ONTARIO ENERGY BOARD

2024 Review of Cost of Capital Parameters and Deemed Capital Structure

INTERROGATORIES

of

INDUSTRIAL GAS USERS ASSOCIATION (IGUA) and
ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO (AMPCO)

for

CONCENTRIC ENERGY ADVISORS

M2-7-AMPCO/IGUA-1

Reference: On page 41, Concentric makes reference to the data used to construct Figure 2 on page 42, which compares the deemed vs actual long-term debt cost rate over the January 2010-January 2024 period, and states (bold added for emphasis):

> *Since 2010, the OEB's deemed long-term debt cost rate has had periods of being above and below the Bloomberg index, and* ***averaged 40 bps higher than the index****.*

Questions:

(a) Please provide all data and workpapers (in excel format), including all formulas and calculations, used to prepare Figure 2, and to determine the 0.40% average referenced in the cited reference.

(b) Please confirm that the observations used to determine the "OEB Deemed Long-Term Debt Rate" depicted in Figure 2, are determined using September forecasts for 10-year Government of Canada bond yields, which are then adjusted to provide estimates of 30-year Government of Canada yields. If not confirmed, please explain.

(c) Please confirm that the cited reference confirms that the deemed long-term rates (based on forecast yields) averaged +0.40% higher than the actual yields that resulted. If not confirmed, please explain.

(d) Please confirm that the +0.40% upward bias (discussed in question (c)) documented by Concentric is identical to the +0.40% upward bias that is determined by Dr. Cleary in Appendix A of his evidence, with respect to OEB 30-year Government of Canada yield forecasts, versus actual yields that prevailed over the 2011-2023 period. If not confirmed, please explain.

M2-10/12-AMPCO/IGUA-2

References: On page 11 of its evidence, Concentric states (bold added for emphasis):

> *An 8.95 percent authorized ROE would be in the bottom decile of* ***authorized ROEs among Canadian and U.S. utilities*** *and* ***would not satisfy the Fair Return Standard.***

On page 12, Concentric states (bold added for emphasis):

> *With regard to equity thickness, Concentric's* ***primary finding*** *within the context of this generic cost of capital proceeding is that Ontario equity ratios across all industry segments are* ***lower than North American industry peers*** *and* ***fail to meet the comparable return standard component of the Fair Return Standard****.*

Alberta Utilities Commission Decision 22570-D01- 2018, para. 474:

> *As previously discussed in Section 4, the Commission will not take any guidance from the evidence presented about approved utility ROEs in other Canadian and U.S. jurisdictions. The objective of the GCOC is to consider the market expectation for the affected utilities and not what other regulators are allowing.*

Alberta Utilities Commission Decision 20622- D01-2016, para. 303:

> *The Commission finds that the material presented by Dr. Villadsen in Figure 21 of her evidence simply lists the allowed ROEs and common equity ratios for a sample of U.S. and Canadian utilities. This information does not permit the Commission to address the deficiencies identified in the 2009 GCOC Decision such as applicable legislations and case law, and individual factors specific to the utility, like the business risk of the utility.* (footnote omitted)

Preamble: Concentric's ROE and equity ratio (ER) recommendations appear to rely heavily on the argument that since allowed ROEs and ERs in the U.S. are higher than those for Ontario utilities, the Ontario utility allowed ROE and ERs need to be increased. There are at least 25 such references in Concentric's report to Ontario allowed ROEs and/or ERs being below those allowed in the U.S., as well as 14 that reference comparisons to both North American and Canadian ratios.

Questions:

a. Does Concentric agree that as or more important than considering allowed ROEs and ERs in other jurisdictions in determining the appropriate ROE and ER for Ontario's utilities is an examination of Ontario utilities' business risk, and examination of market-based evidence regarding factors that should impact earned ROEs, such as expected future stock market returns, government bond yields, yields on Ontario utility bonds, etc.?

b. Is it Concentric's view that the Alberta Utilities Commission (AUC) is wrong in its findings noted as reference for this question? If yes, please explain the basis for such a view.

M2-10-AMPCO/IGUA-3

References: On page 44, Concentric discusses macroeconomic data in May 2024, which it compares to the same November 2009 figures. In its discussion, Concentric states (bold added for emphasis):

> *As shown in the above Figure, **while interest rates on 30-year Canadian government and utility bonds have declined since November 2009**, most other market indicators have increased.*

Exhibit M4, Figure 1:

> Dr. Cleary's evidence reports real GDP growth for Canada in 2008 and 2009 of 1.00% and -2.95% respectively, versus the 1992-2022 average of 2.32%, which is consistent with current real GDP growth expectations for Canada in 2025 of 2.2% according to the Bank of Canada's April 2024 Monetary Policy Report (MPR).
>
> With respect to CPI, Dr. Cleary's evidence reports CPI for Canada in 2008 and 2009 of 1.34% and 1.30% respectively, versus the 1992-2022 average of 2.00% (the Bank's target rate), which is consistent with CPI expectations for Canada in 2025 of 2.2% according to the Bank's April 2024 MPR.

Exhibit M4, Figure 3:

> Dr. Cleary's evidence reports stock market returns on the TSX/S&P Index were -32.95% and +35.04% in 2008 and 2009 respectively, versus the 1998-2023 average of 8.4%; while in the U.S. the S&P 500 returns for 2008 and 2009 were -36.92% and +26.45% respectively, versus the 1998-2023 average of 9.93%.

Questions:

(a) Would Concentric agree that capital market conditions in Canada and the U.S. in November 2009 were atypical as a result of the financial crisis of 2008 and early 2009? If not, please explain please explain why Concentric believes November 2009 is a typical and representative point in time for economic and capital market conditions in Canada and the U.S..

(b) Can Concentric confirm that;

i. Long-term Government of Canada yields and Canadian A-rated utility yields are included in the OEB's ROE formula and bear a very direct relationship to Ontario utilities' cost of equity (KE)?

ii. Long-term Canada yields have declined 0.43% since 2009?

iii. A-rated utility yields have declined 0.55%?

iv. The yield spread between the two yields has declined from 1.46% in 2009 to 1.35% (slightly above the long-term average of 1.3%) today?

v. Long-term Canada yields are used as a proxy for the risk-free rate (RF) in CAPM cost of equity estimates (including those provided by Concentric)?

vi. Utility yields comprise approximately 60% of the weighted average cost of capital for Ontario utilities (assuming a 40% equity ratio), and are closely linked to their cost of equity (KE), and that this relationship is clearly defined in the widely used bond yield plus risk premium approach to estimating Ke?

