70. BCOAPO and RCIA argue that there is no evidence demonstrating that ESG considerations are negatively impacting FEI more than those gas companies included in its proxy group in regard to either its credit ratings or access to capital.¹²¹ With respect, BCOAPO and RCIA's argument misses the point. The primary consideration regarding ESG is not FEI's position relative to other gas companies, but rather the fact that it will be more challenging for FEI to maintain its current rating than it had been in the past given the increasing weight that investors and rating agencies are giving to ESG considerations.¹²² FEI needs a stronger balance sheet to counteract this downward pressure.

71. BCOAPO highlights that FEI has been able to access capital on reasonable terms so far, and suggests other companies might also be impacted by challenging market conditions.¹²³ However, FEI's ability to raise capital in the past has been facilitated by its existing A level credit rating. Maintaining an A level credit rating ensures FEI is able to access capital markets on reasonable terms and pricing in most market conditions.¹²⁴ The evidence is that when the debt capital markets were experiencing significant volatility and access to debt was limited (to all companies, and contrary to BCOAPO's statement, that included FEI), the impact was felt disproportionately by lower-rated entities.¹²⁵ The fact that FEI, if downgraded, would not be the only lower-rated utility facing challenges accessing capital is small comfort. The downgrade to a lower credit rating would not be a simple transition to another lower credit rating state. A credit rating downgrade itself would be a profoundly negative economic event and its overall impact

¹²¹ BCOAPO Final Argument, p. 63; RCIA Final Argument, pp. 29-30.

¹²² FortisBC Final Submissions, paras. 167-183.

¹²³ BCOAPO Final Argument, pp. 63-64.

¹²⁴ Exhibit B1-9, BCUC IR1 6.4.

¹²⁵ Exhibit B1-19, BCOAPO IR2 82.1.

would be so pervasive that it is not possible to reliably quantify the true impact to customers.¹²⁶ It would be contrary the Fair Return Standard to embrace impediments to raising capital simply because there are other lower-rated utilities.

72. CEC concedes that (a) the objective of maintaining the FEI A credit rating is useful and appropriate for FEI customers;¹²⁷ and (b) it is important for the BCUC to give weight to the evidence with respect to the impacts of the ESG movement.¹²⁸ These considerations, along with the business risk analysis, warrant a larger increase in FEI's common equity ratio than CEC acknowledges.¹²⁹

¹²⁶ Exhibit B1-13, RCIA IR1 2.2.1, 17.2.

¹²⁷ CEC Final Argument, para. 323.

¹²⁸ CEC Final Argument, para. 329

¹²⁹ CEC Final Argument, para. 323.

PART SIX: RESPONSE TO SPECIFIC INTERVENER ARGUMENTS ON FBC'S BUSINESS RISK

73. While BCOAPO disagrees with FBC's risk assessment on some specific points, it concurs with FortisBC's overall assessment that FBC's business risk is similar to that of the 2013 Proceeding.¹³⁰ RCIA is silent on whether FBC's business risk has changed since 2013, although its recommendation of maintaining FBC's 40% common equity component¹³¹ suggests that it views FBC's risk as similar. CEC has described the risk as only "slightly" lower,¹³² and does not recommend a downward adjustment to FBC's common equity component.¹³³ Ultimately, ICG is the only intervener advocating thinner equity.

74. ICG appears to base its position on the incorrect proposition that FBC's business risk and FEI's business risk is a zero-sum game.¹³⁴ However, business risk is not limited to a consideration of the give-and-take growth prospects of natural gas versus electric utilities. As canvassed in FBC's business risk evidence and discussed below, FBC faces higher risk in some areas, and accelerated growth comes with its own set of risks to FBC. FBC is not even the primary beneficiary of FEI's lost market share.¹³⁵

A. BUSINESS PROFILE RISK

75. CEC appears to agree that FBC's business profile risk is similar to that assessed in the 2013 Proceeding, but qualifies that it is "potentially lower", on the basis of the repeated argument that the risk FBC faces is faced by all companies.¹³⁶ While, for example, COVID-19 conditions have influenced most companies, the effects would intuitively vary depending on the nature of the company and its customers. CEC has not provided an evidentiary basis for its "broad-brush," which should not be accepted by the BCUC. CEC also characterized the addition

¹³⁰ BCOAPO Final Argument, pp. 35-36

¹³¹ RCIA Final Argument, pp. 4, 31 and 35.

¹³² CEC Final Argument, paras. 192.

¹³³ CEC Final Argument, para. 3.

¹³⁴ ICG Final Argument, paras. 5, 11.

¹³⁵ FortisBC Final Submissions, paras. 204-205.

¹³⁶ CEC Final Argument, para. 195.

of a cryptocurrency customer as risk-reducing, in that it adds diversification and additional load.¹³⁷ There is ample evidence that the addition of this customer raises the overall risk profile of FBC's Industrial load.¹³⁸

B. ECONOMIC CONDITIONS

76. BCOAPO agrees that FBC's risk from economic conditions is higher. CEC repeats its unsupportable argument that global economic conditions should be considered "undiversifiable risks" and should not be considered in a business risk assessment. It is axiomatic that economic conditions can bring different risk to different enterprises. Indeed, part of the focus of this proceeding is the effect of changed economic conditions on cost of capital for utilities.

C. POLITICAL RISK

77. BCOAPO and CEC agree that FBC's political risk is lower than it was at the time of the 2013 Proceeding.

78. CEC nonetheless suggests that FBC is generally not in competition with BC Hydro, so it is not relevant that BC Hydro is the primary beneficiary of fuel switching.¹³⁹ CEC's proviso reveals CEC's misunderstanding of FBC's evidence. FBC makes the point that BC Hydro is the primary beneficiary of fuel switching from FEI, not to highlight its competition with BC Hydro, but to place the impact of fuel switching policy in its proper context—BC Hydro stands to gain the most from fuel switching because there is greater overlap between its service territory with that of FEI; municipal fuel switching policy is mostly being implemented in BC Hydro's service territory rather than FBC's; and heat pumps are more competitive in the Lower Mainland and Vancouver Island than in FBC's service territory.¹⁴⁰

¹³⁷ CEC Final Argument, para. 196.

¹³⁸ FortisBC Final Submissions, para. 200.

¹³⁹ CEC Final Argument, para 200.

¹⁴⁰ FortisBC Final Submissions, paras. 204-205.

79. CEC's political risk argument also overlooks how rapid growth from the Energy Transition could present risk, while FBC also has risk from limited growth potential due to its small service territory.¹⁴¹ As described in the evidence, FBC is surrounded by BC Hydro's service territory and annual population growth is below one percent.¹⁴² It has limited opportunity to expand its service territory and grow its customer base and accelerated electrification in its existing service area could pose threats to grid integrity.¹⁴³

D. INDIGENOUS RIGHTS AND ENGAGEMENT

80. BCOAPO accepts that FBC's risk with respect to its relationship with Indigenous communities has increased since 2013.¹⁴⁴ Nonetheless, BCOAPO misses the point in observing that FBC's near-term capital projects are mainly non-linear, presenting less risk from an Indigenous rights and engagement perspective.¹⁴⁵ As discussed in Part Three, Section C, investors take a long-term perspective on risk, and would recognize the likelihood of FBC seeking to build linear transmission and distribution infrastructure in the future.

81. CEC argues the risk is similar to that assessed in the 2013 Proceeding, as there are fewer Indigenous groups affected by FBC operations than FEI operations, and negative attitudes towards natural gas will not affect FBC or even be positive.¹⁴⁶ FortisBC submits that FBC's Indigenous rights and engagement risk must be viewed in light of its small size — the fact that FBC's service territory engages with fewer Indigenous traditional territories than FEI, does not work to lower FBC's risk. The potential impacts of its operations on Indigenous communities are no less meaningful because its operations have the potential to affect fewer Indigenous groups.

82. There is no evidentiary basis for CEC's contention that Indigenous communities harbour "negative attitudes towards natural gas" to FBC's benefit. Indigenous communities

¹⁴¹ CEC Final Argument, para. 202.

¹⁴² FortisBC Final Submissions, para. 197.

¹⁴³ FortisBC Final Submissions, paras. 206-207, 216-218.

¹⁴⁴ BCOAPO Final Argument, pp. 29-30.

¹⁴⁵ BCOAPO Final Argument, p. 30.

¹⁴⁶ CEC Final Argument, paras. 206-207.

consider many factors in decision making, including reliable access to thermal energy, energy affordability, and the manner in which infrastructure affects the exercise of Aboriginal rights. As recognized by Moody's, Indigenous communities objecting to a specific project or activity is an event risk that cannot be determined in advance with certainty.¹⁴⁷

E. ENERGY PRICE RISK

83. BCOAPO and CEC maintain that FBC's energy price risk is similar to the 2013 Proceeding,¹⁴⁸ although CEC argues that its risk could potentially lower as new technologies "continue to provide benefits",¹⁴⁹ referring to wind and solar energy generation resources. As FBC explained in its evidence, these resources do not provide reliable capacity and, as such, declines in the cost of the energy they produce simply shifts the risk to capacity.¹⁵⁰ The benefits of policies favouring electricity are offset at present by other factors.¹⁵¹

F. DEMAND/MARKET RISK

84. BCOAPO and CEC have taken the position that FBC's demand/market risk is lower overall. CEC repeats its argument that FBC's risk is mitigatable,¹⁵² and BCOAPO claims FBC has not taken into account favourable trends that mitigate risk in this category.¹⁵³ FBC has acknowledged that it stands to benefit from the Energy Transition through policies that favour electrification.¹⁵⁴ Its risk assessment is placed in this context, in light of all mitigation measures. As explained in FortisBC's Final Submissions, FBC's overall demand/market risk is similar to what it was in the 2013 Proceeding, and risk remains:¹⁵⁵

¹⁴⁷ FortisBC Final Submissions, para. 93.

¹⁴⁸ BCOAPO Final Argument, p. 32; CEC Final Argument, para. 213.

¹⁴⁹ CEC Final Argument, para. 213.

¹⁵⁰ Exhibit B1-11, CEC IR1 14.2.

¹⁵¹ FortisBC Final Submissions, para. 230.

¹⁵² CEC Final Argument, para. 217.

¹⁵³ BCOAPO Final Argument, p. 33.

¹⁵⁴ FortisBC Final Submissions, para. 203.

¹⁵⁵ FortisBC Final Submissions, paras. 215-221.

- (a) All else equal, additional EV charging load improves FBC's risk since it would increase FBC's load and revenues. However, increasing EV load in a short period of time or not being able to manage EV charging during peak demand periods can create its own challenges. While FBC may have plans for meeting increased EV load, that does not obviate risk.
- (b) FBC's Wholesale customers have a number of options that would allow them to discontinue taking service from FBC. A loss of any or all of the Wholesale customers to a competing electricity supplier would have a large impact on FBC. While FBC has not recently lost a Wholesale or Industrial customer, that does not guarantee future results – risk remains.
- (c) Any of FBC's eligible Industrial customers can discontinue taking service from FBC by building generation to serve some or all of their load, purchasing electricity on the open market or taking service from BC Hydro through its Open Access Transmission Tariff (OATT).

G. ENERGY SUPPLY RISK

85. All interveners who provided submissions on supply risk (i.e., BCOAPO, CEC) agree that FBC's energy supply risk is similar to that assessed in the 2013 Proceeding.¹⁵⁶

H. OPERATING RISK

86. BCOAPO agrees with FBC that FBC's operating risk has increased.¹⁵⁷

87. CEC argues that FBC's operating risk has been decreasing, citing AMI infrastructure and FBC's ability to plan projects,¹⁵⁸ and the non-diversifiable nature of cybersecurity risk.¹⁵⁹ RCIA

¹⁵⁶ BCOAPO Final Argument, p. 34; CEC Final Argument, para. 219.

¹⁵⁷ BCOAPO Final Argument, p. 34.

¹⁵⁸ CEC Final Argument, paras. 224-225, 229-230, 233.

¹⁵⁹ CEC Final Argument, para. 235.

says that responding to extreme weather events is part of doing business as a utility, and it is not clear they will impact FortisBC's ability to achieve its ROE.¹⁶⁰ As established above:

- (a) FBC's risk assessment is post-mitigation;
- (b) While risks such as cybersecurity may broadly impact other entities, the risk is more acute for utilities than many other enterprises; and
- (c) FBC is not required to prove that a risk factor will impact its ability to achieve its ROE.

88. ICG appears to suggest that FBC has failed to connect its operating risks to the probability of them occurring or their impact on future cash flows.¹⁶¹ However, FBC has provided ample evidence of serious and increasingly frequent extreme weather events, which cause lengthy outage periods for customers and require resource-intensive transmission and distribution infrastructure rebuilds.¹⁶² FBC has also provided evidence on the increased threat of cybersecurity attacks, which may have serious repercussions.¹⁶³ The potential costs associated with these increasing risks have the potential to prevent FBC from earning its allowed return. Investors also perceive these as risks; for example, the 2020 FBC Management Disclosure and Analysis notes:

The facilities of the Corporation could be exposed to the effects of severe weather conditions and other natural events, some of which could be caused by climate change. A major natural disaster, such as an earthquake, could severely damage the Corporation's electricity generation, transmission and distribution systems. Although the Corporation's facilities have been constructed, operated and maintained to withstand severe weather, there is no assurance that they will successfully do so in all circumstances. Furthermore, many of these facilities are located in remote areas which make it more difficult to perform maintenance and repairs if such assets are damaged by weather conditions or other natural events. The Corporation operates facilities in remote and mountainous terrain with a risk

¹⁶⁰ RCIA Final Argument, p. 30.

