Ontario Energy Association (OEA)

Answer to Interrogatory from
Three Fires Group Inc. (TFG) and Minogi Corp. (Minogi)

INTERROGATORY

Reference:

Concentric Energy Advisors ("Concentric") report on "Ontario General Cost of Capital" (the "Concentric Report"), pp. 20-21

Preamble:

Concentric recommends that that the approach to determining the authorized ROE or capital structure should not be differentiated by ownership type and notes that according to "financial theory", the cost of capital depends on the use of funds, not the source of funds.

Question(s):

a) Did Concentric consult with any Indigenous groups and/or First Nations in preparing the Concentric Report?

b) Given the varied ownership structures (including Indigenous partnerships), what specific considerations were made in the Concentric Report and/or Concentric's analysis for Indigenous groups and/or First Nations seeking to partner with utilities regarding the source of capital and developing recommendations for the cost of capital and capital structure methodologies?

c) Did Concentric consider the implications of different deemed equity ratios on utilities that include Indigenous groups and/or First Nations as equity partners compared to other utilities? If not, please identify and discuss possible implications and how the recommendations of the Concentric Report may mitigate or address any identified issues.

d) Are there adjustments to ownership structure and related OEB methodologies that can be made that would increase the likelihood of Indigenous equity participation and, if so, what are they?

e) What does Concentric mean by "financial theory"?

f) How, if at all, has traditional "financial theory" considered the goals of reconciliation and the history of colonization in Canada or elsewhere?

g) Do the sources regarding “financial theory” that Concentric relies on include any chapters or sections addressing issues relating to Indigenous groups and/or First Nations participation in utility ownership structures and other equity participation scenarios?

h) Would a stated policy or goal of supporting Indigenous groups and/or First Nations equity participation have an impact on Concentric’s opinion and the “financial theory” that the use of funds and not the source of funds should determine the cost of capital. In your response, please discuss how such a policy might impact the cost of capital and the development of methodologies for determining the cost of capital.

Response:

a) No, Concentric did not consult with any Indigenous Groups and/or First Nations in preparing our report.

b) As discussed on pages 20-21 of Concentric’s report, Exhibit M2, consistent with the stand-alone principle of utility rate making, Concentric did not differentiate between types of ownership (i.e., the *source* of funds) in its analysis, but rather focused on the financial and business risks specific to each utility segment (i.e., the *use* of the funds).

c) Please see the response to part b). Concentric’s view is that the Fair Return Standard requires that all equity investors, including Indigenous groups and/or First Nations, have an opportunity to earn a fair return on capital invested.

d) Concentric believes that adjustments to ownership structure and related OEB methodologies could be made to increase the likelihood of Indigenous equity participation, for instance through added incentive returns such as those that have been employed by the U.S. Federal Energy Regulatory Commission to encourage investment in U.S. transmission projects. However, such considerations are outside the scope of Concentric’s analysis in this proceeding.

e) Concentric uses the term “financial theory” to refer to academic research related to the fundamental principles of finance. For example, one such principle is that of matching the term over which an asset is financed to the useful life of the asset. Another example is the efficient market hypothesis. In this particular instance, Concentric refers to the principle that the most appropriate way to measure the cost of equity is to consider the use of funds, not the source of those funds. On page 20 of Concentric’s report, Exhibit M2, we provide support for this theory from Dr. Roger Morin’s text, *New Regulatory Finance*.

f) Concentric is unaware of traditional financial theory texts that have considered those goals.

g) See the response to part f).

h) No, a stated policy or goal of supporting Indigenous groups and/or First Nations equity participation would not have an impact on Concentric's opinion and the "financial theory" that the use of funds and not the source of funds should determine the cost of capital. Concentric's analysis in this proceeding is focused on requirements of the Fair Return Standard. The provision of incentives to support Indigenous groups and/or First Nations equity participation is outside the scope of Concentric's analysis in this proceeding.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Three Fires Group Inc. (TFG) and Minogi Corp. (Minogi)

INTERROGATORY

Reference:

Concentric Report, pp. 22-27, 112-120

Preamble:

Concentric notes that the energy transition affects nearly every aspect of existing utilities' businesses and that it has already increased both business and policy-related risks for all Ontario utilities and is inevitably going to continue to do so.

Concentric further notes that other business risks should be considered when evaluating the appropriate cost of capital.

Question(s):

a) What are the most likely early indicators that could occur in the near to medium term related to the energy transition that would cause you to reconsider and/or revisit your conclusions and recommendations in the Concentric Report?

b) In your opinion, should the cost of capital analysis incorporate the quality of a utility's efforts to address energy transition. If yes, how is this reflected in the Concentric Report's recommendations. If no, how would the Concentric Report's recommendation change if the quality of a utility's efforts to address energy transition was integrated into the cost of capital analysis.

c) Were there any commonalities in relation to (i) climate risk and/or (ii) energy transition?

d) Please provide your analysis on the quality of each of the utilities downgraded by S&P Global in relation to their efforts to address energy transition. If no such analysis was undertaken, please explain why not and provide your opinion on the quality of their respective efforts.

e) How and to what extent should (i) effective or ineffective Indigenous engagement, (ii) Indigenous groups and/or First Nations participation and (iii) Indigenous groups and/or First Nations equity partnership in a project be considered to impact or affect

risks? In your response, please discuss how this should or could be made part of a risk framework?

Response:

a) There is currently uncertainty with regard to the timing, pace, and outcomes of the Energy Transition, as well as the regulatory response to the Energy Transition, thereby increasing risk in the utility industry. In the near to medium term, policy and regulatory decisions that change those factors (i.e., timing, pace, and outcomes) could affect utility risk. While Concentric does not consider it likely that those factors will be resolved in the pendency of this proceeding, Concentric anticipates that any future assessments of utility risk in the context of the cost of capital will consider whether and what Energy Transition policies, regulations, and activities have occurred up until that time and are expected going forward.

b) The quality of a utility's efforts and decision making, whether specific to the Energy Transition or more generally in relation to the operation of the business, are subject to oversight by the OEB and the prudent investment test but are not generally considered in cost of capital analysis, which is focused on establishing a return that meets the Fair Return Standard. If the quality of a utility's efforts to address Energy Transition were integrated into the cost of capital analysis, Concentric would view that as a fundamental shift in the approach to regulation in Ontario, which, all else equal, would most likely be considered to reduce the credit and equity supportiveness of the jurisdiction.

c) Yes, insofar as both factors are currently affecting assessments of utility risk, and particularly as both factors are leading to changes in the need for capital investment in the industry. As noted by DBRS:

> *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… We anticipate the trend of elevated capex and reliance on debt financing will likely persist over the longer term.*[1]

d) Concentric did not analyze the quality of the efforts to address energy transition by each of the utilities downgraded by S&P Global due to physical risks because such an analysis was outside of the scope of our report in this proceeding. However, Concentric notes that S&P, in its article[2] describing the impact of physical risks on credit ratings, describes several efforts by utilities and regulators to mitigate physical risks, including:

- “Following these [hurricane] events, utilities and regulators developed and adopted broad recommendations to improve vegetation management, wooden-pole replacement programs, flood monitors, communication efforts, aerial drone usage, and the burying of power lines underground, which is commonly known as undergrounding.”
- “Since these [wildfire] incidents, SDG&E implemented a comprehensive wildfire-prevention plan that helped the utility avoid causing another catastrophic wildfire.”
- “Following this catastrophic [wildfire] event, all of California's IOUs and POUs were mandated to implement comprehensive wildfire mitigation plans, investing billions on system hardening and technology to reduce physical risks.”
- “Southern California Edison Co. (SCE) is currently aggressively replacing its overhead distribution lines with covered conductors. The utility expects to replace more than 7,200 miles, or the vast majority of its distribution lines by 2025. Pacific Gas & Electric Co. (PacGas) is currently undertaking a long-term system hardening initiative that includes undergrounding 10,000 miles of its powerlines. POUs are also undergrounding or replacing wood poles with steel poles, including Guam Power Authority (particularly for the typhoons it experiences), Sacramento Municipal Utility District (for its most at-risk power lines in elevated risk zones), Brunswick Electric Membership Corp. in North Carolina, and Seattle City Light. Other POUs such as Anaheim Public Utilities' electric system and Central Florida Tourism Oversight District (formerly Reedy Creek Improvement District) have long had most of their power lines underground.”

e) Effective or ineffective Indigenous engagement can affect the risk profile of energy infrastructure development, which may be considered by regulators when performing prudence reviews related to utility construction projects. Indigenous Groups’ and/or First Nations’ participation and equity partnership in a project relates to the source of funds, not the use of funds, and thus does not typically factor into cost of capital analyses. As discussed in Concentric’s report, the cost of capital is based on the *use* of funds and not the *source* of funds when determining just and reasonable rates.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Three Fires Group Inc. (TFG) and Minogi Corp. (Minogi)

INTERROGATORY

Reference:

Concentric Report, pp. 129-133

Preamble:

Concentric addresses sector specific risk assessments and their relationship to the Fair Return Standard in determining cost of capital and capital structure.

