PUBLIC INTEREST ADVOCACY CENTRE
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Generic Proceeding – Cost of Capital and Other Matters
EB-2024-0063

Submission of the
Vulnerable Energy Consumers Coalition
(VECC)

November 8, 2024

Vulnerable Energy Consumers Coalition

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Summary of Submissions

1. VECC submits that the Board should continue to adhere to the "stand-alone" principle of rate making. However, the adherence to this principle does not mean that ownership structure or the availability (source) of capital is not influential on the debt cost of a utility.

2. VECC recommends that risks unique to a utility should be addressed through adjustments to its capital structure rather than making adjustments to the return on equity rate.

3. VECC supports the adjustment to short-term debt estimation proposed by LEI. We do not support the use of an estimate as a cap on utilities who propose short-term embedded debt amounts in their specific cost of service applications.

4. VECC supports the use of the "LEI or Cleary LEI modified" calculation of long-term debt forecast.

5. VECC submits that the base ROE should be 7.73% and that 2024 should be the associated base year.

6. VECC submits that no adjustment be made to ROE to recognize flotation costs or financial flexibility. Actual flotation costs should be recorded in a DVA for purposes of recovery.

7. VECC submits that the annual adjustment formula be as follows:
   ROEt = 7.73% + 0.5040 x (LCBFt – 3.14%) + 0.5033 x (UtilBondSpreadt – 1.436%)

8. VECC submits that no change be made to the current capital structure for EGI or electricity transmitters and distributors, with the exception of Hydro One Networks. For Hydro One Networks an equity ratio of 36% to 38% is reasonable.

9. VECC submits that a separate proceeding be initiated to determine the appropriate capital parameters for OPG.

10. VECC submits the Board should make no change to the prescribed interest rates applied to DVA and CWIP.

A. General Issues

Should the approach to setting cost of capital parameters and capital structure differ depending on:
a) The source of the capital (i.e., whether a utility finances its business through the capital markets or through government lending such as Infrastructure Ontario, municipal debt, etc.)?

b) The different types of ownership (e.g., municipal, private, public, co-operative, not for profit, Indigenous / utility partnership, etc.)

What risk factors (including, but not limited to, the energy transition) should be considered, and how should these risk factors under the current and forecasted macroeconomic conditions be considered in determining the cost of capital parameters and capital structure?

What regulatory and rate-setting mechanisms impact utility risk, and how should these impacts be considered in determining the cost of capital parameters and capital structure?

Ownership Structure and Sources of Capital

11. We also discuss the issues of sources of debt capital under issues of Short and Long-term below
12. In their evidence LEI notes[1] that the OEB determined, in EB-2009-0084, that a utility's ownership structure should not be a relevant factor in determining the cost of capital. LEI recommends[2] the continuation of this approach. In explaining its position LEI notes[3] that:
    - *Despite differences in ownership structures, all OEB-regulated entities operate as commercial/corporate entities*".
    - *Allowing some utilities to earn a higher return despite engaging in business activities of similar risk would violate the comparable return standard. As such, LEI believes that as long as utilities undertake business/investment activities of similar (or like) risk, the ownership type/structure should not matter*".

13. While Concentric offers this observation in their evidence:[4]

    "*According to financial theory, the cost of capital depends on the use of funds, not the source of funds. It also depends on the available returns from alternative investments of comparable risk, known as opportunity cost. Assuming that investors in Ontario's utility businesses have comparable investment alternatives, the determinative factor is the use of funds*."

14. Nexus does not address this issue in its written evidence, but did in testimony agree that ownership structure should not have a bearing on the riskiness of assets[5].

15. In his testimony Mr. Dane speaking on behalf of Concentric also stated[6]:

[1] Exhibit M1, pages 46-47
[2] Exhibit M1, page 51
[3] Exhibit M1, pages 52-53
[4] Exhibit M2, page 20
[5] Exhibit M-3, page 2, TC Vol 4, October 1, 2024, pages 162-163
[6] TR, Vol. 2, September 26, 2024, page 101

"I think there was agreement among the experts that the cost of capital would not reflect the ownership of the -- or the source of the funds, but rather be reflective of the use of the funds."

16. Dr. Cleary also agrees[7] with LEI's recommendation and specifically references LEI's explanation that:

    "*Allowing uniform ROE regardless of ownership is also consistent with the comparable investment standard of the FRS. The comparable return standard requires the allowed ROE to be comparable to the return available from the application of invested capital to other enterprises of like risk. The comparable investment standard implies risk determination based on the utilities' business/investment activities, and not the ownership type*."

    In his testimony Dr. Cleary agreed that the OEB's current policy that ownership structure should not be a relevant consideration in determining a utility's cost of capital parameters.[8]

17. However, in his testimony Dr. Cleary offered a more nuanced response with respect to the issue of debt financing[9]:

    MS. STOTHART: And that standard, it doesn't change based on the ownership of the utility; right?

    DR. CLEARY: It should not, except if there's, if it's backed by a large government that provides additional credit support, if you will, to it, financial strength.

    MS. STOTHART: Okay, so is it your position that it does, the comparable return standard does change based on the ownership of the utility?

    DR. CLEARY: Well, what it would do would be to change the risk of the utility to investors, which would in turn affect its financial integrity and its capital attraction; right?

<u>VECC Submissions Issue 1</u>

18. VECC notes that there is general consensus amongst those experts affirming the "standalone" principle of rate making. That is, cost of capital parameters and capital structure should <u>not</u> differ depending on:
    a) The source of the capital (i.e., whether a utility finances its business through the capital markets or through government lending such as Infrastructure Ontario, municipal debt, etc.)
    b) The different types of ownership (e.g., municipal, private, public, co-operative, not for profit, Indigenous / utility partnership, etc.)"

[7] Exhibit M-4, page 18
[8] TC, Vol. 6, October 10, 2024, page 34
[9] TC Vol. 6, October 10, 2024, page 33

19. In general VECC also agrees the Board should adhere to the standalone principle. We note that the utilities may have access to different sources of capital. In the case of debt, sources of potential financing will differ depending upon: i) whether the utility is municipally-owned and therefore potentially has access to borrowing from Infrastructure Ontario; ii) whether the utility has a parent or holding company which it has access to borrowing through, and iii) whether the utility is of sufficient size and has sufficient borrowing requirements to justify publicly issuing debt. Similarly, in the case of equity, sources of potential financing will depend upon: i) whether the utility has an "owner" that is willing/able to provide equity and ii) whether the utility is of sufficient size and has capital attractiveness to justify issuing equity shares.

20. With respect to utility debt, the approach used by the OEB in determining the appropriate rates should be the same regardless of the source. For actual debt, the approach should be based on whether the debt was prudently acquired. Placement of debt should take into account market conditions (both at the time and as a forecast) and be able to show evidence that the utility made efforts to receive the lowest cost debt from the sources available. For large utilities who can and do issue debt either directly or through an affiliate credit worthiness should be indicative of debt costs. For smaller utilities who fund through bank or other institutions evidence demonstrating that due diligence was undertaken (i.e., investigating alternative sources of funds) should be provided. This latter point is important for the majority of utilities the Board regulates. We agree with Dr. Cleary that with respect to debt ownership inherently has an impact as it goes to the lenders assessment of the loan's risk.

21. In its Evidence[10] LEI states that "*the two key risk factors that need to be considered when determining the cost of capital parameters and capital structure are (i) business risks and (ii) financial risks*." With respect to energy transition, LEI goes on to state that "*while energy transition risk has been specifically mentioned in Issue 2, one can reasonably argue that it is part of business risk which can ultimately impact the bottom line (i.e., leading to a change in financial risks/returns*)"

22. In terms of business risk, LEI identifies energy transition, volumetric risk, operational risk, regulatory risk and policy risk as the relevant risk factors to be considered. In LEI's view these business risk factors are consistent with those considered by the OEB in recent proceedings[11]. In contrast, financial risks are linked to the utility's ability to continue attracting debt and equity financing at reasonable terms and primarily rely on assessing key credit metrics and their potential impact on credit ratings (based on scenario analysis modelling for future utility cash flows). Financial risk assessment also includes the utility's debt servicing ability, as well as financial integrity[12]. LEI also make the point that business

[10] Exhibit M1, page 53
[11] Exhibit M1, pages 54-55 and Exhibit M-M1-2-VECC 14 a)
[12] Exhibit M1, page 61

risks and financial risks are related to uncertainty surrounding a company's operating earnings and its ability to finance its investments.[13]

23. Similarly, Concentric notes that there are two fundamental sources of risk for any company, including regulated utilities: business risk and financial risk. Concentric then goes on to state that business risk for a regulated utility results from variability in cash flows and earnings that impact the ability of the utility to recover its costs, including a fair return on and of its capital in a timely manner. Key among these risks are energy transition-related risk and regulatory risk, but they also include risks related to climate change and severe weather, competition between alternative fuels, political risk, risks related to capital spending, volumetric risk, and timely recovery of expenses, among others. In contrast, financial risk is related to a company's debt leverage and liquidity and is measured by its credit profile.[14]

24. Nexus acknowledges the business and financial risks identified by LEI but claims that, given the changes in industry structure occurring due to decarbonization and electrification efforts, there is a category of risk that LEI ignores: strategic risk. In Nexus' view strategic risk is the risk that distributors are subjected to as they face increasing uncertainty regarding the direction of the industry and the significant investments that they will be required to make despite the uncertain future[15]. Nexus' views strategic risk to include the risk that distributors are subjected to as they face increasing uncertainty regarding the direction of the industry and the significant investments that they will be required to make despite the uncertain future[16].

25. To highlight this risk Nexus references the uncertainty regarding future load growth as demonstrated by various scenarios produced by the IESO and uncertainty regarding future associated capital spending requirements as demonstrated in a study commissioned by the EDA. Nexus also cites other factors such as the need for grid hardening and increased cyber-security risk as triggering increases in capital spending.

26. Dr. Cleary acknowledges that the main risk factors to be considered are related to business risk and financial risk. Dr. Cleary also expresses the view that the business risk categories identified by LEI are reasonable and are reasonably consistent with the categories observed in debt rating reports. However, he also notes that individual rate proceedings would also include other risks that may rise which may not fall neatly into one of these categories. Finally, Dr. Clearly references LEI's comment that "*while energy transition risk has been specifically mentioned in Issue 2, one can reasonably argue that it is part of business risk*". [17]

[13] Exhibit M1, page 53
[14] Exhibit M2, page 22
[15] Exhibit M3, page 25
[16] Exhibit M3, page 25
[17] Exhibit M4, page 19

27. Similar to LEI, Dr. Clearly notes[18] that the assessment of financial risks has focused on the utility's ability to continue to attract debt and equity financing at reasonable terms and typically involves an assessment of widely used credit metrics, such as the ones used by debt rating agencies

28. With respect to how any risk factors should be considered LEI considers the status quo as where the OEB: i) sets a uniform ROE for all regulated utilities and ii) undertakes a full reassessment of a utility's capital structure in the event of significant changes in the company's business and/or financial risk[19]. LEI recommends that the OEB's current policy (reviewing business/financial risk factors if there is a significant change from the status quo) be retained. Furthermore, LEI believes that adjusting the allowed /deemed equity thickness remains the appropriate lever to address material changes in a utility's risk profile. However, LEI believes this should not preclude the utilities from highlighting additional risk categories in their rate applications if they consider them to be material in nature.[20]

29. In response to interrogatories LEI observed[21] that changes in risk factors and their impact on capital structure could be reviewed as part of a generic cost of capital proceeding (similar to the current ongoing proceeding). However, LEI noted[22] that such analysis was outside the scope of its report. LEI also observes that while the energy transition is bringing dramatic changes to the sector as a whole, the focus when considering cost of capital implications is not whether and how fast the industry is changing but whether, for regulated businesses, the volatility of net cash flows is changing or there is an increased risk of inability to attract capital or recover associated investments. In LEI's view, neither appears likely in the forthcoming regulatory period. This is because the pace of change remains measured, and regulated utilities can use various regulatory mechanisms such as DVAs, Z factor, I factor, and off-ramp mechanisms to manage net cash flow volatility (if any).[23]

30. Concentric concurs with LEI's recommendation to maintain a stable regulatory environment during the rate case term and re-evaluate equity thickness if there are significant changes to the utilities' risk profiles. However, Concentric notes that LEI's recommendation implies that changes in business/financial risks would be addressed solely with an adjustment of the equity thickness. In contrast, Concentric expresses the view that both the equity thickness and the cost of capital need to be evaluated to meet the Fair Return Standard.[24] Concentric also disagrees with LEI's position regarding the impact of Energy Transition issues on the cost of capital. In Concentric's view the risks resulting from Energy Transition are not fully mitigated by the available regulatory mechanisms and are likely to continue to increase[25].

[18] Exhibit M4, page 19
[19] Exhibit M1, page 54
[20] Exhibit M1, page 62
[21] Exhibit N-M1-VECC 16 c)
[22] Exhibit N-M1-VECC 17 a)
[23] Exhibit M1, page 44
[24] Exhibit M2, pages 28-29
[25] Exhibit M2, page 29

31. Nexus posits that LEI fails to recognize the magnitude of the changes the distributors likely will encounter now and in the coming years[26]. Further, Nexus states that[27]:

"*Other jurisdictions embracing carbon reduction and electrification policies have amended their regulatory mechanisms recognizing that the trajectory of capital spending may be uncertain. The absence of these policy changes in Ontario increases the risk to which 5 distributors are exposed*."

They conclude that[28]:

"*Although we cannot at this point quantify the uncertainty due to the industry changes with enough precision to adjust the recommended ROE, we can nevertheless conclude that the volatility and associated increases in risk support higher ROEs than are proposed by LEI and, especially, a more frequent update of the ROE (i.e., every three years) to determined how capital costs have changed*."

32. Dr. Cleary's recommendation, which aligns with LEI's is:

"*Maintain the OEB's current policy of reviewing business and financial risk factors if there is a perceived significant change from the status quo, and adjusting the allowed equity ratio as appropriate to address material changes in the utility risk profile*."

<u>VECC Submissions - What risk factors should be considered-Issue 2a</u>

33. VECC notes that there is general consensus amongst the four experts who provided evidence that the key risk factors that need to be considered when determining the cost of capital parameters and capital structure are (i) business risks and (ii) financial risks. VECC agrees.

34. While there may appear to be differences between LEI and Concentric and also between the various the LEI reviewed jurisdictions as to what the specific business risk factors are, VECC agrees with the observation[29] that risks can generally be grouped into the categories LEI identified. Indeed, they could also likely be grouped into the various risk categories identified by Concentric.

35. One area where there appears to be some difference opinion is with respect to energy transition in terms of whether or not it is a separate risk factor. LEI lists it as a separate risk factor[30] but then states that it believes "*energy transition risk is primarily a policy risk and may be grouped as such*"[31]. In VECC's view the risks associated with energy transition influence a number of the risk factors identified by LEI including volumetric risk (to the extent it creates uncertainty regarding future demand) and operational risk (to the extent it creates

[26] Exhibit M3, page 25
[27] Exhibit M3, page 28
[28] Exhibit M3, page 28
[29] Exhibit M1, page 61
[30] Exhibit M1, page 54
[31] Exhibit M1, page 61

uncertainty regarding future spending requirements) as well as political risk. Concentric also lists[32] it as a separate risk factor and expresses the view[33]:

> "*The Energy Transition affects nearly every aspect of existing utilities' businesses, from their growth prospects, to the capital projects pursued, to their fundamental ability to secure and offer investors the opportunity to earn a fair return on capital*."

36. Finally, Nexus claims[34] that LEI has overlooked a risk factor that it identifies as "strategic risk" which is related to the changes in industry structure occurring due to decarbonization and electrification efforts. Specific examples offered by Nexus of its strategic risk include[35]:
    - Distributors are required to move into business lines and operations that they traditionally have not operated in, such as non-wires alternatives.
    - Uncertainties regarding load growth can trigger mismatches with infrastructure investment.
    - Regulatory lag associated with the IRM. The existing IRM mechanism was developed for an environment of relatively flat load per customer. In contrast, the energy transition would expect to trigger increasing load per customer.

37. Nexus' claim is that this "strategic risk" is not part of either business risk or financial risk is based on its view that business risk is associated with risk associated with the ongoing operations of a business in a static environment whereas strategic risk is associated with changes in the industry structure[36]. VECC notes that neither LEI nor Concentric take such a narrow approach to business risks. However, both consider regulatory risk, including regulatory lag as a business risk factor. In VECC's submission there is no need for the OEB to consider Nexus' "strategic risk as a separate element of business risk

<u>How should risk factors be considered – Issue 2b</u>

38. There appears to be consensus that risk factors need to be considered in terms of the uncertainty they create and the implications on revenues and revenue (cash) flow volatility. All four experts make somewhat similar claims.

39. LEI notes that "[B]*usiness risks and financial risks are related to uncertainty surrounding a company's operating earnings and its ability to finance its investments*".[37] "*While the energy transition is bringing dramatic changes to the sector as a whole, the focus when considering cost of capital implications is not whether and how fast the industry is changing but whether,*

[32] Exhibit M2, page 22
[33] Exhibit M2, page 23
[34] Exhibit M3, page 25
[35] Exhibit N-M3-2-OEB Staff 32 a)
[36] N-M3-2-OEB Staff 32 b). See also N-M3-VEC-5 d)
[37] Exhibit M1, page 53

for regulated businesses, the volatility of net cash flows is changing or there is an increased risk of inability to attract capital or recover associated investments".[38]

40. Concentric makes a similar point: "*Business risk for a regulated utility results from variability in cash flows and earnings that impact the ability of the utility to recover its costs, including a fair return on and of its capital in a timely manner*."[39] "*Financial risk, which focuses on solvency and liquidity, is often measured through credit metrics. Regulatory framework decisions that restrict the utilities' ability to recover costs and increase the volatility of cash flows impact credit metrics used by rating agencies to further assess the financial health of the company*."[40]

41. During cross-examination, Mr. Zarumba, speaking on behalf of Nexus, confirmed[41] that the uncertainty regarding the future level of capital spending required by electricity distributors is more significant than the higher level of spending anticipated.

42. Dr. Cleary also reiterates LEI's point that business risks "*are related to uncertainty surrounding a company's operating earnings*."[42]

43. VECC agrees that the various business risk factors should be considered in terms of the uncertainty they create regarding future cash flows and cash flow requirements. The evidence by both LEI[43] and Concentric[44] indicate that the identified risk factors need to be considered during generic cost of capital proceedings and in re-basing applications made between generic cost of capital proceedings in which a utility seeks adjustments to a specific utility's capital structure. However, how risk factors should be considered will differ.

44. With respect to cash flow volatility we note that while there is a general recognition that reducing volatility in revenues has an associated risk reduction benefit the Board has not yet made any explicit adjustment for the fact that it has changed the residential rates for distribution in the electricity sector to a fully fixed one. Similarly, EGI currently has a proposal before the Board to move its residential and small customer classes to a "fixed/variable" rate structure. VECC submits the Board should acknowledge the reduction in risk due to these changes and make the appropriate reduction in ROE or capital structure.

45. In a generic cost of capital proceedings cost of capital parameters (in particular ROE) are established with reference to peer groups consisting of comparable utilities. In this context the important consideration is the extent to which the risks faced by the utilities that are subject to the OEB's regulation differ from the risks faced by the companies in the relevant

[38] Exhibit M1, page 44
[39] Exhibit M2, page 22
[40] Exhibit M2, page 27
[41] Transcript Volume 5, page 104
[42] Exhibit M4, page 20
[43] Exhibit N-M1-2-VECC 16 c)
[44] Exhibit M2,pages 29-29

peer groups. As discussed later in VECC's submissions all of the experts in this proceeding have acknowledged the need to address any such differences in setting a generic ROE.

46. However, in the case of re-basing applications that are seeking adjustments to a utility's capital structure (and where a utility specific ROE is not being reconsidered) the important consideration is the extent to which the utility's risk factors have changed since its cost of capital parameters were last set. VECC notes that there appears to be consensus that any such adjustment be made through a change to the capital structure rather than the return on equity rate. LEI states: "*If there is an application to review the change in risks by the utility or the intervenors, LEI recommends that the OEB review the change in business risks (volumetric risk, operational risk, regulatory risk and policy risk including energy transition risk) and financial risks (whether there is a change in the ability of the utility to continue to attract debt and equity financing at reasonable terms*)." Concentric largely concurs that to maintain a stable regulatory environment during the rate case term it is appropriate to reevaluate equity thickness if there are significant changes to the utilities' risk profiles." Similarly, Dr. Cleary recommends: "*Maintain the OEB's current policy of reviewing business and financial risk factors if there is a perceived significant change from the status quo, and adjusting the allowed equity ratio as appropriate to address material changes in the utility risk profile*.[45]

47. Finally, there is a difference in opinion as to the extent energy transition is a significant risk factor in the current regulatory period. In its evidence LEI states:

> "*while the energy transition is bringing dramatic changes to the sector as a whole, the focus when considering cost of capital implications is not whether and how fast the industry is changing but whether, for regulated businesses, the volatility of net cash flows is changing or there is an increased risk of inability to attract capital or recover associated investments. Neither appears likely in the forthcoming regulatory period. This is because the pace of change remains measured, and regulated utilities can use various regulatory mechanisms such as DVAs, Z factor, I factor, and off-ramp mechanisms to manage net cash flow volatility (if any*)."[46]
>
> However, in its evidence Concentric disagrees with LEI stating[47]:
>
> "*the risks resulting from the Energy Transition are not fully mitigated by these (regulatory) mechanisms and are likely to continue to increase. For example, as utilities adopt new technologies and build first-of-a-kind projects, they encounter challenges such as shortages of skilled labour and increased competition across the supply chain, in addition to technology risks. Increased operational risk may lead to funding risks if investors are not compensated fairly for their investments as capital availability tightens with more utilities entering the capital markets to fund construction projects. Securities*

[45] Exhibit M4, page 20
[46] Exhibit M1, page 44
[47] Exhibit M2, page 29

that offer commensurate returns on the equity invested will obtain better access to capital, especially during times of elevated risk associated with the Energy Transition. Furthermore, in certain circumstances, DVAs may not be made available by the OEB."

48. Nexus notes that as decarbonization policies are implemented, the quantity and cost of new capital investments for electricity distributors will be highly uncertain for the next several decades. In support of this claim Nexus references a study completed for the EDA which estimates the increase in capital spending required by Ontario's electricity distributors based on different load growth scenarios developed by the IESO.[48]

49. VECC submits that, if energy transition is to be considered as a separate risk category, then care needs to be taken to ensure that its impacts on risk are not double-counted. It is unclear to us why, just like any other risk, the ROE methodologies adopted by the Board do not already capture energy transition issues. If one adopts comparable earning methods then it is reasonable to assume that similar utilities share comparable risks. To the extent energy utilities have different risks than companies in other sectors of the economy one would presuppose these such "unique " risk factors are also captured in the data and in particular in beta market measurements. The question does arise as to the comparability between electric based (distribution, transmission or energy) utilities and natural gas ones. However, energy transition is just one area in which the risks might vary as between energy sectors. One might also consider that weather impacts are different between the sectors, not just because the different vulnerabilities inherent in the physical plant (e.g. underground and overhead) but also because they might differ as summer or winter peaking enterprises. It is unlikely to be practical to "disentangle" all of these differences.

50. In our view if the Board is intent on incorporating "energy transition" risk into its ROE calculation as a distinct factor then it must consider whether that risk is symmetrical as between natural gas and electric utilities. The risk to natural gas utilities is existential. Decarbonization by definition threatens the use of carbon based fuels. On the other hand, on the assumption that energy demand remains the same a drop in demand for carbon fuel (here natural gas) must result in an offsetting demand for non-carbon produced electricity. In that event the "risk" to electricity utilities is the potential to not maximize its sales and profits. To use an imperfect analogy the introduction of automobiles introduced an extension threat the continued production of horse buggies. Of course, automobile manufactures faced risk during this transition but that risk was largely measured by the failure to not maximize the opportunity of making cars (and more money)[49]. The point is that if the Board decides to increase either ROE or change the capital structure to accommodate as assessment of energy transition risk for EGI it should lower the same for

[48] Exhibit M3, page 27

[49] This is of course an imperfect example since as new evolving industry is introduced there will be strong competitive forces seeking to refine and build efficiencies in a new evolving industry like automobiles displacing horses or computers displacing typewriters. Monopoly electricity utilities face no such threat of outside replacement.

electricity distributors, transmitters and OPG. We submit that one risk cannot go up without the other going down.