¹⁶¹ ICG Final Argument, para. 9.

¹⁶² FortisBC Final Submissions, paras. 225-226.

¹⁶³ FortisBC Final Submissions, para. 228.

of loss or damage from forest fires, floods, washouts, landslides, avalanches and similar natural events.¹⁶⁴

I. REGULATORY RISK

89. Both BCOAPO and CEC argue that FBC's regulatory risk is similar, not higher, than in the 2013 Proceeding. BCOAPO repeats its arguments with respect to deferral account financing,¹⁶⁵ which FortisBC addresses at paragraph 67 above, and takes narrow view of what constitutes regulatory lag by only focussing on particular types of approvals. CEC repeats its arguments that there is little regulatory risk associated with a utility not being able to earn its fair return, given its ability to recover prudently incurred costs.¹⁶⁶ This argument is addressed by FortisBC at Part Three, Section D, and paragraph 68, above.

90. ICG states there is "simply no evidence" that regulatory uncertainty and lag have increased.¹⁶⁷ FortisBC provided evidence of these business risks in its Application, in numerous responses to information requests, and at the oral hearing. Much of this evidence is referred to in FortisBC's Final Submissions.¹⁶⁸

¹⁶⁴ Exhibit B1-8-1, Appendix D-1, 2020 FBC MD&A, p. 18.

¹⁶⁵ BCOAPO Final Argument, p. 35.

¹⁶⁶ CEC Final Argument, para. 240.

¹⁶⁷ ICG Final Argument, para. 6.

¹⁶⁸ FortisBC Final Submissions, Part Three, Section B(j) and para. 229.

**PART SEVEN: OTHER FACTORS DEMONSTRATING 40% EQUITY
REMAINS REASONABLE FOR FBC**

91. FortisBC's Final Submissions addressed the evidence on FBC's credit ratings, restrictive financing covenants and access to capital in considerable detail.¹⁶⁹ BCOAPO and CEC agree with FBC's proposed 40% equity ratio, such that we only have limited reply on this topic. RCIA does not address these issues in its argument, and agrees that FBC's equity thickness be maintained at 40%.¹⁷⁰ ICG is the sole intervener taking the position that FBC's equity ratio be reduced.

92. BCOAPO argues that the Trust Indenture does not represent a material impediment to FBC's capital market access.¹⁷¹ With respect to FBC's financing covenants, if new debt interest rates rise as a result of economic conditions or a downgrade in FBC's credit ratings, the aggregate level of new debt that FBC would be able to issue would be constrained by the Earnings Coverage Test financial covenants. This is one of the reasons justifying maintaining FBC's equity thickness at 40%. FBC (and FEI) currently find themselves in a rising interest rate environment as debt capital markets are experiencing significant volatility, a trend that is expected to continue in the medium term.¹⁷²

93. FBC's submission is not "misleading" as alleged by BCOAPO because FBC has traditionally issued debt up to \$100 million.¹⁷³ FBC has, within the last decade, had a debt issuance of \$200 million.¹⁷⁴ The sensitivity analysis is meant to convey that issuance restrictions arising from the Earnings Coverage Test will result in steadily increasing pressure over time based on changes in the cost of borrowing and as interest rates rise, which is the current trend with interest rates, even if the amount of issuance in a given year is of a lower amount. FEI and FBC

¹⁶⁹ FortisBC Final Submissions, Part Six.

¹⁷⁰ RCIA Final Argument, pp. 4, 31, 35.

¹⁷¹ BCOAPO Final Argument, p. 68.

¹⁷² Exhibit B1-9, BCUC IR1 26.3.

¹⁷³ BCOAPO Final Argument, p. 68.

¹⁷⁴ Exhibit B1-9, BCUC IR1 26.2.

currently find themselves in a rising interest rate environment as debt capital markets are experiencing significant volatility resulting from the government having raised the benchmark interest rate a number of times in 2022 in an attempt to curb record high inflation and recession concerns, the war in Ukraine, and rising oil and commodity prices, a trend that is expected to continue in the medium term.¹⁷⁵ In fact, Bank of Canada Overnight rate has increased a number of times since this proceeding was initiated.¹⁷⁶

94. BCOAPO has made a similar argument in the case of FBC as it did with FEI that “there is no evidence in this proceeding FBC has been unable to issue debt as required to meet its financing needs on term less favourable than other BBB rated utilities.”¹⁷⁷ The Fair Return Standard requires more than meeting the lowest common-denominator; a utility should be able to attract capital on reasonable terms, and financial integrity is also a relevant consideration. FBC is facing risk of a downgrade. Most of FBC’s metrics are consistent with a non-investment grade credit rating, which if applied to FBC, would be a significantly pervasive and profoundly negative development for the utility and customers, as investors generally do not invest in non-investment grade entities, and raising capital would become extremely difficult for FBC.¹⁷⁸

95. ICG’s suggestion that FBC’s equity ratio be reduced is based on its view that the US proxy group should be given no weight when determining FBC’s equity ratio.¹⁷⁹ ICG’s position runs contrary its submissions elsewhere that the BCUC should place the greatest weight on the North American proxy group results.¹⁸⁰ ICG selectively highlights the equity ratios of ATCO Electric and FortisAlberta, but neglects to mention that Newfoundland Power has an equity ratio of 45%, and both Hydro One and Maritime Electric have equity ratios of 40%. ICG’s argument

¹⁷⁵ Exhibit B1-9, BCUC IR1 26.4.

¹⁷⁶ Exhibit B1-17, RCIA IR1 33.1.

¹⁷⁷ BCOAPO Final Argument, p. 68.

¹⁷⁸ FortisBC Final Submissions, paras. 233-235; Exhibit B1-9, BCUC IR1 6.4; Exhibit B1-11, CEC IR1 7.1.

¹⁷⁹ ICG Final Argument, para. 35.

¹⁸⁰ ICG Final Argument, paras. 24, 33.

also overlooks Mr. Coyne's evidence that the smaller size of FBC relative to the proxy group companies in both Canada and the U.S. could justify an increase in FBC's deemed equity ratio.¹⁸¹

¹⁸¹ Exhibit B1-8-1, Appendix C, Concentric Report, p. 151.

PART EIGHT: THE APPROPRIATE ROE FOR FEI AND FBC

96. In this Part, FortisBC first provides a general response to each intervener's ROE recommendations, and then addresses some specific intervener arguments. CEC and BCOAPO have acknowledged that FEI's and FBC's cost of equity has increased since the BCUC's last determinations, although their ROE estimates are still understated due to a combination of calculation errors, omissions and arbitrary deductions. RCIA's contention that FEI/FBC's cost of equity has decreased relies on stale (December 2021) data and deeply flawed analysis that is contrary to the consensus expert evidence and the BCUC's prior decisions. ICG's arguments that FBC's ROE should be reduced are similarly inconsistent with the evidence.

A. GENERAL RESPONSE TO INTERVENERS ON ROE

(a) CEC Acknowledges the Evidence that Cost of Capital Has Increased, but Its ROE Proposals Are Still Understated

97. CEC has recommended increasing FEI's ROE to 9.62% (on 40% equity) and increasing FBC's ROE to 9.56% (inclusive of 0.50% for floatation, and on 40% equity).¹⁸² In doing so, CEC has appropriately acknowledged: (a) "the context of increasing cost of capital";¹⁸³ (b) Mr. Coyne's "modelling and recommendations have been conservative as summarized below and should likely not be cherry-picked by element", citing six of Mr. Coyne's methodological decisions;¹⁸⁴ (c) the Lesser CAPM results "appear to be significantly out of line with other analysis", and "are too far away from reasonable level, as questioned even by Dr. Lesser",¹⁸⁵ (d) the Lesser CAPM Results "would appear to be at a level that would lead to a downgrade of the FEI credit rating",¹⁸⁶ and (e) "Dr. Lesser's CAPM model appears to have some questionable assumptions and may not be a relevant source of information for the Commission in its determination of ROEs for FEI and FBC."¹⁸⁷ These significant concessions are indicative of the

¹⁸² CEC Final Argument, para. 3.

¹⁸³ CEC Final Argument, para. 320.

¹⁸⁴ CEC Final Argument, paras. 262, 263, 298.

¹⁸⁵ CEC Final Argument, paras. 255, 260.

¹⁸⁶ CEC Final Argument, para. 257.

¹⁸⁷ CEC Final Argument, paras. 255-259. CEC made similar comments at para. 304.

overwhelming body of evidence demonstrating that the cost of equity has increased since the BCUC last considered FEI's and FBC's respective ROEs.

98. Nevertheless, CEC's recommended ROEs are still self-evidently understated in two respects. First, in the context of discussing the CAPM Market Risk Premium ("MRP"), CEC states that "investors are not exclusively forward forecast focused . . ." ¹⁸⁸ and has deducted 80 bps from its ROE estimate "for the CEC's perception that the modeling results are too forward looking and should be more grounded in the current and historical data" [Emphasis added]. ¹⁸⁹ CEC's 80 bps deduction, which accounts for most of the difference between CEC's proposal and Mr. Coyne's recommendations, is problematic in three respects:

- (a) CEC concedes that Mr. Coyne was already being "conservative" in giving 50% weighting to historical MRP data in his CAPM. ¹⁹⁰
- (b) Although CEC suggests that it "estimate[d]" ¹⁹¹ the deduction, it offers no explanation for how it arrived at the "estimate".
- (c) CEC's deduction is inconsistent with the expert evidence and financial theory. The cost of capital analysis, including the CAPM, is intended to be forward-looking. ¹⁹² Dr. Lesser, who does not typically use any historical data in the determination of the MRP, noted:

Regardless of the interest rate environment, it is theoretically more appropriate to use a forward-looking MRP that is estimated

¹⁸⁸ CEC Final Argument, para. 283.

¹⁸⁹ CEC Final Argument, para. 300.

¹⁹⁰ CEC Final Argument, paras. 262, 263.

¹⁹¹ CEC Final Argument, para. 288.

¹⁹² E.g., Dr. Lesser states in his report (Exhibit A2-3, p. 42) that: "One potential problem with using raw beta values – in addition to the problem of determining the appropriate time period, data frequency, and so forth – is that estimating the allowed ROE for a utility is a forward-looking exercise. In other words, regulators are concerned with the current opportunity cost of capital for a regulated utility, based on investors' expectations of the future, not historical costs" [Emphasis added].

properly than to rely on a historical average, because the future may not be the same as the past.¹⁹³ [Emphasis in original.]

Mr. Coyne was clear that his decision to weight historical data 50:50 with forecasts was only a pragmatic response to controversy in regulatory proceedings about the accuracy of forecasts.¹⁹⁴ In effect, CEC's approach is saying that investors base investment decisions primarily on historical data, rather than current information and forecasts. It is a big and unjustified leap from CEC's contention that "investors are not exclusively forward forecast focused", to placing the majority of weight on historical data. There is no evidence in this case that the future is going to (in Dr. Lesser's words) "be the same as the past". To the contrary, today's interest rate environment varies significantly from the interest rate environment underlying the historical MRP.¹⁹⁵

99. Second, the modelling underlying CEC's recommendations was all premised on a 45% common equity ratio, and CEC is recommending a 40% ratio. Both experts confirmed that increasing the disparity between FEI's equity ratio and that of the proxy group will increase the required ROE. They also agreed on how the adjustments should be calculated – a WACC adjustment for the Multi-Stage DCF model results, and a Hamada adjustment for the CAPM. Mr. Coyne had elected not to Hamada-adjust his own CAPM results, or perform a WACC adjustment on his Multi-Stage DCF results, only because his recommended common equity ratio of 45% for FEI would significantly narrow the equity disparity with the gas proxy groups; however, that logic would no longer hold at CEC's recommended 40% equity for FEI.¹⁹⁶ Applying a Hamada

¹⁹³ Exhibit A2-20, BCUC-Lesser IR2 10.3.

¹⁹⁴ FortisBC Final Submissions, para. 331.

¹⁹⁵ Tr. 3, p. 217, ll. 11-20 (Coyne): "So, my preference is to put more weight on the forward-looking MRP. The reason -- and even more so, when current interest rates vary so much from what they were historically when you calculate these historic market equity risk premiums, they go back over the last century. So, I have a preference for using the forward-looking approach as well."

¹⁹⁶ FortisBC Final Submissions, paras. 357-358.

adjustment to Mr. Coyne's CAPM results for the North American gas proxy group at 40% equity, for instance, increases the estimated ROE for FEI by 48 bps to 10.78%.¹⁹⁷

(b) BCOAPO Acknowledges the Evidence that Cost of Capital Has Increased, but Its ROE Proposals Are Still Understated

100. BCOAPO endorses an ROE of 9.5% for both FEI and FBC (on 40-42% and 40% equity, respectively), which BCOAPO says is inclusive of a 50 bps adjustment for flotation and financial flexibility, an adjustment for FEI's and FBC's lower equity thickness and a size premium for FBC.¹⁹⁸ BCOAPO's recommendations, like CEC's, acknowledge that the cost of capital has increased since the BCUC last set FEI/FBC's respective ROEs. However, BCOAPO's calculations still understate the required ROE due to its reliance on the Lesser CAPM Result and mathematical errors.