(c) Would Concentric agree that the changes listed in part (b) of this question are very positive capital market condition changes relative to conditions in 2009, and positively affect Ontario utilities? If not please explain why not.

M2-10-AMPCO/IGUA-4

References: On page 46, Concentric provides its Canadian proxy group in Figure 4 as copied below:

Figure 4: Canadian Proxy Group

Company	Ticker
AltaGas Limited	ALA
Canadian Utilities Limited	CU
Emera, Inc.	EMA
Enbridge, Inc.	ENB
Fortis, Inc.	FTS
Hydro One Ltd.	H

2024 Alberta Utilities Commission Proceeding 27084, Determination of the Cost-of Capital Parameters in 2024 and Beyond, November 10, 2022 (GCOC), memo to all parties, Appendix A – Finalized screening criteria," (27084-X0256 2022-11-10 Appendix A - Finalized screening criteria):

> *The following publicly traded Canadian utility holding companies are included in the comparator group, regardless of the screening criteria:*
>
> *o Algonquin Power & Utilities Corp.*
> *o Canadian Utilities Ltd.*
> *o Emera Inc.*
> *o Fortis Inc.*
> *o Hydro One Ltd.*

2024 Alberta Utilities Commission Proceeding 27084, Determination of the Cost-of Capital Parameters in 2024 and Beyond, Generic cost of capital issues list and other matters" (27084-X0255 2022-11-10 AUC letter - GCOC issues list and other matters), page 4 (bold added for emphasis):

> *15. While consensus was successfully reached on the majority of items discussed at the technical conference, certain matters remained outstanding and required further submissions from all parties, which the*

Commission received on November 2, 2022. The Commission has reviewed these submissions and provides a ruling on each unresolved item below:

(a) Inclusion of TC Energy Corporation and Enbridge Inc. – The Commission has determined that ***the comparator group will not include TC Energy Corporation and Enbridge Inc.*** *Integration of these companies would be inconsistent with the Commission's prior approach for determining ROE.*[16] *Furthermore,* ***the associated business risk, form of regulation and comparability of the two companies is not representative of that for regulated transmission and distribution utilities*** *under the Commission's jurisdiction. The majority of parties took a similar position in their November 2, 2022, submissions.*

[16] *Decision 22570-D01-2018: 2018 Generic Cost of Capital, Proceeding 22570, August 2, 2018, paragraph 273.*

Questions:

(a) Please confirm that the five Canadian utilities included in the AUC's Canadian proxy group listed above were determined to be reasonable comparable Canadian utilities during the 2024 Alberta Generic Cost of Capital Proceedings.

(b) Please confirm that during the 2024 Alberta GCOC Proceedings Mr. Coyne of Concentric opposed the inclusion of AltaGas Limited (a BBB- rated utility) as a reasonable Canadian utility comparator.

(c) Please confirm that at the time of the Alberta GCOC proceeding, relative to the AUC's approved proxy group as noted in the above references, AltaGas Limited had:

(i) the highest growth estimate of 8.98% versus group average of 5.27% (which includes AltaGas' high growth rate);

(ii) the second highest DCF Constant-Growth Ke estimate used by Concentric for its Canadian proxy group of 13.22% versus group average of 10.56% (which includes AltaGas' high Ke estimate);

(iii) the highest beta estimate used by Concentric for its Canadian proxy group of 1.16 versus group average of 0.84 (which includes AltaGas' high beta estimate); and

(iv) the highest CAPM (Historical MRP) Ke estimate used by Concentric for its Canadian proxy group of 11.39% versus group average of 9.36% (which includes AltaGas' high Ke estimate).

(d) Please explain why AltaGas is now included by Concentric in its Canadian Proxy Group for the purposes of its evidence in this proceeding.

(e) Please confirm that at the time of the 2024 Alberta GCOC proceeding, relative to the AUC's approved proxy group as noted in the above references, Enbridge Inc. had:

(i) the highest expected dividend yield of 7.77% versus group average of 5.28% (which includes Enbridge's extremely high dividend yield);

(ii) the second highest DCF Constant-Growth Ke estimate used by Concentric for its Canadian proxy group of 12.56% versus group average of 10.56% (which includes Enbridge's high Ke estimate);

(iii) the second highest Beta estimate used by Concentric for its Canadian proxy group of 0.89 versus group average of 0.84 (which includes Enbridge's' high beta estimate); and

(iv) the second highest CAPM (Historical MRP) Ke estimate used by Concentric for its Canadian proxy group of 9.69% versus group average of 9.36% (which includes Enbridge's high Ke estimate).

(f) Please confirm that if Concentric excluded AltaGas Limited and Enbridge Inc. from its Canadian proxy group in this proceeding, that:

(i) The average constant-growth DCF Ke estimate would decline 1.17% from 10.56% to 9.39%.

(ii) The average CAPM (historical MRP) Ke estimate would decline 0.58% from 9.36% to 8.78%.

If not confirmed, please explain.

M2-10-AMPCO/IGUA-5

Reference: On pages 50-55, Concentric discusses the integration of Canadian and U.S. capital markets in order to justify its heavy reliance on U.S. utilities (it includes 19 of 25 U.S. utilities in its North American proxy group, which it bases all of its ROE and ER estimates upon). As part of its discussion, Concentric's Figure 9 (on page 54), includes a 2021 assessment of country risk ratings provided by UBS.

Questions:

(a) Please confirm that the UBS sovereign risk ratings at the time of the 2021 assessment referenced above were A for Canada and AA for the U.S.

(b) Please confirm that more recent (January 2024) data;

(i) rates Canada's sovereign debt at AAA (both S&P and DBRS) and Aaa (Moody's)[1]; and

(ii) rates U.S. sovereign debt as AA+ (S&P) and AAA (DBRS) and Aaa (Moody's).

If not confirmed, please provide corrected ratings and sources therefore.

(c) Would Concentric agree that there is a "home bias" among investors, not only from Canada, but also globally. (For example, while Canadian equities generally represent less

[1] Source: https://tradingeconomics.com/country-list/rating , January 22, 2024.

than 3% of world stock markets (e.g., 2.9% as of September 30, 2021) Canadian investors (including institutions) had a domestic allocation for equities over 40% in 2020.[2] The home bias is even more dramatic in Canadian fixed income markets, which similarly comprise about 3% of global fixed income markets, but Canadian investors had a domestic allocation for fixed income of approximately 84%.)

If not confirmed, please explain and provide empirical support for any such explanation.