51. With respect to Concentric's claims, VECC acknowledges that the risks and uncertainty created by energy transition are not yet fully understood nor fully considered by regulatory rate structures of the OEB. However, Ontario is considered to have one of the more supportive regulatory regimes in North America . And as discussed further in this submission the OEB has demonstrated a progressive track record when it comes to introducing measures in response to emerging risks faced by utilities. The Board has begun to address the unfavourable new risks to natural gas utilities in EB-2022-0200 rebasing applications. It has yet to consider the more favourable benefits accruing to electricity utilities for the same reasons.

52. With respect to Nexus' concerns, VECC notes that the electricity distributors' capital spending requirements under the two scenarios does not start to vary significantly until the mid-2030's . As a result, the analysis actually tends to support LEI's claim that energy transition (at least as it impacts capital spending) is not likely to contribute to cash flow volatility in the forthcoming regulatory period (i.e., 2025-2029)

B. Short-Term Debt Rate

Should the short-term debt rate for electricity transmitters, electricity distributors, natural gas utilities, and OPG continue to be set using the same approach as set out in the OEB Report?

If not, how should the short-term debt rate be set ?

53. There actually two issues that might be considered in setting short-term debt rates as part of cost of service applications. The Board's issue list focuses on the issue of how short term debt should be costed. However, the other issue, not canvassed in this proceeding to any great length was how large should the allowable portion of short-term debt be allowed in the he deemed capital structure.

54. LEI defined short-term debt as debt with a maturity of 12 months or less[50]. For all of the rate regulated utilities the Board allows a 4% deemed structure for short term debt. There was little discussion in this proceeding as to the merit, or lack thereof, of that amount of allowable short-term debt in the regulated capital structure of utilities. In fact, we believe the Boad would be hard pressed to provide a rationale for the figure of 4%. That the issue was discussed little in this proceeding is all the more striking given that one might intuitively conclude that as electricity (and now proposed in natural gas) residential rates have moved to be 100% fixed the need for short-term debt to cover revenue volatility might be expected

[50] N-M1-0-VECC-3

to have decreased their need for short term debt as compared to the past when rate revenues were more volatile.

55. With respect to electricity utilities there is little evidence any short-term debt is raised. Our experience with many small and mid-size utilities is that "shorter" term debt of 5 or less is often used as a proxy for the regulated cost of long-term debt (i.e., Appendix 2-OB). The issue of short-term debt, both its amount and its cost rate have become much more important to ratepayers during recent years as markets have experienced an inverted yield curve with short term rates exceeding long-term one. As the cost rate of short-term debt is now often exceeding that of long-term debt we believe there is merit in the Board seeking to determine a utility's actual short-term debt need in the course of a cost of service proceeding.

56. In their evidence LEI note that in some regulatory jurisdictions regulators will exclude short-term debt with the view that it is temporary and will eventually be replaced with long-term capital. They also found that most regulators use actual cost of short term debt.[51]

57. As far as we are aware only two utilities – Enbridge Gas and OPG propose short-term debt rates based on actual short-term debt issuances. In their evidence LEI observed that the cost rates for short-term debt of these two utilities varied significantly – for Enbridge the average was 2.7% and for OPG it was 0.7%. There was little discussion in this proceeding on why that should be although we note that Enbridge did provide in the most recent cost of service proceeding an explanation as to how its short-term debt borrowings were affected by issues related to its line of business.[52] In any event, as with utilities proposing to embed actual long-term debt costs we believe these are issues that can be examined in the actual proceedings on the utility.

58. If embedded or actual short-term costs are not used then a methodology to estimate the notional rate (for a notional amount of short-term debt) must be found. As a practical matter the method traditionally used by the Board has become defunct due to the discontinuation of the BA market (the current methodology using a 3-month BA rate plus spread). The consensus of the experts was to transition to a three-month average of the Canadian Overnight Repo Rate Average (CORRA).

59. LEI provided four variations for application of the CORRA all of which included a spread value to be applied. The application of the CORRA was as a reference or a 3-month futures with a spread applied. The spread was to be determined by an annual bank survey. They concluded that "*the average CRA (3-month CORRA futures) determined over the relevant forward-looking 12-month period (see Figure 21) is more representative of investor expectations of short-term rates over the next year, in line with potential BoC policy rate reduction expectations*." We agree. We have also considered Dr. Cleary's comment that

[51] LEI, pages 77-78, Figure 20

[52] See EB-2022-0200, Exhibit 5, Tab2, Schedule 1, page 4

"if the *Board decides to continue the practice of using the existing rates rather than futures rates, using the month end rate should be a better estimate of future rate than using the average for the month*" and consider either approach to be reasonable.

60. Generally, the method of calculating an estimate for notional short-term debt was uncontroversial. The disputes among the parties were largely on minor technical adjustments to the estimation methodology. The one area of dispute was with LEI's proposal that the Board's short-term estimate become a cap on the allowed cost rate for embedded short-term debt. Concentric objected to this suggestion and for the reason that using forecasted rates for short-term recognizes a utility's risk differential[53].

61. On this issue we agree with Concentric. If the Board allows the continued use of embedded (or actually forecasts of embedded) short-term debt then it follows it should allow a utility to provide evidence of the cost of that projected debt. Presumably the reason for allowing projections of embedded debt is that it is an attempt to recognize actual rather than notional costs. In other words, it seems counterintuitive to on the one hand allow for an "embedded short-term debt" option but then to limit the reason for which it was allowed.

C. Long-Term Debt Rate

Should the long-term debt rate for electricity distributors, natural gas utilities, and OPG continue to be set using the same approach as set out in the OEB Report and as set out in the Staff Report for electricity transmitters?

If not how should the long-term debt rate be set?

How should transaction costs incurred by utilities be considered when setting the long-term debt rate?

What are the implications of variances from the deemed capital structure (i.e., notional debt and equity) and how should they be considered in setting the cost of long-term debt?

62. For the most part the experts agree on how the methodology the Board should use in setting its long-term debt estimate. LEI sets out this proposal[54]:

[53] Exhibit M2, Pages 33-34
[54] Exhibit M1, Page 93

LEI recommendations - Issue 7

- LEI recommends considering publicly available reputable sources for 30-year bond yield forecasts for LCBF/risk-free rate.
- Bloomberg's BVCAUA30 BVLI Index (12-month trailing average) is appropriate for considering the spread over LCBF for an A-rated utility.
- DLTDR to be applied as a cap for all utilities.

63. Dr. Cleary provides two modifications to the LEI recommendations:

"*Currently the OEB estimates the LCBF based on 10-year yield consensus forecasts, and estimates a spread that it adds to estimate 30-year Canada yields. LEI recommends relying on published forecasts of Canada 30-year yields, which has the benefit of not having to estimate the spread between 10- and 30-year Canada yields, which varies through time and is difficult to forecast. While the LEI recommendation is an improvement, I provide evidence in Appendix A that demonstrates, using Canadian data over the 2011-2023 period, that using existing 30-year yields produces statistically significantly more accurate forecasts of actual 30-year yields in the subsequent period than using forecasts*."

And

"*I recommend that rather than using forecasts to estimate LCBF, the Board should use the actual prevailing bond yields, and I further recommend using the actual prevailing rate as of September 30 of the preceding the test year, which should be a better estimate of future rates than using an average for the month of September*."

"*With respect to the source of funding, the difference in loan rates associated with different sources is the only relevant consideration for determining the cost of capital. While deemed debt rates may incentivize management to be efficient in their use of debt, benefits to customers over time are likely minimal. The use of actual costs is empirical and straightforward to consider. Loans realized directly by the government or by its own controlled agency/development bank often have more favorable rates relative to market rates. However, the OEB's existing methodology (described in Section 4.1.1) allows the actual/embedded cost of debt as a pass-through in most cases. As such, if a regulated utility receives relatively favorable debt terms, it is reflected in its rates under the existing methodology*."

64. It is not clear to us the implications of applying Dr. Cleary's suggested modifications. At this point in time, either the LEI or the LEI modified approach could be considered reasonable. The Board should consider monitoring both to compare the differences and consequences over time.

LEI recommends that the Board's deemed long-term debt rate (DLTDR) be used as a cap for fixed rate debt for all utilities[55]. However, LEI notes that, under its recommendation, a utility would not be prevented from requesting and the OEB would not be prevented from approving a cost of debt higher than the cap if the utility demonstrates that its cost of debt is higher than the cap[56]. Dr. Cleary agreed with the idea of a cap whereas Concentric disagreed with the idea.

65. In our minds most of the experts are confused as to what a "DLTDR cap" currently means. Based on our experience reviewing over 100 cost of service proceedings the cap in question is relatively uncontroversial. As we understand the current application of the Board policy the DLTDR serves as a rate cap only on that long-term debt which is issued by an affiliate and is callable on demand. The origins of the cap were in the propensity of electricity LDCs who (largely notionally) had borrowings with their parent – the owning municipality. This arrangement was the result of the original restructuring of the utilities from city departments to standalone companies that occurred in the late '90s as part of the regulatory restructuring of the electricity sector. We have also observed that overtime a number of these utilities have replaced such "owner supplied" debt with commercial (largely bank) debt. The only controversial issue in the application of the current policy is with the issue of what is determined to be "callable" debt and this is largely due to the way the original covenants were drafted. We would note that the OEB's 2009 Cost of Capital Report states[57]:

> "*For affiliate debt (i.e., debt held by an affiliated party as defined by the Ontario Business Corporations Act, 1990) with a fixed rate, the deemed long-term debt rate at the time of issuance will be used as a ceiling on the rate allowed for that debit*"

However, in our experience this literal meaning has not been applied to utilities like Hydro One and Enbridge whose borrowings are done through a parent or holding company. If we are correct in our assumption of the intent of the policy (i.e., to ensure utilities are borrowing at market rates) then it might wish to clarify the current policy.

66. To be clear the application of the DLTDR to "affiliate" debt has not, in our experience been applied to debt raised in the public market but by an affiliate of the utility (as might be the case for large corporate entities like Enbridge Inc.). Rather it is a protection against non-arms length borrowing and self dealing where in essence the owner (or a beneficiary of the owner) lends money to the corporation. This type of arrangement can lead to ratepayers paying unwarranted high costs for the debt in question.

67. If our understanding of the current policy of a DLTDR cap is correct then we think it should continue. While less of an issue than a decade ago their still remains a body of utilities who have non-arms length debt which needs to be capped. In fact, given the passage of time we

[55] Exhibit M1, page 93 and Exhibit N-M1-VECC 25 b)
[56] Exhibit N-M1-OEA-6 f)
[57] EB-2009-0084, Report of the Board on the Cost of Capital for Ontario Regulated Utilities, December 11, 2009, page 53

believe the Board should modify the current policy and include non-callable debt that is issued by the parent company to its utility affiliate. In our view any debt which is negotiated under a non-arms length (i.e., not market based) debt should be subject to a cap. For example, if a utility were to raised debt (long or short) through a related party who could not demonstrate they were "passing through" market raised debt then they should be subject to a DLTDR cap[58]. In our submission this is just a basic tenet of utility regulation which must guard against unjustified and unreasonable intercorporate transfers.

68. There is general agreement amongst the experts that utilities should be allowed to recover consider transaction costs associated with debt issuance based on actual costs. However, while LEI supports[59] treating such costs as an operating expense the other three experts[60] support including these transaction costs in the cost of debt. VECC agrees that these costs should be considered as part of the cost of debt.

69. For large utilities the Board must also be cognizant that there are often corporate service treasury costs which also recoup costs related to financing the utilities. It is not clear why a utility which borrows through a parent and provides treasury services might also be liable for flotation costs on debt it did not float. Our observation is that such costs are seldom sought by small and mid-size utilities. In any event our submission is that the inclusion of flotation costs should be on a case-by-case basis and subject to the scrutiny when sought.

70. With respect to the source of debt funding LEI notes that "*given that the OEB considers the actual long-term debt rates in most cases, its current methodology already implicitly considers the impacts of different funding sources*[61]". As an alternative, LEI considers[62] whether debt rates should be set (for the entire debt portion of the capital structure) based on a benchmark value for the cost of debt. LEI subsequently recommends that the OEB maintain its current policy regarding the source of funding.

71. As we noted in the hearing for the large body of utilities the Board regulates they acquire their funding through bank loans. Often this includes variable loans which are then subject to an interest swap effectively turning the variable loan into a fixed one. This is not like a large utility raising their own debt or acquiring it through a corporate parent. The latter is raised in the financial markets. Bank borrowing is subject to individual negotiations and while there are posted bank rates these negotiations vary from them. We have also observed a tendency of "bank borrowing" utilities to rely on a single lender not unreasonably because negotiating such loans is much more reliant on a "relationship" with the lender than those large utilities issuing public debt. However, reliance on single lender does lead one to ask whether the bank lender loan is "the best available". In our experience small and mid-

[58] It should be noted that some electricity utilities have borrowings from their parent which are costed below the Board DLTDR.
[59] Exhibit M1, page 96
[60] Exhibit M2, page 39; Exhibit M3, page 35 and Exhibit M4, page 27
[61] Exhibit M1, page 46
[62] Exhibit M1, page 50

size electricity utilities seldom provide evidence it is. The issue becomes compounded when during the IRM rate period the utility acquires a number of loans and it becomes very difficult to understand if the rates of these loans were competitive at the time of acquisition.

72. A related issue is that small utilities often have lumpy borrowing. It is natural to question the timing of borrowing for a utility which over long periods borrows little or which for long periods has an embedded amount of debt significantly lower than the notional one used for rate setting. The lumpiness of borrowing can also lead to a portfolio of debt which is driven by a single loan. This can happen when a small utility borrows out of necessity for a large capital project. If the timing is unfortunate (like in the past two years) then high cost debt will significantly drive up the embedded cost. Our observation is that in the past, when interest rates were low the variance as between the utilities actual debt and the notional amount used for rate making purposes mattered little. As utilities have begun to borrow more heavily to finance large capital programs for system renewal or energy transition during a period of high interest rates ratepayers are paying the consequence of this lack of financial planning.

73. Finally, we also observe there is controversy in a large number of the small and mid-size utility cost of service proceedings on how to price any variance as between the rate setting notional amount and the actual amount borrowed (i.e. embedded). There are two forms of variance when the utility has exceeded the rate making amount and when it has borrowed less. In our view ratepayers should not be at risk for utilities with significant variance between the actual and rate making capital structure. For example, if a utility borrows more than its rate making structure implies it is unclear to us why ratepayers should be required to pay the costliest component of embedded debt. Similarly, if the utility shareholder chooses to significantly borrow less as compared to its approved capital structure then why should the ratepayer not make the assumption that the utility could have borrowed the difference at the lowest cost in the embedded portfolio.

74. In our submission the Board should adjust its policy for pricing "notional" debt.[63] It should always be assumed that ratepayers receive the benefit of the optimum portfolio of debt. The risk in departing from the regulated structure should solely to the shareholder as it is solely the shareholder who is responsible for a fiscally responsible financial plan. In our submission where a utility exceeds its notional debt the highest cost debt should be prorated and eliminated until it meets the regulated amount. Conversely the Board should price any variance below the regulated amount at the price of the lowest cost of debt in the portfolio. In our submission this revised policy should only apply to significant variation in actual/embed and regulated structure debt. It would be unreasonable to expect a utility, large or small, to provide an exact match between the two. In our submission the Board should choose a band of 5-10% under which it would continue to apply the current policy of how to price notional debt. This would focus the policy on those utilities who choose to take

[63] We use the term "notional" here to describe the difference in the principals shown in Appendix 2-OB and Appendix 2-OB for long-term debt.

on significant interest cost risk by significantly diverging from what the regulator has seen as prudent capital financing. We would also observe that implementing this revised policy would also provide the incentive for small and mid-size utilities to do prudent financial planning.

D. Return on Equity

What methodology should the OEB use to produce a return on equity that satisfies the Fair Return Standard (FRS)?

Are the perspectives of debt and equity investors in the utility sector relevant to the setting of cost of capital parameters and capital structure? If yes, what are the perspectives relevant to that consideration, and how should those perspectives be taken into account for setting cost of capital parameters and capital structure?

75. In its 2009 Cost of Capital Decision the OEB references[64] a number of court determinations that have articulated the FRS. The OEB also references the National Energy Board's RH-2-2004 Phase II Decision which set out the FRS as follows:

"*A fair or reasonable return on capital should:*

- *be comparable to the return available from the application of invested capital to other enterprises of like risk (the comparable investment standard);*
- *enable the financial integrity of the regulated enterprise to be maintained (the financial integrity standard); and*
- *permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (the capital attraction standard*)."

76. Indeed, the OEB specifically references the NEB's articulation of the FRS in its July 30, 2009 letter that initiated the Issue List consultation for its 2009 Cost of Capital proceeding, noting it is consistent with previous Board findings and decisions. Experts that submitted evidence in this proceeding have generally relied on the three point definition of the FRS as referenced by the OEB in its 2009 Decision and set out by the NEB[65].

77. With respect to the first of the three FRS requirements, Concentric notes[66] that:

"*The cost of equity cannot be directly observed in the same way as the cost of debt or preferred stock. Analysts use multiple approaches to estimate the cost of common equity, including the DCF model, the CAPM, and the Risk Premium model*."

[64] Pages 17-18

[65] LEI: Exhibit M1, page 101; Concentric: Exhibit M2, page 16; Nexus: Exhibit M3, page 48 and Dr. Cleary: Applies LEI's interpretation of FRS per Exhibit M4, page 5

[66] Exhibit M2, page 55

Nexus makes a similar observation[67]:

> "Equity costs are not directly observable in the marketplace. Consequently, equity costs must be inferred from other market-based evidence. Different economic theories or "models" have been developed to rationalize the inferential process."

78. While not explicitly stating the same point, both LEI and Dr. Cleary rely on various financial models to "estimate" the appropriate ROE for utilities regulated by the OEB. The following sections address various sub-issues of these models.

Use of Single Model vs. Multiple Models

79. LEI's evidence sets out[68] a number of alternatives for determining ROE which involve the use of the Capital Asset Pricing Model (CAPM), the Discounted Cash Flow (DCF) methodology and/or the Equity Risk Premium (ERP) approach. While calculating ROE values using each of these methodologies LEI uses its CAPM results as the basis for its ROE recommendation[69].

80. In its evidence LEI outlines its concerns regarding the DCF and ERP approach and its preference for the CAPM as follows[70]:

> "*LEI believes that using CAPM to estimate ROE is the most reasonable method because it is among the most commonly used valuation methods, with a widespread understanding of the assumptions/inputs involved and the ability to adjust results to account for unsystematic or company-specific risks*".

In response to interrogatories[71] LEI further explains it concerns regarding the DCF and observes that:

> "*Using multiple methodologies with unrealistic assumptions will NOT reduce the uncertainties in estimating the ROE. On the other hand, it will add more noise to the data thereby obscuring a more reasonable and realistic ROE estimate*."

81. In contrast Concentric[72], Nexus[73] and Dr. Cleary[74] rely on the results from all three methods in formulating their ROE recommendations. Their rationales for doing so are similar:

> Concentric: "*No financial model can exactly pinpoint the "correct" ROE; rather, each test brings its own perspective and set of inputs that inform the estimate of the ROE.*

[67] Exhibit M3, page 47
[68] Exhibit M1, page 113
[69] Exhibit M1, pages 125-126
[70] Exhibit M1, page 126
[71] Exhibit N-M1-0-SEC-3
[72] Exhibit M2, page 9
[73] Exhibit M3, page 5
[74] Exhibit M4, pages 42-43

Consistent with the Hope standard, it is "the result reached, not the method employed, which is controlling." Although each model brings a different perspective and adds depth to the analysis, each model also has its own inherent limitations and should not be relied upon individually without corroboration from other approaches."[75]

Nexus: "*Our view is that all models are simplifications of reality, and all models have flaws, or, maybe more charitably, are not applicable in every conceivable situation. For this reason, strict adherence to a single model risks a failure to meet the FRS*."[76]

"*The reason for using multiple models is that each provides perspective. While each modeling approach has its own shortcomings, the potential is that these models, grounded in economic theory, will in combination provide insights into the investor-determined cost of equity*".[77]

Dr. Cleary: "*I weight all three of my Ke estimates equally, as I have done in all my previous evidence, because all three methods are used in practice and provide different perspectives on Ke*."[78]

82. VECC agrees with the views of Concentric, Nexus and Dr. Cleary that the results of multiple methods should be considered by the Board in determining the ROE. No one financial model can pinpoint the "correct" ROE. In one way or another each of the three models is a simplification of reality and, as a result, each has its flaws. On the other hand, each provides a different perspective that can inform the Board's decision as to the ROE that will meet the FRS.

83. However, while agreeing the results of all three methods should be considered by the Board, VECC also agrees with LEI view that using unrealistic assumptions in the application of any of the models will not assist the Board in its determinations regarding ROE. Judgement and common sense need to be applied when considering the reasonableness of both the input assumptions to each model and the reasonableness of the results. On this later point Concentric states[79]:

"*Regardless of which analyses are used to estimate the investor-required ROE, analysts must apply informed judgment to assess the reasonableness of the results and to determine the appropriate weighting to apply to the results under prevailing capital market conditions*."

<u>Choice of Proxy/Peer Groups</u>

[75] Exhibit M2, page 55
[76] Exhibit M3, page 56
[77] Exhibit N-M3-10-OEB Staff-48
[78] Exhibit M3, page 42
[79] Exhibit M2, page 56

84. Both the CAPM and DCF approaches require the user to establish a "peer or proxy group" that consists of companies with risks similar to the utilities for which the ROE determination is to be made. LEI established separate peer groups for each of electric generation, electric transmission & distribution and gas distribution. To shortlist the peer companies, LEI considered the following criteria[80]:

    1. The company stock is publicly traded in a recognized North American stock exchange; and
    2. A certain percentage of the company's revenue or assets are from operations related to particular sectors:
        a) For generation peer companies, at least 70% from electricity generation
        b) For wires peer companies, at least 70% from electricity transmission /distribution
        c) For natural gas peer companies, at least 80% from natural gas transmission/distribution.

85. Also, while not a screening criterion LEI notes that the shortlisted peer companies for electricity transmission/distribution and natural gas distribution have investment-grade credit ratings. However, four shortlisted generation companies (Vistra, TransAlta, NRG and Clearway) have credit ratings one or two notches below investment grade (as rated by S&P Global). With respect to generation, LEI notes that maintaining an investment-grade credit rating is less common for the generation business. Thus, LEI concludes that, since it is important to reflect the underlying requirements of each sector, having investment-grade credit rating as a strict criteria can artificially reduce the sample size.[81]

86. LEI also notes that for the DCF peer group it excluded some outlier companies from the generation peer group due to very high or very low 2024-2026 annual EPS growth estimates that resulted in implausible estimates of the DCF's ROE for the generation peer group. The excluded companies include Brookfield Renewable Corporation, Clearway Energy, Inc., Innergex Renewable Energy Inc., Northland Power Inc., and TransAlta Corporation. Also, others such as Talen Energy, lacked sufficient historical data.[82]

87. Concentric developed six proxy/peer groups for its ROE analysis[83]:
    - The first proxy group is comprised of publicly traded, regulated Canadian electric and natural gas utility companies. Recognizing there are few publicly traded companies in the utility sector in Canada, the only screening criterion was an investment grade credit rating, which all companies in the sector have. TC Energy (formerly TransCanada) has been excluded due to the risk profile of the TransCanada Mainline, which differs from gas distribution operations. Algonquin Power and Utilities Corp. was also excluded because the company did not have positive earnings

[80] Exhibit M1, page 114
[81] N-M1-10-VECC-37 b)
[82] Exhibit M1,page 115
[83] Exhibit M2, pages 50

growth rate forecasts from more than one source and announced a reduction of its dividend in January 2023.