Using Lesser CAPM Results as Starting Point Suppresses BCOAPO's ROE Results

101. BCOAPO arrives at its position by using the following method: (1) adjust the North American proxy group for all models to exclude two Canadian utilities; (2) adjust the MRP in the Lesser CAPM approach upwards; (3) average the proxy-adjusted North American Coyne CAPM results with proxy and MRP-adjusted Lesser CAPM results; (4) average (a) the average adjusted CAPM results of Mr. Coyne and Dr. Lesser with (b) its proxy-adjusted North American Multi-Stage DCF results; and (5) apply judgement to adjust those results upward to account for greater financial leverage relative to the proxy companies.¹⁹⁹

102. Regarding the first step, BCOAPO proposes to exclude Enbridge and Canadian Utilities from Mr. Coyne's North American gas proxy group and Canadian Utilities from North

¹⁹⁷ To calculate this, FortisBC used the Hamada Adjustment as presented in Attachment C.9 ROE Exhibits – FEI – Gas (Hamada Adj. at 45% & 38.5%) of Exhibit B1-50, Undertaking No. 1 and changed the equity ratio in the "Hamada Adj at 45%" tab of the spreadsheet from 45% to 40%. FortisBC then applied the resulting Hamada adjusted betas for the North American proxy group to Mr. Coyne's average CAPM results as presented in Attachment A2; ROE Exhibits – FEI – Gas (Oct 2022 update 90 Day); JMC-FEI-6.1 Avg CAPM of the Undertaking No. 1 for the same proxy.

¹⁹⁸ BCOAPO Final Argument, pp. 57-58.

¹⁹⁹ BCOAPO Final Argument, pp. 53-54.

American electric proxy group. Applying these changes would increase Mr. Coyne's North American gas and electric proxy CAPM results by 10 bps (from 10.3% to 10.4%) and 3 bps (from 10.24% to 10.27%) respectively. However, for Multi-stage DCF, applying these changes would reduce Mr. Coyne results by 59 bps (from 9.72% to 9.13%) and 4 bps (from 9.11% to 9.07%), respectively. We have addressed the problem with BCOAPO's proposed adjustments to the North American proxy groups later in Section B(b).

103. Another significant driver of BCOAPO's lower ROE results is its decision to suppress Mr. Coyne's CAPM results by averaging them with very low adjusted Lesser CAPM Results. As discussed in FortisBC's Final Submissions, the Lesser CAPM results are implausibly low due to a very low MRP. Even Dr. Lesser questioned the validity of such low ROE results, which were below any allowed ROE in Canada in the last 20 years.²⁰⁰ Including unreasonably low results in an average only serves to make the resulting average unreasonably low, and this is the outcome here. BCOAPO implicitly acknowledges that the Lesser CAPM Results are unreasonable because it adjusts Dr. Lesser's MRP upwards. However, the adjustment is insufficient to bring it into reasonable alignment with forward-looking investor expectations. As BCOAPO acknowledges,²⁰¹ Mr. Coyne's CAPM results were already conservative due to Mr. Coyne's decision to base the MRP on a 50:50 blend of forecast and historical data. There is no need to average Mr. Coyne's conservative CAPM results with any other CAPM results, adjusted or otherwise. The BCUC should only be using Mr. Coyne's CAPM analysis.

BCOAPO's Mathematical Error When Averaging Understates Overall ROE

104. Regardless of methodological considerations, BCOAPO has made a straightforward mathematical error in averaging the results of its CAPM calculations for its adjusted North American electric proxy group. The error skewed BCOAPO's results downwards significantly.

²⁰⁰ FortisBC Final Submissions, para. 256.

²⁰¹ BCOAPO Final Argument, p. 50.

105. BCOAPO described its intent in step (3) as follows: “if an equal weighting is assigned to both results (Mr. Coyne – 10.27% and Dr. Lesser – 8.75%) and 50 basis points are added for floatation costs, the revised North American electric utility proxy group result would be a ROE of 9.01%.”²⁰² However, the average of 10.27% and 8.75% is 9.51%, not 9.01% ($10.27+8.75/2=9.51$). The error carries forward when BCOAPO averaged the CAPM and Multi-Stage DCF model results. The correction of BCOAPO’s mathematical error in the overall average of BCOAPO’s proposed CAPM and Multi-Stage DCF models for North American electric proxy increases BCOAPO’s ROE result from 9.04% to 9.29%.²⁰³

BCOAPO Incorporates Only a Fraction of the Hamada Adjustment

106. BCOAPO has acknowledged the need to adjust ROE upwards for FEI’s relative financial risk compared to proxy groups, and states that its ROE recommendations include such an adjustment to reflect that BCOAPO is proposing thinner equity than the basis of all of the ROE calculations (40% to 42% vs. 45%). BCOAPO doesn’t explicitly state how much of an upward adjustment it has included in FEI’s ROE; however, the amount included by BCOAPO can be readily back-calculated as being only 12 bps.²⁰⁴

107. This is clearly insufficient, as a Hamada adjustment would increase the ROE by almost four times that amount. For instance, applying a Hamada adjustment to Mr. Coyne’s CAPM results for the North American proxy group (revised for BCOAPO’s proposed North American Gas Proxy Group) at 42% equity, increases BCOAPO’s estimated ROE by 45 bps to 10.75%.²⁰⁵ The ROE increase would be even larger at 40% equity.

²⁰² BCOAPO Final Argument, p. 53

²⁰³ BCOAPO Final Argument, p. 54

²⁰⁴ Calculated by deducting BCOAPO’s proposed 9.5% from BCOAPO’s adjusted average of CAPM and Multi-Stage DCF results for the adjusted North American gas proxy group (9.38%)

²⁰⁵ To calculate this, FEI used the Hamada Adjustment as presented in Attachment C.9 ROE Exhibits – FEI – Gas (Hamada Adj. at 45% & 38.5%) of Exhibit B-50 Undertaking No. 1 and changed the equity ratio in the “Hamada Adj at 45%” tab of the spreadsheet from 45% to 42%. FEI then applied the resulted Hamada adjusted betas for North American proxy group (excluding ENB and CU as proposed by BCOAPO) to Mr. Coyne’s average CAPM results as presented in Attachment A2; ROE Exhibits – FEI – Gas (Oct 2022 update 90 Day); JMC-FEI-6.1 Avg CAPM of the Undertaking No.1 for the same proxy.

BCOAPO Miscalculates FBC's Size Premium and Correcting that Error Alone Yields an ROE of Over 10%

108. BCOAPO acknowledges the need for a size premium for FBC, and even states (referring to Mr. Coyne's evidence of 105 bps): "Similar results would likely apply to the revised North American electric proxy group which is largely made up of utilities from the US electric proxy group."²⁰⁶ Yet, the amount BCOAPO incorporated in its ROE recommendation to account for FBC's smaller size was far less. BCOAPO's own calculations suggest an implicit size premium of 46 bps.²⁰⁷ However, as explained in paragraphs 104-105 above, BCOAPO made a mathematical error when calculating the CAPM result used to estimate its final ROE for Electric proxy group.²⁰⁸ Once the error is corrected, the implicit size premium is reduced to 21 bps—one-fifth of the necessary adjustment. The proper 105 bps size adjustment alone, notwithstanding the distortion introduced in BCOAPO's calculation by relying on the BCOAPO-adjusted Lesser CAPM Results, would increase BCOAPO's calculated ROE for FBC to approximately 10.09% assuming 40% equity. This is more than Mr. Coyne's recommended ROE of 10.00% for FBC.

(c) RCIA Ignores the Multi-Stage DCF Model, Introduces Unsupported CAPM Adjustments, Uses Stale Data and Omits Hamada and Size Adjustments

109. RCIA arrives at its proposed ROEs of 8.00% to 8.75% for both FEI and FBC by ignoring the Multi-Stage DCF model (and the higher results) altogether, by applying unsupported downward adjustments to Mr. Coyne's CAPM results, by ignoring the most current data, and by failing to account for differentials in financial risk and size premiums. Updating RCIA's own calculations to reflect October 2022 data alone significantly closes the gap with Mr. Coyne's recommendations, and rectifying other shortcomings brings them further into alignment.

²⁰⁶ BCOAPO Final Argument, p. 55.

²⁰⁷ Calculated by deducting BCOAPO's proposed 9.5% from BCOAPO's adjusted average of CAPM and Multi-Stage DCF results (9.04%).

²⁰⁸ BCOAPO calculated an average of CAPM and DCF after adjustments with flotation cost at 9.04%. BCOAPO proposed a 9.50% return reflecting a 46 bps implied adjustment for other things like size. However, after correcting for the mathematical error, the average is 9.29%, reflecting an implied 21 bps adjustment.

RCIA Ignores the Multi-Stage DCF Model (and Those Higher Results) Altogether

110. RCIA's proposed ROEs are based entirely on the CAPM. RCIA has not even discussed the Multi-Stage DCF model. It has not attempted to reconcile its position with Mr. Coyne and Dr. Lesser's Multi-Stage DCF results for the North American proxy groups in the range of 9.72% – 10.03% for FEI and 9.11% – 9.52% for FBC. Dr. Lesser and Mr. Coyne's Multi-Stage DCF results for RCIA's preferred Canadian proxy group are even higher — between 10.28% to 10.93%.²⁰⁹

111. FortisBC submits that RCIA's choice to disregard the much higher Multi-Stage DCF results is untenable:

- (a) Both experts embrace the Multi-Stage DCF model, and it is based on sound financial theory. As Dr. Lesser stated: "The advantages of using the DCF methodology is that it is intuitive, understandable, consistent with financial theory, and readily calculated."²¹⁰
- (b) As Dr. Lesser noted: "The DCF methodology is the most commonly applied methodology by U.S. regulators."²¹¹
- (c) The BCUC has generally given significant weight to the Multi-Stage DCF model results. For example, in the BCUC's 2016 FEI Decision, the BCUC gave approximately equal weight to the results of the Multi-Stage DCF and CAPM models.²¹² In its 2009 Terasen Gas ROE Decision, the BCUC gave the "most weight to the DCF approach."²¹³

²⁰⁹ FortisBC Final Submissions, para. 254.

²¹⁰ Exhibit A2-3, Lesser Report, p. 32.

²¹¹ Exhibit A2-3, Lesser Report, p. 26.

²¹² 2016 GCOC Decision, p. 86.

²¹³ FortisBC Final Submissions, para. 271; *In The Matter of Terasen Gas Inc. Terasen Gas (Vancouver Island) Inc. Terasen Gas (Whistler) Inc. and Return On Equity And Capital Structure Decision*, G-158-09, December 16, 2009 ("2009 GCOC Decision"), p. 65.

- (d) In this case, the experts agree on almost all of the data inputs in the Multi-Stage DCF model,²¹⁴ allowing the BCUC to have a particularly high degree of confidence in the results.

RCIA's Downward Adjustments to Mr. Coyne's CAPM Calculations Are Inconsistent with the Expert Evidence

112. RCIA advocates a number of downward adjustments to Mr. Coyne's CAPM approach, such that the "CAPM ROE should be 8.26%, not 10.68%, as Concentric suggests."²¹⁵ However, RCIA's application of the CAPM is internally inconsistent and contrary to the consensus expert evidence:

- (a) RCIA has used only the Canadian proxy group. (Unlike in the case of the Multi-Stage DCF model, which RCIA has ignored altogether, using the Canadian proxy group in the CAPM produces lower ROE results than the North American proxy group.) However, the consensus expert evidence²¹⁶ was that a North American proxy group better recognizes North American market integration. RCIA's sole reliance on a Canadian proxy group is also inconsistent with RCIA's use of both Canadian and US risk-free rates.
- (b) RCIA determines the risk free rate with reference to actual bond yields as of December 2021, despite both experts agreeing that October 2022 data should be used. Both forecast and actual bond yields increased significantly between December 2021 and October 2022, which (other things being equal) drives a higher CAPM result.²¹⁷

²¹⁴ FortisBC Final Submissions, para. 297.

²¹⁵ RCIA Final Argument, p. 20.

²¹⁶ FortisBC Final Submissions, paras. 282-287.

²¹⁷ Exhibit B1-50, Undertaking No. 1, p. 2, Table 1.

- (c) RCIA only relies on a Canadian MRP, despite the experts agreeing that investors perceive a single integrated North American market.²¹⁸ We discuss this issue further in Section B of this Part.
- (d) RCIA has used a 75:25 blend of historical and forecast MRP data, which further suppresses Mr. Coyne's already conservative 50:50 weighting. As discussed above in the context of CEC, this approach is contrary to the consensus expert evidence that the MRP is intended to be forward-looking and there is no evidence to suggest that the future will look like the past.

Updating RCIA's Calculations for October 2022 Data Significantly Increases RCIA's ROE Results

113. RCIA is also not using the most up-to-date data in its calculations. RCIA's proposed ROEs are based on December 2021 data. RCIA makes limited references to September 2022 data where convenient, but has not used October 2022 data at all. RCIA's approach is contrary to the recommendations of both experts to use the most up-to-date information.²¹⁹ RCIA offers no explanation for why it is disregarding October 2022 data.

114. RCIA's reliance on December 2021 data is a significant determinant of its low ROE recommendations. Even if the BCUC were to accept every one of RCIA's methodological changes to Mr. Coyne's CAPM (the BCUC should not do so), simply updating the data in RCIA's methodology to October 2022 produces an ROE of 9.43%,²²⁰ which is significantly higher than RCIA's proposed 8.00% – 8.75%. Averaging 9.43% with the Canadian Multi-Stage DCF result of 10.46% (October 2022 data) would result in an ROE of 9.94% for both FEI and FBC. These values

²¹⁸ FortisBC Final Submissions, paras. 282-287.

²¹⁹ FortisBC Final Submissions, para. 294.

²²⁰ Mr. Coyne's October 2022 CAPM result for the Canadian proxy group was 10.12%. In terms of RCIA's adjustments: Using actual bond yields will increase the CAPM results by (6 to 42 bps with a mid-point of 24 bps) while RCIA's proposal for using 75:25 Canadian only historical and forward-looking will decrease the October CAPM result by 93 bps. Therefore the overall downward adjustment to Mr. Coyne's CAPM results would be: 24 – 93 = -69 bps.

support Mr. Coyne's recommendations of 10.1% (on 45% common equity) for FEI and 10.0% (on 40% common equity) for FBC.