Indigenous groups and/or First Nations have been increasingly participating in the Ontario regulated utility sector through partial investments into individual regulated utility assets (such as individual transmission lines or electricity generating stations). Such investments do not benefit from the multi-asset risk-averaging that applies to a large utility company.

Question(s):

a) Did Concentric consider the implications of the Fair Return Standard for cost of capital and capital structure as they relate to the single-asset entities in which Indigenous groups and/or First Nations have been invited to invest?

b) In the view of Concentric, is it appropriate for the cost of capital and capital structure applicable to large utilities to be applied to single-asset regulated utilities, in which Indigenous groups and/or First Nations may be investors?

c) Should the nature of the individual asset (i.e., its potentially unique business and financial risks) be taken into account when determining the appropriate application of the Fair Return Standard to the cost of capital and capital structure?

d) Did Concentric consult with any Indigenous groups and/or First Nations with respect to this issue?

Response:

a) Concentric considered multi- versus single-asset entities and their entity-specific risks (i.e., the risks related to investments in such entities as a class) but did not

specifically consider those risks as they related to entities in which Indigenous groups and/or First Nations have been invited to invest.

b) Please see Concentric's report, Exhibit M2, at pages 138-141 for our analysis of multi- versus single-asset entities. Concentric's analysis did not distinguish between single-asset regulated utilities based on ownership or partnership structure.

c) Yes.

d) No, Concentric did not consult with any Indigenous Groups and/or First Nations with respect to this issue in preparing our report.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 6

Preamble:

The Report states:

> "*Utility betas have increased substantially for electric and gas utilities since January 2020, and since the OEB last considered this issue in 2009. This indicates that regulated utilities are seen as increasingly risky by investors. Utility betas have been in the range of 0.80 to 0.90 percent since early 2020, as compared to the historical average level of 0.60 to*
>
> *0.70 in the preceding 10 years, notwithstanding the increase observed in 2009 in the wake of the Great Recession*."

Question(s):

1.0 Please provide (separately) the range of Canadian utility betas and US utility betas for the period since early 2020.

1.1 What were the utility betas at the time the OEB last considered this issue (e.g., the betas used in expert evidence filed for the 2009 proceeding)? If different, please provide (separately) the betas for Canadian vs. US utilities?

1.2 Was there a difference between the betas for electricity distributors/transmitters vs. natural gas distributors vs. utilities with significant generation at the time of the 2009 proceeding? If available, please respond (separately) using Canadian and US utility betas.

1.2.1 If yes, what were the differences?

1.3 Is there currently a difference between the betas for electricity distributors/transmitters vs. natural gas distributors vs. utilities with

significant generation at the time of the 2009 proceeding? If available, please respond (separately) using Canadian and US utility betas.

1.3.1 If yes, what were the differences?

Response:

1.1. See N-M2-VECC-1.1, Attachment 1, for the requested information.

1.2. See N-M2-VECC-1.2, Attachment 1, for the requested information. This same data is shown in Figure 3 of Concentric's report, Exhibit M2.

1.3. The Bloomberg betas for companies in the U.S. Gas, U.S. Electric, and Canadian proxy groups are shown in the Attachment for N-M2-VECC-1.2. In summary, the adjusted betas in November 2009 were as follows:

U.S. Gas	0.724	
U.S. Electric	0.795	
Canadian	0.662	
U.S. Electric T&D	0.778	(Northeast Utilities, PPL)
U.S. Integrated	0.797	

1.4 The Bloomberg betas for companies in the U.S. Gas, U.S. Electric, and Canadian proxy groups are shown in Exhibit CEA-7.1. In summary, the adjusted betas in May 2024 were as follows:

U.S. Gas	0.817	
U.S. Electric	0.911	
Canadian	0.847	
U.S. Electric T&D	0.893	(Eversource Energy, Exelon Corp, PPL)
U.S. Integrated	0.984	

OEA Proxy Group

Atmos Energy Corp.	ATO US Equity
Spire, Inc.	SR US Equity
Northwest Natural Gas Company	NWN US Equity
ONE Gas, Inc.	OGS US Equity
Alliant Energy Corporation	LNT US Equity
Ameren Corporation	AEE US Equity
American Electric Power Company, Inc.	AEP US Equity
Duke Energy Corporation	DUK US Equity
Entergy Corporation	ETR US Equity
Eversource Energy	ES US Equity
Exelon Corporation	EXC US Equity
Evergy, Inc.	EVRG US Equity
NextEra Energy, Inc.	NEE US Equity
OGE Energy Corporation	OGE US Equity
Pinnacle West Capital Corporation	PNW US Equity
Portland General Electric Company	POR US Equity
PPL Corporation	PPL US Equity
Southern Company	SO US Equity
Xcel Energy Inc.	XEL US Equity
AltaGas Limited	ALA CN Equity
Canadian Utilities Limited	CU CN Equity
Emera Inc.	EMA CN Equity
Enbridge Inc.	ENB CN Equity
Fortis, Inc.	FTS CN Equity
Hydro One, Ltd.	H CN Equity

5-Yr Beta	
Start Date:	6/7/2019
End Date:	5/31/2024
Relative Index (US):	SPX
Relative Index (CAN):	SPTSX
Period:	W

	Bloomberg Beta	
	Raw	Adjusted
ATO US Equity	0.7438	0.8292
SR US Equity	0.7952	0.8635
NWN US Equity	0.6170	0.7446
OGS US Equity	0.7487	0.8325
LNT US Equity	0.8106	0.8737
AEE US Equity	0.7589	0.8393
AEP US Equity	0.7675	0.8450
DUK US Equity	0.7357	0.8238
ETR US Equity	0.9620	0.9747
ES US Equity	0.8526	0.9017
EXC US Equity	0.9738	0.9825
EVRG US Equity	0.8391	0.8927
NEE US Equity	0.8683	0.9122
OGE US Equity	1.0267	1.0178
PNW US Equity	0.9037	0.9358
POR US Equity	0.8183	0.8789
PPL US Equity	1.0995	1.0664
SO US Equity	0.8461	0.8974
XEL US Equity	0.7442	0.8295
ALA CN Equity	1.2336	1.1557
CU CN Equity	0.7882	0.8588
EMA CN Equity	0.5782	0.7188
ENB CN Equity	0.9012	0.9341
FTS CN Equity	0.5836	0.7224
H CN Equity	0.5379	0.6919
Average	**0.8214**	**0.8809**

OEA Proxy Group

Atmos Energy Corp.	ATO US Equity
Spire, Inc.	SR US Equity
Northwest Natural Gas Company	NWN US Equity
ONE Gas, Inc.	OGS US Equity
Alliant Energy Corporation	LNT US Equity
Ameren Corporation	AEE US Equity
American Electric Power Company, Inc.	AEP US Equity
Duke Energy Corporation	DUK US Equity
Entergy Corporation	ETR US Equity
Eversource Energy	ES US Equity
Exelon Corporation	EXC US Equity
Evergy, Inc.	EVRG US Equity
NextEra Energy, Inc.	NEE US Equity
OGE Energy Corporation	OGE US Equity
Pinnacle West Capital Corporation	PNW US Equity
Portland General Electric Company	POR US Equity
PPL Corporation	PPL US Equity
Southern Company	SO US Equity
Xcel Energy Inc.	XEL US Equity
AltaGas Limited	ALA CN Equity
Canadian Utilities Limited	CU CN Equity
Emera Inc.	EMA CN Equity
Enbridge Inc.	ENB CN Equity
Fortis, Inc.	FTS CN Equity
Hydro One, Ltd.	H CN Equity

5-Yr Beta	
Start Date:	12/6/2004
End Date:	11/30/2009
Relative Index (US):	SPX
Relative Index (CAN):	SPTSX
Period:	W

	Bloomberg Beta		
	Raw	Adjusted	
ATO US Equity	0.6459	0.7639	
SR US Equity	0.6019	0.7346	
NWN US Equity	0.5114	0.6742	
OGS US Equity	N/A	N/A	
LNT US Equity	0.7410	0.8274	
AEE US Equity	0.8567	0.9045	
AEP US Equity	0.7380	0.8253	
DUK US Equity	0.6451	0.7634	
ETR US Equity	0.5879	0.7252	
ES US Equity	0.6128	0.7418	T&D
EXC US Equity	0.9062	0.9374	
EVRG US Equity	0.7301	0.8201	
NEE US Equity	0.7362	0.8241	
OGE US Equity	0.8262	0.8841	
PNW US Equity	0.7097	0.8065	
POR US Equity	0.6288	0.7525	
PPL US Equity	0.7215	0.8143	T&D
SO US Equity	0.4077	0.6051	
XEL US Equity	0.5303	0.6868	
ALA CN Equity	0.7129	0.8086	
CU CN Equity	0.4042	0.6028	
EMA CN Equity	0.3507	0.5671	
ENB CN Equity	0.5318	0.6878	
FTS CN Equity	0.4687	0.6458	
H CN Equity	N/A	N/A	
Average	**0.6350**	**0.7567**	
US Gas	0.5864	0.7243	
US Electric	0.6919	0.7946	
Canadian	0.4936	0.6624	
US Electric T&D		0.7781	
US Integrated electric		0.7971	

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 9 (Footnote #6)

Preamble:

Footnote #6 states:

"The DCF and CAPM results include an adjustment of 50 basis points for flotation costs and financial flexibility."