- The second proxy group is comprised of like-risk U.S. electric utility companies. To obtain companies of comparable-risk, Concentric started with the 36 companies The Value Line Investment Survey ("Value Line") classifies as Electric Utility Companies and then, to determine a group of electric utilities with similar risk profiles to Ontario's electric utilities performed a number of screens to identify those companies that:
    a) Have credit ratings of at least BBB+ from S&P Global or Baa1 from Moody's;
    b) Consistently pay quarterly cash dividends with no reductions or eliminations in the past two years;
    c) Have positive earnings growth rate projections from at least two sources;
    d) Derived at least 70 percent of operating income from regulated operations in the period from 2021-2023;
    e) Derived at least 80 percent of regulated operating income from electric utility service in the period from 2021-2023; and
    f) Were not involved in a merger or other significant transformative transaction during the evaluation period.
- The third proxy group is comprised of like-risk U.S. gas distributors. To obtain companies of comparable risk, Concentric started with the ten companies Value Line classifies as Natural Gas Distribution Companies and again, to determine a group of gas utilities with similar risk profiles to Ontario's gas distribution utilities, performed a number of screens to identify those companies that:

a) Have credit ratings of at least BBB+ from S&P Global or Baa1 from Moody's;
b) Consistently pay quarterly cash dividends with no reductions or eliminations in the past two years;
c) Have positive earnings growth rate projections from at least two sources;
d) Derived at least 65 percent of operating income from regulated operations in the period from 2021-2023;
e) Derived at least 90 percent of regulated operating income from natural gas distribution utility service in the period from 2021-2023; and
f) Were not involved in a merger or other significant transformative transaction during the evaluation period.

- The fourth proxy group is a combined North American Electric proxy group that includes all Canadian and U.S. electric utility companies determined to be risk comparable to Ontario's electric utilities.
- The fifth proxy group is a combined North American Gas proxy group that includes all Canadian and U.S. gas utility companies determined to be risk comparable to Ontario's gas distribution utilities.
- The sixth proxy group is a North American Combined proxy group that consists of all of the companies in the Canadian, U.S. Electric and U.S. Gas proxy groups.

However, ultimately, for its recommendation, Concentric focused on the results for the North American proxy groups[84].

88. Nexus' evidence specifically addresses electricity distributors[85]. Nexus' method for establishing its peer group was as follows[86]:
    - First, Nexus selected all firms with NAICS codes of 2211 and SIC Codes of 4991, 4931, 4911 from the S&P CapIQ database. These industry classification codes are for Electric Power Generation Transmission and Distribution.
    - Nexus then kept only those firms that traded on North American exchanges (NYSE, NASDAQ, 9 TSX, and OTC).
    - Finally, Nexus examined each of the surviving candidates for special issues that made them inappropriate for comparison and rejected those that (1) had no operations; (2) no longer existed; (3) were REITs rather than operating companies; (4) had no distribution or transmission (were IPPs, engineering companies, developers, or marketers) (5) had only renewables or biogas (too speculative); and (6) had considerable negatives in the historical data such as no revenues or no history of positive earnings (too speculative).

89. This produced 43 candidates, most of which had at least one financial data provider with a beta and an expected earnings-per-share growth rate. However, the financial services data providers (CapIQ, Yahoo Finance, Zacks, and StockAnalysis.com) had relevant information to use the DCF approach for only somewhat over half of the candidates

90. For his CAPM calculations Dr. Cleary uses the same sample of Canadian utilities as established by the AUC for its 2018 Generic Cost of Capital proceeding[87]. This same sample was also used by Dr. Cleary for his DCF calculations[88]. During cross examination Dr. Cleary explained that during the AUC process screening considerations for the peer group selections included level of regulated vs. non-regulated assets, credit rating level and minimal generation. However, the criteria for the Canadian sample, because there's less options to choose from were a little bit more lenient with respect to credit rating and generation[89].

Inclusion of US Utilities

91. LEI, Concentric and Nexus all included US companies in their peer groups whereas Dr. Cleary considered just Canadian companies.

[84] Exhibit M2, pages 8-9 and Transcript Volume 3, page 160
[85] N-M#-12-SEC-78
[86] Exhibit M3, page 60
[87] Transcript Volume 5, pages 181-182
[88] Exhibit M4, page 99
[89] Transcript Volume 5, pages 182-184

92. Dr. Cleary's rationale for excluding US companies is that he considered US utilities to have a higher business risk than Canadian utilities, as evidenced by their higher beta values, and therefore not appropriate to use as peers.[90]

93. LEI has confirmed[91] that one of the considerations in selecting its peer groups was that it be sufficiently large for purposes of the analysis and the inclusion of US companies achieves this. Similarly, Concentric notes the development of a proxy group comprised entirely of Canadian utilities is challenged by the small number of publicly traded utilities in Canada and the fact that several of those Canadian companies derive a significant percentage of revenues and net income from operations other than regulated utility service[92]. As result, Concentric indicates [93] that to find reasonable proxies it is necessary to look to a broader sample than just Canadian utilities and include US utilities

94. Indeed, recognizing there are few publicly traded companies in the utility sector in Canada, the only screening criterion Concentric[94] used for its Canadian utility proxy group was an investment grade credit rating. VECC notes that this led to the inclusion of AltaGas Limited, with a credit rating of BBB-[95], in the Canadian proxy group. In contrast the screening criteria for the US proxy groups required the companies have a credit rating of at least BBB+ from S&P Global or Baa1 from Moody's[96]. An initial comparison of the Beta values (where higher values a indicative of higher risk) used by Concentric would suggest that the risk profile of the Canadian proxy group is roughly the same as that of the North American Gas proxy group and less than that of the North American Electric proxy group. However, if one excludes AltaGas Limited from the Canadian proxy group the differences in risk profile between Canadian utilities and US utilities become much more apparent, as indicate in the following table.

[90] Exhibit M3, pages 90 and 135
[91] Transcript Volume 1, page 76
[92] Exhibit M2, page 52
[93] Transcript Volume 2, page 167
[94] Exhibit M2, page 45
[95] Exhibit CEA-2
[96] Exhibit M2, pages 46 & 47 and Exhibit N-M2-10-AMPCO/IGUA-4 d)

	CONCENTRIC'S					
	CANADIAN VS US BETA VALUES					
	Proxy Group		**Average Beta[1]**		**Average Beta (Excluding AltaGas)[2]**	
	Canadian		0.84		0.78	
	US Gas		0.83		0.83	
	US Electric		0.93		0.93	
	Sources:	1) CEA 7.1				
		2) CEA 7.1 - with AltaGas removed				

95. In its evidence[97] Concentric further supported the inclusion of US companies stating that "*there are no fundamental dissimilarities between Canada and the U.S. (in terms of economic growth, inflation, or government bond yields) that would cause a reasonable investor to have a materially different return expectation for a group of comparable risk utilities in the two countries*".

96. Concentric added to this point of Presentation Day stating[98]: "*whenever we talk with equity investors or equity analysts or credit rating analysts about their views, we repeatedly hear from them how they consider the utility industry to be a North American industry. And this is really a critical point, because it means that Canadian companies are competing for capital with similar risk companies in both Canada and the U.S. So, if Ontario utilities have a lower authorized ROE or a lower deemed equity ratio than their North American peers of comparable risk, it places them at a disadvantage in competing for capital at a time when significant investment is required in the industry*."

97. Concentric's evidence[99] also references the fact that the OEB has previously accepted the inclusion of US companies in the peer groups used to analyze ROE and that both the BCUC

[97] Exhibit M2, page 55
[98] Pages 35-36
[99] Exhibit M2, pages 50-51

and the AUC have accepted the use of a North American proxy group comprised of utility companies in both Canada and the U.S. to set the authorized ROE for utilities.

98. Nexus makes a similar argument to support the inclusion of US companies in its peer group[100]: "*Because Canada and the US are integrated economies with an integrated North American capital market, for the reasons set out above, US companies can serve as proxies to Canadian companies*."

99. Similarly, LEI notes that[101]: "*The eight major pension funds in Canada (informally known as the Maple 8) allocate only about 25% of their portfolio to domestic Canadian investments, which indicates that investors are more likely to consider their investment opportunity costs. As such, the ROE methodology needs to consider US returns*."

100. However, it appears that Concentric's primary reason for including US companies is the fact that it is unable to find sufficient comparable Canadian utilities to support a robust analysis of ROE. This can be seen from Concentric's cross examination[102] where Mr. Coyne acknowledges that despite the integration of the US and Canadian markets, Canadian utilities are not included in Concentric's proxy groups developed for testimony regarding US utilities because considering just US companies provides a sufficiently robust sample.

101. VECC notes that while advocating for the inclusion of US companies, Concentric also recognizes that there is difference between the peer group's utilities and Ontario utilities[103]: "*to the extent that we need to make adjustments for business profile or business risk from that central group of companies, we could make them from there . And if you note in our recommendations, that our equity ratio, our recommended equity ratio is 45 percent, so that already has a built in 7 percent discount off the capital structures of the sample of companies from which this group comes from. So, we are already treating Ontario's T&D companies as a low-risk group of companies*."

102. The other experts in this proceeding have made similar comments about the need to recognize any difference in the business risk faced by Ontario utilities vs. the business risks faced by the companies in the proxy group(s) used:

- LEI[104]: "*As such, the ROE methodology needs to consider US returns. However, this does not necessarily mean that the outcome of the methodology needs to match US returns exactly to be valid*."

[100] Exhibit M3, page 59
[101] N-M1-O-SEC-2
[102] Transcript Volume 3, page 15
[103] Transcript Volume 2, pages 168-169
[104] Exhibit N-M!-0-SEC-2

- Nexus[105]:"*Other important considerations are whether firms have comparable operating risk and are adjusted for financial risk as well as the Board's record on flotation (transactions) costs*."
- Dr. Cleary[106]: "*But just to qualify that, in the past I know some Canadian jurisdictions did not accept US utilities as comparators and, as mentioned before, including them in the group and giving them full weighting and not adjusting for the additional risk are two different things. You can always include them in the group for certain information, but recognize that they have differences*".

103. Indeed, the AUC similarly qualified its inclusion of US companies in its adopted proxy group[107]:

"*After considering the evidence presented in this proceeding, the Commission acknowledges the utilities in the comparator group are not identical to the Alberta utilities, but concludes they are sufficiently comparable for use in various financial models. However, and as set out in in this section and Section 6.4.5, the Alberta utilities are at the low end of the range of risk present in the comparator group of utilities. Accordingly, the Commission retains the view expressed in the 2018 GCOC decision that a significant amount of judgment must be applied by the Commission when interpreting data from the representative utilities to establish the ROE required by investors in the Alberta utilities*."

104. In VECC's view there are material differences between the companies in Canadian proxy groups developed by both Dr. Cleary and Concentric and the regulated Ontario utilities for which the OEB is currently seeking to determine the appropriate cost of capital parameters. These differences suggest that the ROE results derived using either Canadian proxy group would not be directly applicable to Ontario's regulated utilities and adjustments would be required. As a result, in VECC's view it is reasonable to consider the inclusion of US companies, thereby creating large proxy groups that will provide more robust results.

105. However, if US companies are included (consistent with the views of LEI, Concentric, Nexus, Dr. Cleary and the AUC) then any additional differences in risk profiles created by their inclusion must be recognized when using the results of the subsequent ROE analysis to determine the appropriate cost of capital parameters for Ontario's regulated utilities.

106. More specifically with respect to the inclusion of US utilities, VECC submits that the OEB needs to give due regard to Dr. Cleary's evidence that US utilities are not truly comparable to those in Canada as demonstrated by the historic difference in their beta estimates[108]:

"*So, in fact the "comparable" U.S. beta historical averages of 0.61 (monthly) and 0.72 (weekly)are much, much higher than (i.e., almost double) the comparable Canadian beta estimates of 0.34 and 0.38, after accounting for leverage differences. The implied*

[105] Exhibit N-M3-10-OEB Staff-46
[106] Transcript Volume 6, page 132
[107] Exhibit K6.3, page 190 (AUC Decision 27084-D02-2023, page 22, paragraph 104)
[108] Exhibit M4, page 136

"unlevered" U.S. betas (0.234 monthly; 0.278 weekly) are almost double those for the Canadian utilities (0.131 monthly; 0.140 weekly) using D/E ratios of 0.515/0.485 for U.S. utilities and using D/E ratios of 0.60/0.40 for Canadian utilities."

107. Dr. Cleary has also provided further evidence that U.S. utilities possess higher business risk than their Canadian counterparts in:

- Exhibit M4, Appendix B which provided evidence that: i) Enbridge's ability to earn its allowed ROE is greater than that of its US peers and ii) the variability in Enbridge's (and former Union Gas') ROE was less than that of its US peers.
- Exhibit M4, Appendix C which shows that over a long period of time (i.e., more than 25 years), U.S. utility beta estimate historical averages are much, much higher than (almost double) the comparable Canadian beta estimates, and that this difference is even more pronounced after accounting for the higher leverage of Canadian utilities.
- Exhibit M4, Table 8 which shows that both monthly and weekly beta estimates as of December 31, 2023, and estimates based on the 2017-2023 average estimates for U.S. utilities are higher than the comparable Canadian utility beta estimates.

108. VECC notes that this "difference" is also supported by the earlier comparison of Concentric's Beta values for its Canadian and US proxy groups, particularly once one removes the Alta Gas from the Canadian proxy group due to is higher risk profile. Indeed, information provided in Concentric's interrogatory responses indicates that this has also generally been the case in other regulatory proceedings where Concentric provided evidence[109].

109. Dr. Cleary has suggested one way this difference in business risk can be recognized[110]: "*As a result, Dr. Cleary does not feel that making adjustments to the CAPM and DCF cost of equity (Ke) estimates derived from U.S. comparators would produce informative estimates. If U.S. Ke estimates obtained using these models were to be considered (which Dr. Cleary disagrees with), it would be best to simply recognize these estimates could be regarded as maximum or even higher (and not most likely) estimates, since they should be higher than those for Canadian operating utilities, as they are estimated using riskier companies (i.e., U.S. utilities*)."

110. Alternatively, it can be done by setting the equity thickness for Ontario regulated utilities lower than that for comparable utilities in the US, as Concentric has done[111].

Holding Companies

111. The companies included in the various peer groups proposed by the experts in this proceeding are typically holding companies. The reason for this is two-fold. First, most

[109] Exhibit N-M2-CCC-6 e)
[110] Exhibit N-M4-CCC-2 a)
[111] Transcript Volume 2, pages 168-169

Canadian and US utilities are in utility holding company structures these days[112]. Second, the screening criteria generally include the requirement that the companies be traded on a North American exchange as this means the necessary market data is available to undertake the CAPM and DCF analyses.[113]

112. Furthermore, it's been acknowledged that:
- Many of these holding companies include both regulated and unregulated businesses[114], and
- Generally speaking, regulated utility companies are less risky than unregulated energy companies[115].

113. Based on the forgoing it is VECC's submission that this difference in business risks associated with the companies in the peer groups as compared to Ontario's regulated utilities must be recognized and also be taken into account when the results of subsequent ROE analysis are used to determine the appropriate cost of capital parameters for Ontario's regulated utilities. Again, this can be done by: i) setting the ROE for Ontario's regulated utilities at a value less than that determined through the ROE analysis and/or ii) setting the equity thickness at a level less that of the companies in the peer group.

Generation vs. Transmission & Distribution

114. Both Concentric[116] and Dr. Cleary[117] indicate that generation function is generally regarded as being a higher risk than electric transmission and distribution. When asked about the fact the beta value for its electric generation proxy group was lower that the beta value for its electric transmission and distribution proxy group, LEI indicated[118] the expectation that electricity generation would have a slightly higher beta than electricity distribution/transmission if operating in a competitive wholesale market on a merchant basis (suggesting it has a higher risk). LEI then also noted that many generation companies have a significant proportion of their output under long term contracts (which would suggest lower risk). However, LEI concluded that "results from data analysis should not be excluded just because they differ from expectations". VECC also notes[119] that LEI's one-year and three-year betas for its generation proxy group were higher than those for its electricity transmission and distribution proxy group. Overall, VECC submits that the OEB should consider electric generation has having a higher business risk than electric transmission and distribution.

[112] Transcript Volume 4, page 124
[113] Exhibit N-M2-10-IGUA/AMPCO-6 d); Exhibit M3, page 76; and Transcript Volume 6, page 156
[114] Exhibit CEA-2
[115] Transcript Volume 2, pages 20 and 54
[116] Transcript Volume 2, page 150
[117] Transcript Volume 5, page 187
[118] Exhibit N-M1-10-VECC-41 d)
[119] Exhibit M1, page 119

115. While LEI has developed separate peer/proxy groups for electric generation, electric transmission & distribution and gas distribution, Concentric, Nexus and Dr. Cleary did not. Rather for each of three latter experts, the electric proxy group does not distinguish between electric utilities that are primarily involved in generation vs. those that are primarily involved in electric transmission and distribution.

116. However, in response to interrogatories[120] Concentric provided Beta values for its various proxy group and broke down the values for its US Electric group as between Transmission and Distribution utilities and Integrated utilities. The resulting average (Blume-adjusted) betas as of May 2024 were 0.893 and 0.984 respectively, supporting the view that electric utilities with generation are riskier than those with just wires.

117. During the oral phase of the current proceeding Concentric provided the results[121] of its CAPM, DCF and ERP analyses modified to exclude companies that own any material amounts of regulated generation. The results showed a modest (30 basis points) reduction in the average ROE for the North American Electric proxy group[122].

118. In Nexus' case, the recommendations arising from its ROE analysis are meant to be applicable only to electric transmission & distribution and gas distribution[123]. However, Nexus has indicated that the US companies in its proxy group show an average generation rate base percentage of 30% and maximum of 57% for those filing FERC Form 1s in 2023 and for which data are available through S&P Global[124]. Further, in response to an undertaking[125] Nexus indicated that only 5 of the utilities included in its proxy group were actually classified under NAICS code 22112 (electric power transmission, control and distribution).

119. VECC notes that if Nexus' ROE analyses are revised to only include these 5 companies then Nexus' CAPM analyses produces an average ROE (excluding transaction costs) of 9.73% as compared to the 10.19%[126] based on the initial proxy group. Furthermore, in the case of Nexus' DCF analyses the impacts are more significant as the results based on the five companies classified as electric power transmission, control and distribution produce an average weighted ROE of 9.43% (excluding transaction costs) as compared to the 10.92%[127] based on the initial proxy group.

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[120] Exhibit N-M2-VECC 1.4

[121] Exhibit J3.2

[122] The impact is tempered somewhat by the fact that the North American ERP results are based on an average of the Canadian and US Electric ERP results and while the US Electric ERP results were recalculated excluding generation the Canadian ERP results were not.

[123] Exhibit N-M3-12-SEC-78

[124] Exhibit N-M3-VECC 21 c)

[125] Exhibit J5.1

[126] Exhibit M3, page 68 for the 10.19%. The 9.73% calculated using M3-NAICS 2211 v04 (as filed).xlsx and excluding all utilities but the five noted.

[127] Exhibit M3, page 71 for the 10.92%. The 9.43% calculated using M3-NAICS 2211 v04 (as filed).xlsx and excluding all utilities but the five noted.

120. VECC submits that there is a difference in the risk profile of electric utilities with generation as opposed to those just owning transmission and distribution assets, with the former having a higher risk profile. When the OEB is interpreting and applying the various ROE analyses result, it will have to recognize the differences in business risk that exist between the peer companies in each expert's proxy group and Ontario's utilities due to their (i.e., the proxy groups) inclusion of companies with generation.

121. Concentric is recommending that a separate proceeding be initiated to determine the appropriate capital parameters for OPG. VECC agrees with this recommendation and for a number of reasons. Foremost the Board does not regulate rates for OPG, rather it sets the price for a subset of the Utility's generation assets. There are a number of unique parts of legislation which apply only to OPG. The price set assets of OPG are also very different than the distribution and transmission assets of both natural gas and electricity utilities. Nuclear plants have a very different risk profile than hydro electric facilities and both a very different than the "lines and pipes" of other utilities. Finally, OPG is going through a transition in which it is seeking to replace older nuclear asset with small modular reactors, or SMRs. While their may be comparable utilities in the U.S. with nuclear assets it would require careful consideration as to how comparable they are to the generation fleet of OPG. In our view establishing a return on equity for OPG is a very fact based exercise which the model outputs of this proceeding may have little bearing on.

122. VECC submits that if OPG cost of capital parameters are to be established through a separate process then neither Concentric's nor Nexus' ROE analyses results can be applied to the balance of the utilities regulated by the OEB without some adjustment to recognize the higher risk associated with electric generation.

123. There is general consensus between the experts in this proceeding that it is impractical (if not impossible) to develop proxy groups that have precisely the same risk profile as Ontario's regulated utilities. Rather, the objective is to establish proxy groups that have companies that are reasonably similar.

124. Despite the efforts of each consultant to screen for appropriate comparables, VECC submits that, on a number of key aspects, the risk profile of Ontario's utilities differs from that of the proxy groups developed by each of the experts. In VECC's submission it is important that the OEB recognize these differences and account for them when using the results of the experts' ROE analyses to establish the cost of capital parameters for Ontario's utilities.

DCF Analysis

125. Concentric describes the premise behind the DCF model as follows[128]:

[128]Exhibit M2, page 57

"*The premise underlying the DCF model is that investors value an investment according to the present value of its expected cash flows over time. The standard DCF model is shown in Equation [1]:*

$$P = \frac{D_0(1+g)^1}{(1+r)^1} + \frac{D_1(1+g)^2}{(1+r)^2} + \cdots + \frac{D_{n-1}(1+g)^n}{(1+r)^n} \quad [1]$$

where:
P = the current stock price
g = the dividend growth rate
Dn = the dividend in year n
r = the cost of common equity.
Assuming a constant growth rate in dividends, the model is commonly simplified to compute the ROE, as shown in Equation [2]:

$$r = \frac{D}{P} + g \quad [2]$$

Stated differently, the cost of common equity is equal to the dividend yield plus the expected dividend growth rate.
The Constant Growth DCF model requires the following assumptions:
• a constant average growth rate for earnings and dividends;
• a stable dividend payout ratio;
• a constant price-to-earnings multiple; and
• a discount rate greater than the expected growth rate."

126. Concentric also notes that there are other forms of the DCF model that do not rely on the assumption of constant growth in perpetuity.

LEI Model

127. In its evidence LEI applies the DCF model to each of its three proxy groups as follows:
- The Dividend Yield (i.e., D/P) was obtained directly from S&P Capital IQ. LEI used the April 2023 – March 2024 period as it was the latest 12-month period based on completed quarters.[129]
- The growth rates are 2024-26 Earnings Per share growth rates were also sourced from S&P Capital IQ.[130]
- The expected dividend yield and the EPS growth yield were summed to arrive at the DCF ROE estimate.[131]

[129] Exhibit N-M1-10-VECC-38 a)
[130] Excel file "LEI_Figures_OEB cost of capital_20240627" filed on June 27th, 2024 per N-M1-10-SEC-17
[131] Exhibit N-M1-10-VECC-38 c)

128. The dividend yields, growth rates used for each of the three proxy groups along with the resulting ROE estimates are set out in the following table.