RCIA Has Not Adjusted its CAPM for Relative Financial Risk and Size Premium

115. Even once RCIA's CAPM calculations are updated for October 2022 data and the methodological issues are rectified, the results are still understated in two ways:

- (a) RCIA did not incorporate a CAPM Hamada adjustment to recognize that the proxy group companies (even the Canadian proxy companies) have thicker equity than RCIA is advocating.²²¹ The Hamada adjustment to the Canadian proxy group at 40% equity will increase results by 47 bps, which in the case of Mr. Coyne's analysis would represent an increase from 10.12% to 10.59%.²²² Applying this 47 bps Hamada adjustment for 40% equity to RCIA's own calculations (but updated for October 2022 data), the CAPM output would be 9.90% ($9.43+0.47=9.90$).
- (b) RCIA did not incorporate a size premium for FBC, which Mr. Coyne calculated to be 105 bps based on Duff and Phelps data.²²³ This adjustment, which both experts agree is appropriate,²²⁴ would result in a significant increase in RCIA's calculated ROEs for FBC.

Using October 2022 Data in RCIA's Risk Premium Calculations Significantly Increases the Results

116. Although RCIA's proposed ROEs are based on its (flawed) CAPM calculations, RCIA also discusses the Risk Premium model at length. RCIA agrees with Mr. Coyne that the theory

²²¹ Exhibit B-50; Undertaking No. 1; C.9 ROE Exhibits, Hamada Adj at 40.0%. The reference shows that the average common equity of the Canadian proxy group is 41%.

²²² To calculate this, FEI used the Hamada Adjustment as presented in Attachment C.9 ROE Exhibits – FEI – Gas (Hamada Adj. at 45% & 38.5%) of Exhibit B-50 Undertaking No. 1 and changed the equity ratio in the "Hamada Adj at 45%" tab of the spreadsheet from 45% to 40%. FEI then applied the resulted Hamada adjusted betas for Canadian proxy group to Mr. Coyne's average CAPM results as presented in Attachment A2; ROE Exhibits – FEI – Gas (Oct 2022 update 90 Day); JMC-FEI-6.1 Avg CAPM of the Undertaking No. 1 for the same proxy.

²²³ FortisBC Final Submissions, para. 362.

²²⁴ FortisBC Final Submissions, paras. 354, 355, 360.

behind the Risk Premium model is valid and that “statistically significant multi-year linear relationship exists between interest rates (bond yields) and utility risk premiums accorded by the market.”²²⁵ However, RCIA disagrees with Mr. Coyne’s Risk Premium results. We address RCIA’s specific submissions on the Risk Premium model later in these Reply Submissions. At this juncture, we only highlight that RCIA performed all of its Risk Premium calculations using December 2021 data. Simply updating RCIA’s Risk Premium calculations for October 2022 data produces ROE results that are consistent with Mr. Coyne’s recommendations.

117. We have replicated below RCIA’s Table 1 and 2, which summarize RCIA’s calculated Risk Premium results based on December 2021 data, adding the values (in bold underline) generated by substituting October 2022 data and holding all else constant.²²⁶ The resulting ROEs are all over 10.0% and much higher than the results from December 2021. This is what one would expect. As RCIA concedes,²²⁷ the Risk Premium model is influenced by bond yields and yields have increased in tandem with interest rates.²²⁸

RCIA’s Table 1 (December 2021 Risk Premium Results for FEI) Updated With October 2022 Data

	Using 30-Day Actual Average Yield on 30-Year Treasury Bond	Using Q2 2022–Q2 2023 Forecast for Yield on 30-Year Treasury Bond	Using 2023-2027 Forecast for Yield 30-Year Treasury Bond
Yield	1.87% <u>3.92%</u>	2.52% <u>4%</u>	3.40% <u>3.8%</u>
Risk Premium	7.46% <u>6.25%</u>	7.08% <u>6.2%</u>	6.57% <u>6.32%</u>
Resulting ROE	9.33% <u>10.17%</u>	9.60% <u>10.2%</u>	9.97% <u>10.12%</u>

²²⁵ RCIA Final Argument, p. 6.

²²⁶ Exhibit B1-50, Undertaking No. 1; Attachment A2; ROE Exhibits – FEI – Gas (Oct 2022 update 90 Day), JMC-FEI-9 Risk Premium.

²²⁷ RCIA Final Argument, p. 14.

²²⁸ Exhibit B1-50, Undertaking No. 1, p. 2, Table 1. The change is also evident in the Yield rows in RCIA’s Table 1 and 2 replicated below.

RCIA’s Table 2 (December 2021 Risk Premium Results for FBC) Updated With October 2022 Data

	Using 30-Day Actual Average Yield on 30-Year Treasury Bond	Using Q2 2022–Q2 2023 Forecast for Yield on 30-Year Treasury Bond	Using 2023-2027 Forecast for Yield on 30-Year Treasury Bond
Yield	1.87% 3.92%	2.52% 4%	3.40% 3.8%
Risk Premium	7.45% 6.3%	7.09% 6.26%	6.61% 6.36%
Resulting ROE	9.32% 10.22%	9.61% 10.26%	10.01% 10.16%

118. The results based on *actual* bond yields (RCIA’s preference) are even higher than the results based on Blue Chip’s long-term forecasts. As of October 2022, current government bond yields were higher than the forecast yields.²²⁹

Mr. Coyne’s Analysis Was Balanced and Reasonable

119. The fact that RCIA’s own calculations, properly updated for October 2022 data, actually reinforce Mr. Coyne’s recommendations is a full answer to RCIA’s argument that Mr. Coyne’s analysis was biased.²³⁰

120. RCIA’s bias argument also rests on the mistaken belief that Mr. Coyne’s use of forecast bond yields in the Risk Premium model, rather than actual bond yields, increased Mr. Coyne’s ROE results.²³¹ For one thing, RCIA appears to be overlooking the fact that Mr. Coyne based his recommendation on the Multi-Stage DCF and CAPM results, using the Risk Premium Model only as a reasonableness check.²³² Moreover, using forecast bond yields in the Risk Premium model, rather than actual bond yields, produces lower ROE results when using October 2022 data—the exact opposite outcome from what RCIA is suggesting. The same is true for the CAPM analysis.²³³

²²⁹ FortisBC Final Submissions, para. 325.

²³⁰ RCIA Final Argument, e.g., p. 10.

²³¹ RCIA points to “Concentric’s use of forecast data to inflate results...” in the Risk Premium Model: RCIA Final Argument, p. 10.

²³² FortisBC Final Submissions, paras. 400-404.

²³³ FortisBC Final Submissions, para. 315. In the Risk Premium Model, as shown in the tables above, based on October 2022 data, using the 5 year bond yield forecast will lead to 8 bps (10.16% - 10.22%) and 5 bps (10.12%

121. In any event, the evidence demonstrates that Mr. Coyne has been balanced and reasonable. Dr. Lesser agreed with most of Mr. Coyne's methodological decisions and choice of data, both in the Multi-Stage DCF model and the CAPM. Moreover, on the points where the experts disagreed, Mr. Coyne's approach was more conservative than Dr. Lesser's approach in a number of instances. For example:

- (a) Although Dr. Lesser and Mr. Coyne both recognized the validity of a size premium, Mr. Coyne did not include one;²³⁴
- (b) Although Dr. Lesser and Mr. Coyne agreed that an upward Hamada adjustment should be applied to CAPM results to account for FEI and FBC having thinner equity than the proxy groups, Mr. Coyne did not apply one;²³⁵
- (c) Although Dr. Lesser and Mr. Coyne agreed that an upward WACC adjustment should be applied to DCF results to account for FEI and FBC having thinner equity than the proxy groups, Mr. Coyne did not apply one;²³⁶ and
- (d) Mr. Coyne tempered the forward-looking MRP in the CAPM by weighting it 50:50 with historical data.²³⁷

122. In short, RCIA is engaging in the type of "cherry picking" of Mr. Coyne's analysis that CEC has properly acknowledged is inappropriate.²³⁸

(d) Omissions and Inconsistencies in ICG's ROE Position

123. ICG only addresses FBC. It advocates reducing FBC's ROE to 8.80% on 38.5% common equity, which would represent a decrease in FBC's allowed ROE. ICG maintains that its

- 10.17%) lower results , and the result based on a one year forecast is very close to the number produced by October 2022 30-day average actual 30-year bond yields.

²³⁴ FortisBC Final Submissions, para. 362.

²³⁵ FortisBC Final Submissions, para. 352.

²³⁶ FortisBC Final Submissions, para. 357.

²³⁷ FortisBC Final Submissions, paras. 331, 337.

²³⁸ CEC Final Argument, para. 262.

proposed ROE for FBC is based on Mr. Coyne's October 2022 update of Dr. Lesser's average CAPM and Multi-Stage DCF results (30-day average stock prices and interest rates) adjusted for 50 bps flotation and financial flexibility cost.²³⁹ There are three readily-apparent issues in ICG's calculations that drive ICG's counterintuitive result.

124. First, the CAPM result that ICG has used in its calculation is 7.10% (or 7.60% after adjusting for flotation cost),²⁴⁰ a number well below what even Dr. Lesser considers reasonable and not that far removed from the cost of debt.²⁴¹ Averaging a reasonable Multi-Stage DCF result with an unreasonably low Lesser CAPM Result only makes the resulting average unreasonably low.

125. Second, ICG also has not accounted for any size premium for FBC, but offered no explanation for it. Both experts agree that the CAPM will understate ROE results for companies (like FBC) that are smaller than the proxy companies. The size premium calculated by Mr. Coyne based on the Duff and Phelps approach was 105 bps.²⁴²

126. Third, ICG has used internally inconsistent reasoning to reach its low result:

- (a) On one hand, ICG agrees with the experts that the BCUC should give greatest weight to the North American proxy group when determining ROE.²⁴³ ICG's support for a North American proxy group is, no doubt, influenced by the fact that this tends to reduce FBC's ROE results significantly relative to using the Canadian proxy group (i.e., by approximately 60 to 150 bps, depending on the model and which expert's variables are used),²⁴⁴ other things being equal.

²³⁹ ICG Argument, para. 33.

²⁴⁰ FortisBC Final Submissions, para. 254 (See Lesser CAPM results based on October 2022 data - B.6 – Lesser – 30 day).

²⁴¹ FortisBC Final Submissions, para. 256.

²⁴² FortisBC Final Submissions, para. 362.

²⁴³ ICG Argument, para. 24.

²⁴⁴ FortisBC Final Submissions, para. 254, see summary table for October 2022 Coyne and Lesser outputs.

- (b) However, when it comes to determining the common equity ratio, ICG does the opposite—it advocates using the simple Canadian utilities median of 38.7% equity (which ICG then rounds down, without explanation, to 38.5%), and advocates giving “no weight” to the same US proxy companies that ICG advocates using for the ROE calculation.²⁴⁵ As the North American Electric Proxy group has an average equity ratio well above FBC’s proposed equity ratio, ICG’s approach tends to suppress the common equity ratio as well.

127. ICG’s differing approaches are internally inconsistent because the common equity ratio and ROE are intertwined; ROE determinations are affected by the common equity ratio, and *visa versa*. Mr. Coyne and Dr. Lesser both identified the need to adjust for differences in the common equity ratio of the target company and the proxy companies (the Hamada adjustment for the CAPM and WACC adjustment for the DCF model).²⁴⁶ All of the October 2022 ROE calculations based on the North American proxy group (which ICG wants to use) assume that the BCUC has accepted FBC’s proposed common equity ratio of 40%. Even then, the US electric proxy companies will still have approximately 10% thicker equity on average (49.7%), such that the differential with the North American electric proxy group is substantial.²⁴⁷ FBC’s ROE would be even more understated compared to the value determined with reference to the North American proxy group if the BCUC were to accept ICG’s position of 38.5% equity. Applying a Hamada adjustment to the Lesser CAPM Results (30-day average stock prices and interest rates) for the North American proxy group at 38.5% equity, for instance, increases the estimated ROE by 35 bps to 7.95%.²⁴⁸

²⁴⁵ ICG Final Argument, para. 35.

²⁴⁶ FortisBC Final Submissions, paras. 353-356.

²⁴⁷ FortisBC Final Submissions, para. 356.

²⁴⁸ To calculate this, FBC used the Hamada Adjustment as presented in Attachment C.9 ROE Exhibits – FBC – Electric (Hamada Adj. at 40%) of Exhibit B1-50, Undertaking No. 1 and changed the equity ratio in the “Hamada Adj at 40%” tab of the spreadsheet from 40% to 38.5%. FBC then applied the resulted Hamada adjusted betas for North American Electric proxy group to Dr. Lesser’s average CAPM results as presented in Attachment B6; ROE Exhibits – FBC – Electric (Oct 2022 update 30 Day); JMC-FBC-6.2 Forward CAPM of the Undertaking No. 1 for the same proxy.

B. INTERVENERS ARE OUT OF STEP WITH EXPERTS ON PROXY GROUPS AND US DATA

128. CEC, BCOAPO and RCIA's arguments regarding the use of US data and proxy companies depart from the consensus expert evidence, and should be rejected.

