OEB File No.: EB-2024-0063

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B);

AND IN THE MATTER OF a generic proceeding commenced by the Ontario Energy Board to consider the cost of capital parameters and deemed capital structure to be used to set rates

CLOSING SUBMISSIONS OF ELECTRICITY DISTRIBUTORS ASSOCIATION

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I. OVERVIEW

- 1. The current deemed return on equity ("ROE") in Ontario, 9.21%, is lower than almost every other comparable utility in North America, once adjusted to make all the figures reflect the same capital structure of 40% equity and 60% debt. Without doubt, the deemed ROE in Ontario must be increased to meet the legally required Fair Return Standard ("FRS"). It would be an error of law for the Board to not do so.
- 2. While the parties have adduced voluminous evidence in the form of expert reports, interrogatory responses, undertaking responses and oral testimony, there are relatively few core decisions for the Board to make that will inform the applicable new deemed ROE. If, on these core points, the Board makes the determinations proposed by the Electricity Distributors Association ("EDA") and its experts Dr. Frank Pampush and Mr. Ralph Zarumba from Nexus Economics ("Nexus"), the resulting ROE will be in a range of 10.36% to 11.81%, within which 11.08% is the midpoint, assuming a 40% equity thickness.
- 3. This ROE range identified by Nexus captures three of the four proposed ROE figures put forward by experts in this proceeding, including LEI (10.40%, once adjusted to conform to the 2009 OEB Report as described in the following paragraph), Nexus (11.08%), and Concentric (11.38%, once adjusted from a 45% equity thickness to 40%).
- 4. The inclusion of LEI's proposed ROE within these clustered results is premised on only two adjustments to the number referenced in its report:
 - (a) Using results of multiple models: LEI relies only on CAPM, even though it provided analyses to inform DCF and risk premium results. There is no principled

reason to depart from the Board's approach in 2009 of considering all three methodological outcomes, recognizing that all methodologies (including LEI's proposed CAPM) have flaws in modelling reality but together they average to a better representation of the correct ROE; and

- (b) **Including flotation costs**: The prevailing approach in Canada, including in Ontario since the 2009 Board decision, has been to include in the deemed ROE a 50 basis point adder to compensate utilities for flotation costs, as discussed below.
- 5. Both of these adjustments are reasonable and appropriate, both were also implemented by the fourth expert, Dr. Cleary, and most importantly, both were endorsed by the Board in its 2009 cost of capital proceeding.
- 6. There is no evidence, and no good argument, that circumstances have changed since 2009 in a manner warranting a departure from these two important aspects of setting an ROE for Ontario utilities. Regulatory consistency is important to avoid a ruling that varies only with which OEB panel members are making the decision of the day. The clustering of ROE results around 11% should give the Board confidence in the EDA's proposed 11.08% figure.
- 7. The Board should not be persuaded by Dr. Cleary's outlier proposal. In contrast to the other experts, Dr. Cleary in his report and on cross-examination revealed himself to be an advocate

¹ A departure from longstanding practices must be justified in order to be valid under administrative law, otherwise there is a risk of arbitrariness "which would undermine public confidence in administrative decision makers and in the justice system as a whole." (*Canada (Minister of Citizenship and Immigration) v. Vavilov*, 2019 SCC 65 at para. 131). Similarly, "[t]he requirement of consistency in the application of the law is unquestionably a valid objective and so a persuasive argument. For litigants to receive diametrically opposite answers to the same question, depending on the identity of the members of administrative tribunals, may seem unacceptable to some and even difficult to reconcile with several objectives, including the rule of law." (*Domtar Inc. c. Québec (Commission d'appel en matière de lésions professionnelles*, [1993] 2 S.C.R. 756 at para. 66).

advancing an opinion untethered to current and expected market conditions. Moreover, he has made his cost of capital pitch to several regulators, but never had his opinion accepted. Dr. Cleary's approach stands in contrast to Dr. Pampush's approach, who described his role as to "essentially act as a reporter". Dr. Cleary found only *two* utilities comparable (one of which is among the very utilities being regulated in this proceeding and thus not a comparable at all), argued that every utility ROE in North America was too high, used his "usual beta" (a concept that is nonsensical since the nature of betas is dynamic because betas change with market conditions), pulled data from a teaching example, and generally used an approach that yielded an ROE even lower than that currently used in Ontario. His results should be rejected as thesis-driven, subjective and unreliable.

- 8. There is no dispute among three of the experts (Nexus, Concentric and LEI), and it is correct, that many utilities in the United States are comparable to utilities in Ontario. They vary somewhat in characteristics and environment, but they are sufficiently "like" utilities in Ontario to be compared, a fact the Board recognized in 2009. There is no evidence that since 2009 this fact has changed. The Board's confidence should also be enhanced by the fact that, even when Concentric removed from its analysis certain U.S. utilities criticized as flawed proxies, and Nexus also considered the Concentric list of comparables, the end ROE result did not materially change.
- 9. Concerning the energy transition, it will not yield a windfall to utility investors. Regardless of the absolute dollars of capital invested, their deemed return remains the same. It is not a windfall to put more capital at risk and receive in return a proportionate number of dollars. Moreover, because of the risk that new capital investment may not match new revenues, in amount and/or

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² Transcript of Oral Hearing, Vol. 4 (1 October 2024), Toronto ("Day 4 Transcript") at 132:19.

timing, investors may not even actually reach the deemed ROE threshold (as has been the case in the past). The key point is that more demand and more capital investment does not increase the return to investors.

- 10. In opening, the EDA provided six signposts to assist the Board to stay on the right road in this proceeding, and they continue to be useful and bear repeating:
 - (a) This proceeding is about setting a *deemed* return on equity for use by the Board and other proceedings, and not about determining an actual return on equity for a particular utility;
 - (b) The FRS is the lodestar for setting a deemed return on equity and if a proposed ROE is not comparable to like utilities, it does not meet the FRS legal requirement and may not be implemented;
 - (c) It is crucial to measure a proposed deemed return on equity against the return on equity of comparable utilities, taking into account the financial markets from which Ontario utilities attract capital;
 - (d) Modelling reality is difficult, so using multiple established methodologies and reliable datasets are more likely to yield a deemed return on equity result that is realistic;
 - (e) Avoid outliers and embrace tools, such as confidence intervals, that help identify commonalities among the expert evidence; and

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(f) The energy transition is an added reason for the Board to be particularly careful in

selecting a deemed return on capital and avoiding a result that is at the top or bottom

of a proposed range of options. In the current environment, the Board should ensure

stability and avoid unnecessary risk in an uncertain environment.

11. Using these signposts, and applying the same key principles the Board applied in 2009,

setting a deemed ROE in Ontario need not be overly complex, and will lead the Board to authorize

a deemed ROE of 11.08% that is fair to utilities and all Ontario ratepayers. This deemed ROE

should be rigorously updated every three years, so that it does not get out of alignment with market

conditions, which it did in the long interval since the Board's 2009 ROE report.

II. BACKGROUND CONTEXT

Α. **Generic Proceeding**

12. On March 6, 2024, the Ontario Energy Board convened this generic proceeding. Its purpose

was to "consider the methodology for determining the values of the cost of capital parameters and

deemed capital structure to be used to set rates for electricity transmitters, electricity distributors,

natural gas utilities, and Ontario Power Generation Inc." This purpose was confirmed in cross-

examination of LEI:

MR. RUBY: Okay. And we can agree that, with the findings from this proceeding,

that is capital structure and cost of capital parameters, in the future the Board will

use those results to, among other things, set rates for particular utilities?

MR. GOULDING: Yes.

MR. RUBY: We are not setting rates in this proceeding?

³ Exhibit K1.3, Tab 26, Notice of a Rate Hearing.

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MR. GOULDING: That's correct.

MR. RUBY: And the OEB is not examining one or two utilities' cost of capital or

equity thickness?

MR. GOULDING: Yes, that's correct.

MR. RUBY: This is a generic proceeding?

MR. GOULDING: That's correct.4

13. As also highlighted by the foregoing exchange, the purpose of this hearing is **not** to

determine the cost of capital parameters and deemed capital structure for any specific utility. This

is unlike the last British Columbia Utilities Commission ROE decision, which set the actual ROE

rate for two specific utilities, as described further below.

В. The EDA

14. The EDA is one of the parties participating in this proceeding. The EDA represents the

vast number of electricity distributors of all sizes across Ontario.

15. The EDA limits its comments and recommendations in this proceeding to those issues

affecting electricity distributors. The EDA takes no position with respect to the ROE that is fair

for electricity transmitters and natural gas utilities.

C. The Experts

16. Expert evidence was submitted on behalf of four groups of participants, including the EDA.

⁴ Transcript of Oral Hearing, Vol. 1 (25 September 2024), Toronto ("Day 1 Transcript") at 133:3-16.

The experts were:

- (a) London Economics International ("LEI"), on behalf of Ontario Energy Board Staff ("Staff");
- (b) Nexus Economics, namely Dr. Frank Pampush and Mr. Ralph Zarumba, on behalf of the EDA;
- (c) Concentric Advisors ("Concentric"), on behalf of the Ontario Energy Association ("OEA"); and
- (d) Dr. Sean Cleary, on behalf of the Industrial Gas Users Association ("IGUA") and the Association of Major Power Consumers of Ontario ("AMPCO").
- 17. Of the experts, notably, Dr. Pampush's academic focus is in economics, and particularly in econometrics and data analysis. These are the most important subjects of the expert evidence of all parties in this proceeding, so his opinions should carry added weight.

D. 2009 Board Report

- 18. Before this Generic Proceeding, the methodology for determining cost of capital parameters was based on the Board's previous deliberations in a similar 2009 proceeding. That proceeding included participation from numerous interested parties and intervenors, resulting in a comprehensive decision and report (the "2009 Board Report"). It also featured presentations and questioning of a panel of four capital markets experts. (In this 2024 Generic Proceeding, the Board did not have the benefit of evidence from capital market experts.)
- 19. In the 2009 Board Report, the Board reiterated and applied the law that dictated the bounds

of fair cost of capital parameters, as confirmed by the Supreme Court of Canada and otherwise.

This is known as the Fair Return Standard, or "FRS". The FRS is discussed further below.

- 20. The 2009 Board Report is referenced throughout this submission. While the EDA proposes updates to the cost of capital *figures* to reflect current market conditions, the *principled approach* adopted in the 2009 Board Report is equally applicable now. The EDA recommends this approach be continued and the Board should make its decision consistently with the approach taken in the 2009 Board Report, departing from it only where there is evidence of a material change in circumstance. Other experts agree with this proposition. Doing so supports regulatory consistency and predictability and minimizes the risk of subjective regulation (both important to markets).
- 21. Importantly, since 2009, the mandatory FRS and economic theories concerning the CAPM, DCF and risk premium methodologies have not changed. Nor, for example, is there evidence that flotation costs have changed. In these respects, the Board should hold to its well-established course. In particular, the EDA submits that the Board continue to not rely on any one ROE methodology to the exclusion of others, consider United States data and comparables, and include flotation costs in the cost of equity (all as discussed further below).

III. THE LEGAL FRAMEWORK OF FRS

22. The discretion of the Board to authorize an ROE in this proceeding is framed by the Fair Return Standard, or FRS. The FRS is a mandatory legal requirement.⁶ The Supreme Court of

⁵ Exhibit M1, LEI Report at 41; Transcript of Oral Hearing, Vol. 6 (10 October 2024), Toronto ("**Day 6 Transcript**") at 23:13-23.