Proxy Group	Dividend Yield	EPS Growth	ROE
Generation	1.26%	10.26%	11.52%
Wires	4.12%	6.41%	10.53%
Gas Distribution	4.22%	6.34%	10.56%

Source: Exhibit M1, page 115

LEI then assigned weights to the sectoral ROE estimates based on the sector's respective share of the 2022 rate base for the OEB-regulated entities to obtain uniform ROE for all OEB-regulated entities as set out below.[132]

Figure 38. Determination of uniform DCF ROE for OEB-regulated entities

Utility industry sector	Share of 2022 rate base in Ontario	DCF ROE
Electricity transmission and distribution	55%	10.53%
Electricity generation	24%	11.52%
Natural gas distribution	22%	10.56%
Weighted average DCF ROE		10.77%

Concentric Model

129. Concentric calculates the DCF model using the following values for each of the key inputs:

- The Dividend Yield (D/P) is calculated for each company in the respective proxy groups by dividing the current annualized dividend by the average stock price for each company for the 90 trading days ended May 31, 2024.[133]
- For the Growth Rate two different approaches were used:
- Constant Growth: relied on earnings growth estimates from S&P Capital IQ Pro (formerly SNL Financial), the Value Line, Zacks Investment Research ("Zacks"), and Thomson First Call (as reported on Yahoo! Finance) for the companies in the respective proxy groups. Where more than one growth rate was available for company the values were averaged.[134] The ROE estimate was then calculated

[132] Exhibit M1, pages 115-116
[133] Exhibit M2, page 58
[134] Exhibit M2, page 58

using the following formula: [D/P * (1+0.5*g)+g]. Concentric explains[135] the variation from the conceptual form (above) as follows: "one half year's growth rate is applied to the annual dividend rate to account for increases in quarterly dividends at different times throughout the year".

- Multi-Stage Growth: The multi-stage DCF model transitions from near-term growth (i.e., the average of Value Line, Zacks, S&P Capital IQ Pro, and Thomson First Call forecasts used in the Constant Growth model) for the first stage (years 1-5) to the long-term forecast of nominal GDP growth for the third stage (year 11 and beyond). The nominal GDP growth rates used were 3.84% for Canadian companies and 4.04% for US companies based on the Consensus Forecasts for 2030-2034, April 8, 2024. [136]

The results are set out below.

Concentric Proxy Group	**Constant Growth**	**Multi-Stage**
Canadian	10.56%	9.88%
US Electric	10.80%	9.37%
US Gas	9.84%	9.10%
North American Electric	10.50%	9.33%
North American Gas	10.41%	9.71%
North American Combined	10.59%	9.45%
Source: Exhibit M2, page 62		
Note: Results exclude an adjustment of 50 basis points for flotation costs and financial flexibility		

130. For purposes of its ROE recommendations Concentric uses the Multi-Stage results and places more weight on the results of the North American proxy groups.[137]

Nexus Model

131. Nexus calculates its DCF model results using the following inputs:

[135] Exhibit M2,page 58
[136] Exhibit M2, pages 61-62
[137] Exhibit M2, page 62

- The Dividend Yield is calculated as D/P*(1+g) where for D/P is calculated based on then-current price and annualized dividends as provided by S&P's CapIQ.[138]
- For the growth rates the Constant Growth approach was used based on company earnings per share growth rate estimates from Yahoo Finance, Zacks, S&P's CapIQ, and Stockanalysis.com.[139] Since there was considerable dispersion in outlooks for earnings growth, Nexus filtered the growth rates to only use those that are within 2 standard deviations of the overall average. This produces a screened range of growth rates of 1.54 percent to 17.33 percent.[140]. However, rather than applying using the average growth rate from the various to each company (as Concentric did), Nexus calculated separate ROE results based on each sources growth rates and then derived a weighted average with more weight being given to those results from sources that produced a lower variance around the average.
- The ROE estimate was derived using the following formula: [D/P * (1+g) + g].[141]

132. Nexus' average ROE results calculated from the each of the four growth rate sources ranged from 10.11% to 12.22% with the weighted average being 10.92% (excluding transaction costs).[142]

Dr. Cleary's Model

133. Dr. Cleary calculated the DCF model results using various set of inputs and approaches and then averages the results to determine his recommended ROE using the DCF approach:
    - The ROE is calculated[143] as {D/P*(1+g)+g} where different values are used for to determine D/P[144]:
        - The yield as of December 31, 2023 estimated using dividends over the most recent 12-month period sourced from Morningstar.
        - The average yield over the period 2017-2023, again sourced from Morningstar.
    - For growth rates Dr. Cleary uses both the Constant Growth and Multi-Stage approaches:
        - For results based on the Constant Growth approach, Dr. Cleary uses the following historic growth rates in conjunction with the dividend yields calculated over the same period (i.e., 2023 growth and 2017-2023 growth). The growth rates are derived using data from Morningstar and the following formula: g = [(1 – payout) × ROE][145].

[138] Exhibit N-M3-VECC-25 d)
[139] Exhibit M3, page 69
[140] Exhibit M3, page 71
[141] Exhibit M3, page 69
[142] Exhibit M3, page 74. See N-M-VECC-25 g) for details on how the weights were determined.
[143] Exhibit M4, page 97
[144] Exhibit M4, page 100
[145] Exhibit M4, page 100

- For the Multi-Stage results Dr. Cleary uses estimates of the 2023 growth rate (1.91% based on averaging the average and median 2023 growth rates for the proxy group) for the short-term growth rate and estimates of the 2017-2023 growth rate (1.70% based on averaging the average and median 2017-2023 growth rates for the proxy group) for the long-term growth rate. The ROE was estimated assuming either a two year or a four year transition to the long-term growth rate.[146]

134. Dr. Cleary's resulting ROEs and overall recommendation based on the DCF approach are set out below.

DR. CLEARY ROE ESTIMATES - DCF METHOD

(Exlcudes Transaction Costs)

CONSTANT GROWTH			MULTI-STAGE	
Basis	Cnd. Proxy Group AvG.	Cnd. Proxy Group Median	Basis	Cnd. Proxy Group Result
- 2023 Yield & Growth	6.80%	8.00%	Two-Year Transition	6.87%
- 2017-23 Yied & Growth	6.55%	6.30%	Four-Year Transition	6.88%
Average	6.68%	7.15%		
Average for Approach	6.91%		6.88%	
Overall Average	6.90%			
Source:	Exhibit M3, pages 102 & 104			

135. The four experts use various sources and time-frames for their dividend yield values (i.e., D/P). One could argue that the dividend yield should reflect current values and therefore Concentric's approach is the most appropriate. However, one could also argue that basing the dividend yield on the share price as of a specific date makes the calculation overly subject to short variations/fluctuations is stock prices. VECC submits that all of the approaches used to determine the dividend yields are reasonable and each offers a different perspective. There is no basis to reject any of the experts' results based on these values.

[146] Exhibit M4, page 102

136. Two of the experts (LEI and Nexus) rely solely on the Constant Growth approach to estimate ROE using the DCF model. In both cases, the experts use earning growth forecasts prepared by investment analysts and compiled by various sources. The other two experts (Concentric and Dr. Cleary) calculate their ROE estimates using both the Constant Growth and the Multi-Stage approaches. However, there are fundamental differences in the growth rates employed. For its Constant Growth approach Concentric also relies on earning growth forecasts prepared by investment analysists. In contrast, Dr. Cleary uses estimates of historical earnings growth.

137. A major concern expressed regarding the Constant Growth approach is its use of investment analysts' earnings growth rate estimates which critics claim are frequently too high to be considered sustainable over the long term. This concern is referenced by several of the experts in the current proceeding:

- LEI: "LEI believes that the DCF methodology is unsuitable for the determination of the ROE for several reasons: (i) over-reliance on earnings forecasts, which tend to overvalue the cost of equity and are consistently overly optimistic; (ii) When valuing a company or an asset using DCF methodology, a terminal value is frequently considered to capture the value of a business beyond the projection period (typically 10 to 30 years, assuming a steady state growth beyond the projection period) in a DCF analysis. As such, DCF methodology is poorly suited for ROE determination using only a 3-5 years forward-looking outlook and is likely to result in an unrepresentative estimate of the ROE".[147]

- Concentric: "Some intervenors and utility regulators in Canada have expressed concern that analysts' earnings growth rates may be overly optimistic, and LEI makes this assertion in its report in this proceeding. If optimism bias were present in analysts' earnings forecasts, it could create an upward bias in the estimated cost of capital that results from the DCF approach. To control for this concern, some analysts have used GDP growth as a proxy for long-term earnings growth."[148] Concentric indicates that it does not share this concern. However, in order to address concerns about sole reliance on analysts' earnings growth rates, it has "relied on a multi-stage specification of the DCF model which trends the earnings growth down to forecast GDP growth".[149]

- Dr. Cleary: "relying upon sell-side analyst growth estimates in DCF models, which are known to be overly optimistic, will lead to invalid estimates of Ke when using DCF models. For example, a study by Easton and Sommers estimates the "optimism" bias in analysts' growth forecasts inflates final DCF cost of equity estimates by an average of 2.84%."[150]

[147] Exhibit N-M1-10-SEC 3 b)
[148] Exhibit M2, page 59
[149] Exhibit M2,pages 59-60
[150] Exhibit M4, page 99

Also, during cross-examination Dr. Cleary stated[151]:

"*I criticize the use of sell-side analysts' forecasts because those are inflated. They are trying to sell products. They have -- like, their recommendations on stocks are about 65 percent buys, 30 percent holds, and 5 percent sells, so that kind of tells you their inclination to sell the stocks. Unfortunately, we don't have available the buy-side analysts, and the buy-side means the portfolio managers, the pension funds, and the other big asset managers, because that's proprietary information. And I can tell you that they don't use the sell-side analysts; they develop them themselves or, if anything, they temper them. So we are talking two different things here. The price, itself, is not based on those analysts' growth forecasts; it's based on the assessment of professional investors as to what they think the growth assessment is*."

138. As a litmus test for proposed earnings growth rates, Dr. Cleary uses long-term GDP forecasts as a point of comparison based on view that is it not realistic for mature, stable operating utilities operating within a defined region to have long-term (i.e., to infinity) growth rates that exceed GDP[152]. VECC notes the AUC[153] shares a similar view:

"*The Commission recognizes that the utilities are, as Dr. Cleary stated in his evidence, essentially monopolies in mature markets and, because of this, the use of long-term growth in excess of the long-term growth of GDP is unreasonable*."

139. In its evidence Concentric provides historic data (2009-2023) demonstrating that utilities' earnings growth rate have exceeded GDP. The data shows that for two out of Concentric's three North American proxy groups earnings growth exceeded GDP and that the average growth rates over the period for all three proxy groups were 4.93% and 4.59% for utility earnings and GDP respectively.[154]

140. VECC acknowledges that there maybe/can be periods of time when the growth in utility earnings will exceed the growth in GDP. However, VECC submits that it is unreasonable to expect or forecast that earnings growth will significantly exceed GDP group for a substantial period time (let alone for infinity). VECC notes that two of the experts in this proceeding provided long-term GDP forecasts:

- In its evidence Concentric uses long-term annual GDP growth rates of 4.04% for the US and 3.84% for Canada[155].
- In his evidence Dr. Clearly references a range of long-term forecasts for Canadian GDP of 3.3% to 4.3%, with an average of 3.9%.[156].

141. In comparison, the investment analysts' earnings growth rates used by the various experts were significantly higher:

[151] Transcript Volume 6, pages 72-73
[152] Exhibit M4, page 101 and Exhibit N-M4-0-SEC 82
[153] Decision 22570-D01-2018, 2018 Generic Cost of Capital, page 92, para. 438.
[154] Exhibit M2, page 59
[155] Exhibit M2, page 62
[156] Exhibit M3, page 97

- LEI: The average annual earnings growth rates used were 10.26%, 6.41% and 6.34% for generation, electric transmission & distribution and gas distribution proxy groups respectively.[157]
- Concentric: The average annual earnings growth rates used were 6.01%, 5.38% and 5.98% for the North American Electric, the North American Gas and the North American Combined proxy groups respectively[158].
- Nexus: The average annual earnings growth rates from the various sources used ranged from 6.25% to 8.46%[159].

142. VECC submits that, given the long-run forecasts provided by experts for GDP, all of these earnings growth rates are unrealistic (i.e., too high) to use as long-run values (i.e., lasting to infinity) in a DCF model. The OEB should assign no weight to the Constant Growth DCF models that use these values as estimates for future long-term earnings growth. In this regard, VECC notes that, in the case of LEI and Concentric, the respective experts have already – in their own evidence[160] – rejected the use of the Constant Growth DCF model.

143. In contrast, Dr. Cleary's application of the Constant Growth DCF model uses estimates of historic earnings growth rates. The annual growth rates used range from 1.46% to 2.17%[161]. VECC submits that these are reasonable values as they have a basis in actual market data and the Dr. Cleary's resulting ROE estimates should be considered by OEB in making its ROE determinations.

144. Two of the consultants also developed ROE estimates using a Multi-Stage DCF model. However, the two, Concentric and Dr. Cleary, use significantly different assumptions regarding future earnings growth rates. Concentric uses the investment analysts' earnings growth for the initial years of its Multi-Stage model (i.e. the first five years) and then transitions to an annual growth rate equal to Concentric's forecast annual GDP growth rate over the next five years. After year 10, the annual GDP growth rate is used. This approach yields the following estimated ROE values for each of Concentric's five proxy groups.

[157] Exhibit M1, page 115
[158] Exhibit CEA 4, pages 4-6
[159] Exhibit M3-NAICS 2211 v04 (as filed).xlsx, Ke Analysis Tab – Filtered Results
[160] LEI: Exhibit M1, page 126 and Concentric: Exhibit M2, page 62
[161] Exhibit M4, page 102

CONCENTRIC MULTI-STAGE DCF RESULTS		
Proxy Group		**ROE**
Canadian		9.88%
US Electric		9.37%
US Gas		9.10%
North American Electric		9.33%
North American Gas		9.71%
North American Combined		9.45%
Source: Exhibit M2, page 62		
Note: Results exclude an adjustment of 50 basis points for flotation costs and financial flexibility		

145. In contrast Dr. Cleary uses the actual 2023 earnings growth rates for the first year and then transitions over either 2 or 4 years to forecast earnings growth rates based on actual growth for the 2017-2023 period. The results ROE estimates are 6.87% and 6.88% using the two and four year transition periods respectively.[162]

146. While the two Multi-Stage DCF results are materially different, VECC submits that they both warrant consideration by the OEB in its ROE determinations. In VECC's view Concentric's growth rate assumptions are plausible although likely at the high end of a "range of reasonableness". This is because, as Dr. Cleary notes[163], "this approach also assumes that utilities' earnings and dividends will grow at rates above nominal GDP growth for 10 years, then will grow at estimated nominal GDP growth from year 11 to infinity." In contrast, Dr. Cleary's input assumptions which use earnings growth rates which are generally less than one-half the forecast growth in GDP may be viewed by some as being conservative. VECC submits that, by considering both results, the Board will have a reasonable range for ROE based on the DCF method to use in its determinations.

[162] Exhibit M4, page 104
[163] Exhibit N-M3-0-SEC 82

147. In his evidence Dr. Cleary averages the results from his Constant Growth and Multi-Stage DCF approaches to derive a final DCF estimate for ROE of 6.9% (excluding transaction costs). Given Concentric's preference[164] for relying on the results from its North American proxy groups VECC views the average ROE results for these three groups as a reasonable single point estimate of Concentric's Multi-Stage DCF approach. The average ROE for Concentric's three North American proxy groups is 9.50%[165] (excluding transaction costs).

148. Averaging these two values yields an ROE estimate of 8.2% which is the DCF-based value that VECC submits the Board should use based on the initial results filed by the various experts.

149. During the proceeding the experts each undertook to update their ROE analyses using more recent data (i.e., up to September 30, 2024). In Concentric's update[166] the average estimated ROE for its three North American proxy groups using the Multi-Stage DCF approach is 9.17% (excluding transaction costs) while Dr. Cleary's estimate is unchanged (at 6.9%)[167]. The updated average of two values is 8.04%.

CAPM Analysis

150. The CAPM is based on the relationship between the required return of a security and the systematic risk of that security. As shown in following equation, the CAPM is defined by four components, each of which should represent investors' forward-looking view[168]:

$$Ke = rf + \beta(rm - rf)$$

where:

Ke = the required ROE for a given security;

β = Beta of an individual security where beta represents the risk of the security relative to the market.

rf = the risk-free rate of return; and

rm = the required return for the market as a whole.

151. LEI uses the following assumptions for its CAPM analyses:

- Risk-Free Rate: Uses the 2025 forecast for 30-year forecasts for 30-year GOC bond yields (3.19%)[169]
- Market Risk Premium (MRP): Based on analyses of the historical difference between S&P 500 total returns - US 30-year treasury bond yields. To determine the value three different periods in time were analyzed (1994-2023, 2004-2023 and

[164] Exhibit M2, page 62
[165] Excluding transaction costs
[166] Exhibit J4.8
[167] Exhibit J5.3
[168] Exhibit M2, page 63
[169] Exhibit M1, page 119

2014-2023) and the result (7.28%, 7.52% and 10.16% respectively) then averaged to yield a value of 8.32%.[170]

- Beta Values: 1-year and 3-year betas were obtained from S&P Capital IQ. LEI Also computed the 5-year beta by assessing the correlation of daily company stock returns against the relevant daily index returns (S&P 500 for US companies and S&P/TSX composite index for Canadian companies) for the 5-year period from 2019 to 2023. LEI used the 5-year betas in its final ROE determinations.[171] In applying the Beta values in its analysis LEI has: i) not applied the Blume-adjustment and ii) unlevered the initial (raw) Betas based on each companies' tax rate and capital structure and then re-levered them using the current deemed capital structures/tax rates applicable to Ontario utilities. The re-levered Betas for each of the proxy groups were then weighted using each group's share of the 2022 total rate base and the resulting value (0.69) used in the CAPM calculations.[172]

152. The resulting ROE estimate is 8.95% which (when updated for September 2024) LEI sees being will be used as input to update the authorized ROE annually for the years 2025-2029 such that the base year is 2024.[173]

153. Concentric uses the following assumptions in its CAPM analyses:

- Risk-Free Rate: CAPM analysis relies on the 2025 through 2027 average Consensus Economics forecast of the Canadian and US 10-year government bond and then adds the historical spread between 10- and 30-year government debt. The resulting "risk-free" rates are 3.46% and 4.14% for Canada and the US respectively.[174]
- Market Risk Premium (MRP): In its evidence Concentric provides estimates for both historic and forward looking MRP values for both Canada and the US. However, for purposes of applying the CAPM approach Concentric only uses the historic MRP values. For Canada, the historical MRP is based on return data from 1919-2023, while, for the U.S., the historical MRP is calculated using return data from 1926-2023. The historic MRP values used are 5.68% and 7.17% for Canada and the US respectively.[175]
- Beta Values: The beta values for the Canadian and U.S. proxy group companies were sourced from both Value Line and Bloomberg. In each case 5-year values were used. The Blume-adjusted beta values from both sources were used (as opposed to the raw beta values). However, Concentric did not unlever and then re-lever the beta values for each company to align with Ontario's tax rates and deemed capital

[170] Exhibit M1, page 120
[171] Exhibit M1, pages 118-119
[172] Exhibit M1, pages 119-120
[173] Exhibit N-M1-10-VECC-43 b)
[174] Exhibit M2, pages 64-65
[175] Exhibit M2, page 69

structures for OEB-regulated utilities. The resulting Beta values for the six proxy groups ranged from 0.83 to 0.93.[176]

154. The resulting ROEs for Concentric's six proxy groups based on the CAPM approach are:

CONCENTRIC ROE ESTIMATES
CAPM METHOD (HISTORICAL MRP)

PROXY GROUP	ROE
Canadian	8.86%
US Electric	10.12%
US Gas	9.50%
NA Electric	9.73%
NA Gas	9.39%
NA Combined	9.72%

Source: Exhibit M2, page 70

Note: Concentric's reported values have been reduced by 50 basis points to remove transaction costs.

155. The average of the results for Concentric's North American proxy groups is 9.61%.

156. Nexus uses the following inputs for its CAPM analysis:

- Risk-Free Rate: Nexus uses a 2025 forecast for 30-year US Treasury bonds.[177] The value used is 4.06%
- Market Risk Premium: Nexus uses the DCF method[178] and market data for the last year available[179] to calculate the inputs required for the DCF method (i.e., dividend yields and growth rates). The resulting MRP value is 8.83%.
- Beta Values: Nexus used historical betas for the comparator companies in its proxy group sourced from Yahoo, Zacks, S&P's CapIQ, and StockAnalysis. These betas are computed from 3 years of monthly price data using the S&P 500 as the market comparator.[180] Nexus adjusted the raw betas using the Blume adjustment. Also, Nexus re-levered each of the Betas to the deemed debt ratio of 60 percent debt and

[176] Exhibit CEA 7.1
[177] Exhibit M3, pages 64 and 73
[178] Exhibit M3, pages 62-63
[179] Transcript Volume 5, page 98, lines 8-17
[180] Exhibit M3,page 66

40 percent equity and a tax rate of 26.5 percent.[181] The average of the raw betas used for the proxy group companies is 0.5577, while the average of the Blume-adjusted Betas is 0.7037 and average of the re-levered Blume-adjusted Betas is 0.6943.[182]

157. The resulting ROE based on Nexus' CAPM approach is 10.19% (excluding transaction costs).[183]

158. Dr. Cleary uses the following inputs for his CAPM analysis:

- Risk-Free Rate: Dr. Cleary uses the existing long-term government yield of 3.30% as of June 5, 2024 as his estimate for the Risk-Free rate.[184]
- Market Risk Premium (MRP): In his evidence Dr. Cleary reviews a number of sources reporting historical and forecast values for overall market returns and MRP which indicate that MRP values are commonly in the range of 4% to 6%[185]. For his CAPM analysis Dr. Cleary uses an MRP value of 5% which is not only the mid-point of this range but is roughly equal to the 4.97% average difference between Canadian stock and government bond returns over the 1938-2023 period[186].
- Beta Values: Dr. Cleary prefers to use Betas estimated over long period of time. After reviewing available historic evidence Dr. Cleary concluded that a reasonable estimate of beta for a typical Ontario utility should lie within the 0.30 to 0.60 range.[187] His recommended Beta value for this proceeding is 0.45 which he notes is: i) slightly above the mid-point of the long-term average of around 0.35 and ii) below the current average beta estimate of 0.60, as documented in his evidence.[188]

159. The resulting ROE based on Dr. Cleary's CAPM approach is 5.55% (excluding transaction costs).[189]

Risk-Free Rate

160. With respect to the Risk-Free Rate all four experts use the yield for 30-year government bonds. However, there are differences in terms of how the value is established. LEI uses a forecast for the yield on 30-year GOC bonds for 2025. Similarly, Nexus uses a forecast for 2025 for the yield on 30-year US government bonds. However, Concentric uses the average yields forecast for 30-year government bonds for 2025-2027, while Dr. Cleary uses the actual yield on GOC 30-year bonds as of June 5, 2024.

[181] Exhibit M3,pages 67-68
[182] M3-NAICS 2211 (as filed).xlsx at tab [Ke Analysis].
[183] Exhibit M3, page 68
[184] Exhibit M3, page 80
[185] Exhibit M3, pages 80-90
[186] Exhibit M3, page 86
[187] Exhibit M3, page 94
[188] Exhibit M3, pages 93 and 95
[189] Exhibit M3, page 95

161. Concentric explains its use of forecast government bond yields for the 2025-2027 period as follows:

"*We find this five-year result to be most applicable because investors typically have a multi-year view of their required returns on equity.*"[190]

162. VECC disagrees and submits that if the intention is to determine an ROE estimate for 2024 using the CAPM approach then the appropriate long-term government bond yield rate to use is one for 2024. VECC notes that Dr. Cleary's evidence[191] supports using the reference year's long-term government bond yield and agrees with this rationale:

"*using the CAPM to estimate Ke that RF represents the actual existing risk-free asset that an investor "can invest in today" and earn the risk-free rate of return. A Canadian investor today could not buy a 30-year Government of Canada bond promising a "forecast" risk-free rate of return (of for example, Concentric's estimate of 3.46% that differs from the actual rate existing today e.g., 3.30% as of June 5, 2024*)."

163. To obtain the forecasts yields for 2025-2029, the investor would have to post-pone investing until the requisite years.

164. Alternatively, if the intention is to estimate the ROE for a 2025 base year using the CAPM approach then (applying the same logic) the appropriate government bond yield rate to use would be the one forecasted for 2025.