(d) Please confirm that U.S. yields have been higher than Canada yields for several years, and that this is still the case. (For example, as shown in Figure 7 of Dr. Cleary's evidence: the short-term U.S. rates of one year or less were 0.6-0.7% above Canadian rates, while two-year U.S. rates were about 0.8% higher, with 5- and 10-year U.S. yields being about 0.90% higher, and 30-year yields being over 1.1% higher.)

If not confirmed, please explain.

(e) In light of the information cited in questions (c) and (d), does Concentric believe that Ontario utilities would choose to borrow at higher rates in the U.S. and suscept themselves to currency risk, on top of paying higher interest costs? If so, please elaborate on the basis for this belief.

(f) Please provide specific examples over the past five years of Ontario utilities accessing debt and/or equity capital from the U.S. that was of comparable quantity to the amount of debt and/or equity capital that was sourced in Canadian capital markets.

(g) Please provide specific examples over the past five years of U.S. utilities accessing debt and/or equity capital from Canada that was of comparable quantity to the amount of debt and/or equity capital that was sourced in U.S. capital markets.

M2-10-AMPCO/IGUA-6

References: On pages 58-62, Concentric discusses its approach to estimating growth rates to be used in determining its constant-growth and multi-stage growth DCF estimates. On page 59, Concentric justifies its use of analyst growth forecasts, stating (bold added for emphasis):

> ***Some intervenors and utility regulators in Canada have expressed concern that analysts' earnings growth rates may be overly optimistic, and LEI makes this assertion in its report in this proceeding****. If optimism bias were present in analysts' earnings forecasts, it* ***could create an upward bias in the estimated cost of capital*** *that results from the DCF approach. To control for this concern, some analysts have used GDP growth as a proxy for long-term earnings growth.* ***We, however, do not share the view that analysts' earnings growth rates are biased****, as discussed below.*

[2] Source: https://www.finiki.org/wiki/Home_country_bias#cite_note-8, September 10, 2022.

On page 60, Concentric states (bold added for emphasis):

> Both average earnings and average dividend growth for the three North American proxy groups exceeded actual GDP growth over the period. This is unsurprising, as earnings for utilities can, and do, exceed the growth of the overall economy. As evidenced by the data, **there is no fundamental basis to assume that economy-wide GDP growth with a mix of macroeconomic, social and business drivers serves as a limit on utility earnings or dividend growth**.

Alberta Utilities Commission Decision 2191-D01-2015, 2013 Generic Cost of Capital, paragraph 190 [footnote omitted, bold added for emphasis):

> *However, the Commission is also mindful that, as both experts acknowledged,* ***the GDP growth rate may be an ambitious target*** *for long-run earnings growth in respect of low-risk, mature, utilities.*

Questions:

(a) During the Alberta Utilities Commission 2018 Generic Cost of Capital proceedings Mr. Coyne's written Rebuttal Evidence[3] cited research by Easton and Sommers which Mr. Coyne noted *"has put the "optimism" bias in analysts' growth forecasts at an average of 2.84 percent."* Does Mr. Coyne accept the validity of the research findings so cited? If not, please explain why not.

(b) Please provide all data and workpapers (in excel format), including all formulas and calculations, used to prepare Figure 10 in Concentric's report.

(c) Please explain why Figure 10 includes EPS growth forecasts for 2027-29 (three years from now), and GDP growth forecasts for 2030-2034 (six years from now)?

(d) Please confirm that;

a. The data used to construct Figure 10 is based on data for the 25 utilities included in Concentric's North American proxy group.

b. 19 of these utilities are U.S. companies.

c. Most (if not all) of the 25 companies are holding companies and not regulated operating utilities.

If not confirmed, please explain.

(e) Please confirm that Concentric's evidence shows that historical EPS growth (which it accentuates is the appropriate measure of growth estimates) for its sample of mainly U.S. and holding utility companies was 4.93% over the 2009-2023 period, while its estimate of GDP growth over the period was 4.59%, **just 0.34% lower**. If not confirmed, please explain.

[3] AUC 2018 Generic Cost of Capital Proceedings, Exhibit 22570-X0775, Rebuttal Evidence of James Coyne, page 42.

(f) Please confirm that in contrast to the small difference in historical EPS growth versus GDP growth for Concentric's sample of mainly U.S. and holding utility companies, Concentric's average growth rate estimate for its Canadian proxy group of 5.27% exceeds Concentric's estimate of Canadian GDP growth of 3.84% **by 1.43%**, while its average growth rate estimate for its North American proxy group of 5.98% exceeds Concentric's estimate of North American GDP growth of 3.99% by **1.99%**. If not confirmed, please explain.

(g) Does Mr. Coyne agree with the Alberta Utilities Commission statement excerpted in the references for this interrogatory? If not, please explain Mr. Coyne's view in respect of that statement and the rationale for that view.

M2-10-AMPCO/IGUA-7

Reference: On pages 58-62, Concentric discusses its constant-growth and multi-stage growth DCF estimates, which Concentric reports in Figure 13, based on calculations reported in Exhibit CEA-4 and CEA-5 of its Appendix.

Questions:

(a) Please confirm that the average Canadian proxy group Constant-Growth DCF estimates provided in Figure 13 are based on an average future long-term growth rate (to infinity) of 5.27%, which exceeds Concentric's estimate for Canadian GDP growth of 3.84% **by 1.43%**. If not confirmed, please explain.

(b) Please confirm that the average North American proxy group Constant-Growth DCF estimates provided in Figure 13 are based on an average future long-term growth rate (to infinity) of 5.98%, which exceeds Concentric's estimate for North American GDP growth of 3.99% **by 1.99%**. If not confirmed, please explain.

(c) Please confirm that using a long-term growth rate in the Constant-Growth DCF model assumes that this growth rate persists to infinity, and not just for a period of 10 years or less. If not confirmed, please explain.

(d) Exhibit CEA-4 reports the Constant-Growth DCF Ke estimate for the North American proxy group of 10.59% (before flotation costs). Please confirm this 10.59% estimate is based on the sum of the long-term growth estimate of 5.98%, and an expected dividend yield (DY) of 4.61% both of which are provided in Exhibit CEA-4. If not confirmed please provide the correct estimates used.

(e) Please confirm in its multi-stage DCF model, that Concentric assumes the higher analyst growth rates exist for a full 5 years, then gradually decline over the following 5 years to a stable long-term growth rate equal to its estimate of long-term nominal GDP growth. Therefore, this approach assumes that utilities' earnings and dividends will grow at rates above nominal GDP growth for 10 years, then will grow at estimated nominal GDP growth from year 11 to infinity. If not confirmed, please clarify.