⁶ Ontario Energy Board, EB-2009-0084, "Report of the Board on the Cost of Capital for Ontario's Regulated Utilities" (11 December 2009) at 18 ("**2009 Board Report**") citing *British Columbia Electric Railway Co. Ltd. v. Public Utilities Commission of British Columbia et al*, [1960] S.C.R. 837 at 848.

Canada has described an ROE meeting the FRS as being equivalent to what an investor would receive "if it were investing the same amount in other securities possessing an attractiveness, stability, and certainty equal to that of the company's enterprise." It is noteworthy that the focus of the FRS is on the generic investor, without consideration of who is the investor. The exercise is *not* to consider what should be the ROE for, for example, a municipally owned utility as compared to a privately owned utility.

23. More recently, the Supreme Court has elaborated:

[T]he utility must, over the long run, be given the opportunity to recover, through the rates it is permitted to charge, its operating and capital costs ("capital costs" in this sense refers to all costs associated with the utility's invested capital). *The required return is one that is equivalent to what they could earn from an investment of comparable risk*. Over the long run, unless a regulated utility is allowed to earn its cost of capital, further investment will be discouraged and it will be unable to expand its operations or even maintain existing ones. *This will harm not only its shareholders, but also its customers*. [emphasis added]⁸

- 24. The FRS has three branches, each themselves referred to as "standards". Each standard must be met, and none ranks in priority to the others.⁹ A fair return must:
 - (a) be comparable to the return available from the application of invested capital to other enterprises of like risk (the comparable investment standard);

⁷ Northwestern Utilities Limited v. City of Edmonton, [1929] S.C.R. 186. Other seminal statements of the FRS come from Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia, [1923] U.S.S.C. 160, and Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944).

⁸ Ontario (Energy Board) v. Ontario Power Generation Inc., 2015 SCC 44 at para. 16.

⁹ 2009 Board Report at 19.

- (b) enable the financial integrity of the regulated enterprise to be maintained (the financial integrity standard); and
- (c) permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (the capital attraction standard).
- 25. In 2009, the Board specifically cautioned that "focusing on meeting the financial integrity and capital attraction tests without giving adequate consideration to comparability test is not sufficient to meet the FRS." Thus, as will be discussed below, the mere fact (if true) that utilities have not experienced issues raising capital does not indicate the fair return standard is met. The Board also made expressly clear that "Continued investment in network utilities does not, in itself, demonstrate that the FRS has been met by a regulator's cost of capital determination, and in particular, whether the determination of the equity cost of capital meets the requirements of the FRS."
- 26. The goal of the FRS is to pay a return that is *fair*, not merely non-confiscatory. Further, the FRS is forward-looking, so historical evidence of satisfactory fundraising is not indicative of future ability to raise funds.
- 27. With respect to the comparable investment standard, it is important to note two points:
 - (a) A comparable investment *does not depend on ownership of the company*. ¹² One implication of this key point is that it is irrelevant whether utilities actually raise

¹⁰ 2009 Board Report at 19.

¹¹ 2009 Board Report at 21.

¹² 2009 Board Report at 25-26; see also discussion at Day 1 Transcript at 113:27-114:17 and Day 4 Transcript at 156:4-160:28 and 163:4-10.

capital, how and at what cost (and by extension, questions of the EDA and OEA about utilities' municipal ownership or lack of issues raising capital in the past have no bearing on FRS). It is the *opportunity cost to investors* that matters when setting the deemed cost of capital.¹³

- (b) When identifying jurisdictions and entities against which Ontario utilities may be compared, they are *not required to be identical*. Instead, they must merely share similarities and an empirical analysis (which does not necessarily mean mathematical) must be performed to determine if they are "like". ¹⁴
- 28. Finally, while a fair return should not see consumers "paying more than is required to maintain safe, reliable and economic service," the effect of rate changes on consumers is not itself a determining factor in assessing whether a proposed return meets the FRS. As stated by the Federal Court of Appeal, the ROE must be determined solely on the basis of a company's cost of equity capital and "the impact of any resulting toll increase is an irrelevant consideration in that determination". ¹⁵

IV. THE ENERGY TRANSITION

29. This proceeding takes place against the backdrop of the energy transition ongoing in Ontario and elsewhere in North America. Unchallenged evidence presented by Nexus demonstrates that while non-coincident peak demand grew annually at 0.2 percent per year from

¹³ 2009 Board Report at 19-21, 25, 31; Exhibit M3, Nexus Report at 5, 38, 43

¹⁴ 2009 Board Report at 21.

¹⁵ TransCanada Pipelines Ltd. v. National Energy Board, 2004 FCA 149 at paras. 35-43. The Court caveats this comment that the reviewing body can have regard to rate shock and preferring to incorporate changes over time, as long as the utility is ultimately compensated in time and the delay can be implemented without economic loss.

2016 through 2023, projections for the 2025 through 2050 period have the same measure growing at 3.3 percent per year, which would more than *double* peak demand from today's levels. ¹⁶ Clearly, the IESO expects electricity demand to massively increase between now and 2050. 17 The IESO's recent demand forecasts released in October 2024 are even higher: "According to a new annual forecast from the Independent Electricity System Operator (IESO), electricity demand in Ontario is anticipated to grow 75 per cent by 2050, higher than previously forecast, with annual consumption rising from 151 terawatt-hours (TWh) in 2025 to 263 TWh in 2050."18

- 30. No expert disputes that the energy transition will happen. The issue is when it will happen and when a ramp-up in capital spending will be required. The evidence in this proceeding is that new capital is required now. DBRS Morningstar published a report stating that "The industry's ongoing allocation of substantial capital toward initiatives such as climate adaptation, modernization, and energy transition has reached unprecedented levels, with many utilities rolling out capital expenditure (capex) programs that are 10% to 20% greater compared with previous cycles. . . . [T]he trend of elevated capex and reliance on debt financing will likely persist over the longer term."19
- Dr. Cleary's own paper titled "Changing Gears: Sustainable Finance Progress in Canada" 31. stated that supporting the energy transition is a required "short-term action" and offered "engag[ing] institutional investors in financing Canada's future electricity grid" as a

¹⁶ Exhibit M3, Nexus Report at 9.

¹⁷ See, for example, IESO, Pathways to Decarbonization (December 15, 2022), available here; and IESO, Annual Planning Outlook 2024 (March 28, 2024), available here.

¹⁸ See IESO News Release (16 October, 2024), available here.

¹⁹ Exhibit K6.2, Tab 17, DBRS Morningstar, "Losing Steam: Weakening Credit Metrics in the North American Utilities Sector," May 15, 2024.

recommendation on which insufficient action had taken place.²⁰

32. Concentric described the expenditure that must rise to meet demand increases:

[I]f you take a look at the macro-picture, if you look at both Canadian and US goals of net zero by 2050 or something that approximates net zero by 2050, it's going to take an extraordinary investment in new infrastructure, new sources of energy that will be sourced differently than they have previously in order to achieve those goals. So, it's really a broad sweeping change that impacts virtually every aspect of the network all the way from the supply and generation side, to how consumers consume energy, and the distributed energy resources.²¹

33. This increase in demand and associated capital requirements carries strategic risk. Several Canadian utilities have disclosed in public filings that they face risks relating to energy transition.²² And Mr. Zarumba explained on cross-examination:

The risk that is involved in electrification is the uncertainty associated with what the future will look like, and when it will occur, and how it will occur. And it is generally in my experience, that when we have these changes in directions of the industry, we know that something is going to happen, but very often what happens is very different than what we had anticipated. I look back to retail open access and wholesale competition being introduced to electricity markets in the 1990s. I also caught at the very beginning of my career the regulatory implications of the introduction of nuclear power. Both of which had very, very significant impacts on the industry. I think we are at a similar point now. I think that additional risk has occurred that's greater than business as usual, because we're not a business as usual. And did we include any sort of adder to our ROE calculation in the evidence that

²⁰ Exhibit K6.2, Tab 15, Sean Cleary and Andrew Hakes, "Changing Gears: Sustainable Finance Progress in Canada" (2021) ("Changing Gears") at 8, 10.

²¹ Day 4 Transcript at 50:18-27; see also at 49:4-12: "[...] if you look at the IESO's forecast of projected demand and the required increase in generation capacity, that generation capacity has to be fed through a distribution and transmission network that will accommodate it, and on top of that accommodating more distributed resources, non-wire alternatives and all the changes that we see in a state of flux right now, will all lead to greater capital needs from the industry."

²² See for example, Exhibit K6.2, Tabs 18-21.

Dr. Pampush and I have sponsored? No. But we think that the board should be cognizant of that additional risk.²³

- 34. Nexus points in its report to the example of the nuclear energy transition of the 1970s, because whether or not the demand projections ultimately prove accurate, assets will need to be constructed based on policy initiatives, with uncertain outcomes and the possibility that some will not ultimately be necessary.²⁴
- 35. Overall, the evidence is incontrovertible that planning, equipment ordering and construction will take several years in order to be implemented, so even if the ramp up in electricity demand is several years away, capital expenditure increases are likely to be required soon. While Nexus' proposed deemed ROE does not reflect the increased risk created by the energy transition, it comments that "[t]o the extent the Board is faced with a range of proposed ROEs, the Board should not limit itself to the lower end of the range and thereby fail to account at all for energy transition risk." The EDA urges the Board to have regard to this caution.

V. OVERVIEW OF PROPOSED ROES AND DEEMED EQUITY THICKNESS

- 36. The proposals of the parties are as follows:
 - (a) **Nexus**: ROE of 11.08% (the mid-point within a range); maintain existing equity thickness of 40% equity, 60% debt;

²³ Transcript of Oral Hearing, Vol. 5 (2 October 2024), Toronto ("Day 5 Transcript") at 36:4-22.

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²⁴ Exhibit M3, Nexus Report at 27-28.

²⁵ Day 5 Transcript at 103:14-23 and 123:8-125:20.

²⁶ Exhibit M3, Nexus Report at 10; see also Day 4 Transcript at 136:14-137:7.

- (b) **Concentric**: ROE of 10.0%; equity thickness of 45% equity, 55% debt;
- (c) LEI: ROE of 8.95%; equity thickness of 40% equity, 60% debt;
- (d) **Dr. Cleary**: ROE of 7.05%; equity thickness of 40% equity, 60% debt.
- 37. Nexus proposed an ROE of 11.08% based on a weighted average of the results of three well-established economic methodologies. This number is at the mid-point of a range, or "confidence limits", within which Nexus would consider a deemed ROE set by the Board to be substantially similar to its proposed number. Nexus did not propose any change from the Board's current deemed equity thickness of 40% equity and 60% debt.
- 38. To compare each expert's proposed deemed ROE, they must be calculated based on the same equity thickness.²⁷ All the experts used a debt/equity ratio of 60/40, except Concentric. On cross-examination, Concentric agreed that its proposed 10% deemed ROE with a 45% equity thickness was equivalent to 11.38% at a 40% equity thickness. The chart below compares the experts' proposed deemed ROEs at a 40% equity thickness, adding a version of LEI's proposed ROE adjusted to reflect the corrections that are discussed below.