165. Dr. Cleary asserts that that using the actual yields at a given point in time to predict future yields performs far superior to using Consensus forecasts[192]. As discussed in response to the setting of long-term debt costs VECC believes there is merit in exploring Dr. Cleary's approach. Whatever, method is ultimately chosen for establishing long-term debt costs VECC submits that the same approach should be used to determine the 2025 forecast for long-term government bonds for purposes of applying the CAPM model.

166. VECC submissions regarding the appropriate base year for purposes of implementing any changes in ROE are provided in submissions regarding the Annual Adjustment Formula

Market Risk Premium (MRP) Determination

167. The four experts use a variety of approaches to establish the MRP. LEI uses US market data for the most recent 10, 20 and 30-year periods to compare market returns to US government bond yields and establish a value for MRP. Concentric uses a similar approach but includes both Canadian and US market data and employs much longer historical periods. Dr. Cleary's MRP uses just Canadian market data over a long period to calculate MRP based on the average difference between Canadian stock and government bond returns and also considerations regarding future market expectations. Nexus claims that its

[190] Exhibit M2,page 76
[191] Exhibit N-M4-10-OEB Staff 61
[192] Exhibit M4, page 80

MRP estimate is "forward looking"[193]. However, in cross examination it became clear that Nexus' MRP calculations are based on data for the most recent historical year available[194].

168. Evidence provided by Concentric[195] and Dr. Cleary[196] regarding historical MRP indicates that annual values can fluctuate from year to year and that year over year changes can be significant. Nexus claims that since the MRP is not stable the value for CAPM should be based on contemporary data so as to reflect what "people are currently thinking"[197]. VECC disagrees. Given the fluctuation in MRP from year to year and the fact that it can change significantly from year to year, VECC submits that it is more appropriate to use an historical value that has been calculated over a multi-year period and that the OEB should reject Nexus' approach.

169. However, the historical data provided also indicates that the historical period chosen for purposes of averaging can have a material impact on the resulting MRP value:
    - LEI's MRP calculations result in an MRP (using US data) of 7.28% if the historical period used is 1994-2023 but result in an MRP (using US data) of 10.16% if the historical period used is 2014-2023[198].
    - The following table sets out the MRP values for different historic periods based on data provided in Concentric's interrogatory responses.

AVERAGE MRPs

Period	US	CANADA
2014-2023	10.60%	7.00%
2004-2013	5.20%	5.80%
1994-2003	7.10%	5.80%
1984-1993	6.50%	-1.20%
1974-1983	3.00%	3.60%

Source: Exhibit N-M2-10-OEB Staff 14 a), CAN and US Actual Hist. MRP (Kroll) Tabs

[193] Exhibit N-M3-10-OEB Staff 49 b)
[194] Transcript Volume 5, page 98, line 8 to page 100, line 11
[195] Exhibit N-M2-10-OEB Staff-14 a), Attachment 1, see Canada and US Actual History Tabs
[196] Exhibit M4, page 88, Figure 9
[197] Transcript Volume 5, page 100, lines 11-21
[198] Exhibit M1, page 120

170. In his interrogatory responses Dr. Cleary also noted[199] that "sampling data from different time periods can skew the results in such calculations". As result, VECC also has difficulty with the MRP estimate used by LEI which averages three historical periods (1994-2023, 2004-2024 and 2014-2024) and, thereby, gives undue weight to the most recent 10 years[200].

171. Overall, VECC considers the MRP values developed by Concentric and Dr. Cleary to be more reasonable and appropriate for use in a CAPM analysis.

Beta Values

172. The Beta values used by the four experts vary based on: i) the period over which they have been calculated; ii) whether they are raw estimates or Blume-adjusted; and iii) whether they have been re-levered to reflect the capital structure of Ontario's utilities.

173. LEI and Concentric both use 5-year Betas. Nexus uses 3-year Betas and Dr. Cleary uses Betas estimated over a much longer period of time to inform his choice of value for Beta. Evidence provided by the various experts indicates that Beta values vary over time and not in any systematic way that would suggest a trend. This can be readily seen from the graphs in Appendix C of Dr. Cleary's evidence[201]. It can also be seen in the evidence provided by the other experts:

LEI's BETA VALUES

	Levered/Raw Betas		
Proxy Group	1-Year	3-Year	5-Year
Generation	1.09	0.75	0.79
Wires	0.51	0.47	0.70
Gas Distribution	0.60	0.54	0.85

Source: Exhibit M1, page 118

[199] Exhibit N-M4-OEB Staff 64 b)
[200] Exhibit N-M1-10-CCC 5 n)
[201] Exhibit M4,pages 130-132

CONCENTRIC'S NORTH AMERICAN PROXY GROUP BETA VALUES - MAY 2024		
Period	Raw Beta	Blume-Adjusted Bta
Two-Year	0.6055	0.7370
Five-Year	0.8214	0.8809
Six-Year	0.7650	0.8433
Source: Exhibit N-M2-10-VECC 24.2, Attachment 1		

174. Based on the annual variation and the apparent lack of trend or pattern, VECC submits that a longer period of time is the appropriate basis for establishing the value for Beta. In VECC's view the Betas values used by Concentric/LEI (based on 5-years) and those proposed by Dr. Cleary will produce a reasonable range of CAPM results for the OEB's consideration. The five years used by Concentric (and LEI) serve to average out extremes that may occur over shorter periods and is the standard used by Value Line in its publication of Betas[202]. In contrast, based on his analysis of historical beta values drawn from a much longer period of time Dr. Clearly considers a reasonable range for Beta values to be between 0.30 and 0.60, leading to the choice of 0.45 as his preferred value for Beta. Dr. Cleary acknowledges[203] that the 0.45 is less than the 0.60 overall average for his various Beta estimates calculated as of December 2023 as presented in his evidence. However, he notes that the same analysis, using data as of December 2022, yielded an overall average of 0.355, considerably below his 0.45 value[204]. As a result, VECC does not consider the 0.45 Beta value proposed by Dr. Cleary to be unreasonable.

Beta Adjustments

175. The Blume adjustment is based on study undertaken by Dr. Blume[205] which found that the beta value for a low beta portfolios migrates towards 1.0 (exceeding its long-term unadjusted average) in accordance with the following formula[206]:

$$\beta_{adj} = \beta_{raw} \times {}^{2}/_{3} + 1.00 \times {}^{1}/_{3}$$

[202] Exhibit M2, page 66
[203] Exhibit M4, pages 91-92
[204] Exhibit M4, pages 91-92
[205] Exhibit N-M2-10-AMPCO/IGUA 9 a), Attachment 1
[206] Exhibit M3, page 67

176. Two of experts (Nexus and Concentric) used Blume-adjusted Betas in their CAPM analysis while the other two did not. Those not using the Blume adjustment explained their choice as follows:

- LEI: "LEI believes the Blume Adjustment is not required, particularly for the regulated utility sector. No empirical evidence is presented to justify the argument that the beta for regulated utilities moves towards one over the long term".[207]
- Dr. Cleary: Dr. Cleary asserts that the Blume adjustment "is not appropriate with respect to below-average risk utility stocks, whose betas do not gravitate towards one." Dr. Cleary also provides evidence from a number of sources indicating that actual utility beta values do not have a tendency to converge towards one. [208]

177. When asked if there was more recent evidence[209] supporting the Blume adjustment, Concentric makes reference to studies published beginning in 2009 and updated most recently in 2023 by Professor Fernandez[210]. VECC notes that Professor Fernandez studies only involved 30 Dow Jones Industrial companies. As a result, VECC does not view the results as convincing support for the Blume adjustment. This is particularly so in light of the actual trends in historic Beta values put forward by Dr. Cleary.

178. In its evidence Nexus offers another reason for the adjustment[211]:
"*The second reason for the adjustment is forward-looking and specific to Ontario utilities: Given the expected challenges due to electrification, the adjustment is prudent*."

179. In VECC's view little weight should be assigned to this argument. As VECC has noted earlier in these submissions, Nexus evidence has overstated the uncertainty that electrification will create for Ontario's electricity distributors over the coming regulatory period. On the issue of the Blume adjustment, VECC submits that the CAPM analyses should be based on raw betas, as used in LEI's and Dr. Cleary's analyses.

180. In their CAPM analyses LEI and Nexus use re-levered Betas whereas Concentric and Dr. Cleary do not. The theory behind re-levering the Betas used in the proxy group is to align it with the capital structure (and tax rate) applicable to Ontario utilities so as to eliminate any differences in financial risk and make the results more comparable to Ontario utilities[212].

181. As VECC has discussed above, there are material differences between the business risks faced by Ontario's utilities and those faced by the companies in the proxy groups utilized by the various experts. In VECC's view part of this business risk is likely reflected in the ROE's calculated for the various proxy groups. However, part of this business risk difference is likely reflected in the capital structures of the companies in the proxy groups.

[207] Exhibit N-M1-0-SEC-3
[208] Exhibit M-M4-CCC-5
[209] Dr. Blume's work was undertaken in the early/mid 1970's.
[210] Exhibit N-M2-10-OEB Staff-13 b)
[211] Exhibit N-M3-10-AMPCO/IGUA-34
[212] Exhibit N-M1-10-VECC-41 b)

Re-levering the Betas used in the CAPM analysis will eliminate any differences in capital structure (including those resulting from differences in business risk) but the differences in ROE due to business risk will still exist. In VECC's view a superior way to address the financial and business risk differences between Ontario utilities and the companies in the various proxy groups is to apply the various ROE methodologies without any re-levering of the values used for the proxy companies and then, as Concentric has done[213], consider what (if any) adjustments are required to the capital parameters to account for differences in business and financial risk.

182. Based on the foregoing comments VECC considers Concentric's and Dr. Cleary's CAPM analyses results to be the appropriate ones for the OEB to consider in its ROE determinations. Neither expert uses re-levered Betas. In terms of the other major methodological issues identified above, the assumptions used by these two experts tend to "book-end" the approaches discussed. The use of 5-year Betas and the Blume adjustment both serve to increase the ROE values calculated by Concentric, while the use of raw Betas and a long period for determining Beta both tend to reduce the ROE value calculated by Dr. Cleary. As noted above, VECC believes the evidence in this proceeding lends greater support to the use of raw Betas and a longer period for determining Beta values. However, as there is some merit to the other approaches VECC has included both experts' results for purposes of its submissions.

183. Dr. Cleary's and Concentric's reported ROE values from their initial CAPM analyses are 5.55% and 9.61% respectively. The average of the two results is 7.58% (excluding transaction costs). In their updates[214] using data up to September 2024 the resulting ROE values are 5.37% and 9.58% respectively, yielding an overall average of 7.48%

Equity Risk Premium (ERP) Analysis

184. The ERP approach recognizes that equity is riskier than debt because equity investors bear the residual risk associated with ownership. Equity investors, therefore, require a greater return (i.e., a premium) than would a bondholder. The ERP approach estimates the ROE as the sum of the equity risk premium and the yield on a particular class of bonds.[215] As a result the ERP approach uses the formula: ROE = Bond Yield + Equity Risk Premium (Difference between Bond Yield and ROE)

185. LEI uses 30 year Government of Canada (GOC) bond yields as the value for "Bond Yield" in the formula. LEI then estimates the Risk Premium by analyzing the difference between 30-year GoC bond yields and returns from the S&P/TSX utilities index (total

[213] Transcript Volume 2, pages 168-169
[214] Concentric: Exhibit J4.8 and Dr. Cleary: Exhibit J5.3
[215] Exhibit M2, page 74

returns, including dividend returns) and from the BMO equal weight utilities index ETF.[216] The results of this analysis are set out in the following table[217].

Comparable group	Period of study	Average stock return	Average bond yield	ERP
S&P/TSX utilities	2001-2024	6.77%	3.37%	3.40%
BMO utilities	2010-2024	10.98%	2.50%	8.48%
Average				**5.94%**

186. Using a 30-yer GOC bond yield of 3.15% (as of March 2024) LEI then calculates an estimated ROE value of 9.09% (excluding transaction costs)[218].

187. In response to interrogatories LEI confirms that 2024 is the base year for the estimated ROE of 9.09%. LEI also explains that the period of study for the BMO utilities yields is based on the fact the BMO equal-weight utilities index ETF was launched on January 20th, 2010 and that using the S&P/TSX utilities index for the same period would yield an ERP of 3.41%.[219] As a result, changing the period of study for the S&P/TSX utilities index to the same period as that for the BMO equal-weight utilities index ETF would not impact the calculated ERP value.

188. In order to estimate ROE using the Equity Risk Premium approach Concentric used regression analysis to estimate a relationship between government bond yields and electric and gas utilities in the US and Canada. Then, to estimate the value for ERP, Concentric used three estimates of the 30-year U.S. and Canadian Government bond yields: the current 30-day average, a near-term Blue Chip consensus forecast for Q3 2024 – Q3 2025, and a long-term Blue Chip consensus forecast for 2025–2029. However, for purposes of its ROE recommendations Concentric determined the five-year forecast to be most applicable because investors typically have a multi-year view of their required returns on equity.[220]

189. The forecast 2025-2029 Government bond yields used are 3.55% and 4.30%[221] for Canada and the US respectively. The resulting ROE estimates are:

[216] Exhibit M1, page 113
[217] Exhibit N-M1-10-VECC-36 a)
[218] Exhibit N-M1-10-VECC-36 d)
[219] Exhibit N-M1-10-VECC-36 c)
[220] Exhibit M2, pages 74-79
[221] Exhibit M2, pages 77 and 79

CONCENTRIC ROE ESTIMATES ERP METHOD	
PROXY GROUP	ROE
Canadian	8.94%
US Electric	9.86%
US Gas	9.80%
NA Electric	9.40%
NA Gas	9.37%
NA Combined	9.53%
Source: Exhibit M2, page 9	
Note: Concentric's reported values have been reduced by 50 basis points to remove transaction costs.	

190. Nexus' ERP approach uses regression analysis to establish a relationship between authorized ROEs in the US and two factors: i) US 30-year government bond yields and ii) Moody's Baa commercial bond yields. For purposes of estimating this relationship the authorized ROE values were unlevered. This relationship is then used to estimate ROE using: i) the forecast US 30-year government bond yield for 2025 (4.06%) ii) the Moody's Baa commercial bond yield at the time[222] the evidence was prepared. The resulting estimated ROE (7.64%[223]) was then re-levered to a deemed 60:40 debt-to-equity ratio and a tax rate of 26.5 percent to produce an ROE of 11.59 percent. Removing 50 basis points (for transactions costs) produces an estimated ROE of 11.09 percent.[224]

191. For his ERP approach Dr. Cleary uses the yield on long-term A-rated Canadian utility bonds. To do so, he considered the June 5, 2024 the yield on long-term A-rated Canadian utility as reported by Bloomberg and the average yield of 4.78% on bonds outstanding for five Canadian utilities as of June 6, 17 2024. Based on this data Dr. Cleary concluded that 4.7% was a reasonable value for current yield on long-term A-rated Canadian utility bonds.[225]

192. In order to establish the equity risk premium, Dr. Cleary draws on his own experience and numerous estimates provided by analysts to conclude that the ERP approach is

[222] Exhibit N-M3-VECC-28 d) & e)
[223] M3-NAICS 2211 v04 (as filed).xlsx, rp Tab – Column C
[224] Exhibit M3, page 73
[225] Exhibit M4, page 106

commonly applied by adding a spread of 2 to 5% to a company's existing bond yields, with 3.5% being applied for average risk companies, and lower (higher) spreads being applied to lower (higher) risk companies. In the interrogatory responses Dr. Cleary also provided references to several publications that support the use of a similar range[226]. While not referenced by Dr. Cleary, VECC notes that the 3.5% for an average risk company is generally consistent with Dr. Cleary's evidence that: i) average difference between Canadian stock and government bond returns over the 1938-2023 period was 4.97%[227] and ii) the difference between long-term government yields and A-rated utility yields is 1.4%[228].

193. Dr. Cleary then observes that, given the low risk nature of Canadian regulated utilities, a lower risk premium is appropriate and suggests the use of a 2-3% range, with a best estimate of 2.5%.[229] Combining the current yield on long-term A-rated Canadian utility bonds (4.7%) and the equity risk premium estimate (2.5%), Dr. Cleary calculates an estimate for ROE using the ERP approach of 7.2% (excluding transaction costs).[230]

194. VECC notes that the ERP approaches of the four experts differ both in terms of the bond yield used and the basis for determining the equity risk premium

Bond Yield Used

195. With respect to the bond yield:
- LEI uses 30-year GOC bond yields using March 2024 data,
- Concentric uses 30-year US government and GOC bond yields forecast for 2025-2029,
- Nexus uses 30-year US government bond yields forecast for 2025 and current Moody's Baa bond yields, and
- Dr. Cleary uses long-term yields for A-rated Canadian utilities based on June 2024 data.

196. VECC views LEI's use of 30-year GOC bond yields as reasonable, particularly in view of the fact that it is being used in conjunction with the S&P/TSX utilities index and the BMO equal weight utilities index ETF. However, VECC notes that LEI's use of a 30-year GOC bond yield of 3.15% (as of March 2024) means that the ROE estimate reflects a 2024 value. This is confirmed by LEI in its interrogatory responses.[231]. If the Board intends to use the ROE estimates provided by the various experts to determine the ROE for 2025 as the "base year", then LEI's ROE estimate based on the ERP approach will need to be revised accordingly using a forecast for 2025 for the GOC 30-year bond yield.

[226] Exhibit M4, page 106 and Exhibit N-M4-EDA-5
[227] Exhibit M4, pages 73 and 86
[228] Exhibit M4, page 60
[229] Exhibit M4, page 106 and Exhibit N-M4-EDA-5
[230] Exhibit M4, page 107
[231] Exhibit N-M1-10-VECC-44

197. VECC similarly views Concentric's use of Canadian and US long-term government bond yields as reasonable as they are matched with the authorized returns of Canadian and US utilities respectively. However, VECC notes that the long-term government bond yields used in Concentric's derivation of its ERP-based ROE estimates are based on a forecast of yields over the period 2025-2029. Concentric asserts that this is the appropriate time period to use as: "*We find this five-year result to be most applicable because investors typically have a multi-year view of their required returns on equity*."[232]

198. VECC disagrees and submits that if the intention is to determine an ROE estimate for 2024 using the ERP approach then the appropriate long-term government bond yield rate to use is one for 2024. Alternatively, if the intention is to estimate the ROE for a 2025 base year using the ERP approach then the appropriate government bond yield rate to use would be one for 2025. The reasons for this are two-fold. First, today's investors can obtain returns based on today's yields for government bond by investing (today) in such bonds. However, to obtain the forecasts yields for 2025-2029, the investor would have to post-pone investing until the requisite years. Similarly, for investors planning to make an investment in 2025, the relevant GOC long-term bond yield to use as a compactor would be that for 2025. VECC notes that Dr. Cleary makes a similar argument in his interrogatory responses[233]. Second, if the OEB intends to continue to use an annual adjustment formula that includes (as input) the difference between the forecast of the GOC long-term bond yield for the test year versus the base year for the formula then the base year's ROE needs to be based on the GOC long-term bond yield for the base year.

199. VECC notes that compared to the forecast 2025-2029 long-term government bond yields used by Concentric (3.55% for Canada and 4.30% for the US) the current long-term yields are 3.55% for Canada and 4.66% for the US[234]. Using these values would increase the estimated ROE if 2024 is the intended base year. However, if 2025 is the intended base year then the relevant long-term GOC bond yield would be 3.43% and 4.27%[235] for Canada and the US respectively. Using these values would decrease the estimated ROE if 2025 is the intended base year.

200. VECC also considers Nexus' use of US government 30-year bond yields as reasonable as Nexus' analysis only used authorized returns for US utilities. Nexus then uses a 2025 forecast for US 30-year Treasury bond yields, which is reasonable if 2025 is the assumed base year for Nexus' ROE determination.

201. Dr. Cleary's use of long-term yields for A-rated Canadian utilities is also reasonable as he is using them in conjunction with estimates of the equity risk premium for Canadian utilities. In order to derive an ROE estimate based on the ERP approach Dr. Cleary uses a

[232] Exhibit M2,page 76
[233] Exhibit N-M4-10-OEA-9 a)
[234] Exhibit M2, pages 77 and 79
[235] Based on the forecast 2025 values for 10-year Canadian and US government bonds (Exhibit N-M2-AMPCO/IGUA-8, Attachment 1) and the 10 to 30 year spreads as provided in Exhibit M2, pages 64-65

long-term yield for A-rated Canadian utilities of 4.7% consistent with the June 5, 2024 yield on long-term A-rated Canadian utility bonds was 4.68%[236]. As a result, the ROE estimate will be applicable if 2024 is the assumed base year. However, if the intended base year is 2025 the value for the yield on long-term A-rated Canadian utility bonds should be updated accordingly.

ERP Determination

202. LEI's determination of the equity risk premium uses historical market data from two different sources: i) the S&P/TSX utilities index (total returns, including dividend returns) and ii) the BMO equal weight utilities index ETF. The two sources yield widely different ERP values (3.40% and 8.48%). In his evidence and interrogatory responses Dr. Cleary indicates that he is not comfortable with the LEI's ERP analysis for a couple of reasons:

- "*This time period also includes a period of extremely low interest rates (from 2009 until 2022), which is positive for utility stock returns, since they are generally high dividend-paying stocks. In addition, during the 2001-24 period, there were three periods of extreme market declines and uncertainty, due to the technology crash (2001-02), the financial crisis (2008-09) and COVID (2020), and during such periods utility stocks tend to perform better than the average stock in the market due to their low-risk nature (i.e., there is a flight to safety*)."[237]
- "*use of the BMO utilities index, which by nature would be comprised of a small number of primarily Canadian holding company utilities, some of which have significant exposure to international operations and unregulated businesses*."[238]

203. VECC also notes that using the historical BMO equal weight utilities index ETF results in an ERP value (8.48%)[239] which is:
    - Well in excess any of values for ERP calculated by LEI using CAPM, even the value for the 2012-2023 (7.03%) which LEI acknowledges was a period of exceptional market returns[240].
    - Well in excess of the ERP value (3.41%) calculated for the same 2010-2024 period using the S&P/TSX utilities index[241].
    - Well in excess of the MRP values suggested by the Dimson Study[242] for equity markets overall. For Canada and the US, the market ERP values are: i) 4.2% and 5.8% respectively based on the arithmetic averages for long-term equity market and bond returns and ii) 3.3% and 4.4% respectively based on the geometric averages for long-term market and bond returns. Whereas one would expect the ERP for

[236] Exhibit M4, page 106
[237] Exhibit M4, page 30
[238] Exhibit N-M4-VECC-6
[239] Exhibit N-M1-10-VECC-36 c)
[240] Exhibit M1, pages 120-121
[241] Exhibit N-M1-10-VECC-36 c)
[242] Exhibit M4, Attachment AW. See Appendices 1.2 and 1.5

utilities which are less risky than the average equity market investment to be lower. (Note: In response to interrogatories[243] Concentric offers different values. However, the values reported are incorrect as the response derives MRP by subtracting real bond returns from nominal equity returns.)

- Well in excess of the historical MRP values used by Concentric[244] in its CAPM analysis, while (as noted above) one would expect the ERP for utilities to be lower than the MRP for the equity market overall.

204. Based on the foregoing VECC submits that the Board should give consideration to LEI's ERP results when calculated using the S&P/TSX utilities index which yields an ROE estimate for 2024 of 6.55% (3.15% (LTGOC) + 3.40% (ERP)) and for 2025 of 6.60% (3.20%+3.40%). However, no weight should be given to the ERP results calculated using the BMO equal weight utilities index ETF. The ERP derived using the BMO equal weight utilities index ETF as the results are unreasonable. As Concentric states in its evidence[245]:

> "*Regardless of which analyses are used to estimate the investor-required ROE, analysts must apply informed judgment to assess the reasonableness of the results and to determine the appropriate weighting to apply to the results under prevailing capital market conditions*."