Question(s):

Please explain why the Risk Premium results were not adjusted for flotation costs and financial flexibility. Is it because the authorized ROEs used in the analysis are assumed to already incorporate such an adjustment?

Response:

Yes, that is the reason.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 12

Preamble:

The Report states:

"Equity investors and credit rating agencies consider authorized returns and deemed equity ratios as relevant benchmarks against which to measure whether the return in Ontario is comparable, on a risk-adjusted basis, to the returns in other jurisdictions across North America. On this basis, there is a gap that places Ontario's utilities at a comparative disadvantage when it comes to attracting capital."

Question(s):

3.1 Is Concentric aware of any instances were Ontario gas distributors have experienced difficulty raising either equity or debt capital when seeking to do so?

3.1.1 If yes, please describe.

3.2 Is Concentric aware of any instances were Ontario electricity transmitter and distributors have experienced difficulty raising either equity or debt capital when seeking to do so?

3.2.1 If yes, please describe.

Response:

3.1 Please see response to N-M2-11-OEB Staff-17(a).

3.2 Please see response to N-M2-11-OEB Staff-17(a).

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 12

Preamble:

The Report states:

> *"From our examination, the Ontario ROE formula has generally resulted in ROEs that are in line with authorized returns for other Canadian electric and gas utilities but lower than the average authorized returns for comparable risk U.S. peers, and tend to further deviate from those required by the Fair Return Standard during periods of extreme stress in financial markets such as 2008-2009 and 2020-2021."*

Question(s):

4.1 Please provide historical data for the period 2009-2024 that demonstrates: i) the Ontario ROE formula has generally resulted in ROEs that are in line with authorized returns for other Canadian electric and gas utilities, ii) the OEB's formula results have generally been lower than the average authorized returns for comparable risk U.S. peers, and iii) the OEB's formula results have tended to further deviate from those required by the Fair Return Standard during periods of extreme stress in financial markets such as 2008-2009 and 2020-2021.

4.1.1 With respect to item (iii), what has Concentric used as the benchmark/basis for the return value associated with the Fair Return Standard?

Response:

4.1 Please see AMPCO_IGUA-13(a), Attachment 1 for the workpaper supporting Figures 28 and 29 on pages 85-86 of Concentric's report, Exhibit M2.

4.1.1 In assessing the comparable return component of the Fair Return Standard, Concentric uses average authorized ROEs for electric utilities and gas distribution utilities in other Canadian and U.S. jurisdictions as a benchmark and has also relied on market trading data from peer companies, for example, when computing the DCF and CAPM analyses.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 14 and 153

Preamble:

The Report states:

"However, understanding the Board's historical preference to apply a short-term interest rate to DVAs, Concentric recommends that for DVAs that are to be cleared within one year, the short-term prescribed interest rate continue to apply." (page 14)

And

"Concentric recommends, for the reasons discussed above, that the Board apply the WACC to DVA balances that are to remain on utilities' balance sheets for more than one year and retain a short term rate for DVAs that are cleared within one year."

Question(s):

Please clarify what Concentric means by "to be cleared within one year" in the following contexts:

i. Typically the earliest a DVA balance can be cleared is in the second year (e.g., balance as of year-end 2023 could start to be cleared is 2025). Would a balance accumulated in 2023 and cleared in 2025 be subject to the short-term prescribed interest rate?

ii. For some DVAs balances are cleared annually but only if a materiality threshold is achieved. What interest rate should apply?

Response:

Please see the response to N-M2-21-OEB Staff-27 for a discussion and clarification of Concentric's recommendations and definitions regarding short-term and long-term DVAs.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 10 & 22

Preamble:

The Report states:

> *"Concentric recommends that should OPG bring forward a proposal and evidence in its payment amounts application regarding whether and what amount of additional risk premium should be applied to its authorized ROE, the OEB consider that proposal at its discretion as part of that proceeding." (page 10)*
>
> And
>
> *"Concentric recommends that utility-specific factors continue to be used in determining whether a utility's equity thickness, in combination with the generic ROE, meets the Fair Return Standard." (page 22)*

Question(s):

The first reference suggests that there are cases where the ROE should be adjusted to recognize utility specific (e.g., OPG) risk factors. However, the second reference suggests there should be a common/generic ROE and utility specific risk factors recognized in determining utility's equity thickness in combination with the generic ROE. Please reconcile.

Response:

The equity return earned by utilities is influenced by both the authorized ROE and the deemed equity ratio. In order to have the opportunity to earn a fair return, both return components must meet the Fair Return Standard. As discussed in the Concentric report, Exhibit M2, OPG faces a different and heightened level of risk compared to distributors and transmitters, and there are also no direct comparators in the proxy groups analyzed by Concentric for OPG's pure-play rate-regulated generation

operations. As such, and in the context of OPG's next payment amounts application, Concentric finds it would be appropriate to assess both the ROE (and specifically whether a premium is warranted to the generic ROE as part of a fair return for OPG) and the deemed equity thickness.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 22

Preamble:

The Report states:

"Business risk for a regulated utility results from variability in cash flows and earnings that impact the ability of the utility to recover its costs, including a fair return on and of its capital in a timely manner. These risks must be evaluated on a prospective basis." (emphasis added)

Question(s):

Assuming Concentric's recommendation (page 162) that periodic cost of capital reviews with refreshed market data on ROE and capital structure be undertaken every five years, how far forward should the prospective assessment of a utility's business risk look?

Response:

The purpose of the risk assessment is to identify the business and financial risks that investors would consider as they determine their return requirements. The risk assessment should consider both the short-term and long-term risks of the utility at the time the evaluation is performed. Short-term risks typically cover a period from one to three years, while longer-term risks can extend for 30 years or more, given the long-lived nature of utility assets.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 23 & 27
British Columbia Utilities Commission, Generic Cost of Capital Proceeding (Stage 1), Exhibit B1-8-1, Appendix C, CONCENTRIC's Cost of Capital Report, page 125

Preamble:

The Report states (page 23):

> "*The Energy Transition affects nearly every aspect of existing utilities' businesses, from their growth prospects, to the capital projects pursued, to their fundamental ability to secure and offer investors the opportunity to earn a fair return on capital. In Ontario alone, gross capital spending across electric distributors increased from $1.8 billion annually in 2012 to over $2.5 billion annually in 2022*."

And

> "*Consequently, the Energy Transition has already increased both business and policy-related risks for all Ontario utilities and is inevitably going to continue to do so*."

And

> "*Other business risks that should be considered when evaluating the appropriate cost of capital include severe weather events (more frequent and severe weather events, such as wildfires, hurricanes, and floods that pose the highest physical risk to utilities than any other sector), competition from alternative fuels (displacement of fossil fuels with cleaner alternatives) and system bypass, technology risk and two-way power flows, increased expectations regarding reliability, and changes in government policies*"

Concentric's Evidence in the BCUC Generic Cost of Capital Proceeding (Stage 1) states the following in its discussion of FortisBC's business risk profile:
"*In addition, I also considered FBC's risk evidence, which includes the following risk categories: 1) business profile; 2) economic conditions; 3) political; 4) Indigenous*

rights and engagement; 5) energy price; 6) demand/market; 7) energy supply; 8) operating and 9) regulatory."

Question(s):

8.0 Please confirm that the gross capital spending values quoted for 2012 and 2022 including both spending driven by growth and spending to sustain/replace existing assets.

8.0.1 If confirmed, can Concentric indicate what portion of the spending each of these years was driven by growth?

8.1 What was the average annual gross capital spending by Ontario electricity distributors over the period 2010-2012 as compared to 2020-2022?

8.2 The second reference from the current Report suggests that policy (i.e. political) risk is distinct from business risk. However, both the third reference from the current Report and the reference from Concentric's evidence in the BCUC proceeding suggest policy risk is one of the elements of business risk. Please reconcile.