Nexus	Concentric	LEI (adjusted)	LEI (non-adjusted)	Dr. Cleary
11.08%	11.38%	10.40%	8.95%	7.05%

39. The proposed deemed ROEs of Nexus, Concentric (as adjusted for equity thickness) and LEI (as adjusted to match the 2009 OEB Report by using multiple methodologies and including a

²⁷ Day 1 Transcript at 106:6-11.

50 basis points adder for flotation costs) are within Nexus' proposed 95% confidence intervals. Therefore, they indicate that the consensus and correct deemed ROE lies in this close cluster.

VI. NEXUS' PROPOSED ROE MEETS THE FRS

40. The ROE proposed by Nexus is developed based on well-reasoned methodologies and is consistent with that proposed by Concentric, once adjusted for equity thickness. For the reasons that follow, the EDA submits the Board should apply the authorized ROE proposed by Nexus, the reasonableness of which is supported and reinforced by Concentric (and by LEI, once adjusted to match the 2009 OEB Report as discussed below,).

A. Application of Recognized Models to Reflect Expectations of the Marginal Investor

- 41. In order to reach its proposed ROE, Nexus performed a capital asset pricing model ("CAPM") analysis, a discounted cash flow ("DCF") analysis, and a risk premium analysis. It also compared its results to comparable jurisdictions as a final check on fairness.
- 42. The purpose of a cost of capital analysis, as explained by Nexus with reference to the 2009 Board Report, is to determine the price at which an electric service utility can "buy" capital. That determination rests on the opportunity cost to the marginal investor who is willing to move their investment from one asset to another in a market if prices were to vary.²⁸ In other words, the goal of Nexus' analysis is to reach "an understanding, bracketed by limits on our confidence, of what marginal investors believe when they make a bet on the future with their own money at stake, as

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²⁸ Exhibit M3, Nexus Report at 49.

based on market evidence."29

43. Nexus explained why applying multiple methodologies in its analysis was important to achieve the goal of artificially reconstructing reality:

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. Since a theory is a simplification of reality, no one theory or model is ever applicable in every real-world circumstance. Practitioners, including us, generally use multiple methods to compute equity costs.³⁰

44. As acknowledged by the Board in the 2009 Board Report, each methodology "has well documented strengths and weaknesses" and each "brings a different perspective estimation of a fair return". For these reasons, "No single test is, by itself, sufficient to ensure that all three requirements of the fair return standard are met". The corollary is that if the Board does not use a methodology with one or more identified flaws, there would be no methodology to use.

(i) CAPM Analysis

- 45. In a CAPM analysis, an Ontario utility's cost of equity is equal to the risk-free rate plus a markup that compensates the investor for exposure to market risk relating to that type of business.³²
- 46. There are three central components to the CAPM analysis: the risk-free rate, the beta, and the market risk premium (the "MRP"). The CAPM is theoretically forward-looking as is the fair

²⁹ Exhibit M3, Nexus Report at 53.

³⁰ Exhibit M3, Nexus Report at 47.

³¹ 2009 Board Report at 26. See also Day 1 Transcript at 116:9-23.

³² Exhibit M3, Nexus Report at 62.

return standard – but often relies in practice on historical data and the analyst's judgment that such data will reflect going-forward conditions.³³ As Nexus pointed out in its Report, "at best, the historical average provides an indication of what the future average might be. We are more interested in what the MRP is now than we are in some past average. . . .the average itself may simply be a statistical artifact that does not apply on any particular day in the capital markets".³⁴

- 47. Where possible, therefore Nexus sought to prioritize use of available forward-looking data.³⁵ Rather than using a historical market risk premium, Nexus modelled a forward-looking MRP of 8.83% by applying a DCF analysis of the entire market.³⁶ Nexus faced cross-examination on this approach in relation to the growth rates used in this market DCF which outpaced GDP growth. In response, Nexus stressed that it was merely applying what the market data indicated in terms of growth rates, whereas growth rates presented by Dr. Cleary and intervenors do not reveal any underlying data on which their accuracy or relevance can be tested.³⁷
- 48. Further, Nexus applied a well-known approach used by the US FERC for the reason just described.³⁸ In Opinion 569, FERC held:

Using a DCF analysis of the dividend-paying members of the S&P 500 is a well-recognized method of estimating the expected market return for purposes of the CAPM model. . . . Financial research supports using a one-step DCF analysis of

³³ Exhibit M3, Nexus Report at 62.

³⁴ Exhibit M3, Nexus Report at 63.

³⁵ Exhibit M3, Nexus Report at 62-63.

³⁶ The EDA notes that Nexus' use of a "br model" in order to calculate its MRP should not be conflated with Dr. Cleary's use of a br model in his DCF analysis. This is because the MRP is modeling the risk premium for the *market*, including unregulated companies whose ROEs are set by the market, whereas the DCF is modelling the cost of capital for a regulated utility itself. Using the authorized ROE in the br model results in circularity. See Exhibit KP1.3, Nexus Presentation Day Slides at slide 32.

³⁷ Day 4 Transcript at 172:4-174:7.

³⁸ Day 4 Transcript at 169:22-26.

the dividend paying members of the S&P 500 when determining a forward looking expected market return as part of the CAPM model.³⁹

49. FERC addressed the concern about overly high growth rates and determined that since the MRP is designed to reflect the overall market risk premium, it can and should be made up of the companies that are included in the S&P 500, which includes some relatively young companies with high growth rates and other mature companies with lower growth rates, but in all cases generally companies with high market capitalization that is representative of the industries in the economy of the U.S.:

In summary, while it may be unreasonable to expect an individual company to sustain high short-term growth rates in perpetuity, the same cannot be said for a broad representative market index that is regularly updated to include new companies. Put differently, a portfolio of companies behaves differently than an individual company. Accordingly, the rationale for incorporating a long-term growth rate estimate in conducting a two-step DCF analysis of a specific utility or group of utilities for purposes of directly estimating cost of equity does not apply to the DCF analysis of a broad representative market index with a wide variety of companies that is regularly updated to include new companies for purposes of determining the required return to the overall market.⁴⁰

50. In any event, while the methodologies used to derive them were different, Nexus' MRP was also not drastically different from LEI's MRP of 8.32%, or the mid-point between Concentric's historic and forward-looking MRPs of 8.75%. 41 (Dr. Cleary's MRP of 5% was considerably lower than the other experts, to a degree labeled "outside the zone of reasonableness for MRP" by LEI. 42) These are further indications of Nexus' MRP's reasonableness as an

³⁹ Association of Businesses Advocating Tariff Equity et al. v. Midcontinent Independent System Operator, Inc. et al., Opinion No. 569, 169 FERC ¶ 61,129 (2019) at paras 260, 262 ("FERC Opinion 569").

⁴⁰ FERC Opinion 569 at para. 266

⁴¹ Exhibit KP1.3, Nexus Presentation Day Slides at slide 19.

⁴² Day 1 Transcript at 123:12-28.

approximation of average market risk.

- 51. An important component of the CAPM is its beta, which is the multiple applied to the MRP to adjust the market-average risk to reflect the specific risk of a particular company in this case, a utility. A beta of less than 1 indicates the company is less risky than the market, while a beta of 0 indicates it is risk-free. For Nexus' betas, Dr. Pampush extracted three-year historical beta information for companies considered to be proxies to Ontario utilities from various data aggregators, including Yahoo, StockAnalysis, CapIQ, and Zack's. He verified that the data being sourced from these aggregators was consistent.
- 52. In order to correct for the disconnect of a forward-looking principled approach being derived from historical betas, and to reflect the widely-accepted and observable fact that betas will revert toward the mean of 1 over time, Nexus applied the Blume adjustment to its extracted beta data. ⁴⁶ The Blume adjustment is common and widely considered in other regulatory proceedings, sometimes in conjunction with consideration of unadjusted betas. ⁴⁷ Reflecting its prevalence in the industry and investor expectations, the Blume adjustment is factored into betas sourced from Value Line, and included as a user option on Bloomberg terminal. ⁴⁸ Eugene Fama (who received the Nobel Prize in Economics in 2013 for his work on capital market theory) and Kenneth French

⁴³ Exhibit M3, Nexus Report at 64.

⁴⁴ Exhibit M3, Nexus Report at 64.

⁴⁵ Day 4 Transcript at 128:22-129:4; Exhibit M3, Nexus Report at 66-67.

⁴⁶ Exhibit M3, Nexus Report at 67-68; Day 4 Transcript at 129:11-130:13, 178:15-179:20.

⁴⁷ Alberta Utilities Commission Decision, 20622-D01-2016, "2016 Generic Cost of Capital Proceeding" (7 October 2016) at paras. 180-181 ("AUC Decision 2016"); Alberta Utilities Commission Decision, 22570-D01-2018, "2018 Generic Cost of Capital, Proceeding" (2 August 2018) at para. 346 ("AUC Decision 2018").

⁴⁸ Day 4 Transcript at 137:15-138:1.

have explained the Blume adjustment's rational and empirical basis:

[E]mpirical work, old and new, tells us that the relation between beta and average return is flatter than predicted by the Sharpe-Lintner version of the CAPM. As a result, CAPM estimates of the cost of equity for high beta stocks are too high (relative to historical average returns) and estimates for low beta stocks are too low (Friend and Blume, 1970). Similarly, if the high average returns on value stocks (with high book-to-market ratios) imply high expected returns, CAPM cost of equity estimates for such stocks are too low.⁴⁹

- 53. In addition to the general appropriateness of the Blume adjustment, Concentric provided empirical evidence in the utility industry specifically that betas in fact have moved toward 1 over time.⁵⁰
- 54. The Blume adjustment will not in every case result in an increase of the beta (for example, it would decrease a beta that is riskier than 1), and its impact will also be less significant as the raw beta approaches 1 at which time the movement toward 1 will be fractional.⁵¹ Concentric offered a practical explanation on cross-examination: "High-risk companies become less risky over time, you know. Maybe it's an AI company that today is soaring with a very high beta that over time becomes a company that looks more like Microsoft than it does ChatGPT, and the same is true for a very low risk company that will invest those proceeds in different ways and move closer to the market."⁵²
- 55. Finally, it must be noted that while LEI did not apply the Blume adjustment, its unadjusted

⁴⁹ Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," Journal of Economic Perspectives. Volume 18, Number 3—Summer 2004 at 43-44, cited in N-M3-10-OEB Staff-48 ("Fama and French").

⁵⁰ Day 4 Transcript at 138:12-140:10.

⁵¹ Day 4 Transcript at 139:17-140:10.

⁵² Day 4 Transcript at 141:10-23.

beta was identical to Nexus' at 0.69.⁵³ Recognizing that other regulatory bodies have found "both raw betas and adjusted betas provide useful directional information with respect to utility risk,"⁵⁴ the consistency between them in this case is telling about the reliability of the 0.69 figure.

56. Finally, Nexus selected U.S. treasury bonds for its risk-free rate. As explained by Dr. Pampush, it did so to ensure internal consistency in the CAPM methodology, given that it uses a U.S. inclusive MRP and beta:

I found that substantially all of my data for the CAP model, the market risk premium was computed based on US data, it was the US, and my betas were computed on US data, that is to say, the returns progressed on either the NYSE or, you know, some other broad index like that. And so, in order to conform with the balance of that model I also used the risk-free rate. Because remember when we compute that market risk premium, we are computing both those expected returns and then we are subtracting a risk-free rate from that. And so, I used the US all the way through. ⁵⁵

57. Nexus further explained that to do otherwise and use a Canadian treasury bond rate, where U.S. data had been used elsewhere in the model, would be "an apples and oranges error" (akin to the error made by LEI, as further discussed below). From a principled standpoint, a U.S. risk-free rate may be used in an integrated North American market, since the law of one price says that within a market, the same good has but a single price regardless of the buyer. ⁵⁶ The long-term overlap of the two countries' risk-free rates indicates that, over time, any current differences are transient and will converge. ⁵⁷

⁵³ Exhibit M1, LEI Report at 120.