205. In VECC's view, a major shortcoming with Concentric's ERP approach is that it relies on authorized ROEs which are not market data. The returns that investors will expect to/actually earn depend not only on the ROE that has been authorized by the regulator but also on the extent to which the entire regulatory framework that the utility operates in is viewed as supporting/contributing to the ability of the utility to actually earn the authorized return. In this regard, many of the jurisdictions do not rate a favourably as Ontario[246]. The returns that investors can expect to earn will also depend on the utility's own ability to both manage/mitigate the business risks it faces and capitalize on potential business opportunities and efficiencies as they arise.

206. For this reason, VECC questions whether it is reasonable for the OEB to consider the results of Concentric's ERP analysis in its ROE determinations. However, as noted below, VECC has chosen to include them in formulating its overall conclusions regarding the appropriate ROE to ensure that the FRS is met.

207. In VECC's view Nexus' ERP approach suffers from the same shortcomings as Concentric's but also has additional issues that are of concern to VECC:

- The first is that the ERP for utilities implied by Nexus' analysis is 6.53% (based on an ROE of 11.09%, a US 30-year bond yield of 4.06% and removing 0.50% for transaction costs[247]) which is considerably higher than either: i) the historical

[243] Exhibit N-M2-AMPCO/IGUA-10 d)
[244] Exhibit M2, page 69
[245] Exhibit M2, page 56
[246] Exhibit M1, pages 128-129
[247] Exhibit M3, page 73

Canadian MRP (for the market overall) estimated by Concentric in its CAPM analyses (5.68%[248]) or the MRP estimate (for the market overall) used by Dr. Cleary (5%[249]) in his CAPM analyses. Whereas one would expect the ERP for utilities to be lower than the MRP for the market overall.

- The second issue is Nexus approach of unlevering the authorized ROEs for purposes of the analysis and then re-levering them based on the capital structure and taxes applicable to Ontario's electricity distributors. This approach assumes that the US utilities included in the analysis are the "same" as Ontario's electricity distributors in terms of business risk. However, as discussed under Issue #2 above. There are differences (e.g., nature of the regulated business (generation vs. wires) and jurisdiction) even amongst regulated utilities.

208. Given these additional concerns VECC submits that the OEB should give no weight to Nexus' ERP results in its determination regarding ROE.

209. Dr. Cleary's approach is somewhat similar to LEI's except the risk premium is calculated with respect to the historical returns on utility bonds[250] as opposed to GOC long term bonds. Also, while the ERP value used is not derived by Dr. Clearly directly from market data it is supported by numerous references to publications and financial analysis performed by other professionals in the field[251]. As result, it offers a different but useful perspective for the Board to consider.

210. Based on the foregoing, VECC submits that the OEB should consider the ERP results prepared by LEI (excluding the BMO equal weight utilities index ETF results), Concentric and Dr. Cleary. Averaging the results as reported by each of the experts[252] yields an ROE estimate of 7.73% (excluding transaction costs).

211. As already noted, during the proceeding each of the experts undertook to update their ROE analyses using more recent data (i.e., up to September 30, 2024). In Concentric's update[253] the average estimated ROE for its three North American proxy groups using the ERP approach is 9.37% (excluding transaction costs) while Dr. Cleary's updated estimate[254] is 7.1%. LEI did not provide an update for its ERP analyses. However, Concentric's update reports that the yield of 30-year GOC bonds as of September is 3.13% (vs. 3.15% used in LEI's evidence). Using this long-term GOC bond yield reduces LEI's ERP estimate to 6.53%. The resulting overall average for the reported results is now 7.67%.

[248] Exhibit M2, page 69
[249] Exhibit M4, page 40
[250] The
[251] Exhibit N-M4-EDA-5
[252] LEI: 6.55% - calculated using just ERP based on the S&P/TSX utilities index; Concentric: 9.43% based on the results average results for the three NA proxy groups and Dr. Cleary: 7.2%.
[253] Exhibit J4.8
[254] Exhibit J5.3

212. However, as discussed above, this value will need to be refined depending upon:
- Whether the OEB wants to use 2024 or 2025 as its base year.
- Whether Board determines that the same long-term government bond yield should be used by all experts and how it should be determined for the base year.

213. The following table summarizes the ROE values based on the consultants' (as filed) results for each of the three methodologies that VECC submits the Board should consider in its ROE determinations.

EXPERTS' INITIAL ROE RESULTS USED FOR VECC'S RECOMMENDATIONS

Methodology / Expert	ROE Results
DCF	
Dr. Cleary (Avg.)	6.90%
Concentric (Multi-Stage)	9.50%
DCF Average	8.20%
CAPM	
Dr. Cleary	5.55%
Concentric	9.61%
CAPM Average	7.58%
ERP	
LEI (TSX)	6.55%
Dr. Cleary	7.20%
Concentric	9.43%
ERP Average	7.73%
Overall Average	**7.84%**

The following table presents the same results as updated by each of experts to reflect market conditions as of September 2024.

EXPERTS' UPDATED ROE RESULTS USEDFOR VECC'S RECOMMENDATIONS	
Methodology / Expert	**ROE Results**
DCF	
Dr. Cleary (Avg.)	6.90%
Concentric (Multi-Stage)	9.17%
DCF Average	8.04%
CAPM	
Dr. Cleary	5.37%
Concentric	9.58%
CAPM Average	7.48%
ERP	
LEI (TSX)	6.53%
Dr. Cleary	7.10%
Concentric	9.37%
ERP Average	7.67%
Overall Average	**7.73%**

214. However, the ROE values calculated by the various experts do not all use the same risk free rate in their analysis and the analyses are not all based on the same reference year as indicated in the following table.

RISK-FREE & BOND RATES USED IN EXPERTS' ROE ANALYSES UPDATES

	Risk-Free Rate/ Bond Yield	Basis
CAPM		
Concentric	3.45% (Cdn) 4.12% (US)	Average long-term Consensus Forecast of 10-year government bond yields for the period 2025-2027 as of April 8, 2024 plus the average spread between 10- and 30-year bonds for the 10 years ending September 30, 2024.[1]
Dr. Cleary	3.13%	30-year GOC as of September 2024[2]
ERP		
LEI	3.13%	30-year GOC as of September 2024[3]
Concentric	3.14% (Cdn)	30-Year GOC as of September 2024 (30 day)[4]
	4.30% (US)	Long-Term Projected Forecast (2026-2030)[5]
Dr. Cleary	4.60%	Utility bond yield estimate as of Sept. 27/24[6]

Sources:
1) Exhibit J4.8, Attachment 1, Tab 7.1
2) Exhibit J5.3
3) N/A - Use value from Exhibit J5.3
4) Exhibit J4.8, Attachment 1, Tab 9
5) Exhibit J4.8, Attachment 1, Tab 8.1
6) Exhibit J5.3

215. In its submissions below regarding the Annual Adjustment Formula VECC recommends that the base year for purpose of the adjustment formula be 2024, based on the updated data as of September 30, 2024. In the same section VECC also recommends that actual values used be based on 30-day averages. As of the end of September the 30-day average actual yields for long-term Canadian and US government bonds were 3.14% and 4.07%

respectively[255]. The 30-day average spread between A-rated utility bond and long-term GOC bond yields was 1.436%[256]. Adjusting the updated ROE values provided by the various experts to reflect these yield values as of September 30, 2024 produces the following results.

EXPERTS' UPDATED ROE RESULTS FOR VECC'S RECOMMENDATIONS - COMMON BASEY YEAR VALUES

Methodology / Expert	ROE Results	Comments
DCF		
Dr. Cleary (Avg.)	6.90%	No Change
Concentric (Multi-Stage)	9.17%	No Change
DCF Average	8.04%	
CAPM		
Dr. Cleary	5.38%	Risk Free Rate Revised from 3.13% to 3.14%
Concentric	9.44%	CAPM Results Re-Calc Using Sept 30, 2024 RF Values
CAPM Average	7.41%	
ERP		
LEI (TSX)	6.54%	Risk Free Rate Revised from 3.13% to 3.14%
Dr. Cleary	7.38%	Utility Bond Yield Revised from 4.6% to 4.876%
Concentric	9.32%	ERP Results Re-Calc Using Sept 30, 2024 RF Values
ERP Average	7.74%	
Overall Average	**7.73%**	

Flotation Costs

216. Much time in the hearing was on the issue of flotation costs. Concentric and Dr. Cleary also both introduce the concept of "financial flexibility." In Dr. Cleary's evidence the two are interchangeable concepts and he assigns 50 basis points to the concept. Mr. Coyne on behalf of Concentric draws a distinction between the two concepts. In Mr. Coyne view

[255] Values taken from Exhibit J4.8, Attachment 1, Tabs CEA-8.1 (US) and CEA-9 (Canada)
[256] Based on the OEB's November 1, 2024 Letter re: 2025 Cost of Capital Parameters.

"flexibility" are for incremental and "uniquely Canadian" cost. We believe if the Board investigates it may find that the concept originates with Mr. Coyne in earlier proceedings of this Board. VECC submits that there is no justification for including a "flexibility adder" in the ROE.

217. On the other hand, VECC's view is that it is reasonable to allow utilities to recover flotation costs. However, there is no evidence compelling evidence that the cost is 50 basis points[257] or that such costs are incurred for all equity held by a utility[258] . VECC supports LEI's recommendation[259] that flotation costs should no longer be recovered through the ROE but instead be recovered based on actual costs through a deferral account
.

Annual Adjustment Formula

218. The OEB's current adjustment formula was approved in the Report of the Board[260] on the Cost of Capital for Ontario's Regulated Utilities (EB-2009-0084) as:

> Updated ROE = Base ROE + 0.5 X (change in Long Canada Bond Forecast from base year) + 0.5 X (change in the spread of (A-rated Utility Bond Yield – Long Canada Bond Yield) from the spread in the base year).

219. The formula's based year values were determined as of September 2009 and first used to set the ROE for 2010. Based on September 2009 data, the base ROE was set at 9.75% and the corresponding base LCBF was 4.25% and base UtilBondSpread was 1.415%. Thus, the ROE adjustment formula was then specified as[261]:

$$ROE_t = 9.75\% + 0.5 \times (LCBF_t - 4.25\%) + 0.5 \times (UtilBondSpread_t - 1.415\%)$$

220. LEI recommends[262] that the ROE be updated annually using the adjustment factors of 0.26 for LCBF and 0.13 for utility bond spread. The adjustment factors were established using a multivariate regression analysis with the weighted average ROEs allowed by US regulators for electric and gas utilities as the dependent variable and 30-year US government bond yields and Moody's seasoned Baa corporate bond yields as independent variables[263].

221. Using LEI's recommended ROE, a base LCBF of 3.19% (based on average forecast GOC long-term bond yield for 2025[264]) and a base utility bond spread determined as of March 2024, the Annual ROE formula (for year "t") would be as follows:

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[257] Exhibit N-M1-)-CCC-10
[258] Transcript Volume 3, pages 184-186
[259] Exhibit M1, page 122 and Exhibit N-M1-8-CCC-3
[260] Page 59
[261] Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (EB-2009-0084), Appendix B
[262] Exhibit M1, page 127
[263] Exhibit M1, page 116 and Exhibit N-M1-10-VECC-40 a)
[264] Exhibit M1, pages 119 and 123

$$ROE_t = 8.95\% + 0.26 \times (LCBF_t - 3.19\%) + 0.13 \times (UtilBondSpread_t - 1.385\%)$$

222. Concentric also performed a multivariate regression analysis using historical data between January 1, 1993 and May 31, 2024 with U.S. authorized ROEs for electric and gas utilities, as the dependent variable, and both U.S. government bond yields (prevailing six-month trailing average 30-year U.S. government bond yield) and utility credit spreads (prevailing six-month trailing average Moody's A-rated utility bond yield spread over the 30-year U.S. government bond yield) as the independent variables. The regression yielded a government bond yield coefficient of 0.3984 and a utility credit spread coefficient of 0.3340.[265]

223. Based on Concentric's recommended ROE of 10.00 percent, a base LCBF of 3.36% (based on a 25%/75% weighing of the current yield {3.553% 30-day value as of May 31, 2024} and the forecast yield for 2025 {3.296%})[266] and a base utility credit spread of 1.371% (as of May 31, 2024) the annual OEB ROE formula would be as follows[267]:

$$ROE = 10.00\% + 0.40 * (LCBF - 3.36\%) + 0.33 * (Utility\ Credit\ Spread - 1.371\ \%)$$

224. Concentric also recommended updating the values for LCBF and Utility Credit Spread closer to when a final decision is made in the proceeding.[268]

225. Nexus does not offer an independent adjustment formula. However, Nexus does note that there is some merit to LEI's use of empirical analysis to establish the weights in the interest rate-based formula providing the correct data is used.[269]

226. Dr. Cleary recommends using an adjustment factor of 0.75 for both factors (i.e., long-term GOC bond yields and the spread for A-rated utility bonds). His rationale is that these higher factors will serve to maintain the relationship authorized ROE and the yields on both long-term GOC bonds and A-rated utility bonds.[270]

227. The base year values used in the formula would be Dr. Cleary's recommended ROE, the September 30, 2024 actual yield on 30-year Canada bonds (June 5, 2024 value of 3.30%[271] used as a placeholder) and the actual September 30, 2024 value for the A-rate utility bond spread (current value of 1.38% used as a placeholder) for the following formula[272]:

[265] Exhibit M2, pages 97-98
[266] Exhibit N-M2-10-OEB Staff- 7 a), Attachment 1
[267] Exhibit M2, page 98
[268] Exhibit M2, page 98
[269] Exhibit M3, page 79
[270] Exhibit M4, pages 47-48
[271] Exhibit M4, page 30
[272] Exhibit M4, page 48

$ROE_t = 7.05\% + 0.75 \times (LCBF_t - 3.30\%) + 0.75 \times (UtilBondSpread_t - 1.38\%)$

228. VECC submits that data as of September 2024 should be used to set the base ROE value for ROE and base values for the factors used in the annual adjustment formula. This approach is consistent with that adopted by the OEB in its Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (EB-2009-0084)[273]. It also means that, since forecast values are not available for either utility bond yields/spreads, the base value for all of the inputs used in the formula can be set using the same time frame.

Long-Term GOC Yields

229. Both the current formula and all of the proposed formulae use long-term GOC bond yields as one of their parameters. However, each of the three experts uses a different approach for determining the base year's value for long-term GOC bond yields.

230. VECC submits that if 2024 is to be used as the base year then neither LEI's use of a 2025 forecast value for 30-year GOC bonds yields nor Concentric's use of a weighted average of current and forecast 2025 bond yields are appropriate. The value used should be one reflective of 2024.

231. In its interrogatory responses[274] Concentric provided the details regarding the use of current 30-year GOC yields in the determination of the 3.36% value used in its proposed formula. The approach is similar to that used adopted by the AUC[275] which VECC notes uses a 90-day average 30-year GOC bond yield for the current bond yield input to its formula the AUC. However, while elsewhere in its evidence Concentric generally recommends the use of actual data based on 90-day trailing averages[276], Concentric has used a 30-day average in deriving the 3.36%.

232. In contrast, Dr. Cleary recommends the use of the most prevailing yield for 30-year GOC bonds[277]. His rationale for doing so is that[278]:

"*some events may have transpired during the most recent period that could either ease (or elevate) bond investors' risk assessments, which would be reflected in lower (or higher) yield spreads, and hence spreads existing before this unexpected event (or events) would not be as representative as the prevailing spreads at the end of the month, which reflect the most recent capital market conditions*."

[273] Appendix B
[274] Exhibit N-M2-10-OEB Staff- 7 a), Attachment 1
[275] Exhibit M2, page 95
[276] Exhibit M2, page 13
[277] Exhibit M4,page 48
[278] Exhibit N-M4-16-OEB Staff-73

233. In contrast, Concentric's rationale for using a longer time frame is to avoid the inherent volatility in using a shorter timeframe[279].

234. VECC notes that the OEB's current formula uses 30-day historical averages. VECC submits that this represents as reasonable comprise between the approaches suggested by Concentric and Dr. Cleary and should continue to used.

Utility Bond Yields/Spreads

235. The current formula uses the yield of A-rate utility bonds to determine the spread between utility bond yields and long-term GOC bond yields for both the base year and subsequent years. Both Concentric's and Dr. Cleary's proposed formulae also use A-rate utility bond yields whereas LEI proposes to use Moody's seasoned Baa corporate bond yields.

236. LEI explains its rationale for using Baa corporate bond yields as follows[280]:
"*Regulated utility bond yields in the US are correlated with Moody's seasoned Baa corporate bond yield with a relatively significant R-squared value (0.55). In addition, recent Bank of America US Power & Utilities Global Research analysis states "…utility valuations correlate significantly to Moody's Baa corporate bond yields…Since 1980, regulated utility dividend yields are 96.5% correlated to Moody's Baa corporate bond yields*".

237. VECC does not find LEI's rationale to be particularly compelling as it provides no comparison to with how A-rated utility yields perform on a similar basis. VECC submits there is no sound reason to depart from the OEB's current practice of using A-rated utility bond yields in its annual adjustment formula.

Adjustment Factors

238. VECC notes that there are also issues with LEI's derivation of its adjustment factors:
- In its interrogatory responses Concentric[281] identifies a number of statistical issues regarding LEI's derivation of its proposed adjustment factors including: i) the historical data series being highly correlated leading to multi-collinearity issues and ii) loose (wide) confidence intervals for the estimated values.
- While LEI's regression equation uses to Moody's Baa corporate bond yields to estimate the adjustment factor, the calculated adjustment factor is then applied to the change in the spread between Baa corporate bond and government bond yields. A correct application of the results would have been to apply the calculated adjustment factor to the change in Baa corporate bond yields.

[279] Exhibit M2 , page 13
[280] Exhibit N-M1-10-OEA-7 c)
[281] Exhibit N-M2-10-OEB Staff-9 b)

239. Based on the foregoing concerns VECC submits that the OEB should not adopt LEI's proposed adjustment factors.

240. Concentric notes[282] that its multivariate regression analysis is more robust than LEI's as it is based on a large sample of actual historical data, has a high degree of statistical significance and has higher confidence levels than does LEI's analysis. VECC also notes that Concentric's regression analyses uses the spread between utility bond and GOC bond yields as an independent variable as well as in its proposed annual adjustment formula.

241. VECC notes that Nexus[283] takes issue with LEI's use of GOC bonds yields in the formula when it was estimated using only US authorized returns and US government bond yields. A similar issue exists with Concentric's analysis and its proposed annual adjustment formula. In response to Nexus' concerns Concentric states[284]:

> "*It is appropriate to still apply the U.S.-derived weights to the OEB formula because the relationship between U.S. authorized ROEs, government bond yields, and utility credit spreads are expected to mirror the relationship between Canadian authorized ROEs, government bond yields, and utility credit spreads, because North American regulatory authorities rely, in part, on the same interest-rate based models in determining the authorized ROE in their respective jurisdictions*."

242. In its interrogatory responses Concentric[285] provided the results of a multivariate regression analysis using just Canadian authorized returns along with GOC bond yields the spread between Canadian utility bond yields and GOC bond yields. However, the resulting coefficients for the independent variables were not statistically significant and the overall equation had a very low explanatory power.

243. Dr. Cleary expresses concerns about using regression analysis to estimate the adjustment factors[286]:

> "*The regression specification is flawed by design since allowed ROEs in U.S. jurisdictions do not have a direct relationship with changes in capital market conditions in Canada. These allowed ROEs do not change frequently (only during ROE reviews or annually at best if the jurisdiction uses a formula), unlike the LCBF and UtilBondSpread factors which change daily. Further, allowed ROEs for U.S. utilities have no direct relationship to Canada government yields (which often differ from U.S. yields as they do today) or with Canadian yield spreads*."

244. He also notes that "*by definition, the risk-free rate or RF (which is proxied by LCBF in the OEB ROE formula) should have a correlation of zero with market returns (and thereby provide zero explanatory power as an independent variable in a regression where market*

[282] Exhibit N-M2-10-OEB Staff-9 b)
[283] Exhibit M3, page 79
[284] Exhibit N-M2-VECC-35.3
[285] Exhibit N-M2-VECC-35.4, Attachment 1
[286] Exhibit M4, page 46

returns are the dependent variable) according to the CAPM, since it is defined as a risk-free investment".

245. VECC has some difficulty with Dr. Cleary's claim that the LCBF should have zero correlation with market returns when one of his expressed concerns with the OEB's current formula is that it has not maintained the previous relationship between ROE and long-term GOC yields[287]. Overall, VECC submits that the OEB should maintain the current adjustment factors. In VECC's view none of the evidence presented by the various experts is sufficiently compelling to warrant a change.

246. Using VECC's recommended ROE value and the 30-day average values as of September 30, 2024 for LCBF and the A-rated utility yield spread the annual adjustment formula would be:

$$ROE_t = 7.73\% + 0.50 \times (LCBF_t - 3.14\%) + 0.50 \times (UtilBondSpread_t - 1.436\%)$$

247. The approved ROE for 2025 would then be calculated using: i) the forecast value for LBCF and ii) the actual (30-day) spread between A-rated utility bonds and long-term GCO yields as available at the time of the 2025 ROE calculation.

Issue 11 - "Are the perspectives of debt and equity investors in the utility sector relevant to the setting of cost of capital parameters and capital structure? If yes, what are the perspectives relevant to that consideration, and how should those perspectives be taken into account for setting cost of capital parameters and capital structure?"

248. LEI observes[288] that the OEB's existing cost of capital methodologies explicitly consider equity and debt investor perspectives:

- The allowed ROEs are legally required to meet the FRS. The FRS inherently requires sufficient returns for the commensurate risk undertaken by the investors and ensure that the utilities continue to attract incremental capital at reasonable terms.
- The DLTDR and DSTDR formulas are formulated considering OEB-regulated entities' credit profiles (as set by the credit rating agencies).

249. In support of this view LEI notes that[289]:

- The OEB among the few North American regulators to annually update the cost of capital parameters to ensure they align with the current macroeconomic environment.
- it is not aware of OEB-regulated entities facing notable issues in attracting equity and debt capital since 2009.
- In its November 2023 assessment, S&P classified the Province of Ontario (and two other Canadian provinces) as 'most credit supportive'.

[287] Exhibit M4, page 47
[288] Exhibit M1, page 127
[289] Exhibit M1, pages 127-129

- DBRS considers the regulatory regime in Ontario to be one of the key strengths in its rating considerations.

250. Overall, LEI concludes that:
"*the OEB's existing cost of capital regime (including the determination of deemed capital structure) appropriately considers investor perspectives, as market data included in the formula and risk assessment when determining the appropriate equity thickness, when considered appropriately, should reasonably reflect investors' perspectives. The OEB can slightly modify the reporting requirements to enable better monitoring of the actual utility cost of capital*."

251. With respect to the first question Concentric notes[290] that "*debt and equity investors' perspectives inform the reasonableness of the cost of capital, risk and attractiveness of a utility investment relative to the market.*"

252. Concentric's evidence then goes on to review the current perspectives of credit rating agencies and investment banks with respect to both Ontario's overall regulatory regime and specific OEB-regulated Ontario utilities. Concentric identifies several key factors identified by debt and equity investors and credit ratings agencies relevant to the determination of the cost of capital. Among these are:
• Industry segment risk profiles
• Climate risk
• Energy transition
• Cyber security risk
• Regulatory risk[291].

253. Concentric concludes[292] that these "investor" perspectives should be taken into account when establishing ROEs and capital structures.

254. Nexus observes[293] that "*According to the FRS, the perspectives of debt and equity investors are of central importance in the determination of cost of capital parameters*." Nexus also notes that while their perspectives may overlap in that both debt and equity holders are concerned with the financial health and stability of the firm, they also differ in material ways. Debt investors are interested in the timely and complete repayment of interest and principal. Equity investors, who are subordinate to debt holders, are concerned with earning at least an economic return[294].

[290] Exhibit M2, page 124
[291] Exhibit M2, pages 123-125 and 160-161
[292] Exhibit M2, page 125
[293] Exhibit M3, page 80
[294] Exhibit M3, page 81

255. Nexus describes[295] the Board's current policy as being a combination (1) its base rate of return; (2) the annual adjustment mechanism; and (3) its price cap overlay but, for the majority of distributors, the annual adjustment is not reflected until such time as a rebasing occurs.