8.3 Also, with respect to the second reference, has Energy Transition also increased business risk (including political risk) for the Canadian and US peers of Ontario's

utilities? In responding please separately address the question for: i) Ontario's electricity transmitters and distributors; ii) Ontario's natural gas distributors and

i. OPG. Note in the case of OPG please consider as peers companies whose asset base/revenues are primarily associated with generation.

8.3.1 If yes, has the business risk faced by Ontario's utilities due to Energy Transition increased or decreased relative to that of its peers?

Response:

8.1 The values quoted for 2012 and 2022 are the electric distribution sector's "Total Gross Capital Additions" sourced by the OEB's Electricity Distributor Yearbooks (2012) and Ontario Open Data (2022). Concentric is unable to confirm what type of spending is included in this category.

8.2 The average annual capital addition spending by Ontario electricity distributors in 2010-2012 was $1.87B. The average in 2020-2022 was $2.39B. A summary and a link to the source data is provided below.

Year	**Total Capital Additions ($B)**	**Year**	**Total Capital Additions ($B)**
2010	$1.80B	2020	$2.20B
2011	$1.94B	2021	$2.42B
2012	$1.86B	2022	$2.54B
Average 2010-2012	*$1.87B*	*Average 2020-2022*	*$2.39B*
Source	*https://www.oeb.ca/ontarios-energy-sector/performance-assessment/natural-gas-and-electricity-utility-yearbooks#elec*		*https://www.oeb.ca/open-data/electricity-reporting-record-keeping-requirements-rrr-section-2152-capital*

8.3 Concentric agrees that policy risk is one element of business risk. In past proceedings in British Columbia, the company and regulator have segmented risk into the referenced

categories, so for consistency in evaluating FortisBC's risk evidence, Concentric adhered to this same risk grouping.

8.4 Please see Concentric's report, Exhibit M2, at pages 115-120, for Concentric's industry segment analysis of Energy Transition risks. The risks faced by Ontario's utilities related to Energy Transition have risen in line with the North American utilities industry.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 23-24

Preamble:

The Report states:

"In their analysis and ratings, credit rating agencies assess whether the utility's regulatory environment is constructive and supports the predictability of cash flow. For example, Moody's Investors Service ("Moody's") weighs the "stability and predictability of regulatory regime" at fifteen percent in its regulated electric and gas network methodology." (page 23)

And

"Ratings agencies similarly consider the supportiveness of the regulatory framework, or "the extent to which the regulatory formula is supportive of cost recovery, including the mechanism by which one-off costs or overspends are recovered, if at all."" (page 24)

Question(s):

How do Moody's and S&P rate/rank the regulatory regime in Ontario relative to the regulatory regimes in other Canadian and US jurisdictions?

Response:

In S&P's March 2024 jurisdictional ranking update, Ontario's "most credit supportive (strong)" ranking remained unchanged. Concentric discusses Ontario's jurisdictional ranking in further detail on pages 123-124 in Exhibit M2.

Moody's regulated electric and gas utilities scorecard, by which Moody's assigns credit ratings to utilities across North America, attributes 25 percent of the overall issuer rating to the regulatory framework (12.5 percent to the legislative and judicial underpinnings of the regulatory framework, and 12.5 percent to the consistency and predictability of

regulation). For example, Moody's has assigned scorecard ratings of "A" for both components of the regulatory framework factor for Hydro One, Inc. An "A" rating is two notches below the most credit supportive scorecard result of "Aaa", indicating a less credit-supportive jurisdictional environment for utilities operating in Ontario.

From the perspective of equity investors, UBS ranks Ontario's regulatory environment in tier 3 out of 5 (with 1 being the highest) in December 2023, as noted on pages 123-124 in Exhibit M2.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 29

Preamble:

The Report states:

"Concentric disagrees with LEI's position regarding the impact of Energy Transition issues on the cost of capital. LEI states that utilities' cash flows are protected via various regulatory mechanisms (i.e., DVAs, Z factor, I factor, and off-ramp mechanisms). However, the risks resulting from the Energy Transition are not fully mitigated by these mechanisms and are likely to continue to increase."

And

"For example, as utilities adopt new technologies and build first-of-a-kind projects, they encounter challenges such as shortages of skilled labour and increased competition across the supply chain, in addition to technology risks. Increased operational risk may lead to funding risks if investors are not compensated fairly for their investments as capital availability tightens with more utilities entering the capital markets to fund construction projects."

Question(s):

10.1 With respect to the first reference, for each of Ontario's electricity distributors, Ontario's electricity transmitters, Ontario's natural gas distributors and OPG, please indicate Concentric's understanding as to the regulatory mechanisms available to protect case flows that lead to the conclusion that "the risks resulting from the Energy Transition are not fully mitigated by these mechanisms and are likely to continue to increase".

10.2 With respect to the second reference, is it reasonable to assume that a prudently managed utility would consider technical and operational risks and mitigation strategies for addressing them when deciding whether or not to undertake a specific investment project?

Response:

10.1 Utilities in Ontario have several regulatory mechanisms available to mitigate risks to cash flows. These mechanisms include the mechanisms described by LEI and also include incremental capital module ("ICM") adjustments. Importantly, however, those mechanisms do not eliminate risks due to several factors. First, costs can be subject to materiality thresholds and prudence reviews, and often the timing between when a cost is incurred versus when it is recovered can span multiple years, even if flowed through a DVA (for example, Group 2 DVAs are not typically dispositioned until the next rebasing application). In those circumstances, while earnings variability is reduced, the same cannot necessarily be said for cash flows. In addition, the Energy Transition introduces variables that are complex, uncertain, and unknown. Such variables include legislative mandates and technology advancements that can shift a utility's risk profile more rapidly than existing ratemaking tools were designed to keep pace with. Further, while an off-ramp mechanism can act as a backstop to mitigate risk, its deployment usually means that some aspect of the existing rate plan has been determined to be structurally deficient whereby a reassessment of the structure is required. Lastly, as discussed in the Concentric report at pages 125-127, other North American jurisdictions also employ various regulatory mechanisms to mitigate risks to cash flows, which is important to consider when comparing Ontario authorized ROEs and deemed equity thicknesses to peer utilities in other states and provinces.

10.2 Yes, it is reasonable to assume that a prudently managed utility would consider technical and operational risks and mitigation strategies for addressing them when deciding whether to undertake a specific investment project. Prudent planning, however, does not eliminate risk, and utilities may not be able to avoid investments made in response to policy interventions or customer demands.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 30

Preamble:

The Report states:

"A demonstration that the regulated utility has actually earned its allowed return is a retrospective view of a constructive regulatory environment and a well-functioning utility, but not a measure of the business risk and financing requirements companies face in the future and not the basis on which prospective investors make investment decisions."

Question(s):

In Concentric's view does the fact that regulated utilities in a jurisdiction generally earn their allowed return (on equity) indicate that the allowed return met the FRS?

Response:

No. Whether a regulated utility generally earns its authorized ROE is not demonstrative of whether the authorized return meets the Fair Return Standard. Please see pages 15-17 of Concentric's report, Exhibit M2, for the legal requirements of the Fair Return Standard and how those requirements have been interpreted by utility regulators in Canada, including the OEB.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 31

Preamble:

The Report states:

"Changes in relative risk are not predicated on the establishment of significant changes in the applicant's risk, which the current OEB approach requires. While the implementation of a new regulatory mechanism may reduce a utility's absolute risk, it does not necessarily reduce the cost of capital if peer utilities have similar risk-mitigating mechanisms available to them. Further, in Concentric's experience, the regulatory regime and regulatory mechanisms should be considered in their entirety and compared to the suite of mechanisms available in peer jurisdictions."

Question(s):

Given that "the regulatory regime and regulatory mechanisms should be considered in their entirety and compared to the suite of mechanisms available in peer jurisdictions", unless a similar mechanism has only recently (i.e. since the last relative risk assessment) been introduced in the peer jurisdictions, wouldn't the implementation of a new regulatory mechanism in Ontario that reduced utilities' absolute regulatory risk also reduce their overall regulatory risk relative to that of the peer jurisdictions?

Response:

Please see response to N-M2-CCC-3.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 33 and 96

Preamble:

The Report states (page 33):

"Concentric recommends continuing to use the same benchmark plus spread framework. However, in response to the discontinuation of the BA market on June 28, 2024, transitioning to a measure of short-term loan rates, such as a three-month average of the Canadian Overnight Repo Rate Average ("CORRA"), is the most reasonable alternative. The methodology would subsequently use an A-rated corporate short-term loan spread over the CORRA rate instead of the BA rate". (emphasis added)

And

"Concentric notes that to the extent OEB-regulated utilities can reasonably achieve A or A-ratings under the regulatory framework, then the use of an A-rated spread is generally appropriate. However, to the extent utilities cannot reasonably achieve such ratings, a BBB spread may become more applicable."