(a) CEC's Suggestion to Average Results for All Proxy Groups Is Unnecessary

129. CEC suggests averaging the results for the Canadian proxy group, US proxy group and North American proxy group.²⁴⁹ FortisBC submits that it is more appropriate to use the North American proxy groups as a distinct proxy groups, without averaging. The experts agree on the appropriateness of using North American proxy groups. They also agree on Mr. Coyne's proxy group screening criteria for the North American (and US) proxy groups, whereas both experts noted the limited size and composition of the Canadian proxy group.²⁵⁰

(b) BCOAPO's Proposed Revisions to the North American Proxy Groups Are Unwarranted

130. BCOAPO argues that two companies—Canadian Utilities and Enbridge—should be excluded from North American Gas and/or Electric Proxy groups. In support of this change, BCOAPO cites Mr. Coyne's comment that he would probably have had to exclude Enbridge and Canadian Utilities from his North American proxy groups if the US proxy group screening criteria were rigidly applied to Canadian companies.²⁵¹ However, there was a sound rationale for Mr. Coyne to refrain from applying the US proxy criteria to the Canadian utilities in the North American group: doing so would undermine the value of using a North American proxy group (which both experts agreed is most appropriate) because there are only a handful of comparable utility companies listed on the Canadian stock exchange. The proxy screening exercise must consider the need for having a sufficient number of companies, as Dr. Lesser noted:

A regulated utility's cost of capital cannot be set without reference to other firms facing comparable risks. Yet, because each firm is unique, it is important to

²⁴⁹ CEC Final Argument, para. 297.

²⁵⁰ FortisBC Final Submissions, paras. 281, 282; Exhibit B1-8-1, Concentric Report, Appendix C, p. 39.

²⁵¹ BCOAPO Final Argument, p. 43.

develop proxy groups with enough firms to provide some semblance of statistical validity. For example, the U.S. Federal Energy Regulatory Commission (FERC) requires proxy groups to contain a minimum of four firms and prefers at least five firms. Thus, there is an inherent tradeoff: larger proxy groups provide more statistically valid results, but as the number of firms increases, the less likely some of those firms will be “comparable” to the regulated firm under review.²⁵²

131. FortisBC submits that Enbridge and Canadian Utilities should remain a part of the North American proxy groups.

(c) RCIA’s Opposition to US Data Is Inconsistent with Consensus Expert Evidence and Regulatory Practice

132. Whereas CEC, BCOAPO and ICG all acknowledge the need to rely on US data, RCIA does not. RCIA states that Mr. Coyne has used assumptions that “baselessly incorporate . . . non-Canadian data, which in turn raise the assumption values and subsequently the recommended ROEs.”²⁵³ RCIA’s position in this regard is without merit.

133. The summary tables included in paragraph 249 of FortisBC’s Final Submissions show that, in fact, the Canadian proxy group produced much higher ROEs in Mr. Coyne’s Multi-Stage DCF analysis than either of the US and North American proxy groups. The Canadian proxy group CAPM results are only slightly lower than those produced with the other proxy groups. That is, the effect of using the Canadian proxy group is largely offsetting based on October 2022 data, but tend to slightly increase the overall ROE.

134. Regardless, FortisBC submits that there is ample basis for using US data in ROE analysis. Dr. Lesser and Mr. Coyne agree that using US data is appropriate, and both favour North American proxy groups. The BCUC’s 2016 Decision used the US proxy group results, citing both increasing integration and the scarcity of Canadian publicly-traded utilities.²⁵⁴ Other Canadian regulators have taken a similar approach. The extent of integration has only increased over time,

²⁵² Exhibit A2-3, Lesser Report, p. 6.

²⁵³ RCIA Final Argument, p. 3.

²⁵⁴ See 2016 GCOC Decision, pp. 52-53.

as shown by the data that Mr. Coyne provided.²⁵⁵ Various metrics and examples in evidence show that “investors would consider returns in these markets [i.e., Canada and US] to be closely correlated.”²⁵⁶

135. FortisBC observes that, while RCIA is critical of Mr. Coyne’s use US proxy companies and data, RCIA itself uses US data when it suits them. RCIA’s proposed risk-free rate is based on the mid-point of Canadian and US 30-year bond yield, and RCIA’s reliance on the US data in that instance served to suppress its ROE results.²⁵⁷

C. INTERVENERS ONLY IDENTIFY NARROW ISSUES ON MULTI-STAGE DCF MODEL

136. RCIA did not discuss or rely on the Multi-Stage DCF model at all—as discussed above, this a notable omission and a key reason why its overall recommended ROE is so low. BCOAPO, CEC and ICG all rely on the Multi-Stage DCF model, so the submissions below are limited to addressing discrete issues about the model’s application.

(a) Using 90 Day Dividend Yields Is Reasonable but Skews the Results Downwards

137. BCOAPO suggests that because of the market uncertainty, 90 trading days “should be the primary focus”.²⁵⁸ FortisBC agrees that 90 days should be the primary focus under normal market conditions, but the BCUC should also recognize that a period that long is skewing the DCF results downwards in the current circumstances. Despite the uncertainty in the world in 2022, one fundamental fact is absolutely certain: interest rates increased by 2.25% during the 90-day period used for Mr. Coyne’s September 2022 Update, and 1.25% in September and October 2022 alone. The statistical data shows that dividend yields on utility stocks are generally higher than government bond yields (which is intuitive, as higher returns are necessary to attract investment with a higher risk profile).²⁵⁹ As Mr. Coyne explained in his September 2022 Update, utility stock

²⁵⁵ FortisBC Final Submissions, paras. 282-286.

²⁵⁶ FortisBC Final Submissions, para. 285.

²⁵⁷ RCIA Final Argument, footnote 59.

²⁵⁸ BCOAPO Final Argument, p. 40.

²⁵⁹ FortisBC Final Submissions, paras. 306-308.

prices lagged the sharp interest rate increases and down market in 2022, meaning that “90-day historic stock price averages used in the DCF model are not reflective of current market conditions.”²⁶⁰

138. BCOAPO suggests that FortisBC has misinterpreted Dr. Lesser’s evidence with respect to whether a shorter period might be reasonable. FortisBC has included Dr. Lesser’s response to FortisBC-Lesser IR1 5.1²⁶¹ below for ease of reference. In that response, Dr. Lesser indicated that (a) regulators are using periods of between 30-90 days, (b) a period not less than 30 days should be used, and (c) left to his own choice, he would likely pick 90 days. Dr. Lesser added at the hearing that “I would not do a rote, you know, it must be 90 days, it must be 60 days. I would probably, you know, look at what’s happened in the market. I would certainly not use less than, say, a 30-day period.”²⁶² During the oral hearing, Dr. Lesser also acknowledged that he has previously used 30-days or 60-days depending on the market conditions.²⁶³ This is all consistent with how we described Dr. Lesser’s position in paragraph 305 of FortisBC’s Final Submissions, though we acknowledge that we inadvertently took one specific quote (from p. 201 of the transcript) out of context and apologize for our error.

Topic/Issue: DCF Model - Dividend Yield Calculation

5.0 Reference: Exhibit A2-3, BCUC Staff Consultant Report, page 30

5.1 Dr. Lesser discusses various averaging periods for calculating the stock price in the DCF model. What averaging period does Dr. Lesser prefer?

RESPONSE:

5.1 Dr. Lesser has used averaging periods between one month and six-months, depending on the underlying requirement by regulators. He believes a one-month period to be a minimum time period. If he were to perform an analysis unfettered by regulator’s requirements for such analyses, he would likely use a three-month period.

²⁶⁰ Exhibit B1-8-1-2, September 2022 Update, p. 5.

²⁶¹ Exhibit A2-8.

²⁶² Tr. 4, p. 440, ll. 20-24 (Lesser); see also: FortisBC Final Submissions, para. 305.

²⁶³ Tr. 4, pp. 444 to 447 (Lesser).

(b) Using Multiple Sources of Analyst Estimates Is Superior to Using One Source

139. Only BCOAPO and CEC address the source of analyst estimates in the DCF calculations. BCOAPO agrees with Mr. Coyne that multiple sources should be used.²⁶⁴ CEC suggests that, rather than adopting one of Mr. Coyne's or Dr. Lesser's approach to data sources, the BCUC could give weight to both approaches.²⁶⁵ The problem with CEC's suggestion is that Dr. Lesser's preferred I/B/E/S data set is already included as one of Mr. Coyne's sources.²⁶⁶ Taking CEC's proposed approach just gives double weight to one source (I/B/E/S), without a clear justification for preferring that one data set over the others. Mr. Coyne's approach is intuitive and reasonable and should be accepted.

D. RESPONSE TO INTERVENER ARGUMENTS ON THE CAPM

140. As we discussed in Section A above, only ICG and RCIA wholeheartedly embrace the very low Lesser CAPM Results. CEC has recommended against giving any weight to the Lesser CAPM Results,²⁶⁷ while BCOAPO has sought to rehabilitate those results by adjusting Dr. Lesser's MRP upwards.²⁶⁸ In this section, FortisBC answers ICG's, RCIA's and BCOAPO's specific CAPM arguments, all of which focus on the risk-free rate and MRP.²⁶⁹

(a) Using Actual Bond Yields for the Risk Free Rate Will Increase CAPM Results

141. RCIA and ICG advocate using actual bond yields, rather than forecast bond yields, to determine the risk-free rate in the CAPM.²⁷⁰

²⁶⁴ BCOAPO Final Argument, p. 41.

²⁶⁵ CEC Final Argument, para. 312.

²⁶⁶ FortisBC Final Submissions, para. 299.

²⁶⁷ CEC Final Argument, para. 260.

²⁶⁸ BCOAPO Final Argument, p. 49.

²⁶⁹ Beta is the other component of the CAPM. RCIA and BCOAPO accept Concentric's beta values (RCIA Final Argument, p. 11; BCOAPO Final Argument, p. 51), and other interveners are silent on beta.

²⁷⁰ BCOAPO takes no position, while CEC rejects the Lesser CAPM Results for other reasons. BCOAPO Final Argument, 45.

RCIA Is Incorrect About the Effect of Using Forecast Bond Yields

142. RCIA has mischaracterized the nature of the disagreement between Mr. Coyne and Dr. Lesser when it comes to the risk-free rate. RCIA suggests: “What is at issue is the use of blended forecast and actual data (as proposed by Mr. Coyne) versus the use of only actual data (as recommended by Dr. Lesser).”²⁷¹ In fact, Mr. Coyne based his calculations on a forecast bond yield only (i.e., he did not “blend” forecast and actual).²⁷²

143. RCIA argues that using actual data, rather than forecasts, reduces ROE by between 0.68% – 1.04% (mid-point of 0.86%).²⁷³ However, RCIA has made its submissions based on December 2021 data, despite that data being updated twice during the course of this proceeding. Mr. Coyne’s use of the most up-to-date forecast data to determine the risk-free rate actually supressed the CAPM results relative to the use of actual bond yields.²⁷⁴ The following Figure compares Mr. Coyne’s forecast bond yields with Dr. Lesser’s preferred actual 30-day average 30-year bond yields updated for October 2022. It shows that using actual October 2022 data will increase the CAPM results by 0.06% (for Canada) and 0.42% (for US) with a mid-point of 0.24%.

		Consensus forecast as used by Mr. Coyne	Dr. Lesser – 30 day Average Actual 30-Year bond yield	Difference
Bond Yield (Canada)	December 2021 data	2.58%	1.82%	-0.76%
	October 2022 data	3.21%	3.27%	0.06%
Bond Yield (US)	December 2021 data	2.91%	1.87%	-1.04%
	October 2022 data	3.5%	3.92%	0.42%

²⁷¹ RCIA Final Argument, p. 12.

²⁷² FortisBC Final Submissions, para. 315.

²⁷³ RCIA Final Argument, footnote 59 and 60. RCIA states that it computed these values “by taking the difference between the CAN Bond Yield of Mr. Coyne Original (2.58%) and Dr. Lesser’s CAN 90-day average as of December 2021 (1.9%), as such (2.58% - 1.9% = 0.68%), and US Bond Yield of Mr. Coyne Original (2.91%) and Dr. Lesser’s US 30-day average as of December 2021 (1.87%), as such (2.91%-1.87%=1.04%).”

²⁷⁴ FortisBC Final Submissions, para. 315.

144. RCIA's opposition to the use of forecasts is based, in part, on its view that "forecasting is fraught with uncertainty" and that there is "no evidence forecast data identifies and weighs or filters transitory circumstances better than actual (or spot) data."²⁷⁵ RCIA's focus on *ex post* forecast accuracy misses the point. The use of forecast bond yields recognizes that cost of capital is dictated by forward-looking investor expectation,²⁷⁶ and investors use forecasts.²⁷⁷ As the saying goes—"if we could predict the market, we would all be millionaires." At the same time, (as discussed further below in response to ICG) we know that current bond yields reflect investor decisions made based on considerations other than just future market expectations, such that it is incorrect to assume current prices are a perfect reflection of future expectations.

Response to ICG on Risk Free Rate

145. ICG advocates using actual bond yields to determine the risk free rate, suggesting that using forecasts (as Mr. Coyne recommends) represents a "rejection" of the efficient market hypothesis that underlies the cost of capital models.²⁷⁸

146. Mr. Coyne never suggested that price is unaffected by future expectations; rather, he made the accurate observation that today's price also incorporates investment considerations other than future expectations about prices. Many investors buy and sell for pragmatic considerations that are unrelated to what they expect the price will be in the future.²⁷⁹ Were that not the case, one would expect consistent alignment between current prices and the litany of forecasts produced by market observers on an ongoing basis. Mr. Coyne and Dr. Lesser both recognized that the models are theoretical constructs, and that all models have shortcomings

²⁷⁵ RCIA Final Argument p. 15.