(f) Exhibit CEA-5 provides the multi-stage DCF Ke estimate for the North American proxy group of 9.45% before flotation costs. According to Exhibit CEA-5 (and Figure 11), this

estimate is based on a growth rate of 5.98% for years 1-5, an average growth rate of 4.99% for years 6 through 10, followed by long-term growth of 3.99% from years 11 to infinity. Please confirm that the long-term growth rate that would also lead to a 9.45% Ke estimate (pre-flotation costs) for the North American proxy group in the Constant-Growth DCF model, based on an expected dividend yield (DY_1) of 4.61% would be 4.45% (given the Constant-Growth DCF model Ke (9.45%) = DY_1 + g = 4.61% + 4.84%).

If not confirmed, please provide the correct corresponding long-term growth rate in the Constant-Growth DCF model that would result in a Ke estimate of 9.45% for the North American proxy group, based on its DY_1 of 4.61%.

(g) Please confirm the implied long-term growth rate of 4.84% determined in part (h) above is well above Concentric's estimate of North American long-term nominal GDP growth of 3.99%. If not confirmed, please explain.

(h) Does Concentric agree that the analysis included in parts (f) and (g) above demonstrate that Concentric's growth forecasts used in obtaining its multi-stage DCF estimates provide results are equivalent to using a growth rate of 4.84% in a Constant-Growth DCF model, which exceeds Concentric's 3.99% estimate of expected North American nominal GDP growth? If not, please explain why not.

M2-10-AMPCO/IGUA-8

Reference: On pages 64-66, Concentric discusses its risk-free (RF) rate estimates that it uses in its CAPM Ke calculations.

Questions:

(a) Please provide the April 2024 Consensus Economic forecast document used to support these estimates, which is referenced in footnote 75 on page 65.

(b) Given that pages 41-42 of Concentric's evidence show that the deemed long-term debt rates (based on forecast yields) averaged +0.40% higher than the actual yields, please explain why Concentric chose to rely on "forecasts" for 10-year Canada yields and then estimates a spread it adds to this forecast to estimate 30-year Canada yields.

(c) Please explain why Concentric added the 0.33% historical spread between 10- and 30-year Canada bond yields, rather than the current negative spread (in Canada) that Concentric noted on page 64 of its evidence.

(d) Please confirm that in the CAPM, RF represents the actual existing risk-free asset that an investor can invest in today and earn the risk-free rate of return. If not confirmed, please explain.

(e) Please explain how a Canadian investor today could buy a 30-year Government of Canada bond promising a risk-free rate of return of 3.46% (i.e. Concentric's estimated Canadian RF), when available 30-year Canada bonds are trading at prices that provide a yield of 3.30%?

M2-10-AMPCO/IGUA-9

References: On pages 66-68, Concentric discusses its beta estimates it uses in its CAPM Ke calculations.

On page 66, Concentric states that:

> "… empirical studies have provided evidence that an individual company beta is more likely than not to move toward the market mean of 1.0 over time." The study by Blume that Concentric references to support this assertion in footnote 77 is a 1970 article – 54 years old.

Evidence supporting the fact that utility betas do not gravitate towards one:

Michelfelder and Theodossiou (2013) show empirically that utility betas do not have a tendency to converge to 1.0 and concluded that the adjusted betas as reported by Value Line are not applicable for public utilities.

- As shown in Appendix B of Exhibit M4 herein (Dr. Cleary's evidence), Sikes (2022) provides a chart in Figure IV of his report that estimates betas for utilities over the 1970-2020 period (i.e., using over 50 years of observations) that leads Sikes to note (on page 48 of his report) that: "It is undeniable based on Figure IV that the Value Line Adjustment is inappropriate. Clearly, utility betas have been consistently below 1.0 and as shown in Exhibit H of the Appendix, the historical sample suggests an average of 0.55." In fact, the line depicting adjusted betas in Sikes' Figure IV is ALWAYS above the line depicting actual betas – which clearly shows that adjusted beta estimates are upwardly biased.

- Exhibit M4, Appendix B shows that over the historical raw Beta estimates for Canadian Utilities over the 1995-2019 period averaged 0.40 (weekly data) and 0.34 (monthly data), with maximums of 0.71 and 0.62 respectively and nowhere during this 25-year period did the Canadian Utility beta estimates even come close to 1.0.

- Exhibit M4, Appendix B shows that over the historical raw Beta estimates for U.S. Utilities over the 1995-2019 period averaged 0.49 (weekly data) and 0.42 (monthly data), with maximums of 0.84 and 0.85 respectively and nowhere during this 25-year period did the U.S. Utility beta estimates even come close to 1.0.

Questions:

(a) Please provide the Blume (1970) study referenced in footnote 77.

(b) Please confirm that the Blume (1970) study referenced by Concentric examines beta estimates for a broad variety of industries and does not focus on one particular industry (including utility stocks). If not confirmed, please explain.

(c) Given the evidence cited above that utility betas do not gravitate to one (or that utility sample averages never get close to one) please explain the rationale for Concentric's reliance on upwardly biased adjusted beta estimates.

(d) Please provide all the associated raw "unadjusted" beta estimates for the beta estimates provided in Concentric's Exhibit CEA-7.3 for the Canadian and North American proxy groups, and recalculate Concentric's CAPM Ke estimates for all of the proxy groups as reported in Figure 18 (page 70) of Concentric's evidence using raw beta estimates. If Concentric is unable to locate the raw or unadjusted beta estimates from the initial data sources, please adjust the beta estimates using the formula:

$$\text{Raw Beta} = (\text{Adj. Beta} - 1/3) \times (3/2)$$

For example, the average adjusted beta of 0.84 for the Canadian proxy group would equate to a raw beta of 0.765 as calculated below:

$$\text{Raw Beta} = (0.84 - 0.33)(3/2) = 0.765$$

Please provide all supporting data and worksheets (in excel format), with all accompanying formulae.

M2-10-AMPCO/IGUA-10

References: On pages 69-70, Concentric discusses its market risk premium (MRP) estimates it uses in its CAPM Ke calculations, and its final CAPM Ke estimates.

On page 70, Concentric states:

> *Although we have presented our CAPM results using three different MRPs (i.e., an average of the forward-looking and historical MRP, a forward-looking MRP, and an actual historical MRP), as discussed above, our recommended ROE for Ontario's utilities uses the CAPM results with the actual historical MRP.*

Questions:

(a) Please provide the source documents, as well as workpapers including all data and calculations used to estimate the historical MRP estimates for Canada and the U.S.