And

"LEI further recommends that the spread for a R1-low rated utility over CORRA should be applied in the short-term debt rate calculation, with the spread to be determined from an annual confidential survey of 6-10 banks."

The Report also states (page 96):

"An additional consideration is that not all Ontario utilities have an A rating."

Question(s):

13.1 What is the difference between the R1-low rating referred to by LEI and the A/A and BBB ratings referred to by Concentric?

13.2 What ratings do Ontario utilities currently have?

Response:

13.1 The R1-low rating referred to by LEI is the rating issued on short-term debt and commercial paper, whereas the A/A- and BBB ratings referred to by Concentric are long-term issuer ratings for the Ontario utilities.

13.2 Please see Exhibit M2, Appendix B, for the long-term issuer ratings from S&P Global, Moody's and DBRS for the Ontario utilities covered in Concentric's report.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 39

Preamble:

The Report states:

'In Concentric's view, debt issuance costs are a legitimate cost of funding the operations of the utilities and should be recovered in rates through the embedded cost of long-term debt, as is the OEB's current practice. Debt issuance costs include fees and expenses for underwriting the debt security, legal services, security exchange registration, and fees paid to credit rating agencies."

Question(s):

14.1 Is Concentric aware of any Ontario-regulated utilities that receive debt through an affiliate (i.e. the debt is actually borrowed by an affiliate) and the utility is charged a transaction fee by the affiliate?

14.1.1 If yes, and that the "transaction fee" is not cost-based, should the utility be permitted to recover the transaction fee from its customers?

14.2 If the Board allows debt issuance costs to be embedded and recovered in long-term debt rates what if any other debt related financial treasury related costs should a utility (as provided directly or by an affiliate) be allowed to include in operating costs?

Response:

14.1 Concentric is aware of Ontario-regulated utilities receiving debt through affiliate arrangements and understands that the associated interest rate reflects the costs of the issuance by the affiliate.

14.1.1 As noted in Exhibit M2, debt transaction fees are collected by third parties to effectuate debt transactions between parties. Debt issuance costs include various incremental fees, including those paid to law firms, auditors, and regulators. Transaction costs in affiliate debt transactions may differ from those incurred in public debt offerings, for example Securities and Exchange Commission fees can be avoided but should still be considered as the cost to execute debt agreements. Furthermore, as stated in OEB's Affiliate Relationships Code in Section 2.4.2, "A utility shall ensure that any loan, investment, or other financial support provided to an affiliate is provided on terms no more favourable than what that affiliate would be able to obtain on its own from the capital markets and in all cases at no more favourable terms than the utility could obtain directly for itself in capital markets."[1]

The utility should be permitted to recover the fees associated with debt transactions regardless of the sources of funds.

14.2 Additional treasury-related costs that should be recovered in rates as operating costs would be the direct administrative and personnel costs of the treasury function, and allocated costs from the parent company, as appropriate, where support for raising capital, support of regulatory reporting, support for rate applications and support of other utility services is provided. External costs related to ongoing maintenance of credit ratings and credit facilities (such as standby fees) are other examples of treasury-related costs that are incurred annually irrespective of debt issuances and are reflected in operating costs. These are distinct from the costs associated with specific issuances that are typically acquired through outside service providers (e.g., banks, law firms, ratings agencies, security registration fees, etc.).

[1] Ontario Energy Board, Affiliate relationships Code for Gas Utilities, revised November 25, 2010.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 41

Preamble:

The Report states:

"LEI recommends continuation of the OEB's status quo approach regarding this issue, which LEI describes as "consider deemed capital structures regardless of actual capital structures." As described above, Concentric agrees with this recommendation."

Question(s):

15.1 Where a utility's actual long-term debt is less than that associated with its deemed capital structure, what is Concentric's recommendation as to the debt rate that should be attributed to the notional long-term debt portion of the capital structure?

15.2 If a utility's actual long-term debt exceeds its deemed capital structure what, if any adjustment should be made to calculating the weighted long-term debt rate for the purpose of rate setting.

15.3 Is there any point at which the magnitude of divergence between actual and deemed long-term debt should cause the regulator to make cost of debt or cost of equity adjustments?

Response:

15.1 The debt rate should be the embedded cost of long-term debt allowed in rates.

15.2 No adjustment would be necessary unless the Board were to determine that the excess long-term debt (above that allowed in the approved capital structure) had materially impacted (increased) the utility's embedded cost of debt. The same would be the case if the utility were carrying excess equity, where the Board would want to determine if the excess equity had materially impacted (lowered) the cost

of debt. As a practical matter, these determinations are difficult to make with precision.

15.3 Concentric is not aware of regulatory guidelines on this matter, and the capital structure can be expected to fluctuate over time depending on the magnitude of capital raises, capital investment requirements, and seasonal fluctuations in cash flows.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M3: CONCENTRIC Report, page 42
Board Decision, EB-2016-0152, page 105

Preamble:

The Report states:

"Further, and as previously found by the Board, OPG faces a different and heightened level of risk compared to distributors and transmitters. As such, the base ROE recommendation of 10.0 percent understates the ROE for OPG. In addition, the OEB has previously found that there is a heightened risk of nuclear generation relative to hydroelectric generation, which is important to consider as OPG embarks on first-of-a-kind nuclear projects in addition to refurbishing its existing nuclear units."

In its EB-2016-0152 Decision the OEB states:

"The OEB finds that given the planning, the approval of the spending in this proceeding and the regulatory protections afforded OPG, the DRP does not materially increase OPG's business risk."

Question(s):

16.1 Please provide references to support Concentric's statement – "as previously found by the Board, OPG faces a different and heightened level of risk compared to distributors and transmitters."

16.2 Is it Concentric's view that the heightened level of risk faced by OPG should be reflected through an adjustment in the allowed ROE or the allowed equity thickness?

16.2.1 If both, please explain how this can be done without "double-counting" the impact of the risk.

16.3 Please reconcile Concentric's last sentence in the referenced quote from the Report with the OEB's conclusion in EB-2016-0152 that "the DRP does not

materially increase OPG's business risk".

Response:

16.1 Concentric's statement is referenced in EB-2007-0905, Decision with Reasons, November 3, 2008, p. 149.

Board Findings
Union Gas Limited and Enbridge Gas Distribution Inc. both have equity ratios of 36%, and the risk differential between Union and Enbridge is reflected in Union's ROE which is 15 basis points higher. The electric LDCs and Hydro One have equity ratios of 40%, and Great Lakes (transmission) has an equity ratio of 45%. "*The Board has concluded that OPG is of higher risk than electricity LDCs, gas utilities and electricity transmission utilities* and of lower risk than merchant generation."

16.2 It is Concentric's view that the heightened level of risk faced by OPG should be considered in OPG's next payment amounts application and could be reflected in both the equity thickness and an additional risk premium as part of the authorized ROE. Considering both return elements (i.e., the ROE and the equity ratio) would represent a balanced approach, because, for instance, trying to achieve a fair return outcome by only adjusting equity thickness could result in an equity thickness that represents a significant increase from today's level.

If both elements are set in a manner that meets the Fair Return Standard, then there should be no double counting of risk. For example, the preclusion of double-counting can be accomplished through the consideration of the weighted return on equity (i.e., authorized ROE times deemed equity ratio) relative to returns in investments of similar risk.

Furthermore, by allowing potential adjustment to each of the ROE and deemed equity thickness, the OEB can offer greater flexibility in regulatory mechanisms in line with its stated mandate of modernization and to be responsive to the changing needs of utilities, such as OPG, as each progresses through Energy Transition.

16.3 In EB-2016-0152, prior to issuing its decision, the OEB reviewed evidence on the planning and preparation of the Darlington Refurbishment Project (DRP). Broadly, this included about 10 years of planning, preparing and assembling the internal and external resources by OPG with the goal of positioning the DRP with for a high likelihood for successful execution. Informed by such evidence, the

OEB approved OPG's request for a capital in-service envelope for the first unit to undergo refurbishment as part of the DRP.

Since EB-2016-0152, OPG's risks have increased. During Energy Transition, as Ontario's largest and only regulated generator, OPG is expected to be relied upon to execute a number of large generation projects. In addition to completing the DRP, such projects to date include the development of small modular reactors at the Darlington site, the planned refurbishment of the four reactors at the Pickering Nuclear Generating Station, and a program of major hydroelectric refurbishments across the province (e.g., Sir Adam Beck Complex, R.H. Saunders generating station and others). Given the current planning timelines identified by the IESO for Ontario's system needs, the need to plan and execute these Energy Transition projects in parallel creates overlapping requirements and risks that did not previously exist.