²⁷⁶ E.g. Dr. Lesser states in his report (Exhibit A2-3, p. 42) that: "One potential problem with using raw beta values – in addition to the problem of determining the appropriate time period, data frequency, and so forth – is that estimating the allowed ROE for a utility is a forward-looking exercise. In other words, regulators are concerned with the current opportunity cost of capital for a regulated utility, based on investors' expectations of the future, not historical costs."

²⁷⁷ FortisBC Final Submissions, para. 317.

²⁷⁸ ICG Argument, paras. 12, 14.

²⁷⁹ FortisBC Final Submissions, paras. 321-324.

that prevent ROE estimation from being reduced to a rote exercise.²⁸⁰ This is one instance where clinging inflexibly to the academic hypothesis is unhelpful in achieving a fair real-world result.

147. ICG's support for rigidly applying the efficient market hypothesis in this context is inconsistent with ICG's acceptance of using forecast bond yields in an AAM "to facilitate adjustment to the model results for regulatory efficiency reasons".²⁸¹

148. In short, the efficient market hypothesis is a useful abstraction, but an abstraction nonetheless. The mere fact that models are based on that abstraction does not dictate that the BCUC should ignore what actually occurs in real life in the markets. The Fair Return Standard is grounded in real world considerations—capital attraction, financial integrity and comparable investment—and is not defined with specific reference to a particular theoretical model like the CAPM or DCF.

(b) Response to RCIA's Argument that Only Canadian MRP Should Be Used

149. RCIA, observing that the US MRP is higher than the Canadian MRP, contends that the MRP "should only incorporate Canadian data".²⁸² The essence of RCIA's argument is as follows:

Historically, expected returns on U.S. utilities have not been the same as the expected return on an investment in a Canadian utility. This difference is clearly demonstrated by the different historical MRP values between the two countries. Therefore, one would expect a Canadian utility to have a return profile slightly lower than the overall Canadian stock market return, whereas U.S. utilities would be expected to have a return profile slightly less than the **comparatively higher returning** U.S. stock market.²⁸³ [Emphasis in original.]

RCIA goes on to argue that a blended North American MRP is inappropriate because "In particular, there is no evidence indicating the risk associated with the ROE of a Canadian utility is

²⁸⁰ FortisBC Final Submissions, para. 270.

²⁸¹ ICG Final Argument, para. 15.

²⁸² RCIA Final Argument, p. 3.

²⁸³ RCIA Final Argument, p. 15.

directly comparable to that of a U.S. utility.”²⁸⁴ There are a number of problems with RCIA’s arguments.

150. First, it is not possible to draw any inference whatsoever about the relative expected returns for utilities in Canada and the US from a differential in the US and Canadian MRP. Utilities represent only a very small portion of indices such as the S&P/TSX Composite or the S&P 500 indices, which are the proxies for market as a whole and are used to calculate MRP.²⁸⁵ The MRP in each country will always differ simply because of differences in the composition and sector breakdown of Canadian and US markets as measured by indices. Heavier weightings of sectors like technology and healthcare that have much higher growth and returns will cause the expected returns of an index to be higher than an index dominated by the financial and energy sectors, for instance. The evidence is that the S&P 500 includes some of the world’s largest companies with high growth rates (e.g., Amazon, Microsoft).²⁸⁶

151. More fundamentally, RCIA is misconstruing the role of the MRP in the CAPM analysis. The MRP is a representation of what a potential investor in FEI or FBC could earn by investing in the market as a whole (represented by a proxy such as the S&P/TSX Composite or S&P 500 indices),²⁸⁷ not a measure of whether “the risk associated with the ROE of a Canadian utility is directly comparable to that of a U.S. utility.” Relative financial risk between FEI/FBC and a US utility is addressed through a Hamada adjustment to beta.²⁸⁸ Relative business risk is addressed through an after-the-fact adjustment to the output of an ROE model or (more typically in BC) an adjustment to the utility’s equity thickness.²⁸⁹

²⁸⁴ RCIA Final Argument, p. 17.

²⁸⁵ For instance, there are only a handful of publicly traded utility holding companies in Canada: Exhibit B1-8-1, Appendix C, Concentric Report, pp. 39-40.

²⁸⁶ Tr. 3, p. 242 (Coyne).

²⁸⁷ FortisBC Final Submissions, para. 327. See, in particular, footnote 550.

²⁸⁸ FortisBC Final Submissions, para. 354.

²⁸⁹ FortisBC Final Submissions, para. 33.

152. Dr. Lesser and Mr. Coyne agree that there is now one integrated North American market, where investors would consider returns to be closely correlated.²⁹⁰ The significance of the integration in the context of the MRP is that investors can, and do, earn a premium over the risk free rate by investing in the markets of both countries. Since a potential investor in FEI/FBC could obtain a return above the risk-free rate by investing in a fund that tracks the TSX or S&P 500, there is a sound conceptual basis for using a single North American MRP in the CAPM analysis.

153. In a similar vein, RCIA states that “the Canadian stock market should already reflect any market expectations related to the impact of integration with the U.S. or other external markets”.²⁹¹ Again, RCIA is overlooking the fact that the differential in the TSX and S&P 500 returns is attributable to the different industry weightings in the respective indexes, not expectations about utility earnings. The Canadian stock market will continue to have a lower MRP so long as it continues to have a relatively small technology and healthcare weighting and remains less diversified.

154. Averaging the two proxies—TSX and S&P 500—to create a North American proxy, as Mr. Coyne has done, is reasonable approach. Dr. Lesser expressed his agreement with Mr. Coyne in this regard, stating:

I think if you were using a -- for the Canadian specific proxy group and the U.S. specific proxy group, I would use their respective MRPs, not combined. I certainly agree with Mr. Coyne that for the North American proxy group it'd be appropriate to use an average. And I'd recommend, and I think Mr. Coyne agrees with me, that it would probably and generally be better to rely on the results of the combined North American proxy group.²⁹² [Emphasis added.]

155. The averaging approach is potentially conservative, in that it would also reasonable to just use the US MRP, rather than averaging Canada and the US. A potential investor

²⁹⁰ FortisBC Final Submissions, paras. 285, 286.

²⁹¹ RCIA Final Argument, p. 16

²⁹² Tr. 3, p. 211 (Lesser).

in FEI or FBC can, as an alternative, obtain the US market return represented by the S&P 500. As Mr. Coyne noted, there are already enough US based companies to use as proxies and the US market is more diverse than Canada.²⁹³

156. In any event, RCIA has also overstated the downward impact on ROE of “using only Canadian MRP data”. RCIA explains its calculation of a 0.77% downward ROE impact as follows: “This value is computed by taking the difference between the CAN MRP (5.54%) and average CAN & US MRP (6.4%) and multiplying it by Beta (0.89), as such $(6.4\% - 5.54\%) \times 0.89 = 0.77\%$.”²⁹⁴ RCIA’s calculation does not reflect the true impact of only considering Canadian MRPs in Mr. Coyne’s CAPM model. It is based entirely on historical MRP data, i.e., it completely excludes forward-looking MRPs, despite the expert evidence that an MRP is intended to be forward-looking.²⁹⁵ Using October 2022 MRP data shown below, the downward impact on ROE if only Canadian MRPs are used is only 0.49%, not 0.77%.²⁹⁶

	Canadian MRP		US MRP	
	December 2021	October 2022	December 2021	October 2022
Historical MRP ^{297,298}	5.54%	5.74%	7.25%	7.46%
Forward-Looking MRP	9.10% ²⁹⁹	7.74% ³⁰⁰	12.08% ³⁰¹	8.21% ³⁰²
Average MRP	7.32%	6.74%	9.67%	7.84%

²⁹³ Tr. 3, p. 211 (Coyne).

²⁹⁴ RCIA Final Argument, p. 17, fn 52.

²⁹⁵ Exhibit A2-20, BCUC-Lesser IR2 10.3: “Regardless of the interest rate environment, it is theoretically more appropriate to use a forward-looking MRP that is estimated properly than to rely on a historical average, because the future may not be the same as the past” [Emphasis in original]. See also: FortisBC Final Submissions, para. 331.

²⁹⁶ Calculated as the difference between the average of Canadian historical and forward-looking MRPs (6.74%) and the average of MRPs for US and Canada (7.29%) multiplied by beta (0.89), as such $(6.74\% - 7.29\%) \times 0.89 = 0.49\%$.

²⁹⁷ Exhibit B1-50 – Undertaking No.1; A.1 ROE Exhibits JMC-FBC-8.1 Avg CAPM; Formula for Avg Market Risk Premium is $(=AVERAGE(5.54\%, 7.25\%, 'JMC-FEI-6 \text{ Canada MRP}'!J6, 'JMC-FEI-7 \text{ US MRP}'!J6))$;

²⁹⁸ Exhibit B-50 – Undertaking No.1; A.2 ROE Exhibits JMC-FBC-8.1 Avg CAPM; Formula for Avg Market Risk Premium is $(=AVERAGE(5.74\%, 7.46\%, 'JMC-FEI-6 \text{ Canada MRP}'!J6, 'JMC-FEI-7 \text{ US MRP}'!J6))$;

²⁹⁹ Exhibit B1-50, Undertaking No. 1; A.1 ROE Exhibits JMC-FBC-6 Canada MRP.

³⁰⁰ Exhibit B1-50, Undertaking No. 1; A.2 ROE Exhibits JMC-FBC-6 Canada MRP.

³⁰¹ Exhibit B1-50, Undertaking No. 1; A.1 ROE Exhibits JMC-FBC-7 US MRP.

³⁰² Exhibit B1-50, Undertaking No. 1; A.2 ROE Exhibits JMC-FBC-7 US MRP.

157. The above table is also an answer to RCIA's argument that Mr. Coyne did not adjust its MRPs downwards for higher interest rates.³⁰³ It shows that higher interest rates have resulted in a sharp decrease in forward-looking MRP values, validating the inverse relationship between the two CAPM inputs.

(c) Using the Constant Growth DCF, Moderated by 50% Historical Data Weighting, Produces a Reasonable MRP

158. Among the interveners, only ICG embraces Dr. Lesser's use of the Multi-Stage DCF model to determine the MRP. CEC explicitly rejects Dr. Lesser's premise that "the market is the economy",³⁰⁴ which was the basis of Dr. Lesser's opposition to using the Constant Growth DCF model for determining the MRP. BCOAPO suggests upward adjustments to Dr. Lesser's MRP. RCIA takes the approach of trying to further moderate Mr. Coyne's results by increasing the weighting of historical data, rather than starting from Dr. Lesser's MRP. FortisBC answers ICG's, BCOAPO's and RCIA's arguments below.

ICG Has Misinterpreted the AUC's Approach in 2018

159. FortisBC identified in its Final Submissions that Mr. Coyne's approach to determining the MRP is most consistent with FERC's approach. In response, ICG cites³⁰⁵ the Alberta Utility Commission ("AUC") 2018 GCOC Decision, suggesting that the AUC rejected a single-stage DCF model for determining the MRP.

160. ICG's characterization of the AUC decision is incorrect. The AUC, in that instance, rejected all forward-looking DCF estimates (i.e., both the single-stage DCF and Multi-Stage DCF) in favour of relying exclusively on historical MRP data.³⁰⁶ Even the AUC's approach would

³⁰³ RCIA Final Argument, p. 19. RCIA states: "... if Concentric expects a higher interest rate next year, then it should also expect a correspondingly lower MRP. Concentric's failure to adjust the forward-looking MRP seems inconsistent with the principles underpinning the derivation of Mr. Coyne's RFR assumption and, not surprisingly, results in an upward bias to the calculated ROE."

³⁰⁴ CEC Final Argument, para. 295.

³⁰⁵ ICG Argument, paras. 29, 30.

³⁰⁶ AUC Decision 22570-D01-2018 (August 2, 2018), para. 322: "Consequently, the Commission will place no weight on the expected market return rates for Canada in assessing a reasonable MERP value. As a result, the

produce an MRP value higher than Dr. Lesser's MRP value, since Dr. Lesser's MRP is lower than the long-term historical average MRP.³⁰⁷

161. The BCUC must determine this case based on the evidence before it, and the evidence in this case favours Mr. Coyne's approach. First, there is ample evidence that determining the MRP using a Multi-Stage DCF model understates the MRP. As discussed in paragraphs 331 to 338 of FortisBC's Final Submissions:

- (a) It is unrealistic to assume, as Dr. Lesser's approach implies, the market (for which the S&P 500/TSX 500 are proxies) will suddenly only grow at the long-term GDP growth rate starting in year six. Dr. Lesser concedes this.
- (b) Earnings per share and dividends per share of regulated utilities in Canada and the US grew faster than nominal GDP over the period 2005 to 2019, despite being lower risk than the market as a whole.
- (c) The Multi-Stage DCF model produces an MRP value that is lower than the long-term historical average MRP.

162. ICG has made no attempt to reconcile its position with the above evidence.

163. Second, the expert evidence in this proceeding does not support relying entirely on historical MRP data, as the AUC had done in its 2018 decision. Dr. Lesser and Mr. Coyne both emphasize that the CAPM is forward-looking. Using historical MRPs is only theoretically sound if there is evidence that investors' expect return in the future is equal to historical return.³⁰⁸ There is no such evidence on the record here. Mr. Coyne's 50:50 weighting of the Constant Growth

Commission will consider the historical Canadian MERP rates on the record of the proceeding, and the results produced by Mr. Hevert's regression method, in determining a reasonable MERP."

³⁰⁷ FortisBC Final Submissions, para. 338.

³⁰⁸ Dr. Lesser's response to BCUC IR 10.3 states "Regardless of the interest rate environment, it is theoretically more appropriate to use a forward-looking MRP that is estimated properly than to rely on a historical average, because the future may not be the same as the past."