⁵⁴ AUC Decision 2016 at para. 181.

⁵⁵ Day 4 Transcript at 130:17-131:5.

⁵⁶ Exhibit M3, Nexus Report at 49.

⁵⁷ Exhibit KP1.3, Nexus Presentation Day Slides at slide 26.

58. The foregoing points also informed Nexus' response to questions about whether Ontario utilities would borrow at a higher rate in the U.S. if offered a lower Canadian rate. Nexus further offered the example of BCE, which obtained bonds in the U.S. market notwithstanding there were lower Canadian bond rates, as further evidence of the integrated market for risk-free investment. As noted by Dr. Pampush, "it's impossible to think BCE could have saved themselves a percentage point if they had borrowed here in Toronto instead of New York, let's say." When asked by Commissioner Sardana whether the BCE example could have been routine financing in replacement of a prior U.S. note, rather than an indication of capital market integration, Dr. Pampush stressed that regardless, if there had been disintegration between the markets, then the note would have been raised in Canada at a lower rate.

(ii) DCF Analysis

- 59. Nexus also performed a single-stage DCF analysis, which is premised on the theory that the value of a utility equals the expected cash paid discounted by the relevant risk-adjusted cost of capital.
- 60. Both the dividend yields and growth rates input into Nexus' model were derived from the same data aggregation sources as the betas for its CAPM.⁶¹ As with the CAPM, Nexus' proposed DCF model results in an ROE (10.92%) that is reasonably proximate to those of LEI (10.53%) and Concentric (single-stage) (10.5%). Again, this clustering of results despite methodological

⁵⁸ N-M3-10-AMPCO/IGUA-29(c); Exhibit M3, Nexus Report at 44.

⁶⁰ Transcript of Oral Hearing, Vol. 5 (2 October 2024) at 143:14-145:10.

⁵⁹ Day 4 Transcript at 131:27-132:2.

⁶¹ Exhibit M3, Nexus Report at 69-70.

differences supports the reasonableness of Nexus' approach and output.

61. Dr. Cleary criticized Nexus' decision to apply a single-stage DCF model. While Nexus acknowledges that other regulators have in some cases preferred a modified single-stage or multistage DCF model to include the effects of a lower long-term growth rate, any theoretical benefits of this approach are mitigated by its implementation challenges. It requires the analyst to determine the timing and glide path from first-period growth to terminal growth, and this is particularly challenging in the utility industry where the energy transition may require continued growth for a period of five, ten, twenty, or even thirty years into the future. Labor requires the analyst to determine a second terminal growth rate, where it is very difficult to predict GDP and inflation estimates in, say, 2050. Every instance of analyst intervention creates a new opportunity for engineered results or errors. Labor requires the analyst intervention creates a new opportunity for engineered results or errors.

62. Further, while a single-stage DCF model does apply a growth rate into the indefinite future, the valuations are nonetheless finite because each year in the future is discounted more and more.⁶⁴

63. Dr. Cleary criticized the use of so-called "optimistic" growth forecasts that outpaced GDP. LEI was also not in favour of using analysts' forward looking forecasts. However, Nexus relied on well-regarded analyst expectations from a variety of sources. 65 This is precisely the forward-looking information about market expectations the DCF is designed to reflect:

LEI claims that relying on analyst-determined EPS growth forecasts is a weakness in the DCF approach when it is actually a strength. Examining analyst-provided

⁶² Exhibit KP1.3, Nexus Presentation Day Slides at slide 29.

⁶⁴ Exhibit KP1.3, Nexus Presentation Day Slides at slide 28

⁶⁵ Exhibit M3, Nexus Report at 69-72 and Excel M3-NAICS 2211 v04 from the N-M3 All Workbooks folder.

⁶³ Exhibit KP1.3. Nexus Presentation Day Slides at slide 29.

future growth rates provides a glimpse into investors' perceptions about the capital markets when they 1 buy and sell what amount to bets on the future.

Investment analysts and portfolio managers are front-line thinkers about capital markets. In some cases, they are fiduciaries who are charged with making decisions about client funds as though they were their own. Even when a stock analyst is not a fiduciary, bad stock picks (based on bad predictions) result in investors withdrawing funds from the analyst's portfolios. In other words, the people who provide the growth estimates have skin in the game. It is true, as LEI notes, that beating the autopilot of index investing is very difficult. It is for this reason why the survivors in the stock-picking industry may be useful to listen to. 66

64. Importantly, LEI's and Dr. Cleary's concern that investment analysts' forecasts are overly optimistic does not reflect relatively recent rules governing investment recommendations. Rule 2241 of the Financial Industry Regulatory Authority (FINRA) requires that the pay of an analyst who issues reports must be reviewed annually by a committee, which must evaluate the quality of the analyst's research and the correlation between the research analyst's recommendations and the performance of the recommended securities. In other words, analysts are graded on their performance. This Rule mitigates against the concern that analysts are overly optimistic, because they are required to be paid for getting their forecasts right. Moreover, Rule 2241(c)(1)(b) requires that: "[A]ny recommendation, rating or price target has a reasonable basis and is accompanied by a clear explanation of any valuation method used and a fair presentation of the risks that may impede achievement of the recommendation, rating or price target." 68

65. These FINRA requirements for analysts undermine Dr. Cleary and LEI's evidence-free argument that analysts provide forecasts biased in favour of growth. Simply put, whatever the prior

⁶⁶ Exhibit M3, Nexus Report at 53-54.

⁶⁷ N-M3-10-CME-15(d) and (e).

⁶⁸ N-M3-10-CME-15(e).

history, now analysts' forecasts must be unconnected to their compensation and offered on a transparent and reasoned basis. In other words, analyst forecasts are reliable, and the concerns of LEI and Dr. Cleary are out of date.

66. Finally, continuous growth in excess of GDP may not be unreasonable in an industry that is expected to continue expanding in light of the energy transition. In addition to the demand increases forecasted as described above, as Dr. Cleary pointed out in an article titled "Changing Gears: Sustainable Finance Progress in Canada", investors have been "piling into" responsible investments and there is "clearly strong growth in Canada's retail market". ⁶⁹

(iii) Risk Premium Analysis

- 67. In its risk premium approach, Nexus examined authorized ROEs as a function of interest rates. It used the S&P's SNL Financial data file of US-authorized returns on equity and filtered to remove various plainly irrelevant data. This resulted in 545 observations. Nexus then computed a linear regression equation that estimated average allowed ROEs as a function of 30-year US Treasury bond yields and Moody's Baa-rated commercial bond yields. To put the regression equation on an equal risk-adjusted footing, Nexus then re-levered the authorized ROEs to 60:40 equity thickness from each observation's deemed equity thickness.
- 68. Nexus' risk premium result (11.09%) is similar to the result LEI would have achieved had it performed the risk premium analysis allowed by its Figure 69 (10.80%).⁷⁰ It is also similar to Concentric's U.S. analysis, once adjusted to account for the U.S. typical 50% equity thickness

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⁶⁹ Exhibit K6.2, Tab 15, Changing Gears at 40.

⁷⁰ Exhibit KP1.3, Nexus Presentation Day Slides at slide 33.

(10.87%). Concentric's Canadian analysis is slightly lower, reflecting the fact that Canadian authorized ROEs have to date remained slightly below U.S. authorized ROEs.⁷¹ As with aspects of the CAPM and DCF methodologies, the similarities between these risk premium methodological results provide additional confidence in the reasonableness of the results.⁷²

(iv) Use of Confidence Intervals and Weighted Average

- 69. As noted above, Nexus' approach was to use confidence intervals and provide a range of reasonable outcomes in order to address potential flaws in the data.⁷³
- 70. For each of the methodological approaches it applied, Nexus computed confidence intervals. The purpose of such confidence intervals was, consistent with Nexus' view that its role was to communicate what the data was telling it but also convey the limitations thereof, to acknowledge "margins of error" or a range within which small variabilities in data would not allow Dr. Pampush to have certainty about proposing a single result output. Instead, Dr. Pampush explained that "confidence intervals give us structure and allow the data to help us understand what we know and don't know" and that if different experts reach numbers within the confidence intervals, they are "essentially indistinguishable" in Nexus' eyes. 74
- 71. Because no one methodology is without limitation, Nexus also takes a weighted average of its CAPM, DCF, and risk premium results. Weighted averaging "determine[s] whether and to what extent the computed numbers are coalescing around a useful average" and gives greater

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⁷¹ Exhibit KP1.3, Nexus Presentation Day Slides at slide 33.

⁷² Exhibit M3, Nexus Report at 73.

⁷³ Exhibit M3, Nexus Report at 74.

⁷⁴ Day 4 Transcript at 132:13 - 134:2.

weight to such grouped results.⁷⁵ Thus, Nexus' proposed ROE of 11.08% is derived from a 49% weighting to the CAPM result, a 38% weighting to the DCF result, and a 13% weighting to the risk premium result.⁷⁶ As a result, whatever tweaks others have proposed to Nexus' various calculations must be considered in light of their weightings and the relatively little overall change to the proposed ROE they suggest.

B. Nexus' Selection of Comparables

- 72. Because the ROE requires an assessment of the marginal investor's opportunity cost when considering assets in the utility market, and because opportunity cost cannot be analyzed directly with respect to the utilities themselves, application of the methodologies discussed above requires consideration of comparable assets that are publicly traded. Much of the cross-examination of Nexus and Concentric focused on their selection of comparable or peer companies for use in the proxy groups from which data was pulled and applied in the various methodologies. These critiques focused on two issues: (i) the use of U.S. companies in creating a proxy sample made up of North American companies; and (ii) the inclusion of companies that appeared riskier in some way than Ontario utilities.
- 73. These critiques are misplaced and merely pick at marginal comparables. They have no impact on the thrust of the Nexus and Concentric analyses.
- 74. It is undeniable that Canadian and U.S. companies compete for capital in the same market. Nexus pointed on Presentation Day to a graphic showing the harmonization of Canadian and U.S.

⁷⁵ Exhibit M3, Nexus Report at 74-75.

⁷⁶ Exhibit M3, Nexus Report at 40, Table 5.

capital markets since NAFTA, reflected in particular in the convergence of 10-year treasury bond yields. Prior to NAFTA, Canada averaged more than 100 basis points above the U.S., whereas post-NAFTA, it averages a statistically insignificant 1.3 basis points lower. The Pampush noted as another factor the interdependence of the two economies in terms of trade: "And I also looked at other things the ties between the two economies that 75 percent exports from Canada are to the US, 50 percent of the imports to Canada are from the US, a lot of ties that would also explain the -- a lot of real economic ties that would also explain the integration of the capital markets."