(b) Please confirm that the historical MRP estimate for Canada of 5.68% is 35% higher than the arithmetic average estimate of 4.2% provided in the Dimson et al. (2016) study[4] (which examines MRPs over the 1900-2015 period), and is 72% above the geometric average of 3.3% determined in the same study. If not confirmed please provide the actual percentage differences.

(c) Please confirm that the historical MRP estimate for the U.S. of 7.17% is 24% higher than the arithmetic average estimate of 5.8% provided in the Dimson et al. (2016) study (which

[4] This study is included as Exhibit AY of Exhibit M4 (Dr. Cleary's evidence), and is summarized in Figure 12 on page 40 of that evidence.

examines MRPs over the 1900-2015 period), and is 63% above the geometric average of 4.4% determined in the same study. If not confirmed please provide the actual percentage differences.

(d) Please explain why Concentric's historical MRP estimates are so much higher than those included in the Dimson et al. (2016) study, given the significant overlap of a large number of annual observations included in both estimates.

(e) Please confirm that Concentric estimates its forward-looking Canadian MRP of 12.09% using the Constant Growth DCF Model, with calculations provided in Exhibit CEA-6.1 of the Appendix that uses an expected dividend yield of 3.60% and an expected growth rate of 11.95%, which translates into an expected market return of 15.56%. Concentric then subtracts its RF estimate of 3.46% to arrive at a Canadian forward-looking MRP of 12.09%. If not confirmed, please explain.

(f) Please confirm that the company growth estimates used to calculate the average market growth expectations for the Canadian market are based on only 60 (of 230) company growth estimates, with 170 company growth estimates not being available. If not confirmed, please explain.

(g) Please confirm that the company growth estimates used to calculate the average market growth expectations for the Canadian market range from +194.72% to -29.16%. If not confirmed, please provide the range in growth estimates for the companies used to estimate the market growth estimate.

(h) Given the lack of growth data for 170 (74%) of the 230 companies included in the S&P/TSX Index, as well as the wide variability in such growth estimates that are available, please explain why Concentric did not follow common finance practice and simply use its estimate of long-term nominal GDP growth of 3.84% for Canada as its growth estimate and combine it with the average expected S&P/TSX dividend yield of 3.60% to estimate the expected return on the market (which would equal 7.44%), and hence the MRP.

(i) Please confirm that Concentric estimates its forward-looking U.S. MRP of 11.30% using the Constant Growth Model, with calculations provided in Exhibit CEA-6.1 of the Appendix that uses an expected dividend yield of 1.73% and an expected growth rate of 13.71%, which translates into an expected market return of 15.45%. Concentric then subtracts its U.S. RF estimate of 4.14% to arrive at a U.S. forward-looking MRP of 11.30%. If not confirmed, please explain.

(j) Please confirm that the company growth estimates used to calculate the average market growth expectations for the U.S. market range from +189.05% to -24.00. If not confirmed, please provide the range in growth estimates for the companies used to estimate the market growth estimate.

(k) Can Concentric please reconcile such high predicted growth rates in earnings (and dividends) for Canadian (11.95%) and U.S. (13.71%) companies with Concentrics' own forecast of expected nominal GDP growth rate for the Canadian and U.S. economies of 3.84% and 4.04% respectively? Please explain why we can expect corporate profits to grow at 12-14%, despite

the respective economies only growing at an annual rates that are **less than one-third** of these growth figures at around 4%.

(l) Can Concentric please reconcile such high predicted expected market returns for Canadian (**15.56%**) and U.S. (**15.45%**) companies with the long-term average expectations of market professionals for expected market returns of **6.1%** for Canada and **6.8%** for the U.S., as provided in Table 7 of Exhibit M4 (Dr. Cleary's evidence)?

(m) Please explain why Concentric disregards the forward-looking and average MRP CAPM Ke estimates.

M2-10-AMPCO/IGUA-11

References: On pages 74-79, Concentric discusses what it refers to as its risk premium analysis. This analysis uses the identical approach used by Mr. Coyne in the 2018 Alberta GCOC proceedings, which Mr. Coyne referred to as his Bond Yield Plus Risk Premium Model (BYPRPM) during those proceedings.

In its 2018 GCOC Decision (Decision 22570-D01-2018, paras. 392-393), the Alberta Utilities Commission (AUC) concluded that (bold added for emphasis):

> *The BYPRPMs of Mr. Hevert and Mr. Coyne estimate the risk premium component by comparing the approved ROEs to the long-term government bond yields in place at the time, thus capturing the inverse relationship. However, the Commission* ***has two concerns*** *with Mr. Hevert's and Mr. Coyne's approach. First, because their models estimate the risk premium in excess of long-term government bond yields, i.e., the risk-free rate****, they lose the advantage of incorporating the observable market data on utilities' credit spreads****, as compared to Dr. Cleary's approach.*
>
> *Second, these models* ***use the approved ROEs of other regulators in the U.S. as proxies for the market return****. In the Commission's view, although observable, the ROEs approved for the U.S. utilities are* ***not strictly market data****. Accordingly, the main assumption of these models, that the approved ROEs represent market return, does not hold, because the approved ROEs would be heavily influenced by the ROEs awarded by other regulators.*

Questions:

(a) Please confirm that the Risk Premium approach discussed on pages 74-79 of Concentric's evidence is the same model that Mr. Coyne labelled as "BYPRPM" during the 2018 proceedings and which is referenced in the passage cited above. If not confirmed please provide an exhaustive explanation of differences between that previous model and the current model relied on by Mr. Coyne.

(b) Does Mr. Coyne agree with the AUC's concerns that using government bond yields loses the advantage of incorporating the observable market data on utilities' credit spreads? If not, please explain why not.

(c) Does Mr. Coyne agree with the AUC's concerns that approved ROEs are not strictly market data, and are heavily influenced by ROE's awarded by other regulators? If not, please explain why not.

(d) Would Mr. Coyne agree that allowed ROEs in the U.S. do not account for issues such as jurisdiction-specific legislation and case law, nor do they reflect Ontario utility-specific business risks? If not, please explain why not.

M2-10-AMPCO/IGUA-12

Reference: On pages 79-84, Concentric again returns to its heavy emphasis on awarded ROEs and ERs in other jurisdictions (particularly U.S. deemed ratios), and provides a summary table of its analysis in Figure 27 on page 80.

Questions:

(a) Please provide the data and workpapers (in excel format), including all formulae used to construct Figure 27.