DCF results and historical MRP—his pragmatic nod to the type of controversy evident in the AUC’s decision—is truly conservative.³⁰⁹

BCOAPO Implicitly Recognizes that Dr. Lesser’s MRP Is Incongruous

164. BCOAPO has recognized the incongruity of Dr. Lesser’s forecast MRP being well below the long-term historical average MRP.³¹⁰ It has proposed averaging Dr. Lesser’s forecast MRP with the historical average so as to increase the MRP value and reduce the extent to which the Lesser CAPM Results are outliers. BCOAPO then applies these higher country-specific MRPs to Dr. Lesser’s CAPM model³¹¹ and adjusts the North American gas and electric groups to calculate CAPM results of 8.86% and 8.75% for North American gas and electric proxy groups respectively.

165. While BCOAPO’s adjustment reduces the considerable gap between the Lesser CAPM Results and every other model and reasonableness check, the adjusted results would still be an outlier.

166. Further, BCOAPO’s critique³¹² of using the Constant Growth DCF is flawed. Both Dr. Lesser and Mr. Coyne agree that broad market indices such as S&P 500 can be used as proxy for the market as a whole and the evidence shows that these indices can and do grow more than GDP over long periods of time.³¹³ BCOAPO’s second argument that a potential investor in the market would earn a lower effective market return due to investment fees is unpersuasive. There is no evidence that an investor would necessarily face material fees to invest in an Exchange Traded Fund that tracks a broad market index.

³⁰⁹ FortisBC Final Submissions, para. 331.

³¹⁰ BCOAPO Final Argument, p. 49; FortisBC Final Submissions, para. 338.

³¹¹ Exhibit B-50, Undertaking No. 1; Attachment B.7 ROE Exhibits for FEI and FBC.

³¹² BCOAPO Final Argument, p. 50.

³¹³ FortisBC Final Submissions, paras. 335-337.

RCIA's Suggested 75% Weighting of Historical MRP Is Inconsistent with the Expert Evidence

167. RCIA maintains that “Concentric’s assumption of equal weighting of historical and forward-looking MRP biases the resulting MRP to the upside.” It recommends a weighting of 75% historical and 25% forecast.³¹⁴ In fact, Mr. Coyne’s approach to average historical returns and forward looking MRPs introduced a downward bias of approximately 180-190 basis points,³¹⁵ not an upward bias. As indicated previously, both experts agree that the cost of capital analysis, including the CAPM, is intended to be forward-looking. Dr. Lesser does not typically use historical data at all in the determination of the MRP.³¹⁶ Mr. Coyne was clear that his use of historical data was a pragmatic step and cannot be justified on theoretical grounds.³¹⁷ RCIA’s proposal represents a considerable departure from the forward-looking focus of investors, and should be recognized as being results-driven.

168. RCIA supports its 75:25 weighting in favour of historical MRP by comparing the 10-year Canadian historical MRPs from each decade between 1920 and 2019 with the average of Canadian historical and forward-looking MRPs for December 2021 (7.32%). RCIA then repeated the same comparison using a 75:25 MRP blend (6.43%). RCIA highlights that 7.32% is below the 10-year historical MRP averages only twice, whereas 6.43% would exceed 10-year historical Canadian MRPs three times. RCIA suggests these results show 75:25 has greater statistical validity and less bias, but RCIA’s analysis is flawed.

- (a) RCIA’s argument and comparison is flawed since, as explained by Mr. Coyne during the oral hearing,³¹⁸ the lower historical MRPs are due to much higher historical interest rates.

³¹⁴ RCIA Final Argument, p. 19.

³¹⁵ FortisBC Final Submissions, para. 350.

³¹⁶ Exhibit A2-20, BCUC-Lesser IR2 10.3.

³¹⁷ FortisBC Final Submissions, para. 331.

³¹⁸ Tr. 3, p. 217 (Coyne).

- (b) Even RCIA's math is flawed, as RCIA is not using the most recent data. When updated for October 2022 data, the average Canadian historical and forward-looking MRP decreases to 6.74% (as opposed to 7.32%), which is also below the 10-year historical averages three times (same as 75:25 MRP blend proposed by RCIA).
- (c) Performing the same analysis for US data indicates that Mr. Coyne's average historical and forward-looking MRP calculated at 7.8% (based on October 2022 data) is below the past ten sample decades MRPs six times. On RCIA's logic, this would indicate the absence of any directional bias in Mr. Coyne's analysis.

169. In any event, RCIA has overstated the impacts of its proposed re-weighting on the MRP and, as a consequence the ROE results, by virtue of not using October 2022 data. When updated for October 2022 data, RCIA's "blended MRP" is 44 bps lower,³¹⁹ not the 79 bps lower indicated by RCIA. The total downward impact on Mr. Coyne's CAPM results is only 0.93%.³²⁰

E. RCIA'S ARGUMENTS REGARDING RISK PREMIUM MODEL

170. Mr. Coyne has used the Risk Premium model as a reasonableness check on his CAPM and Multi-Stage DCF results, and the results do support his recommendations.³²¹ RCIA favours using the Risk Premium model as a primary model. RCIA characterizes the model as "simple and provides accurate and reliable estimations of ROE. The Risk Premium Analysis model provides an intuitive framework to understand other FortisBC ROEs, and how the selection of assumptions impact ROE estimates."³²² We make two points below regarding RCIA's position.

³¹⁹ $6.74\% - (0.75 * 5.74 + .25 * 7.74) = 6.74\% - 6.24\% = 0.5\% * .89 = 0.44\%$.

³²⁰ Another way to calculate the effects of RCIA changes is to compare 7.29% with the Blended Canadian only MRP: $(7.29\% - 6.24\%) * .89 = 0.93\%$ which equals $0.44\% + 0.49\%$.

³²¹ FortisBC Final Submissions, paras. 400-404.

³²² RCIA Final Argument, p. 4.

(a) RCIA's Proposed ROEs Are Far Below What the Risk Premium Model Suggests

171. It is impossible to reconcile RCIA's endorsement of the Risk Premium model with the ROE values RCIA is advocating. RCIA's proposed ROE values are far below the output of the Risk Premium Analysis based on October 2022 forecast and actual bond yields.³²³ The results based on October 2022 forecast bond yields were 10.12% based on the US Gas proxy group and 10.16% for the US Electric proxy group. The results based on actual bond yields (RCIA's preference) are even higher because October 2022 forecast government bond yields were lower than actual government bond yields.³²⁴ In other words, the October 2022 Risk Premium model outputs are relatively consistent with Mr. Coyne's recommended ROEs for FEI and FBC, both in terms of direction and magnitude.

172. It is important to recognize that these ROE values were all determined with reference to US proxy utilities that have, on average, much thicker common equity ratios than FEI or FBC. As discussed above and in Part Seven, Section E of FortisBC's Final Submissions, other things being equal, one would expect the ROE values to be higher when applied to a utility with thinner equity.

(b) Risk Premium Model Output Reinforces the CAPM and Multi-Stage DCF Results

173. RCIA argues that the Risk Premium model reveals a potential weakness in Mr. Coyne's other models. Specifically, RCIA observes that the Risk Premium model suggests that ROE should increase as interest rates increase, and notes that Mr. Coyne's CAPM and DCF results had decreased slightly in the September 2022 Update relative to December 2021 despite increasing interest rates.³²⁵ FortisBC agrees that one would expect ROE to have increased since December 2021, and that is what has occurred. The slight decreases evident in the September

³²³ Tr. 4, p. 658, ll. 6-18 (Coyne).

³²⁴ FortisBC Final Submissions, paras. 403-404.

³²⁵ RCIA Final Argument, p. 14.

2022 CAPM and DCF results were transitory; the results had increased markedly by October 2022, but RCIA has disregarded the more up-to-date information.

174. Mr. Coyne's September Update explained the reasons behind the slightly lower numbers in CAPM and DCF models. Specifically, the forecast interest rates used in the September 2022 analysis were well below then-current levels. Mr. Coyne also explained that utility stock prices responded slowly to the down market and unprecedented rapid increase in interest rates in 2022; therefore, the 90 trading days historic stock prices averages used in DCF models were not reflective of current market conditions. He validated that assessment in his September Update using spot prices to calculate the DCF models. Further, in his October 2022 update, he calculated the models using 30 trading days instead of 90 days, and again the model results shifted back to approximate those from December 2021. For instance, for the US Electric proxy group, the average of the CAPM and Multi-Stage DCF models for December 2021³²⁶ and October 30 trading days are identical at 10.0%.

175. RCIA's notion that the transitory results in September 2022 calls the model itself into question is predicated on the fallacy that all models should produce the same results at all times. The reason that Mr. Coyne and Dr. Lesser both favour the use of multiple models is because the models have their own strengths and weaknesses and respond differently in different conditions.³²⁷ Mr. Coyne considers various models to check for reasonableness of its model and any model may at specific times and due to events such as market disruptions result in estimates that would require adjustments or judgement. Dr. Lesser's practice is no different.

F. INTERVENERS HAVE NOT ACCOUNTED FOR DISPARITIES IN FINANCIAL RISK BETWEEN FEI/FBC AND PROXY GROUPS

176. None of the interveners has properly accounted for disparities in financial risk between FEI/FBC and the applicable proxy groups. Mr. Coyne's modelling, and the calculations he performed using Dr. Lesser's recommendations, had all assumed a common equity ratio of

³²⁶ Exhibit B1-50, Undertaking No. 1, Figures 2 and 6.

³²⁷ FortisBC Final Submissions, para. 270.

45% for FEI and 40% for FBC. The interveners all proposed less than 45% equity for FEI, and yet did not adjust their modelling outputs upward accordingly. ICG proposes 38.5% equity for FBC, but has not adjusted its ROE position upwards. FortisBC submits that the expert evidence on this point was clear that the models will understate ROE for utilities with thinner equity than the proxy companies.³²⁸

G. NOT INCLUDING A SIZE PREMIUM FOR FBC UNDERSTATES ITS COST OF CAPITAL

177. FortisBC's Final Submissions highlighted the consensus expert evidence that a size premium is appropriate for a utility of FBC's size; Mr. Coyne's decision not to include one in his own calculations was an attempt to be conservative.³²⁹ BCOAPO acknowledges the need for a size premium for FBC of approximately 105 bps,³³⁰ but (as discussed in Section A(b) of this Part) its recommended ROE for FBC of 9.50% has only a limited implied adjustment to account for it. The proper 105 bps adjustment alone would increase BCOAPO's calculated ROE for FBC to approximately 10.09% assuming a 40% equity.

178. The other interveners are silent on the size premium. None of them has reflected a size premium for FBC in their recommendations, such that their calculations are more likely to understate FBC's true cost of capital.

H. INTERVENERS ACKNOWLEDGE THAT A FAIR RETURN MUST ACCOUNT FOR FLOTATION COSTS AND FINANCING FLEXIBILITY

179. ICG³³¹ and CEC³³² have acknowledged the need for a 50 bps allowance for flotation costs and financing flexibility, consistent with typical Canadian practice. RCIA does not explicitly address the issue, but it has applied its downward ROE adjustments to Mr. Coyne's CAPM result that already included the 50 bps adder. Although FortisBC disagrees with some of BCOAPO's

³²⁸ FortisBC Final Submissions, paras. 353-356.

³²⁹ FortisBC Final Submissions, para. 357.

³³⁰ BCOAPO Final Argument, p. 55.

³³¹ ICG Argument, para. 33.

³³² CEC Final Argument, e.g., para. 3.

commentary on this issue (discussed below), at the end of the day BCOAPO has also concluded that the 50 bps adder is reasonable.³³³

180. BCOAPO “. . . does not disagree that issuance costs are a [sic] valid . . .”, but suggests there is insufficient evidence to establish any specific ROE adjustment: “At best, BCOAPO can confidently opine that it is likely no more than 25 bps and could be materially less.” BCOAPO’s reference to 25 bps comes from Dr. Lesser’s analysis of actual issuance costs, which is sound evidence. However, BCOAPO is overlooking the evidence that FEI and FBC, as relatively small companies, would have relatively high issuance costs. In other words, 25 bps should be considered a minimum, not a maximum, when it comes to issuance costs.³³⁴

181. In respect of financing flexibility, BCOAPO (i) accepts that companies need to maintain a buffer above the allowed equity thickness, and (ii) acknowledges that there is a disparity in the equity ratios between Canada and the U.S. BCOAPO believes, however, that it would be “double counting” to justify the adder based on facilitating access to capital in challenging market conditions.³³⁵ FortisBC submits that BCOAPO is failing to recognize that access to capital is inextricably linked to the acknowledged disparity in equity ratios. FortisBC is competing with those less-leveraged utilities for capital, and will face greater difficulty attracting capital in adverse market conditions when investors are exposed to higher financial risk. Unless the disparity is fully addressed (on a business risk-adjusted basis), FEI remains at a disadvantage. Mr. Coyne emphasized that the standard financing flexibility adder still falls well short of making up for the higher overall allowed returns of US utilities.³³⁶ Further, FEI and FBC should be compensated for maintaining a cushion above their allowed equity thickness to maintain financial flexibility and, in the case of FEI, comply with the BCUC’s ring-fencing mechanism.

³³³ BCOAPO Final Argument, p. 57: “Overall, BCOAPO submits that the flotation cost adjustment of 50 basis is reasonable provided the BCUC recognizes that a portion of adjustment is to account for differences in the authorized equity ratios in Canada versus the US and this recognized when setting the equity ratios for FEI and FBC.”

³³⁴ FEI Final Submissions, paras. 376-377.