75. Because companies in North America compete for the same capital, companies in the U.S. are relevant comparables to companies in Canada. The proxy groups of Nexus, Concentric, and LEI all include U.S. companies. This approach has been endorsed by regulators beginning as early as the 2009 Board Report. More recently, the B.C. Utilities Commission (the "BCUC") has similarly acknowledged the shortcomings of using an exclusively Canadian proxy group and instead favoured a group including U.S. companies:

With respect to using non-Canadian comparators, as Mr. Coyne correctly points out, several Canadian regulators, including the BCUC, have recognized the integrated nature of Canadian and US financial markets, that Canadian utilities are competing for capital in global financial markets and that Canadian data are limited by the small number of publicly traded utilities. This has led to Canadian regulators adopting a pragmatic view of the use of US data and proxy groups to estimate the allowed ROE for Canadian regulated utilities. We see no reason to deviate from the BCUC's previous determination regarding the reasonableness of using US market data and proxy groups and endorse the wisdom of continuing to do so in light of the small sample size of Canadian comparators notwithstanding any jurisdictional differences. We accept Mr. Coyne's evidence that the US gas and electric proxy groups are more comparable to FEI and FBC, respectively, in terms of business risk than the Canadian proxy group utilities, many of which have significant non-gas or

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⁷⁷ Exhibit KP1.3, Nexus Presentation Day Slides at slide 11.

⁷⁸ Day 4 Transcript at 132:3-12.

⁷⁹ 2009 Board Report at 21-23.

non-electric operations and unregulated operations.

For the reasons outlined above, we find the use of the Canadian proxy groups and US proxy groups alone to be inferior to that of using a North American proxy group which has a reasonable mix of both Canadian and US comparators, and the averaging of the results of these three groups to be a poor compromise. On balance, we find that having a proxy group of North American comparators trumps any jurisdictional or structural differences. In making this determination, we rely on the facts that financial and capital markets are highly integrated and that utility regulatory regimes in North America are sufficiently similar for the purpose of establishing a comparable ROE.⁸⁰

- 76. As discussed below, Dr. Cleary alone advocates for a "Canadian" proxy group as a preferable approach based on his view that U.S. companies are subjected to greater risk than Canadian companies. While Dr. Cleary adamantly opposes the inclusion of U.S. peer companies and companies with generation capacity, on cross-examination, he was forced to concede that three of his five "Canadian" comparables have the majority of their operations in the U.S. and are therefore subject to many of the same risks. And unlike Nexus, Concentric, and LEI, his proxy group is not large enough to still have instructive appeal if some of the chosen comparables do not share important characteristics with Ontario utilities.
- 77. With respect to the breadth and variety of proxy companies included, the EDA urges the Board to recall its own comment in 2009 that "'like' does not mean the 'same'". 81 It is impossible to be perfectly comparable, which is why Concentric noted on cross-examination that "that's why we have a group of utilities and try to compile it as broadly as possible". 82 This point is also

80 British Columbia Utilities Commission, G-236-23, "Generic Cost of Capital Proceeding Decision and Order" (5 September 2023,) at 15-16 ("BCUC Decision").

^{81 2009} Board Report at 21.

⁸² Transcript of Oral Hearing, volume 2 (26 September 2024), Toronto ("Day 2 Transcript") at 151:3-10; see also AUC Decision 2023 at para. 103.

consistent with how the Alberta Utilities Commission (the "AUC") addressed the issue in its recent cost of capital proceedings. Faced with similar arguments about excluding comparable companies due to differences in activities, the AUC commented: "The commission is not persuaded by the argument that certain of the representative utilities in the comparator group lack comparability due to the involvement of their parent corporations in generation, retail or other unregulated business sectors."

- 78. All of the experts acknowledge the need for some flexibility in the selection of proxies. As noted by Mr. Goulding: "I don't intend for any comparable to be identical. In fact, almost no comparable is. For me, a comparable is relevant, but it may be different in various characteristics[.]" 84 As such, Mr. Goulding agreed that "it was important to look at a range of peer group utilities in order to inform the exercise of [his] professional judgment". 85 LEI's opinion uses a proxy group that includes 20 US companies out of a total of 23 comparators. On cross-examination, after noting the importance of comparing apples to apples, LEI agreed that its overwhelmingly US-based proxy group was sufficiently relevant to be a basis for comparison, as well as sufficiently large to allow a robust analysis. 86
- 79. When Nexus conducted its analyses using Concentric's North American proxies, the difference from its own proposed ROE was immaterial: its average proposed ROE moved to 10.81% (as compared to 11.08%), falling between a range of 10.19% to 11.43% (as compared to

⁸³ AUC Decision 2023 at para. 102.

⁸⁴ Day 1 Transcript at 73:21-74:8.

⁸⁵ Day 1 Transcript at 74:2-8.

Day 1 Transcript at 74.2-6.

⁸⁶ Day 1 Transcript at 76:5-12, 78:15-21.

10.36% to 11.81%).87

80. In response to cross-examination, Mr. Zarumba confirmed "we treated regulated companies as regulated companies" rather than undertake a suggested subjective analysis of the various business and revenue streams of each of them. 88 Concentric stressed a similar point on cross-examination, driven by the investor's perspective and lack of differentiation between utilities that engage in generation activities and those that do not:

MR. RUBENSTEIN: All right. And so would -- Duke, with its large generation fleet, you'd agree with me that it's really nothing like Ontario's distributors and transmitters?

MR. COYNE: Nothing like, in the fact that it is a vertically integrated utility compared to a T&D company. But, again, from an investors' perspective, when they look at this industry, they look at regulated utilities as being similar investments. And it comes back to the basic point I made a few moments ago, that, from an investors' perspective and from this Board's perspective, "similar" is the standard for whether or not they are appropriate to be included in a cost-of-capital analysis as comparators. And, if you go down -- you're pointing out some examples of companies that have generation in their portfolio. If you look at the market and how the market views these companies, from our analytical standpoint, you will not see a difference in those that have generation assets versus those that are pure play, T&D companies, nuclear or otherwise. So, insofar as the market is concerned, these distinctions are not showing up as differentiating Ontario's utilities from these companies. And the reason for that is that they operate under regulatory frameworks where the costs and risks associated with these investments are managed effectively and constructively, much like they are here, in Ontario. And so, from an investor's perspective, they -- I think they would find it quite limiting if they were just looking for pure play, T&D companies. They generally look for a broader set of investments in the sector to invest in, and that is why these companies are quite successful as utilities.⁸⁹

81. Concentric's point was informed by an analysis it performed in light of cross-examination

⁸⁷ Exhibit KP1.3, Nexus Presentation Day Slides at slide 18.

⁸⁸ Day 5 Transcript at 13:21-14:11.

⁸⁹ Day 2 Transcript at 160:20-161:23; see also AUC Decision 2023 at para. 103.

by intervenors, in which it considered whether or not there is a difference from an investor standpoint between the companies in its comparable proxy groups that own large fleets of generation versus those that are pure transmission and distribution companies, and further whether there is a difference for companies that own nuclear assets versus those that don't. When Concentric considered those sub-groups, it found "there wasn't a material difference in the end result. Our results come out to about 10 percent as the required rate of return" (at a 45% equity thickness). 90

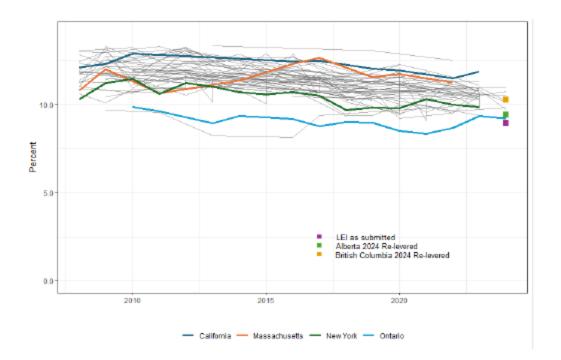
C. Comparing Proposed ROEs to Those Available in Comparable Jurisdictions

82. Only Nexus' and Concentric's proposed ROEs meet the comparable investment branch of the FRS. This is plain on the face of the ROE numbers authorized in various jurisdictions. As can be seen from the below Figure, the current Ontario authorized ROE sits below every U.S. authorized ROE (reflected as grey lines) and below the B.C. 2024 authorized ROE (once re-levered to 60/40) (reflected as the yellow dot). The proposed LEI ROE (8.95) is even lower (reflected as the purple dot), and the proposed Dr. Cleary ROE (7.05) would be 300 basis points below the lowest of the clustered results. ⁹¹

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⁹⁰ Day 2 Transcript at 163:13-164:4; Concentric Answer to Undertaking J2.4.

⁹¹ LEI admitted on cross-examination that Dr. Cleary's recommendation an ROE of 7.05% does not meet the FRS, is not within its "zone of reasonableness" and is an "outlier": Transcript Day 1, 88:24-28, 89:16-25 and 90:5-8.



83. Regardless of whether Ontario utilities are still managing to raise capital, the comparable return standard is violated from this data alone. Investors in Ontario utilities are not earning a comparable return to investors in B.C., California, Massachusetts, or New York, all jurisdictions with similar energy and regulatory policies to Ontario. ⁹² As can be seen from a review of the data points above, movement to an 11.08% ROE would make the authorized ROE for Ontario utilities comparable to those available in other jurisdictions. Once re-levered to a 40% equity thickness, 19 U.S. states have ROEs above 11.08%, including California and Massachusetts, being comparable jurisdictions with similar energy and regulatory frameworks to Ontario. ⁹³

84. Further, investors have options. In an integrated North American market, it is clear that such investors will not accept a lower rate of return from an Ontario utility when they could achieve

92 Exhibit KP1.3, Nexus Presentation Day Slides at slide 4; Exhibit M3, Nexus Report at 18-23.

⁹³ N-M3-10-OEB Staff-42.

a higher rate of return from a B.C. utility or a U.S. utility. While Commissioner Janigan asked questions about trying to make adjustments to U.S. ROEs to account for purported elevated levels of risk, first, there is no evidence such risk differentials exist (and will exist into the future) or that adjustments would be warranted, including because of Concentric's analysis described at paragraph 81 and, second, there is no evidence of what such adjustment could be.

D. Include Flotation Costs as Part of ROE

85. In addition to the ROE that resulted from the application of its CAPM, DCF, and risk premium methodologies, Nexus added 0.50% on account of transaction costs, or "flotation costs", associated with the issuance of equity. This is the same approach the Board used in 2009 and should not be discarded absent compelling and convincing evidence that they are not costs incurred in association with a deemed cost of capital (which evidence has not been adduced).

(i) Flotation costs must be included in ROE

- 86. The cost of capital reflects the "actual cost that needs to be recoverable" in order for utilities to raise capital and investors to keep their funds invested. 94 All of the experts, with the exception of LEI, agree that flotation costs should be recoverable as part of the authorized ROE. Even Dr. Cleary agrees that a flotation costs adder "embeds the actual costs of equity financing related to new equity issues into the cost of equity, as they should be". 95 They are validly included in a *deemed* cost of capital. The question is not what costs are *actually* incurred.
- 87. Flotation costs are costs associated with equity issuances that result in the cost of the capital

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⁹⁴ Day 1 Transcript at 59:10-17.

⁹⁵ Exhibit M4, Cleary Report at 34.

to the equity issuer being higher than the return actually required by investors themselves. ⁹⁶ These flotation costs include professional fees tied to equity issuances, such as bankers' and lawyers' fees. But Nexus points out that they also include dilution costs: "when you issue equity, you have the existing shareholders that then have less because of the fact that you have added more shareholders, so you basically have a numerator that is at one level but the denominator has gotten larger so the result has become smaller." These dilution costs are equally costs associated with equity issuances that must be factored into the ROE that a utility would need to earn to compensate for its cost of capital.