(Note: It is not clear in Concentric's evidence which Canadian utilities were included in these average estimates, or how the averages are determined. For example, on page 79, Concentric states that "The authorized ROE for Canadian investor-owned gas distribution companies currently ranges from 8.90 percent (Energir) to 10.65 percent (Eastward Energy), with an average of 9.23 percent." However, Eastward Energy (a very small utility) is not included in Figure 27, so presumably Concentric may include other Canadian utilities it does not include in that figure.)

(b) Please confirm that the evidence provided in Figure 27 in fact shows that Ontario utilities are in line with Concentric's estimated averages of awarded ROEs and ERs for Canadian utilities. If not confirmed, please explain.

M2-10-AMPCO/IGUA-13

Reference: On pages 85-94, Concentric discusses the OEB formula results over the 2010-24 period.

Questions:

(a) Please provide the data and workpapers (in excel format), including all formulae used to construct Figures 28, 29 and 30.

(b) Please confirm that the evidence provided in Figure 28 and in Figure 29 in fact shows that awarded ROEs for Ontario utilities over the period examined were generally above the Canadian averages they report, and on average were higher than the Canadian period

averages for the Canadian Electric estimate (Figure 28) and the Canadian Gas estimate (Figure 29). If not confirmed, please explain.

(c) Concentric's main argument in the referenced section of its report seems to be that since allowed ROEs in the U.S. are higher than those for Ontario utilities, the allowed Ontario ROEs and ERs need to be increased in order to satisfy the FRS (even though they are above Canadian deemed ROEs). Please confirm this reading of Concentric's position in this section, and/or elaborate as appropriate.

(d) Please confirm that Figure 30 shows that in 2009 the base ROE was 9.75%, and the base LCBF (or RF) was 4.25%, so that the allowed ROE-RF spread was **5.5%** at the time. Similarly, the base Util Spread of 1.415% reported in Figure 30 implies a base A-rated utility yield of 5.665% (i.e., 4.25% + 1.415%), and an allowed ROE to A-rated utility yield spread of **4.09%**. If not confirmed, please explain.

(e) Please confirm that Figure 30 shows that in 2024 the allowed ROE was 9.21%, and the LCBF (or RF) estimate was 3.05% (i.e. 3.25% - 0.196% 10/30 spread), so that the allowed ROE-RF spread was **6.16%** at the time (0.66% above the base ROE-RF spread of 5.5%). If not confirmed please explain.

(f) Please confirm that the 2024 Util Spread of 1.525% reported in Figure 30 implies a 2024 A-rated utility yield of 4.575% (i.e. 3.05% + 1.525%), and an allowed ROE to A-rated utility yield spread of **4.64%** (0.55% above the base ROE-A-yield spread of 4.09%). If not confirmed, please explain.

(g) Please confirm that Figure 30 shows that over the 2010-24 period the average allowed ROE was 9.08%, and the average LCBF (or RF) estimate was 2.84% (i.e., 2.44% + 0.395% 10/30 spread), so that the average allowed ROE-RF spread was **6.24%** over the period (0.74% above the base ROE-RF spread of 5.5%). If not confirmed please explain.

(h) Please confirm that the average Util spread of 1.493% reported in Figure 30 implies an average A-rated utility yield of 4.33% (i.e., 2.84% + 1.493%) over the period, and an allowed ROE A-rated utility yield spread of **4.75%** (0.66% above the base ROE-A-yield spread of 4.09%). If not confirmed, please explain.

(i) Please confirm that the statistics provided in questions (d)-(h) above demonstrate that in Ontario both allowed ROE-RF and ROE-A-yield spreads have widened since 2009, in terms of both the 2024 spreads and the average spreads over the 2010-2024 period. If not confirmed, please explain.

M2-10-AMPCO/IGUA-14

References: On pages 94-95, Concentric discusses the LCBF estimate used in the OEB ROE formula. On page 95, Concentric states:

> *The base LCBF in the new AUC formula is based on an average of the forecast of the quarterly 30-year GOC bond yield for each of the four quarters in the coming year from three Canadian investment banks – RBC, TD Bank, and Scotia Bank – which receives a 75% weight, and the current*

90-day average 30-year GOC bond yield, which receives a 25% weight. Concentric prefers this latter approach.

On page 41 Concentric states (bold added for emphasis):

Since 2010, the OEB's deemed long-term debt cost rate has had periods of being above and below the Bloomberg index, and ***averaged 40 bps higher than the index.***

Questions:

(a) Please confirm that Concentric's recommendation to use 25% of actual prevailing yields is reflective of forecast inaccuracy. If not confirmed, please explain.

(b) Please confirm that Concentric's recommendation to use 30-year Canada yield forecasts, rather than use Consensus 10-year Canada yield forecasts, and then estimating a 10- vs 30-year Canada yield spread to be added to the forecast, reflects the fact that this spread varies through time. If not confirmed, please explain.

M2-10-AMPCO/IGUA-15

References: On pages 95-98, Concentric discusses the LCBF and Util Spread adjustment factors used in the OEB ROE formula.

On page 95, Concentric asserts that:

Although the positive correlation between the utility cost of equity and LCBF has been historically well-noted, the strength of the relationship has weakened over time.

On page 98, Concentric recommends changing the adjustment factors for LCBF and Util spread to 0.40 and 0.33 respectively, based on the results of a regression analysis that regresses:

i. "Authorized ROE", defined as *"the data stream of authorized ROEs from almost 1,700 U.S. gas and electric rate cases decided between January 1, 1993, and May 31, 2024"*

ii. "U.S. Government Bond Yield" defined as *"the associated prevailing six-month trailing average 30- year U.S. government bond yield as of the rate case decision date"*; and

iii. "Utility Credit Spread" defined as *"the associated prevailing six-month trailing average Moody's A-rated utility bond yield spread over the 30-year U.S. government bond yield"*.

Questions:

(a) Please provide empirical support for the assertion cited at the first reference above, both that "the positive correlation between the utility cost of equity and LCBF has been historically well-noted," and that "the strength of the relationship has weakened over time."

(b) Please provide the data and workpapers used to conduct the described regression analysis.

(c) Please explain why Concentric believes that U.S. government bond yields, U.S. yield spreads, and awarded ROEs in the U.S. reflect current capital market conditions in Canada that are intended to be reflected in the OEB's ROE formula, as captured by changes in the LCBF and UtilBondSpread estimates included in the OEB formula. In particular, please detail, with supporting analysis, the relationship between allowed ROEs in U.S. jurisdictions and changes in capital market conditions in Canada in general and Ontario utilities' cost of equity or debt in particular.

M2-10-AMPCO/IGUA-16

Reference: Concentric "Cost of Capital" dated November 7, 2023 filed with the Newfoundland and Labrador Board of Commissioners of Public Utilities (PUB), on behalf of Newfoundland Power Inc. (NP) (2023 12 12, NP 2025 2026 GRA (Volume 2)).