Additionally, the risks of individual Energy Transition projects themselves may be higher than those of the DRP. For example, construction of new nuclear generation facilities with first of a kind technology such as SMRs is expected to carry higher risks than those of DRP. At the same time, the refurbishment of the Pickering reactors is expected to be more complex than the DRP due to factors such as the age of the facility. In navigating these project specific risks, OPG will also need to manage any supply chain and labour resource limitations, and such other risks that may emerge, in view of the other utilities and infrastructure builds being executed during Energy Transition (see Ex. M2-2-2-SEC-33). Taken together, the above challenges support differentiating OPG's present and anticipated circumstances from the OEB's findings in EB-2016-0152.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 44

Preamble:

The Report states:

"Specifically, monetary policy in both Canada and the U.S. is significantly more restrictive in May 2024 in response to higher inflation as compared to November 2009, when central banks were seeking to stimulate the global economy following the financial crisis."

Question(s):

17.1 Apart from the change in the betas and utility bond ratings, please confirm that the changes in economic conditions set out in Figure 3 will impact all companies (not just Ontario-regulated utilities).

17.2 With respect to the referenced quote, is it not also the case that in recent months monetary policy in both Canada and the US is becoming less restrictive?

Response:

17.1 Confirmed. Concentric has assumed that the question meant to refer to interest rates on A-rated utility debt, not "utility bond ratings."

17.2 Monetary policy in Canada has become less restrictive in recent months, with the Bank of Canada reducing the overnight rate on two separate occasions. Figure 3 reflects the first of those two reductions by the Bank of Canada. In the U.S., the Federal Reserve has continued to maintain the federal funds rate within a range from 5.25% to 5.50% as shown in Figure 3. Nevertheless, monetary policy in both countries is significantly more restrictive in August 2024 as compared to November 2009.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 45-50
British Columbia Utilities Commission, Generic Cost of Capital Proceeding (Stage 1), Exhibit B1-8-1, Appendix C, CONCENTRIC's Cost of Capital Report

Preamble:

At the referenced pages the Report sets out the screening criteria used to establish Concentric's various proxy groups and resulting companies selected for each group.

Question(s):

18.1 Please describe how the definitions of the proxy groups used in Concentric's current evidence differ (if at all) from the proxy groups used in Concentric's Cost of Capital Report filed in recent BCUC Generic Cost of Capital Proceeding.

18.2 For those proxy groups with the same definition in both proceedings, please indicate any differences in the companies selected to be included in the proxy group and explain why.

18.3 In its Decision and Order G-236-23 did the BCUC accept Concentric's the companies included in each of Concentric's proposed proxy groups?

18.3.1 If not, what revisions were made?

18.3.2 If not, do Concentric's currently proposed proxy groups reflect the revisions made by the BCUC and, if not, why not?

18.4 With respect to the Canadian Proxy Group (Figure 4) please provide a schedule that sets out the following for each of the utilities in the group: i) annual revenues, ii) credit rating and iii) value of regulated assets/rate base.

18.5 With respect to the US Gas Distribution Proxy Group (Figure 5) please provide a schedule that sets out the following for Enbridge and each of the utilities in the group: i) annual revenues, ii) credit rating and iii) value of regulated assets/rate

base.

18.6 With respect to the US Electric Proxy Group (Figure 21) please provide a schedule that sets out the following for each of the utilities in the group: i) annual revenues, ii) credit rating and iii) value of regulated assets/rate base.

18.7 For those utilities included in the North American Electric Proxy Group (Figure 7) is information readily available as to the percentage of regulated operations (either revenue or assets) that is made up of generation as opposed to transmission and distributions related operations?

18.7.1 If yes, please provide the relevant breakdown for each of the companies listed in Figure 7.

18.7.2 If not, can Concentric provide a rough break down (base on its understanding of each companies' operations) as between those that are: i) primary generation; ii) primarily transmission & distribution and iii) a balanced mix of both.

Response:

18.1 The only substantive difference in the screening criteria used by Concentric to select the proxy groups in Ontario as compared to the criteria used in British Columbia relates to the percentage of regulated operating income from electric utility service. In Ontario, Concentric used an 80% threshold, whereas in BC we applied a 90% threshold. The relaxation of this screen in Ontario resulted in the inclusion of 16 U.S. electric utilities, as opposed to 10 in BC. The only other difference is one of timing, with the screens in BC based on business segment data from 2018-2020, while the Ontario screens are based on 2020-2022 segment data.

18.2 Any differences in the composition of the respective proxy groups in Ontario and BC are due to application of the stated screening criteria. For example, Algonquin Power and Utilities Corp. was included in Concentric's Canadian proxy group in BC but was excluded in Ontario because, as noted in our report, Algonquin Power did not have positive earnings growth rate forecasts from more than one source and announced a reduction in its dividend payment in January 2023. Southwest Gas Holdings was excluded from our Ontario proxy group because it no longer meets the BBB+/Baa 1 credit rating screen, but Southwest was included in BC.

18.3 In Order G-236-23, the BCUC removed certain companies from the Canadian, North American Gas and North American Electric proxy groups. Specifically, Enbridge Inc. and Canadian Utilities Ltd. were removed from the Canadian and North American Gas proxy groups, and Canadian Utilities Ltd. was also removed from the North American Electric proxy group.

Concentric included Enbridge Inc. in our Canadian, North American Gas and North American combined proxy groups in Ontario because we continue to view Enbridge Inc. as a regulated utility even though we recognize that Enbridge Inc. derives a relatively small percentage of its operating income from gas distribution service. That percentage will certainly increase in the future with the recent acquisition of U.S. gas distribution businesses from Dominion Energy.

We also included Canadian Utilities Ltd. in our proxy groups for Ontario. CU Ltd. was excluded by the BCUC because the company derives approximately the same percentage of regulated operating income from its gas and electric utility operations. Concentric did not present a North American Combined proxy group in BC; however, we continue to believe it is reasonable to include CU Ltd. in the Ontario proxy groups since the same generic return is traditionally applied to both electric and gas utilities under the Ontario formula.

18.4 Please see VECC-18.4, Attachment 1.

18.5 Please see VECC-18.5, Attachment 1.

18.6 Please see VECC-18.6, Attachment 1.

18.7 Concentric does not have access to this information. However, we have provided VECC-18.7, Attachment 1, which details whether each company in the North American Electric proxy group owns regulated generation, and if so, what percentage of the company's total energy disposition came from their own net generation in 2023, which may provide a rough estimate of the company's generation makeup. The data is sourced from S&P Global, which obtains its data from the FERC Form 1 and EIA Form 861.

CANADIAN PROXY GROUP

Company Name	Ticker	2023 Annual Revenues ($M)	S&P Credit Rating	Rate Base ($M)	*Source Link(s)*
AltaGas Limited	ALA	$ 12,997	BBB-	$ 4,400	*https://www.altagas.ca/invest/financials/financial-highlights https://www.altagas.ca/infrastructure/utilities*
Canadian Utilities Limited	CU	$ 3,796	A-*	$ 15,400	*https://www.canadianutilities.com/content/dam/web/canadian-utilities/investors/CU-Annual-Report-2023.pdf*
Emera Inc.	EMA	$ 7,600	BBB	$ 27,200	*https://investors.emera.com/news/news-details/2024/Emera-Repo https://investors.emera.com/corporate-profile/default.aspx*
Enbridge Inc.	ENB	$ 43,639	BBB+	$ 27,000	*https://www.enbridge.com/investment-center/reports-and-sec-filin https://www.enbridge.com/media-center/news/details?id=123779*
Fortis, Inc.	FTS	$ 12,000	A-	$ 37,000	*https://www.fortisinc.com/news-and-media/details/fortis-inc-reports-fourth-quarter-annual-2023-results*
Hydro One, Ltd.	H	$ 7,844	A**	$ 23,994	*https://www.hydroone.com/investorrelations/Reports/Hydro%20One%20Limited%20Annual%20Report%202023.pdf*

**Credit rating from Fitch*

***Upgraded from A- to A from S&P on June 10, 2024*

U.S. GAS PROXY GROUP

Company Name	Ticker	2023 Annual Revenues ($M)	Credit Rating	Rate Base ($M)	Source Link(s)	
Atmos Energy Corp.	ATO	$ 4,275	A-	$ 16,600	https://s201.q4cdn.com/158157484/files/doc_financials/2023/ar/2023-Annual-Report.pdf	
Northwest Natural Gas Company	NWN	$ 1,197	A+	$ 1,955	https://ir.nwnaturalholdings.com/news/news-details/2024/NW-Natural-Holdings-Reports-Fourth-Quarter-and-Full-Year-2023-Results/default.aspx	https://s23.q4cdn.com/611156738/files/doc_financials/2023/ar/nwn_2023_annual_report_bmk.pdf
ONE Gas, Inc.	OGS	$ 2,372	A-	$ 5,550	https://www.onegas.com/news/press-release-details/2024/ONE-Gas-Announces-Fourth-Quarter-and-Full-Year-2023-Financial-Results/default.aspx	https://www.onegas.com/investors/financials-and-filings/guidance/default/
Spire, Inc.	SR	$ 2,666	BBB+	$ 4,265	http://q4live.s25.clientfiles.s3-website-us-east-1.amazonaws.com/231862843/files/doc_presentations/2023/09/SpireInvestorPresentation_Sept23.pdf	