- 88. Nexus does not address financial flexibility, but an adjustment for flotation costs has also been described (including by Concentric in this proceeding) as taking into account "the need for financial flexibility, meaning that utilities are capital-intensive businesses and must be able to access capital markets at all necessary times regardless of conditions in capital markets or the economy."
- 89. LEI acknowledges these costs exist, but proposes a new and unparticularized scheme for recovering them, not doing away with them entirely. LEI's proposed approach for flotation costs is misguided, for four reasons:
 - (a) Unlike every other aspect of cost capture by the cost of capital, it compensates the utility for flotation costs as an actual cost and not part of an opportunity cost of the marginal investor, no matter who that investor may be. Every other aspect of the

⁹⁶ Exhibit K6.2, Tab 14, Laurence Booth, Sean Cleary & Ian Rakita, "Introduction to Corporate Finance: Managing Canadian Firms in a Global Environment," 4th ed (Toronto, ON: John Wiley & Sons Canada Ltd, 2016) at 703 ("Cleary Textbook").

⁹⁷ Day 4 Transcript at 138:16-23; see also Exhibit M3, Nexus Report at 36.

cost of capital is assessed on a deemed basis, not the actual cost of the utility. The fact that some utilities will never incur traditional equity "costs" because they are municipally owned does not mean the cost does not exist in a principled sense as part of an artificially modelled reality. 98

- (b) As explained by Mr. Zarumba, flotation costs "are essentially incurred and essentially become a permanent part of the utility capital structure". 99
- (c) LEI's proposed solution for expensing flotation costs does not include costs beyond the actual expenses associated with raising capital, such as legal and investment banker fees. In reality, the flotation costs are the difference between the gross value of the funds raised and the funds actually received by the utility. This difference includes third party expenses, but also dilution costs.
- (d) A flotation costs adder can also be viewed as taking into account financial flexibility, meaning that a utility needs to raise capital to serve customers when they require infrastructure (because of the requirement to serve), even if that is an inopportune moment in the markets to raise such capital.
- 90. These four reasons indicate flotation costs should be compensated for as part of the ROE, which is the well-established approach, not treated as a cost different from every other cost of capital. This is the pragmatic approach the Board used in 2009 and should continue to use. When pressed on cross-examination, even LEI conceded that "there might be a pragmatic reason to use

⁹⁸ Exhibit M4, Cleary Report at 34.

⁹⁹ Day 4 Transcript at 138:24-139:4.

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an evidence-based adder in ROE". 100

91. Addressing flotation costs otherwise than as a component of equity costs is also

inconsistent with IAS 32, which provides: "Costs of issuing or reacquiring equity instruments are

accounted for as a deduction from equity[.]"101

92. Finally, if the Board were to remove flotation costs from its authorized ROE, it would be

effectively confiscating from utilities their as-yet-unrecovered past equity costs. This is because

the historical 50 basis points adder reflects an amortization over infinity. As explained by Mr.

Zarumba, the flotation costs adder covers not only future equity raises but also part of the costs of

past equity raises:

MR. MORRISON: Okay. And what you say in your report is that, and I think you just covered this so I'm just going to try and put a point on it, is that the 50 basis

point adder essentially amortized the equity transaction costs over an infinite

period; is that correct?

MR. ZARUMBA: That's correct. So, they are essentially renting it, so there is no

recovery, so there is something out there.

MR. MORRISON: And so, your point isn't just that the adder captures future equity

transactions, it actually continues to capture previous equity transaction costs;

correct?

MR. ZARUMBA: That is true. 102

Quantifying flotation costs (ii)

93. The appropriate value to authorize for flotation costs is difficult to quantify with precision,

¹⁰⁰ Day 1 Transcript at 138:5-9.

¹⁰¹ Deloitte, "IAS 32 - Financial Instruments: Presentation," IAS Plus, available here.

¹⁰² Day 4 Transcript at 140:20-141:4.

because equity issuances are sporadic. In Dr. Cleary's textbook, he suggests the average issuing costs for a large equity issuer to be 5%, whereas for a small or private issuer the costs are even higher. ¹⁰³ Perhaps reflective of a similar figure, it has been common practice for Canadian regulators and some U.S. regulators to approve an "adder" for flotation costs, with 50 basis points being the typical value. ¹⁰⁴ A 50 basis points adder was included by the Board in its 2009 Board Report. The Board in 2009 had the benefit of a capital markets panel (which did not oppose the inclusion of the flotation costs adder) and reached a conclusion that is consistent with the principles described in this section and other Canadian jurisdictions.

- 94. In contrast, LEI labelled the Board's decision to include 50 basis points in the ROE for flotation costs a "gift". ¹⁰⁵ This inappropriately maligned the Board and there is no evidence supporting LEI's allegation.
- 95. Two recent regulatory proceedings considered flotation costs: the AUC's October 2023 order included the 50 basis points adjustment, whereas the BCUC's September 2023 decision did not. Importantly, unlike this Ontario proceeding, the BCUC decision did not set a deemed cost of capital for the energy utilities it regulates. Instead, the BCUC set the cost of capital for two specific Fortis utilities. ¹⁰⁶ In that context, the BCUC commented, "there is no evidence before the panel that [either of the two Fortis entities] incurs any flotation costs and therefore there are no costs to recover". ¹⁰⁷ Declining to include flotation costs in the ROE of the *specific* utilities was a decision

¹⁰³ Exhibit K6.2, Tab 14, Cleary Textbook at 704.

¹⁰⁴ Exhibit M2, Concentric Report at 71-72.

¹⁰⁵ Day 1 Transcript at 138:10-24

¹⁰⁶ Transcript Day 1, 133:9-20 and 134:11-28

¹⁰⁷ BCUC Decision at p. v.

quite different from the generic deemed cost of capital proceeding in which the Board is engaged.

96. For all of these reasons, the EDA urges the Board to maintain a 50 basis points adder as part of the authorized ROE it sets.

E. Issues That Have No Impact on an FRS-Compliant ROE

- 97. A concern raised by certain intervenors and Commissioners was the notion that the energy transition is actually a net benefit to utilities, with any risk mitigated by increases to the overall demand for electricity and therefore increases in revenues, such that an increase to the ROE was not justified.
- 98. Setting aside that the EDA's proposed increase to the ROE is based entirely on the application of its three methodologies designed to meet FRS, not the energy transition, there is no logical connection between the prospect of increased revenues and a reduction in risk. First of all, demand projections and associated revenues may never materialize, leaving Ontario utilities at risk of building assets that are ultimately under-utilized. Further, most of the EDA's customers are residential, and distribution fees do not vary with increased demand. In effect, therefore, demand increases cannot be used to pay for the considerable capital costs required to meet them.
- 99. In other words, more revenues overall are accompanied by a proportionate increase in capital expenditure and risk, with no resulting net financial benefit. 109 As explained further by Mr. Zarumba:

¹⁰⁸ N-M3-2-OEB Staff-31

¹⁰⁹ Day 2 Transcript at 138:23-139:27.

Capital is added to serve customers. One theme that has bothered me in this proceeding is its implication that adding capital is going to make utilities bigger and, because they are bigger, the utilities are better. That's not true.

The ROE is a cost to the utility. We have discussed that before. A fair return ROE essentially equates to what we economists would say is a zero profit. Something below that is actually an economic loss. Therefore, if the utilities become bigger but they are not awarded a fair return, they are just going to have a larger economic loss. And, as the old saying goes, you don't make it up in [volume]. Two, getting back to looking at the regulatory mechanisms, we need to have regulatory mechanisms that ensure that a utility that is operating prudently, that is achieving the goals that are neutral on the scorecards, have a reasonable opportunity to earn their return. From what we can tell now that's not the case, and that is referencing a graphic in the LEI report. 110

100. The graphic Mr. Zarumba references is a table contained in a letter provided by Staff on July 18, 2024 (the "July 18 Staff Letter"), which demonstrates that utilities in Ontario are on average not earning their authorized ROE. 111 Nexus points out that there may be several reasons a utility is not earning its authorized ROE – and according to Dr. Cleary, under-earning the ROE is an indication of elevated risk 112 – but it clearly reveals an issue that is currently unmet by existing regulatory policy. 113 This suggests that the Board should revisit the IRM and other regulatory mechanisms in a future proceeding to ensure they are sufficiently robust to allow utilities to earn their authorized ROE and incur the capital spend required to match the upcoming energy transition.

101. Another issue that arose on cross-examination was the suggestion that Ontario utilities have not experienced issues raising capital to date. Setting aside whether that is indeed true – and there is no evidence either way – it is irrelevant. The FRS is a forward-looking standard that is concerned

¹¹¹ Ontario Energy Board Staff, *Generic Proceeding – Cost of Capital and Other Matters: Return on Equity Value Requests – Updated*, EB-2024-0063 (Ontario: Ontario Energy Board, 18 July 2024).

¹¹⁰ Day 4 Transcript at 137:13-138:3.

¹¹² Day 6 Transcript, 40:12-15 and 143:4-12

¹¹³ Exhibit M3, Nexus Report at 31.

with whether the ROE will meet the capital attraction, financial integrity, and comparable investment standards. As stated by the Board in 2009: "the mere fact that a utility invests sufficient capital to meet service quality and reliability obligations" does not indicate the FRS has been met. Instead, the Board endorsed one party's submission that "the capital attraction standard is universally held to be higher than a rate that is merely non-confiscatory" and "maintaining rates at a level that continues operation but is inadequate to attract new capital investment can be considered confiscatory". 114

F. Non-ROE Issues Addressed by Nexus

102. In addition to Issue 10 from the Board's issue list, Nexus Economics addresses several other issues. In summary:

Issue	Summary	M3 Page Reference
2 - Risk Factors to Be Considered When Determining the Cost of Capital	Nexus identified the following risks: - Business risk - Financial risk - Strategic risk, including in respect of the energy transition Distributors in Ontario have been facing significantly higher levels of uncertainty than ever since the industry transformation in the late 1990s.	24-28
3- Key Regulatory and	Regulatory mechanisms impact the level of risk to which a utility is exposed. However, the regulatory environment offered in Ontario is not significantly safer than its peers.	29-33

¹¹⁴ 2009 Board Report at 20.

Issue	Summary	M3 Page Reference
Rate Setting Mechanisms		
8 - Treatment of Capital Acquisition Transaction Costs	Both debt transaction costs and equity transaction costs are the same economic phenomenon: they are both legitimately incurred in the procurement of a loan or equity and should be recoverable under the FRS. Transaction costs should be recovered over the life of the instruments, as they have been since 2009 and before, and for equity should continue to be reflected as a continued 50 basis points addition to the base authorized ROE. There is no evidence of a change in circumstances that warrants a change to this ROE adder.	34-37
11 - Perspectives of Debt & Equity Investors	The perspectives of both debt and equity investors are the primary determinants in setting the cost of capital parameters. Ontario distributors have on average failed to attain their authorized return on equity in any of the 8 years between 2015 and 2022. Even assuming that the authorized ROE itself met the Fair Return Standard, this reality provides clear evidence that the current Board cost of capital parameters as a whole is inconsistent with the FRS.	80-83
12 - Capital Structure / Equity Thickness	Nexus' proposal is that the Board retain its existing policy (60% debt, 40% equity) for now.	84
14 - On-going Monitoring Indicators Testing the Reasonableness of the Results of the Cost of Capital Methodology	The Board Staff should prepare quarterly reports on macroeconomic conditions and their impact on the cost of capital, and promptly make those reports public.	85

Issue	Summary	M3 Page Reference
15 - Review Mechanism to Ensure Adherence to the FRS	The Board should augment existing processes by monitoring credit rating and the pace of capital injections, plus conduct a benchmarking analysis of ROEs.	86
17 - Defined Interval to Review the Cost of Capital Policy	A litigated cost of capital proceeding should be held every three years. This recommendation for the three-year interval is consistent with the Auditor General's recommendation. 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) addresses uncertainty about energy policy and the impact of energy policy on cost of capital issues.	87

VII. LEI'S PROPOSED ROE SHOULD NOT BE ADOPTED

103. EDA reserves the right to make submissions about the Board staff's closing arguments, but at this stage offers a few submissions about LEI's analysis.