This evidence reflects Concentric's views understanding and opinions that:

(i) NP maintains an A rating from DBRS, and a Baa1 rating from Moody's;

(ii) Faces a significant risk due to its small size, as discussed on pages 61-63 of the referenced report.

(iii) Faces a significant risk due to weak macroeconomic and demographic conditions in Newfoundland, as discussed on pages 63-66 of the cited report.

(iv) Faces a significant risk due to potential issues with future demand and slow potential for growth in customer demand, as discussed on page 70 of the referenced report.

Questions:

(a) Figure 18 (page 29) of the referenced report depicts Concentric's Canadian proxy group of utilities that it relied upon during those proceedings. The group includes five of the six utilities included in its Canadian proxy group for the current proceedings (excluding Fortis Inc.) but also includes Algonquin Power and Utilities Corp. (which it also included in its evidence provided in February 2023 during the 2024 Alberta GCOC proceedings). Please explain why Concentric did not include Algonquin Power in its current Canadian proxy group.

(b) Figure 20 (page 31) of the referenced report depicts Concentric's U.S. Electric proxy group of utilities that it relied upon during those proceedings. The group of 10 utilities includes

10 of the 15 included in its U.S. Electric proxy group for the current proceedings but excludes the following five utilities that are included in the Concentric's current proxy group; Ameren Corporation, Exelon Corp., PPL Corporation, Southern Company, and Xcel Energy Inc.. Please explain why Concentric chose to include these additional utilities in its current U.S. Electric proxy group, but did not include them in its Newfoundland evidence.

(c) Figure 28 (page 47) of the referenced report depicts Concentric's MRP estimates, as copied below:

Figure 28: Market Risk Premia – Canada and U.S.

	Canadian MRP	U.S. MRP
Historical	5.62%	7.17%
Forward-Looking	4.85%	10.33%
Average	6.99%	

In contrast, Figure 17 (page 69) of Concentric's current evidence reports a Canadian forward-looking MRP of 12.09% (well more than double the 4.85% estimate reported above), a U.S. forward-looking MRP of 11.30% (almost 1 percentage point higher than the 10.33% reported above), and an average MRP estimate of 9.06% (2.07 percentage points higher than the average of 6.99% reported above). Would Concentric agree that these are material variations in estimates obtained only 8 months apart and using similar processes and data? If not, please explain why not. If so, what are the implications of such variations to application of Concentric's MRP methodology?

(d) During the Newfoundland proceedings, Concentric recommended an allowed ROE for Newfoundland Power of 9.85% and an allowed ER of 45%, similar to its current recommendations for Ontario utilities of 10% and 45% respectively; albeit with a slightly lower ROE recommendation for Newfoundland Power.

(i) Does Concentric agree that Ontario utilities do not face the risks that Concentric identified are facing NP?

(ii) If Concentric does agree, please explain why Concentric believes that Ontario utilities require the same equity thickness and a slightly higher ROE than those which it recommended for NP.

M2-10-AMPCO/IGUA-17

References: On February 1, 2023, Concentric filed a report titled "Generic Cost of Capital for 2024 and Beyond" before the Alberta Utilities Commissions, on behalf of ENMAX Power Corporation (27084-X0315 2023-02-01 Appendix 1 - Evidence of Concentric Energy Advisors).

During the Alberta GCOC proceedings, Concentric recommended an allowed ROE of 9.5% and an allowed ER of 40%, as compared to its current recommendations for Ontario utilities of 10% and 45% respectively. Concentric made these

recommendations in Alberta 17 months ago based on its acknowledgement on page 92 of its Alberta report that its recommendations at that time were based on bringing Alberta utilities in alignment with the deemed equity ratios of comparable-risk electric utilities in Ontario and elsewhere across Canada.

Questions:

(a) Figure 17 (page 48) of that report depicts Concentric's Canadian proxy group of utilities it relied upon during those proceedings. The group includes five utilities, including four of the six utilities included in its Canadian proxy group for the current proceedings (excluding AltaGas Limited and Enbridge Inc.) but also includes Algonquin Power and Utilities Corp. (which it also included in its Newfoundland November 2023 evidence). Please explain why Concentric did not include Algonquin Power in its current Canadian proxy group.

(b) Please also explain why Concentric now decided to include AltaGas Limited in its Canadian proxy group, despite the position that Concentric took in the Alberta proceedings that AltaGas was not a reasonable Canadian comparator.

(c) Please explain why Concentric now decided to include Enbridge Inc. in its Canadian proxy group, contrary to its exclusion by Concentric as a reasonable comparator during those proceedings.

(d) Figure 18 (page 49) of Concentric's Alberta report depicts Concentric's U.S. Electric proxy group of utilities that it relied upon during those proceedings. The group of 22 utilities includes 11 of the 15 included in its U.S. Electric proxy group for the current proceedings but it excludes the following four utilities which are included in its U.S. Electric proxy group for the current proceedings; Exelon Corp., NextEra Energy Corporation, Pinnacle West Capital Corporation, and PPL Corporation. Please explain why Concentric chose to include these additional utilities in its current U.S. Electric proxy group, but did not include them in its Alberta evidence.

(e) Figure 18 (page 49) of Concentric's Alberta report also included the following 11 utilities: ALLETTE Inc., Black Hills Corporation, CenterPoint Energy, CMS Energy Corporation, Dominion Energy Inc., DTE Energy Corporation, MGE Energy, NorthWestern Corporation, Sempra Energy, Unitel Corp, and WEC Energy Group. Please explain why Concentric did not include these utilities in its U.S. Electric proxy group for these proceedings.

(f) Figure 26 (page 64) of Concentric's Alberta report depicts Concentric's MRP estimates, as copied below:

Figure 26: Market Risk Premia – Canada and U.S.

	Canadian	U.S.
Historical	5.74%	7.46%
Forward-Looking	9.22%	7.93%
Average	7.59%	

In contrast, Figure 17 (page 69) of Concentric's current evidence reports a Canadian forward-looking MRP of 12.09% (well more than 30% higher than the 9.22% estimate reported above), a U.S. forward-looking MRP of 11.30% (3.37 percentage points higher than the 7.93% reported above), and an average MRP estimate of 9.06% (1.47 percentage points higher than the average of 7.59% reported above). Would Concentric agree that these are material variations in estimates obtained only 8 months apart and using similar processes and data? If not, please explain why not. If so, what are the implications of such variations to application of Concentric's MRP methodology?