256. Nexus concludes[296] that the perspectives of equity investors are not represented by the current Board regulatory mechanisms. As support for this conclusion Nexus points to the fact that:

- Ontario distributors have on average failed to attain their authorized return on equity in any of the 8 years between 2015 and 2022.
- the authorized returns on equity under the current Board approach are substantially lower than those of comparables in California, New York, Massachusetts, Alberta, and British Columbia (and indeed nearly all U.S. states).

257. Nexus recommends a more frequent (every 3 year) full review of the cost of equity parameters to ensure that investor perspectives are being taken into account.[297].

258. With respect the perspectives of debt and equity investors, Dr. Cleary notes[298]:

> "*debt investors are totally focused on receiving their promised interest payments, since the only way they receive capital gains is if interest rates decline – and so safety of income returns is their number one priority. While safety of returns is also important to equity investors, they are more inclined to also focus more on the upside of their equity investments, which can vary significantly depending on the investment*."

259. Dr. Cleary also notes that:

> "*the approach of determining an appropriate estimate of the required ROE and appropriate estimates of DLTDR and DTSDR implicitly considers the perspectives of both debt and equity investors: Determining an allowable ROE that satisfies the FRS in effect should ensure this is the case. For example, my BYPRP Ke estimate for ROE is based on providing a return to equity investors that is above the required return on a utilities' cost of long-term debt*."

VECC Submissions on Issue 11

260. All the experts in this proceeding generally agree that the perspectives of debt and equity investors in the utility sector are relevant to the setting of cost of capital parameters and capital structure. Indeed, some (e.g. Nexus) go further and indicate that they are key to ensuring the cost of capital parameters meet the FRS. VECC agrees.

[295] Exhibit M3, page 80
[296] Exhibit M3, pages 81-82
[297] Exhibit M3, page 80
[298] Exhibit M4, page 50

261. There also appears to be general agreement as to what the perspectives of debt and equity investors are and that these perspectives align with the FRS. Again, VECC agrees.

262. In VECC's submission these perspectives can best be taken into account by using market data in the determination of the cost of capital parameters along with consideration of the views of credit rating agencies/investment agencies with respect to the relevant risk factors. Examples of this are using market data in the methodologies used to estimate ROE and using actual/reasonable forecasts when determining the cost of debt. VECC notes the support from the experts on this point.

263. VECC observes that there is some disagreement amongst the experts with respect to whose views credit rating agencies represent. In its interrogatory responses LEI states[299]: "*the views of rating agencies incorporate perspective of both debt and equity investors*".

264. However, in its evidence Concentric expresses the view[300]:
"*ratings agencies analyze the default risk for debt holders, and they consider equity as a cushion for debt, but they do not focus on the residual risk to the equity shareholders. Oftentimes, those risks are aligned at a macro level, but there have been notable cases where credit ratings have not been a good measure of shareholder risk*".

265. Nexus expresses a similar view[301]:
"*Credit rating agencies have a very important place in the discussion of debt capital and debt costs, but these agencies have an overriding objective, and that is to assess the likelihood that lenders will be repaid in full and at the promised time. The utility's opportunity to earn a return on equity that meets the Fair Return Standard is not central to the mission of credit rating agencies*."

266. In VECC's view favourable credit rating agency reports are a necessary component of a regulator's assessment of cost of capital parameters, including both the cost of capital and the cost of equity. Clearly, regulatory frameworks that support debt holders being repaid will positively contribute to the ability of shareholders to receive a fair return (and vice versa). However, they are not likely sufficient in all cases.

267. In its evidence Nexus claims the fact that Ontario electricity distributors have (on average) failed to earn their authorize ROEs in any of the 8 years between 2015 and 2022 "*provides clear evidence that the current Board cost of capital parameters as a whole are inconsistent with the FRS*".

268. VECC disagrees. At rebasing rates are set so as to recover the authorized ROE. Failure to actual earn the authorized ROE does not indicate that the authorized ROE is too low relative to the FRS. However, it may suggest that other aspects of the OEB's rate setting

[299] Exhibit N-1-11-OEA-13 a)
[300] Exhibit M2, page 129
[301] Exhibit M3, page 83

framework need to be revised. It could also suggest an inability on the part of distributors to accurately forecast their loads and costs in the rebasing test year. Indeed, analysis undertaken by OEB Staff and included in the OEB Staff's 2016 Report[302] identified a number of reasons for differences between OEB approved and actual ROE results over the period 2011-2014 including:

1) Approximately 20-25% of electricity distributors rebase in any given year.
2) Disposition of certain deferral and variance accounts can cause significant impacts on income, particularly due to temporal differences in revenue and cost recognition.
3) Variations in costs and revenues from the forecasts factored into the base rates, largely related to customer numbers, customer consumptions and loads, revenue sources, cost factors, as well as weather, macroeconomic conditions and conservation (whether based on programs or natural).
4) The utility's ability to manage its costs leading to under or over spending, and demand pressures.
5) The effectiveness of a utility's planning to smooth out investments.

E. Capital Structure

269. Evidence filed by the various experts addressed this question from both a generic perspective (i.e. what should be the approach to setting capital structure?) and/or a specific perspective (i.e., what should be the deemed capital structure for the various utilities regulated by the OEB?).

270. LEI describes the OEB's current policies and practices with respect to the setting of capital structure as follows[303]:

> "*The OEB's policy/guidelines assume that the base capital structure will remain relatively constant over time and require undertaking a full reassessment of a utility's capital structure only in the event of significant changes in the company's business and/or financial risk.*
>
> *As such, the OEB sets a uniform ROE for all regulated entities, and it increases the equity thickness in the capital structure if it assesses that an entity's business and financial risks have increased relative to the previous assessment. On the other hand, the allowed equity thickness can be reduced if OEB assesses that the business and financial risks for a regulated utility has decreased significantly*."

271. LEI then summarizes the current capital structure of the utilities regulated by the OEB as follows[304]:

[302] OEB Staff Report (EB-2009-0084): Review of the Cost of Capital for Ontario's Regulated Utilities, page 15
[303] Exhibit M1, page 134
[304] Exhibit M1,page 135

"• In 2006, the OEB set the deemed capital structure at 60% debt and 40% equity for all electricity distributors and transmitters. The capital structure is set on a case-by-case basis for other regulated entities.
• OPG's equity thickness was set at 47% between 2008 and 2014. This was reduced to 45% in 2014 and has remained unchanged since then.
• Enbridge Gas' equity thickness was approved at 36% between 2006 and 2023. The OEB recently approved an increase in Enbridge Gas' equity thickness to 38%, applicable for 2024 rates. EPCOR Natural Gas' equity thickness of 40% has remained unchanged since 2006."

272. LEI believes the OEB's status quo approach, with one modification, is sound, administratively efficient, and meets the FRS. The one modification is that the OEB should mandate forward-looking cash flow analysis with scenarios for utilities (or participants) within the status quo approach (as part of financial risk analysis) when requesting a change in equity thickness[305].

273. Finally, LEI notes that:
"*a full assessment of business/financial risks (along with forward-looking cash flow modelling) required to assess the appropriateness of the existing equity thickness for electricity distributors, OPG, EPCOR Natural Gas (and other OEB-regulated utilities) is outside the scope of this report*."

274. In terms of what the approach should be for setting the capital structure, Concentric states:
"*The Fair Return Standard requires consideration of both changes in the utility's risk profile over time, as well as how the utility's business risk and deemed capital structure compares to the proxy group companies*."

275. As part of the current proceeding Concentric recommends[306]:
- OEB set a minimum deemed equity ratio for Ontario utilities of 45 percent, which is at a point approximately halfway between the Ontario level and the U.S. average. This recommendation reflects Concentric's view that Ontario's regulated utilities have comparable business risk to the North American Electric and Gas proxy groups. However, it is also meant to recognize the regulatory principle of gradualism and that an immediate move to parity with the U.S. would be abrupt. In addition, Concentric notes that increasing the equity ratios for electric distributors and transmitters and Enbridge Gas would also reflect those industry segments' increased levels of risk.
- OPG's equity ratio in order to meet the Fair Return Standard, with a specific determination to be made by the OEB as part of OPG's next payment amounts proceeding taking into account the company's higher business risk relative to the proxy group.

[305] Exhibit M1, pages 138-139
[306] Exhibit M2, pages 136-137

- Each utility be authorized at its discretion to retain its current equity ratio and also have the ability to propose differences from the "generic" equity thickness in its rates application.

276. Nexus' proposal is that the OEB retain its existing policy for now. However, Nexus does note that[307]:
    - a 50:50 Debt-to-Equity ratio for regulated electric utilities is common in the US and Debt ratios greater than 60 percent are fairly rare.
    - Ontario's Deemed Debt-to-Capital Ratio of 60 percent is higher than those of the comparable states (New York and California) identified by LEI in its report. British Columbia and Alberta have Deemed Debt Ratios of 55 percent.

277. In terms of the generic question as to how capital structure should be set Dr. Cleary states[308]:

    "*My recommendation, which is consistent with that of LEI, is:*
    - I concur with LEI's position that the OEB's current practice of setting a uniform ROE and adjusting the capital thickness if it determines upon application that there has been a meaningful change in business/financial risks is appropriate.
    - I also agree with LEI's recommendation that applicants should be required to include forward cash flow modeling and scenario analysis showing impact on credit metrics to support their case for adjustment of capital thickness."

278. With respect to the capital structure for specific utilities, Dr. Cleary's evidence includes an examination of Hydro One and recommends that the OEB should reduce Hydro One's allowed equity ratio to 38%, and should consider reducing it further to 36% over the following 2-3 years[309]. Also, while not making a specific recommendation, Dr. Cleary did express the opinion that, in general, the Ontario equity ratios for electricity distributors could be lowered[310].

VECC Submissions on Issue 12

279. VECC submits it is important to distinguish between the approach to setting capital structure in the context of a full generic cost of capital proceeding (such as is currently taking place) versus in the context of a specific utility's application for a revision to its capital structure as a part of a rebasing year (or other separate utility specific proceeding).

280. In a full generic cost of capital proceeding ROE and capital structure are being set "together" since (other factors being equal), firms with lower common equity ratios require higher rates of return to compensate for the additional financial risks faced by their

[307] Exhibit M3, page 84
[308] Exhibit M4, page 51
[309] Exhibit M4, page 52 and pages 113-119
[310] Exhibit N-M4-CCC-1 b)

shareholders[311]. Furthermore, the consideration of ROE generally involves the use of proxy groups and even though the companies chosen for the proxy group maybe similar to those of utilities for whom the ROE is being set there are likely to be differences such that other factors are not equal. In such cases accounting for these other factors requires either setting ROE values that differ from those established using the proxy groups and/or capital structures that differ from those of the companies in the proxy groups. In this regard this holistic approach to setting ROE and capital structure, VECC notes the comments of both LEI and Concentric:

- LEI: "*There is no specific bifurcation of risks being addressed by ROE and capital structure. The dollar value of ROE earned is a function of the allowed percentage ROE and the equity thickness*."[312]
- Concentric: "*It is Concentric's view that the heightened level of risk faced by OPG should be considered in OPG's next payment amounts application and could be reflected in both the equity thickness and an additional risk premium as part of the authorized ROE*."[313]

281. In the context of generic cost of capital proceeding, to the extent changes in the overall business or financial risk of the regulated utilities are similar to those being experienced by the proxy group these impacts will be capture through the ROE analysis based on the proxy group. As a result, VECC submits that decisions regarding capital structure need to focus on differences in financial and business risk between the regulated utilities whose capital parameters are being set and those in the proxy relevant proxy group. Also, where applicable/useful the regulator will need to consider the specific credit metrics of the utilities it is regulating.

282. In the case of the OEB, the current approach is to set a uniform ROE that is applicable to all utilities and then recognize difference in risk through the setting of the capital structure. The experts participating in this proceeding are generally supportive of this approach[314]. VECC also considers this approach to be appropriate.

283. In the case of the re-assessment of a specific utility's capital structure as part of a rebasing (or other) application, VECC submits that the focus should be on whether the business and financial risks faced by the utility have changed materially since the last generic cost of capital proceeding (i.e., when a determination was made the utility's currently approved capital structure in conjunction with the approved ROE met the FRS).

[311] Exhibit M2, page 18
[312] Exhibit N-M1-2-VECC-15 a)
[313] Exhibit N-M2-VECC-16.2
[314] LEI-Exhibit M1, page 138, Concentric-Exhibit M2, page 22, and Cleary-Exhibit M4, page 51 & Exhibit N-M4-VECC-12

284. Concentric raises concerns[315] with respect to LEI's recommendation that utility-specific applications for a change in capital structure include forward-looking cash flow modelling. In VECC's view the need for such information will depend on: i) the rationale behind the utility's application to change its capital structure and ii) whether financial performance/poor credit metrics were part of the justification for its current capital structure. Under either of these circumstances, VECC submits that cash flow modelling would need to be core part of the utility's application. Concentric also suggests that there is no need for the utility to perform such analysis as it is already being done by the credit rating agencies[316]. VECC submits that while this may be the case for a limited number of the large utilities, most of the utilities regulated by the OEB are not the subject of a credit rating agency report. Utilities are fully responsible for providing the information necessary to support an application to the OEB. If such applications require cash flow modelling in order to be adequately supported then VECC expects the utility will do so with the consequences being that its application may not be approved.

285. Concentric recommends that the equity ratio for all the utilities regulated by the OEB be increased to 45%. Concentric's primary, if not sole, justification is the need for the capital structure of Ontario's utilities to move to (or towards) that of its US peers. With respect to EGI, when asked to identify any differences in Concentric's risk analysis between EB-2022-0200 and this proceeding the response[317] was:

> "*Concentric's risk analysis for EGI in this proceeding builds on our analysis in EB-2022-0200, considers Energy Transition activities across North America since we developed our evidence in EB-2022-0200, and includes new evidence such as S&P's finding in June 2024 that Enbridge was on a negative credit outlook that "reflects the uncertainty around upcoming regulatory outcomes related to EGI's gas utility operations and the potential for increased business risk from the energy transition*."

286. VECC submits that Concentric's claim that "*Ontario's regulated utilities have comparable business risk to the North American Electric and Gas proxy groups*" ignores the fundamental differences in business risks faced by the companies in Concentric's proxy groups versus Ontario utilities noted in VECC's submissions with respect to Issue #10). This is particularly so for Ontario's electric transmission and distribution utilities where all of the issues identified (i.e. the proxy companies being primarily in the US, consisting of unregulated as well as regulated businesses and including the riskier generation activity) are present. VECC notes that Dr. Cleary disagrees[318] with Concentric's recommendation and, in explaining why, cites differences between Concentric's recommendations in this proceeding as compared to recommendations in other recent proceeding where it has provided evidence. He also highlights the lack of supporting justification with respect to Ontario utilities' own business risk, or market-based evidence regarding factors that should impact

[315] Exhibit M2, page 138
[316] Exhibit N-M2-12-OEB Staff-22 a)
[317] Exhibit N-M2-19-CME-12 a)
[318] Exhibit N-M4-CCC-1 a)

earned ROEs on Ontario, such as expected future stock market returns, government bond yields, yields on Ontario utility bonds, etc..

287. VECC submits that Concentric's analysis is insufficient to support a change in the capital structure of Ontario's regulated electricity transmitters and distributors.

288. With respect to Enbridge, VECC notes that the cited June 2024 S&P report did not change the outlook for EGI as noted by the following excerpt:

> "Our outlook on Enbridge subsidiary Enbridge Gas Inc. (EGI) **remains** negative, and we affirmed the 'A-' issuer credit rating and 'A-2' short-term rating." (emphasis added)

289. VECC does not consider this as adequate evidence to warrant a change in EGI's capital structure from that approved by the OEB in EB-2022-0200.

290. With respect to Dr. Cleary's recommendation regarding Hydro One capital structure, Dr. Cleary has provided extensive financial related analysis to support his view. With respect to business risk, VECC notes that Hydro One's business risk can be considered to be less than that faced by Fortis BC (the BC electric affiliate of FEI) due to Hydro One's larger service area[319], non-ownership of generation assets[320] and RRRP subsidies[321]. VECC notes that the BCUC's recent decision to increase FortisBC's equity ratio from 40% to 41% based in part on its decision to consider financial flexibility in its determination of the capital structure[322]. As result, VECC submits that an equity ratio of less than 40% would reasonable in Hydro One's case and a ratio of 36% to 38% is reasonable.

<u>VECC Submissions on Issue 13 – Single Asset Transmitter</u>

291. Ontario is unusual in that a number of single asset electricity transmitters who own nothing more than the transmission line that's been licensed. Therein lies a question as to whether such entities should attract a different return on equity due to their unique structure. We say not.

292. While there are a number of issues with single asset entities they lie primarily in asset depreciation and returns of the monies invested. These are assets which are generally speaking, not subject to annual injection in order maintain their service life. Instead, the asset is drawn down and then replaced. As such ratepayers are at risk because the entity is not annually required to add to its capital stock. Once the asset is exhausted the entity presumably applies to rebuilt its system. If denied that opportunity it losses nothing as it has not reinvested in assets over the life of its licence.

293. The other reason there is no extra risk to single asset transmission entities is that they receive their revenues as a portion of the Uniform Transmission Rate. In fact, this makes

[319] Reduces operational risk by reducing the impact of local events of overall operations.
[320] As generation assets are considered to have higher business risk
[321] Helps to support sales volumes in rural parts of its service area
[322] BCUC Order (and Reasons for Decision) G-236-23, page 135

them less risky. Irrespective of their own load they deliver receive a fixed portion of the overall transmission revenue. It is the predominant transmitter – Hydro One that in effect under writes the load risk of the small transmitters in the UTR. As such we would argue that, if any adjustment were to be made it should be to lower the return on equity allowed for single asset transmitters.

F. Mechanics of Implementation

294. As LEI notes in its evidence[323], these issues deal with the on-going (i.e. quarterly) monitoring the Board Staff undertakes to test the reasonableness of the results generated by it cost of capital methodology. As such it is distinct and separate from: i) the annual assessment that the OEB under takes each year when the cost of capital parameters are updated to confirm that FRS continues to be met (see Issue #15) and ii) the periodic comprehensive reviews under taken by the OEB to review its cost of capital policy (see Issue #17).

295. As explained in LEI's evidence[324], the ongoing monitoring process is conducted through quarterly reports that are prepared for internal review purposes only. Currently LEI is retained by the OEB to prepare these quarterly reports which comprise of two key analytical components:
• Updated data is used to recalculate the cost of capital parameters, which are then compared to the values published as part of the OEB's annual cost of capital updates; and
•A review of the current macroeconomic outlook on a global, North American, and provincial scale, including key macroeconomic developments that have unfolded in the previous quarter is provided.
A copy of the most recent report is provided in Exhibit N-M1-14-VECC-64 a).

296. LEI recommends that[325] "*OEB staff should continue to monitor the cost of capital parameters and test their reasonableness in the context of prevailing macroeconomic conditions on a quarterly basis, through reports prepared for internal review purposes only*." LEI recommendations do not include any suggested changes to indicators currently being monitored.

297. Concentric does not object to a quarterly report but is of the view that an annual update that considers the indicators monitored quarterly as well as others (see Issue #15) is sufficient for these purposes. Concentric does not see any basis for restricting the monitoring to an internal report.[326]

[323] Exhibit M1, page 144
[324] Exhibit M1, pages 144-145
[325] Exhibit M1, page
[326] Exhibit M2, pages 142-143

298. Nexus supports the continuation of the current quarterly monitoring but recommends that it be made available to all interested parties. Nexus' evidence did not include any specific comment on the indicators to be monitored.[327]

299. Dr. Cleary recommends that the OEB's current practice of continuous monitoring through the review of quarterly reports adds value and should be retained. [328] In response to the interrogatories Dr. Cleary indicated that the topics currently included in the quarterly reports "*seemed appropriate*"[329].

VECC Submissions on Issue 14- Monitoring

300. VECC sees value in the OEB's quarterly monitoring as it will provide early warning as to whether its annually issued cost of capital parameters are consistent with recent/expected economic and market conditions. As such, VECC recommends that the current practice of quarterly monitoring be continued.

301. The OEB's annual cost of capital parameter update utilizes recent information regarding short-term and long-term GOC bond yields and A-rated utility bond yields/spreads. While the quarterly reports include the necessary information to re-calculate the cost of capital parameters (i.e., deemed short and long term debt rate and ROE) there does not appear to be any section that formally addresses the recent trends in actual short-term and long-term GOC bond yields and A-rated utility bond yields and changes in the relationship between the values of these indicators. In VECC's view such information would be a useful addition to the reporting.

302. Finally, VECC agrees with Concentric and Nexus that the reports should be made publicly available. VECC sees no reason why they should not be made public and, contrary to LEI's claims[330], sees there to be little administrative effort or cost in doing so. As Concentric notes[331]:

> "*Sharing of such information increases transparency and would allow stakeholders the opportunity to monitor the results of the OEB's cost of capital determinations on the same basis as Staff*."

The Fair Return Standard

303. Each year, as part of its annual cost of capital parameter adjustment process, the OEB undertakes an assessment to confirm whether or not the numerical results from the formulaic methodologies meet the Fair Return Standard[332].

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[327] Exhibit M3, page 85
[328] Exhibit M4, page 42
[329] Exhibit N-M4-VECC-13
[330] Exhibit N-M1-15-VECC-53 b)
[331] Exhibit M2, page 143
[332] Exhibit M1, page 148

304. LEI recommends:
"*The OEB should continue to annually confirm that the FRS is being met, as it currently does through its cost of capital update letters. In addition, the OEB should direct utilities, as part of the annual reporting requirements, to provide credit ratings and details regarding new short-term and long-term debt and equity issued/borrowed during the year.*"

305. In its evidence LEI states that: "*the OEB can use this information to monitor the credit ratings and pace of capital injections for the regulated utilities on an ongoing basis, as a further test of whether the FRS continues to be met*".[333] Concentric agrees with LEI that annual monitoring of the FRS is sufficient.

306. Concentric also agrees with LEI on requiring utilities to file updates to their credit ratings on an annual basis. However, it does not see the benefit of requiring utilities to file specific details regarding equity and debt issuances during each year as this would be both administratively burdensome, and beyond typical reporting requirements. In its evidence Concentric specifically recommends that following items be tracked and compared by the OEB on an annual basis[334]:
• Authorized ROEs and equity ratios in other Canadian jurisdictions (individually) and the U.S. by industry segment (electric, gas) as reported by RRA
• 10 and 30-year Treasury Bond Yields (Canada and the U.S.)
• A- and BBB-Rated Utility Bond Yields (Canada and the U.S.)
• Betas for the North American Proxy Group as defined by Concentric
• Credit ratings from each agency covering Ontario's rate-regulated utilities

307. Nexus recommends that the OEB should include a benchmarking analysis of ROEs (i.e., the deemed ROEs provided in Ontario be compared to peer jurisdictions) in addition to the existing processes[335].

308. Dr. Cleary's recommendation is consistent with LEI's and calls for[336]:
- The OEB to retain its current annual review practice.
- The current annual review process to be supplemented by adding annual reporting requirements for utilities to provide credit ratings, as well as details regarding new short-term and long-term debt and equity issued/borrowed during the year.

VECC's Submissions on Issue 15

309. All of the experts support the OEB's current approach whereby the cost of capital parameters are reviewed on an annual basis to determine if the FRS continues to be met.

[333] Exhibit M1, page 151
[334] Exhibit M1, pages 142 and 144
[335] Exhibit M3, page 86
[336] Exhibit M4, page 53

VECC agrees. VECC also agrees that the timing of the annual review should be linked to the OEB's issuance of its annual cost of capital parameter update.

310. Evidence from a number of the experts has included recommendations as to what should be included/considered in the annual assessment review process. VECC agrees with LEI, Concentric and Dr. Cleary that utilities should be directed to provide any recent credit rating reports. This information will assist in the OEB in assessing the financial integrity component of the FRS. However, in VECC's view, care will need to taken be when interpreting such reports to determine whether changes in credit metrics with respect to financial integrity are due to utility specific issues (which should be addressed on a utility-specific basis) or broader market/economic issues (which could be addressed through the OEB's cost of capital parameters).