B. LEI's Adjusted ROE Falls Within Nexus Confidence Intervals

- 104. For the reasons described above, the EDA submits that Nexus' proposed ROE of 11.08 (or an ROE within the range of 10.36% to 11.81%) meets the FRS. Concentric's proposed ROE of 10.0 at an adjusted equity thickness is also within Nexus' confidence intervals and meets the FRS.
- 105. LEI's proposed ROE of 8.95 does not meet the FRS. It is not comparable to authorized ROEs in comparable jurisdictions, as explained above with reference to the July 18 Staff Letter. This lack of comparability also suggests it would not meet the capital attraction standard.

106. However, LEI's methodology suffers from three errors, the correction of which brings its resulting proposed ROE within the range of Nexus' confidence intervals: (i) it improperly focuses on a single methodology rather than incorporating all of its methodologies considered; (ii) it improperly omits any flotation costs adder; and (iii) it selectively rejects U.S. data in one aspect of its methodology but not others. Correction of even one of these errors upwardly impacts LEI's proposed ROE. Each is discussed below.

C. Sole Reliance on CAPM

107. Reliance on the CAPM to the exclusion of other models is an error resulting in an incomplete picture of a fair ROE. Indeed, Fama and French have commented that "the empirical record of the CAPM is poor – poor enough to invalidate the way it is used in applications. The CAPM's empirical problems may reflect theoretical failings, the result of many simplifying assumptions. But they may also be caused by difficulties in implementing valid tests of the model."

108. This is not to say the CAPM has no utility or should not be considered (and indeed, Nexus' proposed ROE is weighted 49% to its CAPM result). But it should not be considered as the *sole determinant* of ROE. As stated by Henri Theil in The Principles of Econometrics, "Models are to be used but not to be believed". ¹¹⁷ Fama and French have also pointed out that "all interesting

 $^{^{115}}$ Correction of the first two errors moves LEI's proposed ROE from 8.95% to 10.40%. Correction of all three moves it to 10.59%.

¹¹⁶ Fama and French at 25.

¹¹⁷ Henri Theil. PRINCIPLES OF ECONOMETRICS. (New York) (1971) John Wiley & Sons, p. vi, cited in Exhibit KP1.3, Nexus Presentation Day Slides at slide 15.

models involve unrealistic simplifications". 118

109. For these reasons, other regulatory bodies – including the 2009 Board Report, as outlined

above – have generally endorsed the preferability of considering multiple models in order to avoid

the limitations of any one of them. 119

110. LEI conceded on cross-examination that such reference to multiple models was the "exact"

approach followed by the 2009 Board Report, and what it declined to do in its proposal here:

MR. SMITH: Okay. And I am correct, sir, that alternative, the averaging of the

ROE, the capital asset pricing model, and the ERP, was exactly what the Board did

in its 0084 case; correct?

MR. PINJANI: Yes.

MR. SMITH: Right. And so, if we were to take your calculation of the capital

asset pricing model, not Dr. Cleary's, not Nexus's, not Concentric's, and we use your determination of CAPM, ERP and the DCF and we average them, that gives

me 9.6; correct?

MR. GOULDING: Yes, that's correct.

MR. SMITH: And that is without any adjustment for flexibility and flotation costs;

correct?

MR. GOULDING: Yes.

MR. SMITH: So, that is exclusive of the 50 basis-point adjustment?

MR. GOULDING: Yes. 120

111. There is no basis to move away from the 2009 Board Report's approach – and the approach

of other regulatory bodies - without clear evidence that the CAPM accurately determines ROE.

¹¹⁸ Fama and French at 25-26, 30.

¹¹⁹ BCUC Decision at 65; AUC Decision 2023.

¹²⁰ Day 1 Transcript at 84:24-85:12.

LEI itself articulates one of the principles on which it grounds its recommendation as "Transitioning away from the status quo only if the associated benefits are material as there is limited merit in modifying aspects of the methodology that have worked well." LEI has not presented such evidence. In circumstances where the CAPM cannot be relied upon with certainty, other models provide reasonableness checks that allow the Board to feel confident in its conclusions. Nexus' proposed use of weighted averaging also strikes a reasonable balance in which, if the CAPM has more closely clustered results, it will be afforded more weight.

D. Flotation Costs Are Properly Included in Deemed ROE

112. Every other expert, even Dr. Cleary, agreed that flotation costs are properly included as part of the deemed ROE. The EDA repeats and relies on the discussion in paragraphs 85 to 96 above.

E. Selective Application of Relevant Data from US Comparables

113. LEI acknowledged that its proxy groups were "overwhelmingly" made up of US utilities. LEI also acknowledged the integration of the Canadian and US capital markets. Indeed, LEI attempted to compute a CAPM ROE using Canadian MRP data, but acknowledged that the result generated did not reflect investors' expected equity returns because they would have sufficient opportunity costs based on the U.S. market.

¹²³ Day 1 Transcript at 102:3-103:21.

¹²¹ Exhibit M3, Nexus Report, p. 12.

¹²² Day 1 Transcript at 70:8-11.

¹²⁴ Exhibit M1, LEI Report at 120.

114. Despite LEI's recognition of the North American capital market, and despite using US data for its MRP and beta, LEI substituted a Canadian bond yield as the risk-free rate in its CAPM analysis. Nexus explains why this is an "apples and oranges error" in its Report:

[W]e do not agree that any long-term rate can be used in an implementation equation when the training phase used US Treasury bonds. Swapping in the LCBF at the implementation phase of a modeling project in place of the US data that is used in the training or estimation phase of the same project introduces an easily avoidable error. The swap violates the FRS's reliance on opportunity cost as its touchstone for equity returns. In a single market, there is but one price for a good. 125

115. Nexus explained further in answers to interrogatories that in addition to the points below, the US treasury bonds are bellwethers for the capital market and any differences with the Canadian long bond rate may be transitory. ¹²⁶

VIII. DR. CLEARY'S PROPOSED ROE DOES NOT MEET FRS

116. EDA also reserves the right to make submissions about AMPCO/IGUA's closing arguments, but at this stage offers a few submissions about Dr. Cleary's analysis.

117. Dr. Cleary did not consistently use established methodologies. Moreover, without intending any discredit to his relevant expertise, his proposed ROE is simply so far afield from a range of reasonable outcomes as to be a clear outlier and given no credit. If the Board were to adopt it or even approach it, Ontario utilities would be faced with an authorized ROE that is not comparable to any other North American jurisdiction and that does not allow it to compete for capital with comparable companies in the relevant capital market.

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¹²⁵ Exhibit M1, LEI Report at 50.

¹²⁶ N-M3-10-OEB Staff-45.

118. The flaws with his analysis are numerous, but stem from his insistence on repeating a consistent position that he has taken on multiple occasions over 10+ years, in different markets and at different times with different market conditions, always on behalf of consumer interests and with a stated belief that "authorized ROEs are too high". This subjective opinion leads him to make numerous methodological decisions that are not grounded in sound empirical and data-driven analysis, such as applying a "usual beta" in the face of market evidence that current betas are much higher, using a growth rate that implies negative real growth in the utility industry, and extrapolating a hypothetical example as the basis for his risk premium methodology.

A. Dr. Cleary's Consistent Position in Other Regulatory Proceedings

119. Compared to the proposed ROEs of the other experts in these proceedings (including LEI when the adjustments described above are implemented), the recommendation of Dr. Cleary can only be seen as an outlier designed with the purpose not of interpreting what the data shows, but advocating for a reduced ROE in an attempt to advance subjective belief that authorized ROEs in every jurisdiction are too high and counter-balance his perception of "utilities' experts".

120. Dr. Cleary confirmed on cross-examination that he has only ever represented consumer interests in all his cost of capital and other regulatory proceeding mandates. He has never provided evidence for a utility or a regulator. ¹²⁷

121. Dr. Cleary also acknowledged that his ROEs have always been materially below the authorized ROE ultimately ordered by the regulator. 128

¹²⁷ Day 6 Transcript at 31:20-32:1.

¹²⁸ Exhibit K6.2, Tab 6; Day 6 Transcript at 32:2-9.

- 122. Dr. Cleary readily admits that it is "not surprising to me that I'm recommending much lower than utilities' experts, because . . . I believe that allowed ROEs are too high in Canada and in the US." He therefore "argues" 130 to use Dr. Cleary's own words that U.S. utilities are not comparable to Canadian utilities. He has adopted this same position in multiple cost of capital proceedings in which he appeared. 131 In other words, he is convinced that his singular position is right and every regulator is wrong.
- 123. Dr. Cleary's role and perception of himself as an advocate who "argues" for consumers, rather than an expert whose opinion follows the data and current market conditions, is evident in several passages from his oral testimony. See, for example:

MS. STOTHART: And you've only ever recommended ROEs that are substantially below the authorized ROE that was ultimately ordered by the regulator; right?

DR. CLEARY: Just as the utilities' experts have consistently recommended those that are well above the authorized ROEs in all of the proceedings I'm involved in. 132

124. And as an even more striking example, he sees his role as a consumer advocate to balance off the evidence adduced by utilities:

MS. STOTHART: Okay. But you are aware that in British Columbia, in BC, in Canada, they set an ROE in their most recent proceeding of 9.65 percent; right?

DR. CLEARY: Yeah, and if you look at the record there, there was no expert representing the consumer groups in that proceeding for the first time in sometime. And so that decision seems totally in line with their previous decisions, when they had a balanced evidentiary providing from both the utilities side and the consumer's

¹³⁰ Exhibit M4, Cleary Report at 29 and 122.

¹²⁹ Day 6 Transcript at 31:8-16.

¹³¹ Day 6 Transcript at 114:1-10; Exhibit M4, Cleary Report at 29 and 122.

¹³² Day 6 Transcript at 32:5-7.

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side. And the Alberta decision was about the same time, and it was a more balanced decision, although, as you know, my opinion is that it was still a little bit too high. ¹³³

125. By contrast, Dr. Pampush described himself and Mr. Zarumba as a neutral "reporter". 134

The evidence of Nexus should be preferred.

B. Proposed ROE is Not Comparable to Any Authorized ROE

126. As already discussed in this argument, only Nexus' and Concentric's proposed ROEs

satisfy their FRS. Nowhere is this more evident than on the comparable investment standard.