(g) Considering the references above, please explain why Concentric now believes that Ontario utilities require higher equity thickness and a higher allowed ROE than those it recommended for Alberta utilities.

(h) Does Concentric believe that Ontario utilities are riskier than their Alberta counterparts? If so, please provide evidence to support this assertion.

M2-12-AMPCO/IGUA-18

References: On page 128, Concentric states (bold added for emphasis):

> *Financial risk is assessed in terms of capital structure, credit rating, credit metrics, and authorized return (capital structure and authorized return span both major risk areas, i.e., regulatory, and financial risk). As discussed in the previous section, Ontario's electric transmission and distribution utilities* ***have similar deemed equity ratios as other electric utilities in Canada but substantially lower equity ratios than their U.S. counterparts****. Ontario's gas distributors have somewhat lower deemed equity ratios than other gas distribution companies in Canada and* ***substantially lower equity ratios than their U.S. peers****.* ***On that basis*** *and as further discussed below,* ***we find that these Ontario electric and gas utilities have higher financial risk than the North American proxy groups****.*
>
> ***Credit metrics provide a snapshot of how a company is financed and to what extent fixed obligations absorb income and cash flows****. Credit analysts focus on the potential for default on debt obligations and rate the financial strength of the companies they cover, with A range entities being more resilient.*

On page 129, Concentric states (bold added for emphasis):

> *Under the Fair Return Standard, the rate of return must be sufficient to* ***enable regulated utilities to maintain financial soundness and to attract capital on reasonable terms****. The utility industry is capital intensive, and companies require sufficient financial strength (i.e., sufficient equity) to access capital under a variety of economic and capital market conditions. An increase in the deemed equity ratio for Ontario's utilities is therefore necessary* ***in order to bring the financial risk of Ontario's utilities more in line with their North American peers****.*

Questions:

(a) Given the importance of credit metric analysis noted in the second passage cited above, did Concentric attempt to provide any such analysis? If so, please file it. If not, please explain why not.

(b) The second quote above from page 129 implies that Ontario deemed ERs need to be increased "**to maintain financial soundness and to attract capital on reasonable terms**." Please provide evidence to support the assertions that Ontario utilities are not financially sound, and/or are not able to attract capital on reasonable terms.

M2-12-AMPCO/IGUA-19

Reference: On page 130, Concentric states (bold added for emphasis):

> *Growth of **capital spending to meet increasing demand** (such as that anticipated due to the Energy Transition) will put additional pressures on electric distributors' financial results and the **perception of risk** by both equity investors and credit rating agencies. A fair return on equity and reasonable deemed capital structure will ensure that distributors **are able to attract equity and debt investment on reasonable terms** amid growing capital needs to meet demand and improve resilience and reliability.*

Questions:

(a) Please explain more particularly why Concentric considers increasing demand to be a negative risk as opposed to a positive business consideration.

(b) The quote above alludes to issues facing Ontario distributors in attracting "equity and debt investment on reasonable terms." Please provide any empirical support that Concentric has for this assertion.

M2-12-AMPCO/IGUA-20

Reference: On pages 133-135, Concentric provides another of comparable equity ratios in other jurisdictions, with summaries provided in Figure 35 and Figure 36. On page 133, Concentric states (bold added for emphasis):

> *The deemed equity ratios for Ontario's regulated electric distribution and transmission and gas distribution utilities are generally **in line with the average equity ratios for their Canadian counterparts** but **well below the average level for U.S. electric and gas utilities.***

Questions:

(a) The title for Figure 35 suggests that Ontario utilities' ERs are compared to "Canadian and U.S. Averages (2009-2024);" however, there is no line depicting the Canadian averages in the figure. Please reproduce Figure 35 with the inclusion of Canadian average ERs.

(b) Please provide all of the data (i.e., including specifically which utilities are included and what their allowed ERs are) and workpapers (in excel format), including all formulae used to construct Figures 35 and 36.

M2-14-AMPCO/IGUA-21

Reference: On page 13, Concentric, recommends the OEB should track and compare several indicators, as listed below:

- *Authorized ROEs and equity ratios in other Canadian jurisdictions (individually) and the U.S. by industry segment (electric, gas) as reported by Regulatory Research Associates ("RRA")*
- *10 and 30-year Treasury Bond Yields (Canada and the U.S.)*
- *A- and BBB-Rated Utility Bond Yields (Canada and the U.S.)*
- *Betas for the North American Proxy Group as defined in Section V*
- *Credit ratings from each agency covering Ontario's rate-regulated utilities.*

Questions:

(a) With respect to the first indicator noted above - why does Concentric believe the OEB should track such non-market-based information? In particular, please explain;

(i) why awarded ROEs and ERs in other jurisdictions would impact the cost of capital to Ontario operating utilities and/or their business risk profile; and

(ii) how the OEB should use such information.

(b) With respect to the second and third indicators noted above – does Concentric believe the OEB should track U.S.-based yields, which do not appear in the OEB formula, if the majority of debt financing obtained by Ontario utilities is Canadian-based? In particular, please explain;

(i) why U.S. Treasury yields and U.S. utility bond yields directly impact the cost of capital to Ontario operating utilities and/or their business risk profile; and

(ii) how the OEB should use such information.

(c) With respect to the fourth indicator noted above;

(i) Would Concentric agree that betas are not truly observable – reported betas are in fact beta "estimates," which are known to vary through time?

(ii) Please explain why and how beta estimates for 19 U.S. utilities, and six Canadian utilities would impact the cost of capital to Ontario operating utilities and/or their business risk profile.

(iii) Please elaborate on how the OEB should use such information.

M2-15-AMPCO/IGUA-22

Reference: On page 145, Concentric states (bold added for emphasis):

> *We **do not, however, see the benefit** of requiring utilities to file specific details regarding equity and debt issuances during each year. This would be both **administratively burdensome**, and beyond typical reporting requirements.*

Questions:

(a) Does Concentric agree that receipt of annual reports from utilities regarding debt and equity issues during the year would provide timely market-based information about Ontario utilities' ability to attract capital on favorable terms? If not, please explain why not?

(b) Please explain why such reporting would be "administratively" burdensome to utilities.

(c) Does Concentric agree with LEI that Ontario utilities do not typically have a large number of debt issues every year (and may have no new issues in some years)?

(d) Does Concentric agree with LEI that utility equity issues are even less frequent occurrences than utility des issues, often with no new issues over several years?

(e) Would utilities' financial teams have ready access to such information?

(f) Would such information typically be included in annual financial reporting by the utility to its shareholder(s) and/or utility reports to potential investors?