³³⁵ BCOAPO Final Argument, p. 57.

³³⁶ FortisBC Final Submissions, para. 390.

I. INTERVENERS HAVE NOT RECONCILED THEIR POSITIONS WITH BCUC AAM OUTPUT

182. FortisBC's Final Submissions identified the BCUC AAM as a potential, albeit imperfect, reasonableness check. Notably, none of the interveners attempted to rationalize their ROE positions with the much higher output of the BCUC AAM.

PART NINE: OTHER ISSUES

183. This Part addresses three other issues raised in intervener submissions.

A. RESPONSE TO ICG ON THE ROLE OF EXPERTS

184. ICG suggests that FortisBC set out initially to “limit the record to one expert opinion recommending a return on equity and capital structure”, only to “now [in Final Submissions] limit expert opinions relevant to the ROE and capital structure to those of just Mr. Coyne.”³³⁷ This is an incorrect synopsis of FortisBC’s position on expert evidence. More accurately, FortisBC (a) sought to ensure that Dr. Lesser’s participation accorded with the original Terms of Reference developed by the BCUC and procedural fairness, and (b) has identified that Dr. Lesser concurs with Mr. Coyne on most points, and has urged the BCUC to adopt Mr. Coyne’s analysis on points of disagreement.

185. The BCUC’s Terms of Reference for Dr. Lesser had never contemplated Dr. Lesser providing a full cost of capital analysis for FEI and FBC, nor did the terms assume that interveners would depart from past practice and decline to file expert evidence of their own. The Terms of Reference called for participation of Dr. Lesser akin to the role Brattle had fulfilled previously.

186. In every prior proceeding since 2006, interveners have filed expert evidence. They were again invited to do so in this proceeding. Intervenors’ collective intention not to file any evidence only became apparent at the first procedural conference. FortisBC never objected to Dr. Lesser’s participation; rather, FortisBC identified a fairness issue with changing Dr. Lesser’s Terms of Reference late in the proceeding, and after FortisBC had filed its evidence. Accordingly, the BCUC provided an opportunity for questions to be directed to Dr. Lesser pertaining to Mr. Coyne’s evidence.³³⁸

³³⁷ ICG Final Argument, para. 2.

³³⁸ Exhibit A-13, Order G-106-22 with Reasons for Decision Amending the scope and regulatory timetable, p. 5.

187. FortisBC's statement that "it would be unreasonable for the BCUC to place any weight on the Lesser CAPM results" was not predicated on Dr. Lesser's more limited Terms of Reference, as ICG appears to imply. The full quote from FortisBC's Final Submissions makes this abundantly clear:

It is worth noting that Dr. Lesser made the above comments in reference to a BCUC Staff witness aid that was based on September 2022 data and neither expert could verify the accuracy of Staff's calculations. When Mr. Coyne re-ran the numbers himself based on October 2022 data, the Lesser CAPM Results were even lower than the numbers he questioned at the hearing. FEI and FBC respectfully submit that, in light of Dr. Lesser's commentary above, it would be unreasonable for the BCUC to place any weight on the Lesser CAPM Results.³³⁹ [Emphasis added.]

In other words, it would be unreasonable to give any weight to Dr. Lesser's October 2022 CAPM Results when they were materially lower than September results that Dr. Lesser "would be surprised by" and already characterized as "it's lower than I would have expected to see".³⁴⁰

B. AUTOMATIC ADJUSTMENT MECHANISM IS NOT WARRANTED

188. As FortisBC described in its Final Submissions, a regulatory proceeding is the predominant approach for setting ROE in North America. For the most part, interveners agree that the BCUC should not implement an AAM at this time. BCOAPO cites the current market uncertainty and volatility, accepting that "now is not likely the appropriate time to attempt to design and implement an AAM."³⁴¹ ICG also does not support an AAM.³⁴² As such, we focus on the submissions of CEC and RCIA.

(a) Response to CEC

189. CEC recommends that the BCUC task FEI with establishing AAM formulas for the BCUC to review as a compliance requirement related to this proceeding.³⁴³ FortisBC submits that

³³⁹ FortisBC Final Submissions, para. 261.

³⁴⁰ FortisBC Final Submissions, paras. 259-260.

³⁴¹ BCOAPO Final Argument, p. 72.

³⁴² ICG Final Argument, para. 39.

³⁴³ CEC Final Argument, para. 397.

there is little utility in examining an AAM in the current period of high inflation and economic uncertainty.³⁴⁴ Mr. Coyne's evidence was that:

An ROE formula can perform reasonably well when economic and capital market conditions are relatively stable and predictable. However, when there are major disruptions to the economy and capital markets, such as the 2008-2009 financial crisis and the 2020-2022 COVID pandemic, extended periods of declining or increasing bond yields, or periods of high inflation, the ROE formula may not produce returns that meet the three elements of the fair return standard.³⁴⁵

190. FortisBC submits that attempts to mechanize the cost of capital may lead to ROE values that do not meet the Fair Return Standard, particularly in uncertain market conditions. However, should the BCUC determine that the reintroduction of an AAM warrants consideration at this time, FortisBC agrees with CEC that it would be more appropriately considered in a further stage.³⁴⁶

(b) Response to RCIA

191. RCIA is the only party supporting the immediate implementation of an AAM.³⁴⁷ RCIA's suggestion is problematic in a number of respects.

192. First, RCIA proposes the re-establishment of the 2013 AAM "as soon as reasonably possible". RCIA appears to disregard the BCUC's finding in the 2016 ROE proceeding, based in part on uncertain economic conditions, that: "The Panel is not persuaded that continuing to rely on an AAM to update FEI's ROE on an annual basis is appropriate or will necessarily meet the Fair Return Standard. Therefore, the Panel suspends further use of an AAM as a mechanism to adjust FEI's ROE on an annual basis."³⁴⁸ There is no basis upon which to conclude that the BCUC should reverse this view given that the economic conditions existing today are even more uncertain than

³⁴⁴ FortisBC Final Submissions, paras. 77-80; Tr. 3, p. 173, l. 23 – p. 174, l. 6 (Coyne).

³⁴⁵ Exhibit B1-9, BCUC IR1 61.2.

³⁴⁶ FortisBC Final Submissions, para. 412.

³⁴⁷ RCIA Final Argument, pp. 32-33.

³⁴⁸ 2016 GCOC Decision, p. 89.

in 2016.³⁴⁹ RCIA has not demonstrated any validity of the 2013 AAM in the current economic climate.

193. Second, as FortisBC noted in its Final Submissions, the 3.8% trigger point³⁵⁰ in the previous AAM, which was implemented by the BCUC to recognize the potential for downward bias in ROE results when bond spreads are low, has not been reached.³⁵¹ There is little benefit in approving an AAM when it is unknown whether it will even operate.

194. Third, RCIA is incorrect in stating that the previous 2013 AAM is “no less sophisticated than the models presented by FortisBC”.³⁵² Mr. Coyne prepared a rigorous analysis that contained multiple models³⁵³ that is in no way akin to the output of the 2013 AAM which is a two-variable model, based on long Canada bond yields and the spread between long Canada bonds and A-rated utility corporate bonds.

195. In addition to changes in an individual company's financial and business risk, the formula approach fails to consider other important factors that can affect the cost of capital models. These may include changes in proxy companies' earnings growth and beta values. For instance, the market volatility created by the COVID-19 pandemic in 2020 led to significant increases in utility betas which would not have been reflected in a formula. Mr. Coyne's evidence, based on his 2012 report on AAMs, is that periodic rate hearings remain the only reliable method for determination of utility ROEs given that “fluctuations in financial markets are inevitable, and relationships between bond and utility equity securities cannot be fully anticipated by historical relationships, leading formulaic Automatic Adjustment Mechanisms results to deviate from required equity returns.”³⁵⁴

³⁴⁹ FortisBC Final Submissions, paras. 76-80.

³⁵⁰ Paragraph 411 of FortisBC's Final Submissions refers to a “bond spread” trigger when the reference should be to the Long Canada bond yield trigger.

³⁵¹ FortisBC Final Submissions, para. 411.

³⁵² RCIA Final Argument, p. 32.

³⁵³ Exhibit B1-8-1, Appendix C, Concentric Report.

³⁵⁴ Exhibit B1-8-1, Appendix C, Concentric Report, p. 154.

196. Dr. Lesser shares this view. In his report to the BCUC he stated “The benefit of an AAM is also its greatest weakness: the simpler the AAM, the less likely it will meet the fair return standard; simple adjustment mechanisms cannot account for other changes that affect a regulated utility’s opportunity cost of capital.”³⁵⁵

197. FortisBC submits that the BCUC should continue to use periodic regulatory proceedings to set ROE, rather than implement an AAM.

C. TRIGGERS FOR FUTURE APPLICATIONS

198. FortisBC agrees with CEC’s recommendation that it should be open at all times for a benchmark utility to approach the BCUC with a justified request for a new generic cost of capital, and complete overhaul of the cost of capital regime, including the need to discard an AAM that cannot be suitably adjusted to deliver a fair return.³⁵⁶

199. RCIA submits it is reasonable to defer any substantive review of the generic cost of capital to 2025 or later.³⁵⁷ FortisBC agrees with this recommendation to the extent that it implies that another proceeding should not be currently scheduled for the immediate future, but in FortisBC’s submission, 2025 would be too early for a further periodic review.

200. BCOAPO submits that if appropriate “triggers” cannot be established, then the BCUC should either: (i) schedule another full cost of capital review no later than in three years’ time, or (ii) at a minimum, on a similar timeline, establish a regulatory process to determine whether economic and market conditions have changed sufficiently to warrant a full review.³⁵⁸

201. As FortisBC explained in its Final Submissions, the BCUC should not establish a trigger for future cost of capital proceedings in advance. The established approach, which

³⁵⁵ Exhibit A2-3, Lesser Report, p. 92.

³⁵⁶ CEC Final Argument, para. 405.

³⁵⁷ RCIA Final Argument, p. 34.

³⁵⁸ BCOAPO Final Argument, p. 72.

includes periodic review of utilities' cost of capital, is most appropriate.³⁵⁹ Maintaining flexibility over the timing of the next review allows for a more appropriate response to business and capital market factors affecting the cost of capital for utilities that are inherently dynamic.³⁶⁰

202. In any event, past experience would suggest that the three-year timeline that BCOAPO suggests is too short; the BCUC has generally considered FEI's cost of capital every five years.³⁶¹

D. IMPLEMENTATION OF ORDER

203. CEC,³⁶² ICG³⁶³ and RCIA³⁶⁴ agree with FortisBC that the order should be implemented, effective January 1, 2023.

204. BCOAPO agrees that January 1, 2023 is the appropriate effective date, so long as rate adjustments can be put in place by April 1, 2023; otherwise, it should be shifted to January 1, 2024. Its reasoning is to limit interim rates to no more than three months.³⁶⁵ FortisBC agrees that it is generally preferable to limit the amount of time a utility remains on interim rates (which was the point that FEI was conveying in its initial evidentiary filing, quoted by BCOAPO); however, BCOAPO's approach is unduly rigid. The BCUC should give greater weight to the factors that FortisBC identified in paragraphs 417-419 of its Final Submissions—particularly, the implications for FortisBC's ability to earn what the BCUC has determined is a Fair Return.

205. Nelson Hydro, while it agrees with FBC's proposed common equity and capital structure, advocates an implementation date on or after the decision date. Its rationale is that ". . . municipal utilities will risk a shortfall if there is a retroactive implementation of the GCOC

³⁵⁹ FortisBC Final Submissions, para. 413.

³⁶⁰ Exhibit B1-8-1, Appendix C, Concentric Report, p. 156.

³⁶¹ Exhibit B1-12, ICG IR1 1.3.

³⁶² CEC Final Argument, para. 401.

³⁶³ ICG Final Argument, para. 40.

³⁶⁴ RCIA Final Argument, p. 33.

³⁶⁵ BCOAPO Final Argument, p. 71.

results . . .”.³⁶⁶ The first answer to this submission is that a January 1, 2023 implementation date is not “retroactive” in the legal sense, as FBC rates are currently interim.³⁶⁷ Second, Nelson Hydro is effectively arguing that the impact of FBC rates would justify not implementing a Fair Return that has been determined based on data that is most closely aligned with a January 1, 2023 effective date. As FortisBC described in paras. 418 and 419 of its Final Submissions, this approach would contravene the Fair Return Standard; the BCUC must set rates irrespective of rate impacts—cost of capital is a legitimate utility cost, just like operating and capital costs. The legally permissible solution to the practical issue that Nelson Hydro identifies is for Nelson Hydro to request approval for a deferral account to capture the impacts of the change to FBC’s cost of capital for 2023 on Nelson Hydro’s energy costs for recovery in future year(s).

³⁶⁶ Nelson Hydro Final Argument, p. 2.

³⁶⁷ BCUC Order G-12-23.

PART TEN: CONCLUSION AND ORDER SOUGHT

206. The evidence in this proceeding related to business risk, ROE modelling and credit ratings, overwhelmingly demonstrates that the cost of capital for FEI and FBC has increased more than interveners have acknowledged. The BCUC should approve FEI's and FBC's proposal.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: February 21, 2023 ***[original signed by Matthew Ghikas]***
Matthew Ghikas
Counsel for FortisBC Energy Inc. and
FortisBC Inc.

Dated: February 21, 2023 ***[original signed by Tariq Ahmed]***
Tariq Ahmed
Counsel for FortisBC Energy Inc. and
FortisBC Inc.

Dated: February 21, 2023 ***[original signed by Courtney Gibbons]***
Courtney Gibbons
Counsel for FortisBC Energy Inc. and
FortisBC Inc.