311. While VECC sees merit in the OEB considering recently authorized ROEs and changes in capital structure in other jurisdictions, VECC also has some reservations. Authorized ROEs are not market data but rather are based the relevant regulator's judgement after having considered a number of inputs and perspectives. To draw any inferences or conclusions from such determinations as to what are the appropriate cost of capital parameters for Ontario would require a full consideration of the regulator's reasons for decision and even that may not be sufficient depending upon the level of detail provided in the decision. A simple and recent example of this is the BCUC's recent decision to increase FortisBC's equity ratio from 40% to 41%. One might readily assume that this was due to a perceived increase in the business risk faced by the utility. However, in reality, the BCUC[337] determined that: i) "no change in FBC's equity component within its current capital structure is warranted to reflect no material changes in its business risk" and ii) "In light of our decision to consider financial leverage and financial flexibility in the capital structure, we find that a modest upward adjustment in equity thickness of 1.0 percent for FBC is warranted to conform with the Fair Return Standard".

312. Concentric does not agree with LEI's recommendation (which is supported by Dr. Cleary) that utilities be required to file details regarding new short-term and long-term debt and equity issued/borrowed during the year. With respect to details regarding new short-term and long-term debt, VECC see some merit in the OEB obtaining such information as input into the reasonableness of its calculated deemed short-term and long-term debt rates for the coming year. However, again, care will need to be taken in drawing inferences from yields on individual debt issuances as to the reasonableness of deemed rates which are to be applicable and applied on an industry-wide basis.

313. Given the year to year variability in Beta values[338] VECC sees little value in Concentric's recommendation that the OEB monitor Beta values for the companies in its North American proxy group.

[337] BCUC Order G-236-23, pages 134 and 135

[338] See VECC's submissions regarding Issue 10 and the CAPM approach

314. Finally, Concentric recommends that the annual monitoring include the values for: i) 10 and 30-year Treasury Bond Yields (Canada and the U.S.) and ii) A- and BBB-Rated Utility Bond Yields (Canada and the U.S.). In VECC's view the monitoring of bond yields is important as they are used in both the OEB's annual adjustment formula and the methodologies used in generic cost of capital proceeding to determine ROE. Further the choice as to the specific government bonds and utility bonds to monitor should include (at a minimum) those specifically used in the OEB's annual adjustment formula.

Issue 16 Updates to the cost of capital parameters

315. The OEB updates the cost of capital parameters every year and publishes a letter with the updated parameters in October or November for rates taking effect in January of the following year. The underlying calculations typically rely on data as of the end of September.[339]

316. LEI's recommendation on this issue is:
"*Consistent with the OEB's existing policy, the OEB should continue to publish its annual cost of capital parameter updates in October or November, using 12-month trailing data as of the end of September (i.e., from October of the previous year to September of the current year), for rates going into effect in the following January*."

317. LEI does not see any reason to change the timing of the OEB's annual cost of capital parameter updates. Stakeholders are familiar with the OEB's existing cost of capital update schedule. In LEI's view continuing this approach would promote predictability and stability objectives.[340]

318. Concentric is in agreement with LEI on the annual updates to the OEB's cost of capital parameters in October, using data as of September 30th, except where forecasts are utilized.[341] Concentric notes[342] that, from a data perspective, it would not have any concerns if the OEB were to use market data as of October 31 for the annual cost of capital parameters update rather than using market data as of September 30. However, from a timing perspective, the OEB would need to consider the administrative process after the data is available and determine if a shift to using October 31 data leaves sufficient time to make updates prior to the effective date of new rates.

319. Dr. Cleary's recommendation is for the OEB to[343]:
"*Maintain the status quo, but consider changing to the use of October data rather than September data to update the ROE formula, if the OEB determined this change would not cause undue disruptions to its existing processes and procedures*."

[339] Exhibit M1, page 151
[340] Exhibit M1, page 152
[341] Exhibit M2, page 147
[342] Exhibit N-M2-14-OEB Staff-24
[343] Exhibit M4, page 54

320. This recommendation reflects Dr. Cleary's view that "the use of October data as opposed to September data, would provide more up-to-date capital market estimates and hence improve the accuracy of the parameters used in the ROE formula.[344]

VECC's Submissions on Issue 16

321. VECC agrees that the OEB's annual update should be based on actual data as of September 30th. In principle VECC agrees with Dr. Cleary that the use of more recent data would likely improve the accuracy of the historically based parameters that are being used in the adjustment formula to set the next year's deemed interest rates and ROE. However, VECC shares Concentric's concern[345] that waiting until data as of October 31st may not leave sufficient time to make updates prior to the effective date of new rates (i.e., January 1st), particularly given the OEB's annual "time-out" period starting in December.

Issue 17 Review Interval

322. In its EB-2009-0084 Decision[346] the OEB determined that:
"a review period of five years provides an appropriate balance between the need to ensure that the formula-generated ROE continues to meet the FRS and the objective of maintaining regulatory efficiency and transparency."

323. The Decision did not establish an "trigger mechanisms" for generic reviews of its cost of policy outside of the five-year cycle. The Board Staff 2016 Cost of Capital Report did not include any conclusions regarding with the appropriate frequency for cost of capital policy reviews or trigger mechanisms for such as review.

324. LEI recommends that the OEB commit to reviewing the cost of capital policy every five years. Its reasons for doing so include[347]:

- the OEB's 2009 decision determined that a five-year interval would provide an appropriate balance between the various identified objectives.
- the five-year interval is aligned with the review schedules observed in other jurisdictions, and thus is consistent with international practice.
- the five-year interval also falls within the range of average business cycle lengths in Canada.

325. LEI also notes that if the OEB commits to a five-year review interval as part of this GCOC proceeding, it is important that this schedule is adhered to in practice. At the very

[344] Exhibit M4, pages 53-54
[345] Exhibit N-M2-14-OEB Staff-24
[346] Page 64
[347] Exhibit M1, pages 157-158

least, if a periodic review is skipped, the OEB should announce this and provide reasons for this decision – this will ensure the objectives of predictability and stability are upheld.[348]

326. In terms of trigger mechanisms, LEI suggests that the OEB currently has several mechanisms in place that could involve a regulatory review of the cost of capital parameters, including enabling utilities to apply for different parameters during their individual rate hearings, as well as the off-ramp mechanism[349]. LEI recommends that, in the event that a regulatory review is triggered, the utility and/or intervenors should be allowed to submit evidence for the OEB's consideration regarding the extent to which the cost of capital parameters and/or capital structure caused or contributed to triggering the off-ramp. The OEB can then exercise its own judgement (based on the evidence presented) as to whether the cost of capital parameters and/or capital structure are to be included in the regulatory review[350].

327. Concentric recommends periodic cost of capital reviews with refreshed market data on ROE and capital structure every five years[351]. Concentric's evidence does not include any specific comments regarding trigger mechanism. However, Concentric does indicate its support for LEI's recommendations with respect to trigger mechanisms[352].

328. Nexus recommends that a litigated cost of capital proceeding occurs every three years. Nexus states that the increased frequency of a litigated proceeding provides the following advantages: it (i) maintains the ROE at a rate dictated by financial markets; (ii) establishes a level of institutional knowledge; and (iii) address uncertainty about energy policy and the impact of energy policy on cost of capital issues. Nexus also notes that its recommendation for the three-year interval is consistent with the Auditor General's recommendation.

329. Dr. Cleary supports regular reviews of the cost of capital policy (and allowed ROEs) at regular intervals (ideally every three years, but never more than five years)[353]. Dr. Cleary considers the OEB's current off-ramp mechanisms to be reasonable. However, he does have one suggestion for a specific trigger mechanism that would be indicative of a period of extreme uncertainty in Canadian capital markets, which could significantly impact the validity of the parameters used in the ROE formula[354]:

> "I*f the Canadian A-rated utility yield spreads exceed 2%, I recommend an immediate and thorough assessment of existing capital market conditions. This could lead to a full regulatory review, depending on the results of this assessment. This is because, a spread greater than 2% would be indicative of a period of extreme uncertainty in Canadian capital markets".*

[348] Exhibit M1, page 158
[349] Exhibit M1, page 157
[350] Exhibit M1, page 158
[351] Exhibit M2, page 147
[352] Exhibit M2, pages 147-148
[353] Exhibit M4, page 54
[354] Exhibit M4, pages 55-56

VECC Submissions on Issue 16

330. LEI's claim that the last cost of capital policy review occurred in 2014 (resulting the OEB Staff 2016 Report) raises the question as to what constitutes a cost of capital policy review. VECC agrees with Concentric[355] that a cost of capital policy review should involve a full review of ROE and capital structure based on refreshed market data. VECC also agrees with LEI[356] that utilities and intervenors should be allowed to submit expert evidence and/or comments as part of the cost of capital policy review. The 2014-2016 review undertaken by the OEB did not include of these aspects. Indeed, in VECC's submission, the type and depth of analysis underpinning the OEB Staff 2016 Report aligns with what the OEB should be undertaking annually in order to confirm the continuing appropriateness of its cost of capital parameters (per Issue #15).

331. Recommendations by the various experts as to the appropriate frequency for cost of capital policy reviews range between three years and five years. While some experts reference a range, Nexus is the only one clearly advocating for a 3 year cycle. With respect to Nexus' comment that a three year review cycle is consistent with the Auditor General's Report VECC notes that actual recommendation of the Auditor General was[357]:

> "*RECOMMENDATION 10*
> *To regularly confirm that rate-regulated entities are financially viable and earn a fair—but not excessive—return, we recommend that the Ontario Energy Board:*
> *• review the deemed capital structure and return on equity (ROE) formula and thereafter at defined intervals (for example, every three to five years); and*
> *• adjust the deemed capital structure and ROE formula as informed by the review, so that they reflect the risk profile of rate-regulated entities*."

332. As a result, both a three year and a five year review cycle are consistent with the Auditor General's recommendations.

333. Nexus further supports its three year proposal as follows[358]:
"*Nexus Economics has proposed a three-year cycle to capture changes in the macroeconomy, financial markets, and institutional changes in the energy industry in Ontario. Longer time periods increase the risk that the deemed cost of capital variables would differ from what is appropriate, thus resulting in a situation in which the cost of capital is potentially too high or too low*."

334. VECC acknowledges that a shorter cycle would provide the OEB with the opportunity to identify and capture economic and/or financial market changes sooner. However, VECC

[355] Exhibit M2, page 147
[356] Exhibit N-M1-5-VECC-55 b)
[357] Office of the Auditor General of Ontario, Value-for-Money Audit - Ontario Energy Board: Electricity Oversight and Consumer Protection, page 41
[358] Exhibit N-M3-17-PP-2

notes that the purpose of the annual adjustment formula is also to permit the OEB's approved ROE to be adjusted in response to changes in both the economy and financial markets. Indeed, too frequent reviews of the OEB's cost of capital policy would beg the question as to whether there was actually any need for an annual adjustment formula. In VECC's submission a five year cycle for reviewing the OEB's cost of capital policy is reasonable.

335. However, regardless of the interval selected for reviewing the OEB's cost of capital policy, VECC agrees with LEI that the schedule must be adhered to in practice.

336. VECC notes that none of the existing policies noted by LEI represent mechanisms that would, in themselves, automatically trigger a review of the OEB's cost of capital policy:

- As LEI's evidence acknowledges[359] the 300 +/- ROE basis points off-ramp that exists under Price Cap IR or Annual IR Index rate-setting plans really just triggers a review of the utilities rates and whether the variance justifies a revision to said rates. Depending upon the reasons for the variance this may lead to questions as to the appropriateness of the utility's capital structure but it is unlikely to lead to questions regarding the utility's authorized ROE[360]. If broader economic or other changes (e.g. government policy) are the underlying cause then VECC would expect such changes to have been already identified in the OEB's quarterly reports or annual assessments as to the ongoing appropriateness of its cost of capital parameters.
- LEI also makes reference[361] to the current OEB provision whereby:

  ""*an applicant or intervenors can … file evidence in individual rate hearings in support of different cost of capital parameters due to their specific circumstances, but must provide a strong rationale and supporting evidence for departing from the OEB's policy*"

337. However, as such evidence would be filed as part of an individual utility's rate hearing any findings by the OEB would only be applicable to that utility. For a generic cost of capital policy review to occur the OEB would need to determine that the issues raised where sufficiently broad as to affect the utilities more generally such that a broader policy review (i.e., a separate proceeding) was warranted.

338. VECC's other concern with this proposed mechanism is that it is heavily weighted in favour of the utilities. Utilities are able to readily include such evidence in their rate application, the preparation of which is funded by ratepayers. However, for intervenors to provide such evidence they would likely require leave/permission from the OEB to do so and have to demonstrate to the OEB that such evidence was warranted. While intervenors may receive cost awards, the recovery of the cost of providing first the justification that such

[359] Exhibit M1, pages 153-154

[360] As VECC has noted earlier in this argument, the level of authorized ROE does not impact the variance between a utility's actual and authorized ROE

[361] Exhibit M1,page 153

evidence is warranted and then the actual evidence itself (if approved for filing) is risk that intervenors face and may not be able to take on.

339. In VECC's submission the only real mechanisms that exist for triggering reviews of the OEB's cost of capital policy (during the established review intervals) are the OEB's quarterly and annual reviews as to the continuing reasonableness of its cost of capital parameters in satisfying the FRS. In VECC's view, this makes the public availability of such reviews (as discussed under Issues #14 and #15) all that more important.

340. The only specific recommendation made regarding additional trigger mechanisms is Dr. Cleary identification[362] of circumstances where the Canadian A-rated utility yield spreads exceed 2%. However, VECC notes that Dr. Cleary evidence is not that such a wide spread should trigger a review of the OEB's cost of capital policy. Rather he calls for an immediate and thorough assessment of existing capital market conditions that could lead to a full regulatory review. As a result, VECC recommends that the circumstances identified by Dr. Cleary should be one of the indicators included in the OEB's annual review.

Implementing changes to the cost of capital parameters – Issue 18

341. In its evidence LEI has interpreted[363] the scope of this issue as relating the implementation of changes in the cost of capital parameter as a result of the OEB's annual adjustment methodology and capital structure changes arising from utility-specific applications. In contrast, Concentric[364] appears to have interpreted the scope of this issue as including the implementation of changes in the cost of capital parameters arising as a result of generic cost of capital review such as the current proceeding as well as changes due to the annual adjustment methodology as evidenced by the following statement:

> "*Changes in the cost of capital parameters (ROE, long-term debt and short-term debt rates) should take effect for all utilities in the rate year* ***following the OEB's decision in this proceeding*** *(subject to any settlement agreements and each utility submitting a compliance filing demonstrating how the change would be implemented within the context of its specific IR plan), and* ***in subsequent periods where the parameters are updated.***" (emphasis added)

342. For those utilities opting for Price-Cap IR, updated cost of capital parameters based on the OEB's annual adjustment methodology are only updated at time of rebasing. For those utilities on Custom IR (CIR), the OEB has approved various approaches to setting the cost of capital parameters in the outer years of these multi-year rate plans, including allowing:
- updates for each year;
- forecasts of future parameters; and
- no updates to parameters for certain years beyond the first year.[365]

[362] Exhibit M4, page 55
[363] Exhibit M1, page 159
[364] Exhibit M2, page 148
[365] Exhibit M1, page 159

343. LEI recommend that: "*Consistent with the OEB's existing policy, the OEB should continue to implement changes in the cost of capital parameters and capital structure upon rebasing*."

344. As noted at the introduction to this section, Concentric's evidence states[366]:
"Changes in the cost of capital parameters (ROE, long-term debt and short-term debt rates) should take effect for all utilities in the rate year following the OEB's decision in this proceeding (subject to any settlement agreements and each utility submitting a compliance filing demonstrating how the change would be implemented within the context of its specific IR plan), and in subsequent periods where the parameters are updated."

345. It is not clear to VECC whether last part of the referenced quote is referring to changes made as a result of the OEB's annual adjustment methodology. If it is, then it appears that Concentric is suggesting that the rates for utilities on Price-Cap IR (and perhaps even Annual IR) should be adjusted each year to account for cost of capital parameter changes due to the annual adjustment methodology. Concentric may want to clarify this in it reply submission.

346. Dr. Cleary agrees with LEI's opinion that the status quo satisfies the FRS and is consistent with the objectives of promoting predictability and stability. As such, he recommends the OEB maintain the status quo, subject to any concerns regarding mitigation of significant resulting rate impacts.[367]

<u>VECC's Submissions on Issue 18</u>

347. VECC submits that, for those utilities on Price-Cap IR or Annual IR, changes in the cost of capital parameters due to the annual adjustment mechanism should only occur at rebasing, as is currently the practice. To parties that seek to incorporate annual adjustments to the cost of capital parameters in Price-Cap or Annual IR derived rates (between rebasing) on the basis that they are an identified change in costs, VECC's response is that the basic objective of IR plans is to decouple rates from costs. Indeed, during an IR term there are likely to be changes to a number of the utility's cost components with cost of capital only being one of them. There is no reason why changes in the cost of capital should be treated any differently than changes in other cost components of the revenue. Protection from the impact of these changes is provided through various mechanisms such as the +/- 300 basis points ROE off-ramp.

348. In the case of Custom IR plans, each plan is unique and the issue of whether or not adjustments are to be made based on the annual cost of capital updated methodology are best addressed by the specifics of each CIR Plan.

[366] Exhibit M2,page 148
[367] Exhibit M4, page 56

349. With respect to Dr. Cleary's comments regarding the possible need for mitigation of significant resulting rate impacts, VECC notes that the need for bill impact mitigation is already part of the OEB's Filing Requirements for cost of service (i.e., rebasing) applications where impacts of all changes in the revenue requirement, including those related the cost of capital parameters, are taken into account.

Implementing cost of capital changes during a rate period

350. As noted in the preceding section, VECC interprets Issue #19 as dealing with the implementation of cost of capital parameter changes arising out of generic cost of capital reviews, such as the current proceeding.

351. LEI notes[368] that (based on its understanding) the last time the OEB changed its cost of capital policy (i.e., in 2009) the policy was implemented by way of cost of service applications beginning in 2010 and utilities only transitioned to the new cost of capital parameters and capital structure once they filed their cost of service application (i.e., upon rebasing, not in the middle of an approved rate term).

352. LEI states that[369]:
"LEI believes the OEB's current approach of implementing cost of capital parameter and capital structure updates upon rebasing remains appropriate, so long as implementation of these changes in this way continues to meet the FRS and does not directly result in rate shock."

353. As a result, LEI recommends that[370]:
"Consistent with the OEB's existing policy, the OEB should continue to implement changes in the cost of capital parameters and capital structure upon rebasing. However, to ensure the FRS continues to be met, the OEB should also introduce an option for parties to request implementation of such changes prior to rebasing, so long as the two-factor test is met – (i) the utility should have more than 60% of its rate term remaining, and (ii) deviations in the cost of capital parameters should be material (100 bps or more)."

354. Concentric believes it would be appropriate for changes in the cost of capital parameters and/or capital structure arising from this proceeding to be implemented in the next rate year, including for utilities in an approved rate term, subject to any settlement agreements and each utility submitting a compliance filing demonstrating how the change will be implemented within the context of its specific IR plan (e.g., Custom IR or I-X plan).[371]

[368] Exhibit M1, page 161
[369] Exhibit M1, pages 161-162
[370] Exhibit M1,page 163
[371] Exhibit M2, page 149

355. Concentric see no basis for the limitations recommended in LEI's two-prong test, or a determination of "rate shock"[372]. However, should the Board set such a threshold, Concentric would recommend a 25 basis point differential for debt (both short term and long term) and 50 basis points for ROE, given the relative magnitude of debt and equity costs.[373]

356. Dr. Cleary supports LEI's recommendations[374]:"*I support maintaining the current OEB approach, but also incorporating the additional option recommended by LEI*.

VECC's Submissions on Issue 18

357. The OEB's October 31, 2024 letter regarding the 2025 cost of capital parameters for 2025 indicates that a decision for this proceeding is expected in the first quarter of 2025. The letter also indicates that the 2025 cost of capital parameters would be set on an interim basis for those utilities rebasing in 2025. In addition, the letter establishes variance accounts related to the ROE and Deemed LT debt rate similar to the one established for the Deemed ST debt rate in July 2024. The interim approval of the 2025 cost of capital parameters and the establishment of the related variance accounts provides the OEB with the flexibility to implement any changes the cost of capital parameters starting in January 1, 2025 or any time thereafter.

358. While the Board's decision will not be issued until the first quarter of 2025, to ensure fair and equal treatment of utilities regulated by the OEB VECC submits that the cost of capital parameter changes should be implemented with an effective date of January 1, 2025.

Treatment of Utilities Rebasing as of January 1, 2025

359. For those utilities that rebased their rates as of January 1, 2025, VECC submits that the impact of any changes in the cost of capital parameters as a result of this proceeding should be should be calculated for 2025 and recorded in the approved variance accounts. VECC notes that the calculation of the entry for 2025 can be readily done by simply adjusting the revenue approved for 2025 to reflect the new cost of capital parameters and does not need to await the 2025 year-end. Further, in VECC's view the calculation should be straight forward and mechanistic such that it can be reviewed and the balance cleared as part of the utility's 2026 IRM application. In VECC's submission this approach is far superior to one where the variance account continues to track annual variances until the time of the utility's next rebasing as it:

- Simplifies the calculation of the balance to be cleared, and
- Avoids the build-up of a larger balance that would need to cleared at the utility's next rebasing.

[372] Exhibit M2, page 150
[373] Exhibit N-M2-18-OEB Staff-25 d)
[374] Exhibit M4, page 57

Treatment of Utilities between Rebasing Applications 2025

360. VECC agrees with Concentric that the cost of capital is a "cost". However, VECC submits that it is no different than any other cost in terms of its implications on the ability of a utility to meet FRS. The actual ROE achieved by a utility depends not only on the reasonableness of the cost of capital parameters used in the determination of its rate but depends also on the reasonableness of the values used for the other cost components that contribute to the overall revenue requirement and resulting rates.

361. As noted above, for those utilities on an IR plans the objective is to decouple price/rates from costs, subject to certain materiality/threshold considerations. In this regard, the OEB has established materiality thresholds for other cost components in terms of when it is appropriate to apply for a deferral/variance account, make a Z-Factor application or make an ICM application. In VECC's view the same principles/approach should apply to changes in the cost of capital parameters as a result of a cost of capital policy review. Rather than using an ROE threshold (as proposed by LEI and Concentric) VECC submits that the threshold should be based on the impact of the cost of capital parameter changes on a utility's revenue requirement and the materiality threshold that was used in its last rebasing application. Indeed, using the approved revenue requirement and materiality threshold from a utility's last rebasing application should make the calculation straight-forward and mechanistic. VECC also submits that, for those utilities that can demonstrate the impact of the changes in the cost of capital parameters exceeds the "threshold", whether or to apply for an adjustment should be left to the discretion of the utility.

Treatment of Utilities on a CIR Plan

362. VECC submits that, subject to any special provisions in the approved CIR Plan, a similar approach to that outlined above for utilities between rebasing applications in 2025 could also be adopted for utilities on a Customer IR Plan. Indeed, if the CIR plan includes the calculation of an annual revenue requirement along with an associated rate base and equity return it may be possible to calculate the revenue requirement impacts for 2025 as opposed to using the last rebasing year.

G. Other Issues

363. VECC submits the Board should make no change to prescribed interest rates applied to DVA and CWIP. Specifically. VECC rejects the suggestion that CWIP should attract the weighted cost of capital rather than a short-term interest rate. Projects that are not used or useful are not part of rate base. The cost of constructing a project is included in the final asset that is entered into rate base. The purpose of CWIP is to compensate for financial holding costs of a under construction project therefore analogous to construction financing costs.

364. VECC has no submissions with respect the Cloud Computing Deferral Account.

VECC submits that it has acted responsibly and efficiently during the course of this proceeding and requests that it be allowed to recover 100% of its reasonably incurred costs.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

November 8, 2024