127. Contrary to each of the other experts who acknowledge the need to authorize an ROE that

is comparable with jurisdictions considered comparable to Ontario, Dr. Cleary does not even agree

that is a relevant inquiry. He stated: "I don't use [authorized ROEs in other jurisdictions] as a

starting point and say, to satisfy the comparable investment component of the fair return standard,

we just have to set them in line with everyone else. I look at it objectively and look at the data and

say, if I was new to this world, which I was over a decade ago, what would my estimate of the cost

of equity be for these types of businesses." ¹³⁵ In other words, he tries to find the ROE that is

"correct", even if not comparable:

MS. STOTHART: . . . So, I just want to be very clear about your position. Your position is not that this Board -- your position is that this Board should not be

seeking to be comparable to the authorized ROEs in any other jurisdiction?

DR. CLEARY: That should not be the ultimate objective.

MS. STOTHART: Okay. And your position, by extension, is that these ROEs

authorized in every other jurisdiction are too high?

133 Day 6 Transcript at 36:9-20.

¹³⁴ Day 4 Transcript at 132:19.

¹³⁵ Day 6 Transcript at 42:17-43:2.

DR. CLEARY: That's correct. Well, sorry. I don't know about every other jurisdiction, but the ones that I am aware of. 136

128. That approach violates FRS, which *requires* comparison with like utilities.

129. There is not a single jurisdiction in North America that approaches Dr. Cleary's proposed ROE of 7.05. On cross-examination, Dr. Cleary could not identify any jurisdiction below 8.00,

and pointed only to Quebec as below 9.00. 137

130. Dr. Cleary's view, as he stressed repeatedly, is that U.S. and other jurisdictions' ROEs are too high. ¹³⁸ But the Board must recall that the FRS is interested in what the authorized ROE available in another jurisdiction *is*, not what Dr. Clearly thinks it *should be*.

C. Dr. Cleary Makes Numerous Methodological Decisions Which Under-Value ROE

131. Dr. Cleary reaches a proposed ROE of 7.05% based on several decisions in his methodological approach that can best be classified as subjective in each of his CAPM, DCF, and "bond yield plus risk premium" analyses.

132. With respect to the CAPM, Nexus highlighted on Presentation Day that, "Dr. Cleary's [CAPM] result of 5.55% is over 18 standard errors even from LEI's (N. American Capital Market) of 9.80%. The probability that Dr. Cleary is measuring even the same concept as LEI, Concentric, or Nexus is infinitesimally small." Furthermore, it is less than 100 basis points over the long-

¹³⁶ Day 6 Transcript at 44:3-16.

¹³⁷ Day 6 Transcript at 44:17-20.

¹³⁸ Day 6 Transcript at 31:10-16.

¹³⁹ Exhibit KP1.3, Nexus Presentation Day Slides at slide 19.

term debt rate Dr. Cleary presents, indicating that Dr. Cleary's recommended CAPM ROE would provide virtually no equity risk premium. ¹⁴⁰ Dr. Cleary's outlier result is the function of his MRP of 5% (which LEI called labeled "outside the zone of reasonableness for MRP"¹⁴¹) and his beta of 0.45, both of which are considerably lower than the remaining experts.

133. Dr. Cleary's sampling of Canadian weekly and monthly beta estimates reveals betas of 0.668 and 0.582, respectively (with US estimates being slightly higher). His sampling of seven-year average Canadian historical weekly and monthly betas are 0.658 and 0.513, respectively (with US estimates again being slightly higher). ¹⁴² Instead of inserting these numbers in his CAPM analysis, Dr. Cleary notes that they are "well above the long-term average beta estimate of 0.35" and then applies an arbitrary bump to his "usual beta estimate of 0.45". Without explanation, he labels this a "conservative and appropriate beta estimate". ¹⁴³ The proposed beta of 0.45 is thus not derived from any direct mathematical formula. ¹⁴⁴

134. Dr. Cleary has recommended the use of this same beta across multiple proceedings, at different times and under different market conditions. Dr. Cleary appears to view this as a feature of his analysis rather than a flaw, but his perspective here stands in direct contradiction to his acknowledgement that "capital markets can change throughout time" and that it is "important for the ROE to reflect the current capital market conditions". ¹⁴⁵ In the latter, he is correct: as stated

¹⁴⁰ Day 6 Transcript at 147:25-148:13.

¹⁴¹ Day 1 Transcript at 123:12-28.

¹⁴² Exhibit M4, Cleary Report at 92.

¹⁴³ Exhibit M4, Cleary Report at 92.

¹⁴⁴ Day 6 Transcript at 111:10-112:9.

¹⁴⁵ Day 6 Transcript at 26:10-17.

above, the purpose of the ROE is to reflect the *forward-looking* opportunity cost to investors.

135. With respect to Dr. Cleary's DCF analyses, both are flawed in similar ways, including that he uses a sustainable growth model that disregards "sell-side" analyst expectations despite the model's philosophical foundation in expected growth and cash flow (while then justifying his result with reference to nominal growth rates used by *other* analysts ¹⁴⁶), embeds the earned ROEs (which are themselves influenced by deemed ROE) into the very equation used to generate and recommend a different deemed ROE, and most importantly, suggests a growth rate that implies negative real growth in the utility industry.

136. Because Dr. Cleary uses existing ROE in his sustainable growth model equation, he ultimately proposes a result that is self-fulfilling and internally inconsistent. The sustainable growth model is based on the premise that a utility will be able to reinvest its earnings and earn the ROE. But a too-high or too-low ROE is thus baked into the equation and will not result in material changes in any proposed ROE generated from the application thereof. Dr. Roger Morin explains the flaws underlying this premise:

[T]here is a potential element of circularity in estimating [growth] by a forecast of [retained earnings] and ROE for the utility being regulated, since ROE is determined in large part by regulation. To estimate what ROE resides in the minds of investors is equivalent to estimating the market's assessment of the outcome of regulatory hearings. Expected ROE is exactly what regulatory commissions set in determining an allowed rate of return. In other words, the method requires an estimate of return on equity before it can even be implemented. Common sense would dictate the inconsistency of a return on equity recommendation that is different than the expected ROE that the method assumes the utility will earn forever. For example, using an expected return on equity of 11 % to determine the growth rate and using the growth rate to recommend a return on equity of 9% is inconsistent. It is not reasonable to assume that this regulated utility company is expected to earn 11% forever, but recommend a 9% return on equity. The only way

¹⁴⁶ Exhibit M4, Cleary Report at 97-98.

this utility can earn 11% is that rates be set by the regulator so that the utility will in fact earn 11%. One is assuming, in effect, that the company will earn a return rate exceeding the recommended cost of equity forever, but then one is recommending that a different rate be granted by the regulator. In essence, using an ROE in the sustainable growth formula that differs from the final estimated cost of equity is asking the regulator to adopt two different returns. 147

137. In other words: Dr. Cleary inputs an average ROE of 8.5% into his sustainable growth rate as the "expected ROE that the method assumes the utility will earn forever", in the same metaphorical breath as recommending a change in the deemed ROE to 7.05%.

138. Further, and critically, the growth rate Dr. Cleary employs in his single-stage DCF is 1.9%. ¹⁴⁸ As he notes in the same paragraph, the 2% Bank of Canada inflation target can be used as the basis for estimating nominal growth rates. This is unrealistic, and effectively implies that the electric utility industry will slowly disappear relative to the economy over time. For similar reasons, the AUC specifically rejected the use of a long-term growth rate that is less than inflation. The Commission stated:

[T]his growth rate [of 1.89%] is within the Bank of Canada's targeted range of 1 to 3 percent for inflation. If long-term inflation exceeds Dr. Cleary's 1.89 percent long term growth rate, this results in negative real growth. The commission considers that over the long term investors would not accept the risks of equity ownership if the expected long-term outlook for real growth was at or near negative levels. Consequently, the Commission will not accept the single-stage DCF model results in submitted by Dr. Cleary. ¹⁴⁹

139. An issue that applies across the entirety of Dr. Cleary's analysis is his disregard for any socalled "U.S." companies in his proxy group. Instead, he relies on data for a limited set of five

¹⁴⁹ AUC Decision 2018 at para. 439.

¹⁴⁷ Exhibit K6.2, Tab 40, Roger A Morin, *New Regulatory Finance* (Vienna, Va: Public Utilities Reports Inc, 2006) at 306.

¹⁴⁸ Exhibit M4, Cleary Report at 97.

comparable "Canadian" companies. And yet, when cross-examined and presented with evidence of his comparables' U.S. operations (including their self-published annual reports, which he claimed not to have reviewed), he was forced to concede that of his comparables, each of Algonquin, Emera, and Fortis engaged in considerable U.S. and non-Canadian operations (accounting for as much as 96% of revenues in the case of Algonquin). ¹⁵⁰

140. If these three utilities are excluded from Dr. Cleary's proxy group as required to be a truly "Canadian" comparable group, then the proxy group is made up of only two companies, one of which is Hydro One and is among the very utilities being regulated by this proceeding (and therefore not, in fact, *comparable* at all). ¹⁵¹ Dr. Cleary could not identify any Canadian regulator – and there is none – that relies on a proxy group of only two companies to underlie its ROE analysis. ¹⁵²

141. Finally, Dr. Cleary relies on a methodology called the bond yield plus risk premium, or "BYPRP", as another source justifying his low proposed ROE – this is a good example of why Dr. Cleary's approach is subjective and should not be taken seriously. His methodology on this point is based on an example from a test problem contained in a CFA textbook. ¹⁵³ It involves adding the Canadian long-term bond yield to a risk premium, which Dr. Cleary says is 2.5% because "the usual range is 2-5%, with 3.5% being commonly used for average risk companies, and lower values

¹⁵⁰ See discussion at Day 6 Transcript at 113:12-131:11 and the documentary references referenced therein; see also Exhibit KP1.3, Nexus Presentation Day Slides at slide 12.

¹⁵¹ Day 6 Transcript at 130:25-131:14; AMPCO-IGUA Response to Undertaking J6.1.

¹⁵² Day 6 Transcript at 131:18-21.

¹⁵³ Despite Dr. Cleary's insistence that he provided more references in response to an interrogatory, the referenced interrogatory response – N-M4-EDA-5 – references only ranges and does not provide any more specific basis for the 2.5% risk premium used.

for less risky companies". 154

142. Dr. Cleary cites a CFA homework problem involving a hypothetical IBM beta as an example indicating his proposed 2.5% risk premium "is very reasonable by comparison" since "clearly IBM is riskier than a regulated A-rated utility". ¹⁵⁵ Yet a different edition of the same CFA textbook uses an identical example with different numbers, reflecting that it is nothing more than an example used for students to model and practice. ¹⁵⁶ It is certainly no benchmark against which to compare how risky an Ontario utility or how reasonable a risk premium is.

143. The AUC specifically rejected Dr. Cleary's same proposed risk premium as too low in its 2023 decision, stating: "Dr. Cleary's recommended risk premium of 2.50 per cent is subjective, not supported by any analysis and does not take into account the changing market environment". 157

IX. CONCLUSION

144. For all of the reasons set out above and detailed in the Nexus Report, the various interrogatory and undertaking responses provided, and the evidence offered at the oral hearing, the EDA respectfully submits that its proposed deemed ROE of 11.08% should be authorized by the Board.

154 Exhibit M4, Cleary Report at 107-08.

¹⁵⁵ Exhibit M4, Cleary Report at 41 and Attachment AH.

¹⁵⁶ Exhibit K6.2, Tab 33, Equity Asset Valuation, 2nd Edition.

¹⁵⁷ AUC Decision 2023 at para. 168.