U.S. ELECTRIC PROXY GROUP

Company Name	Ticker	2023 Annual Revenues ($M)	Credit Rating	Rate Base ($M)	Source Link(s)
Alliant Energy Corporation	LNT	$ 4,027	A-	$ 13,271	https://www.alliantenergy.com/aboutus/whoweare/annualreport
Ameren Corporation	AEE	$ 7,633	BBB+	$ 19,991	https://www.amereninvestors.com/investors/financial-releases/financial-releases-details/2024/Ameren-Announces-2023-Results-and-Issues-Guidance-for-2024-Earnings-and-Long-Term-Growth/default.aspx
American Electric Power Company, Inc.	AEP	$ 18,814	BBB+	$ 65,412	https://www.aep.com/Assets/docs/investors/RateBaseandROE_12-31-23v1.pdf
Duke Energy Corporation	DUK	$ 27,412	BBB+	$ 81,672	https://s201.q4cdn.com/583395453/files/doc_financials/2023/q4/Q4-2023-Earnings-Presentation_vF-w-Reg-G.pdf
Entergy Corporation	ETR	$ 13,113	BBB+	n/a	
Eversource Energy	ES	$ 9,650	A-	n/a	
Exelon Corporation	EXC	$ 21,817	BBB+	$ 60,300	https://investors.exeloncorp.com/static-files/ac3c26d7-2a7d-4f38-b4a7-ffde3c607e6c
Evergy, Inc.	EVRG	$ 5,553	BBB+	$ 18,600	https://investors.evergy.com/static-files/eba56800-70a1-46b4-84e4-925ef1b7cc4f
NextEra Energy, Inc.	NEE	$ 18,196	A-	$ 61,900	https://www.investor.nexteraenergy.com/~/media/Files/N/NEE-IR/news-and-events/events-and-presentations/2024/01-25-24/4Q%202023%20Slides%20vF.pdf
OGE Energy Corporation	OGE	$ 2,808	BBB+	$ 6,977	S&P Global
Pinnacle West Capital Corporation	PNW	$ 4,717	BBB+	$ 10,355	S&P Global
PPL Corporation	PPL	$ 6,784	A-	$ 25,000	https://investors.pplweb.com/regulatory-filings
Portland General Electric Company	POR	$ 2,967	BBB+	$ 6,174	S&P Global
Southern Company	SO	$ 18,493	A-	n/a	
Xcel Energy Inc.	XEL	$ 14,831	BBB+	$ 42,000	https://s202.q4cdn.com/586283047/files/doc_downloads/2024/07/2023-investor-fact-book-august-final.pdf

n/a indicates Concentric was unable to locate the requested information.

NORTH AMERICAN ELECTRIC GROUP

Company Name	Ticker	Owns Regulated Generation?	2023 Net Generation (MWh)	2023 Total Disposition of Energy (MWh)	Net Generation / Total Disposition of Energy (%)
Canadian Utilities Limited	CU	n/a	n/a	n/a	n/a
Emera Inc.	EMA	n/a	n/a	n/a	n/a
Fortis, Inc.	FTS	n/a	n/a	n/a	n/a
Hydro One, Ltd.	H	n/a	n/a	n/a	n/a
Alliant Energy Corporation	LNT	Yes	27,277,606	35,121,877	77.7%
Ameren Corporation	AEE	Yes	31,854,815	46,561,957	68.4%
American Electric Power Company, Inc	AEP	Yes	69,312,876	130,478,797	53.1%
Duke Energy Corporation	DUK	Yes	202,468,971	251,154,475	80.6%
Entergy Corporation	ETR	Yes	113,668,549	159,174,858	71.4%
Eversource Energy	ES	Yes	62,854	62,090,288	0.1%
Exelon Corporation	EXC	No	0	201,182,207	0.0%
Evergy, Inc.	EVRG	Yes	35,619,888	58,127,800	61.3%
NextEra Energy, Inc.	NEE	Yes	146,408,118	151,160,730	96.9%
OGE Energy Corporation	OGE	Yes	13,293,839	32,158,987	41.3%
Pinnacle West Capital Corporation	PNW	Yes	25,493,508	37,714,588	67.6%
PPL Corporation	PPL	Yes	29,426,245	71,160,367	41.4%
Portland General Electric Company	POR	Yes	16,234,024	28,024,600	57.9%
Southern Company	SO	Yes	135,590,483	177,430,574	76.4%
Xcel Energy Inc.	XEL	Yes	75,104,417	128,439,828	58.5%

Source: S&P Global; FERC Form 1 and EIA Form 861

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 46

Preamble:

One of the screening criteria for US companies is:

"Have positive earnings growth rate projections from at least two sources."

Question(s):

19.1 Please explain why this criterion is necessary.

19.2 Would replacement of this criterion with one that only required "earnings growth projections from at least two sources" have resulted in additional companies being included in either the US Electric Proxy Group (Figure 5) or the US Gas Proxy Group (Figure 6)?

19.2.1 If yes, please identify the additional companies that would have been included.

19.2.2 If yes, please re-calculate the results for the Constant Stage DCF and the Multi-Stage DCF (similar to Figure 13) using proxy groups that include these additional companies.

19.2.3 If yes, please re-calculate the CAPM results (Figures 16 and 18) using the companies in the revised proxy groups to determine the beta values.

Response:

19.1 This criterion is necessary because investors would not choose to invest in a company if they believed it would not have positive EPS growth over the long-term. Because Concentric uses a DCF model to estimate the authorized ROE for its proxy group companies, we always exclude companies from the proxy group if they do not have positive EPS growth rate forecasts from at least two sources.

19.2 No, it would not.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 45-50 and pages 81-84
M1: LEI Expert Evidence, pages 114-115

Preamble:

In its discussion of LEI's application of the various methodologies Concentric (pages 81-84) does not make any reference or comments regarding the proxy groups used by LEI or LEI's selection criteria for choosing the companies to include in each proxy group.

Question(s):

Please provide Concentric's views on the appropriateness of the proxy groups established by LEI and the screening criteria used by LEI to determine the companies to be included in each proxy group for purposes of determining the cost of capital parameters for Ontario's regulated utilities.

Response:

Concentric understands that LEI used the following screening criteria (LEI Report, pp. 114-115):

1. The company stock is publicly traded in a recognized North American stock exchange; and

2. A certain percentage of the company's revenue or assets are from operations related to particular sectors:

    a. For generation peer companies, at least 70% from electricity generation
    b. For wires peer companies, at least 70% from electricity transmission/distribution
    c. For natural gas peer companies, at least 80% from natural gas transmission/distribution

These screens resulted in three proxy groups:

Figure 37. Determination of DCF ROE for electricity generation, wires (electricity transmission/distribution) and gas transmission/distribution

Generation			
Company	**Dividend yield (Apr 2023 - Mar 2024)**	**2024-2026 annual EPS growth estimate**	**DCF ROE**
Boralex Inc. (TSX:BLX)	2.1%	5.9%	7.9%
Constellation Energy Corporation (NASDAQGS:CEG)	0.7%	13.2%	13.8%
NRG Energy, Inc. (NYSE:NRG)	2.0%	3.6%	5.6%
Ormat Technologies, Inc. (NYSE:ORA)	0.7%	15.3%	16.0%
Vistra Corp. (NYSE:VST)	0.9%	13.4%	14.3%
Average	**1.26%**	**10.26%**	**11.52%**

Wires (electricity transmission and distribution)			
Company	**Dividend yield (Apr 2023 - Mar 2024)**	**2024-2026 annual EPS growth estimate**	**DCF ROE**
Ameren Corporation (NYSE:AEE)	3.7%	6.1%	9.8%
Consolidated Edison, Inc. (NYSE:ED)	3.4%	5.1%	8.5%
Edison International (NYSE:EIX)	4.1%	8.7%	12.8%
Eversource Energy (NYSE:ES)	4.7%	5.5%	10.1%
Exelon Corporation (NASDAQGS:EXC)	3.9%	5.4%	9.4%
FirstEnergy Corp. (NYSE:FE)	4.2%	6.5%	10.7%
Hydro One Limited (TSX:H)	3.1%	6.1%	9.2%
National Grid plc (LSE:NG.)	5.0%	6.2%	11.2%
NorthWestern Energy Group, Inc. (NASDAQGS:NWE)	5.0%	8.1%	13.1%
Average	**4.12%**	**6.41%**	**10.53%**

Gas distribution			
Company	**Dividend yield (Apr 2023 - Mar 2024)**	**2024-2026 annual EPS growth estimate**	**DCF ROE**
AltaGas Ltd. (TSX:ALA)	3.9%	10.3%	14.2%
Atmos Energy Corporation (NYSE:ATO)	2.7%	8.0%	10.7%
Chesapeake Utilities Corporation (NYSE:CPK)	2.3%	9.0%	11.3%
Enbridge Inc. (TSX:ENB)	7.3%	5.7%	13.0%
New Jersey Resources Corporation (NYSE:NJR)	4.0%	4.3%	8.2%
Northwest Natural Holding Company (NYSE:NWN)	5.1%	3.5%	8.5%
ONE Gas, Inc. (NYSE:OGS)	4.1%	3.1%	7.2%
RGC Resources, Inc. (NASDAQGM:RGCO)	3.9%	7.9%	11.8%
Spire Inc. (NYSE:SR)	4.8%	5.3%	10.2%
Average	**4.22%**	**6.34%**	**10.56%**

Note: LEI has excluded some outlier companies from the generation peer group due to very high or very low 2024-2026 annual EPS growth estimates that resulted in implausible estimates of DCF ROE for the generation peer group. The excluded companies include Brookfield Renewable Corporation, Clearway Energy, Inc., Innergex Renewable Energy Inc., Northland Power Inc., and TransAlta Corporation. Others, such as Talen Energy, lacked sufficient historical data.

Source: S&P Capital IQ.

As a general premise, Concentric prefers a more detailed set of screens (we used a seven factor screen for both the North American electric and gas proxy groups). The resulting overlap between LEI's and Concentric's proxy groups is partial (4 of LEI's 9

electric proxy group companies are in one of Concentric's groups, and 6 of LEI's 9 gas companies are in one of Concentric's groups). That said, LEI and Concentric are aligned in drawing from both Canadian and U.S. companies, and we believe that LEI's sample is reasonably representative of the North American electric and gas utility sectors. For the electric generation sample, LEI's screen produced 5 companies used in their DCF analysis, and 10 companies used in their CAPM analysis. We appreciate that identifying an appropriate generation proxy group for a regulated generation company is challenging. The LEI generation group companies own a mix of generation resources (e.g. gas, coal, wind, solar, geothermal) and participate in other related businesses (e.g. electricity retail) that are not directly comparable to OPG's pure-play regulated nuclear and hydroelectric generation business.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 44 and 55

Preamble:

The Report states (page 55):

"Our cost of capital analysis is framed by the conclusion that Canada and the U.S. have comparable macroeconomic and investment environments."

Question(s):

Please reconcile the referenced statement on page 55 with the fact that (per Figure 3) while the yield on A-rated Canadian utility bonds decreased between November 2009 and May 2024, the yield on Moody's A-rated utility bonds increased.

Response:

It is important to take a holistic view of market data, rather than focusing on a specific data point, such as A-rated utility bond yields in Canada and the U.S. Other economic indicators and market data in Figure 3 demonstrate that capital costs were higher in May 2024 than in November 2009. Furthermore, A-rated utility bond yields are a function of government bond yields. In order words, when utilities issue debt, the pricing is based on a spread over government bond yields at the time when the issuance is priced. In November 2009, 30-year GOC bond yields were 37 basis points lower than 30-year Treasury bond yields in the U.S., while in May 2024 30-year GOC bond yields were 111 basis points lower than in the U.S. This is largely due to Canada being slightly ahead of the U.S. in terms of relaxing monetary policy, with the Bank of Canada having cut the overnight rate by a total of 50 bps in June and July 2024, while the U.S. Federal Reserve has held off on reducing the federal funds rate so far. However, as discussed in Concentric's report, Exhibit M2, our ROE analysis uses forecast bond yields in the CAPM and Risk Premium models, not current historical average yields. Lastly, as noted in Concentric's report, the most important change in market data since November 2009 that influences the authorized ROE is the significant increase in utility betas.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 59

Question(s):

22.1 With respect to Figure 10, please explain why the historical GDP growth (2009-2023) varies across the three North American proxy groups.

22.2 With respect to Figure 10, please explain why the forecast GDP growth (2030-2034) varies across the three North American proxy groups.

22.3 Are the historical results in Figure 10 skewed at all by the fact the starting point of the period used is 2009 – the time of financial crisis (per pages 44, 64 and 96)?

Response:

22.1 The data presented in Figure 10 differ slightly by proxy group because the number of Canadian and U.S. companies differ in each proxy group. Companies were “assigned” the Canadian historical GDP growth rate (4.45%) or U.S. historical GDP growth rate (4.65%) based on their primary country of operation, and then the growth rates were averaged for each proxy group. This enabled Concentric to present country-specific growth rates in a proxy group-based table.

22.2 See the response to VECC-22.1. The Canadian forecast GDP growth rate used was 3.84% and the U.S. forecast GDP growth rate was 4.04%.

22.3 Concentric does not believe that using a 2009 starting point skews the comparison, as both GDP and earnings/dividends growth would be depressed during and immediately after the financial crisis, and therefore the relative comparison still holds. In fact, using the year 2013 as a starting point, which is relatively removed from the financial crisis, yields similar, if not more pronounced, results compared to those in Figure 10.

North American Electric Proxy Group	**Historical EPS CAGR through 2023**	**Historical DPS CAGR through 2023**	**Historical GDP CAGR through 2023**
2009 Start Year (as seen in Figure 10)	4.36%	5.44%	4.61%
2013 Start Year (illustrative)	5.36%	5.93%	4.81%

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 64

Preamble:

The Report states:

"We selected a three-year forecast of the Canadian bond yield because it reflects the medium-term outlook for government bond yields as central banks continue to focus on bringing inflation down to target levels. Even with an annual adjustment formula, a forward looking bond yield is appropriate, as the cost of capital is a forward-looking estimate.

Although the current spread between 10- and 30-year government bond yields in Canada is negative, the average spread between 10- and 30-year government bond yields over the past 10 years has been approximately 33 basis points in Canada and 47 basis points in the U.S.

As illustrated in Figure 15 the projected yields on 30-year government bonds over the period 2025-2027 are 3.46 percent in Canada and 4.14 percent in the U.S. By comparison, the 30-day average of the 30-year bond yields in Canada and the U.S. stood at 3.37 percent and 4.50 percent, respectively, as of June 30, 2024." (emphasis added)

Question(s):

23.1 Given the cost of capital is meant to be a forward looking estimate why is it appropriate to use a 10-year historic period to establish the average spread between 10- and 30-year government bond yields?

23.2 What would be the average Canadian and US spreads based on: i) a five-year historic average or ii) a three-year historic average?

23.3 Is there now a more recent Consensus Forecast for 10-year Canada and US bond yields?

23.3.1 If yes, please provide an updated version of Figure 14

23.4 Based on the April 2024 Consensus Forecast what are the forecast for 10-year Canada and US government bond yields for 2024?

23.4.1 If a more recent Consensus Forecast is available, what are its forecasts for 10-year Canada and US government bond yields for 2024?

Response:

23.1 Concentric typically calculates the average spread between 10- and 30-year government bond yields over a recent 90-day period. However, this spread has been inverted in recent months, especially in Canada. Because investors require higher returns on bonds with longer maturities, it is not reasonable to apply a negative 10/30 spread to the Consensus Economics' forecast of the 10-year bond yield. As an alternative, Concentric has used the long-term average 10/30 spread over the last 10 years to determine the risk-free rate. This long-term average spread, reflecting mostly non-inverted market conditions, represents a reasonable on-average estimation for what the spread will be, or settle to, going forward.

23.2 Based on a five-year average for the period ending May 31, 2024, the average Canadian and U.S. 10/30 government bond yield spreads were 0.19 and 0.39, respectively. Based on a three-year average, the average Canadian and U.S. spreads were 0.07 and 0.24, respectively.

23.3 There is not a more recent forecast available from Consensus Economics at this time. Long-term forecasts that were used in Figure 14 are published in April and October of each year.

23.4 Based on the April 2024 edition of Consensus Economics, the forecast for the 10-year U.S. and Canadian government bond yields for 2024 were 4.1% and 3.4%, respectively.

23.4.1 Based on the July 2024 edition of Consensus Economics, the forecast for the 10-year U.S. and Canadian government bond yields as of the end of October 2024 were 4.2% and 3.3%, respectively.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: Concentric Report, page 66

Figure 16: Value Line and Bloomberg Betas

Canadian	0.77	0.85
U.S. Electric	0.95	0.91
U.S. Gas	0.85	0.82
North American Electric	0.92	0.88
North American Gas	0.83	0.87
North American Combined	0.90	0.88

Question(s):

24.1 Please clarify the data period used for this table.

24.2 Please recalculate the Betas shown in figure 16 using the time period of 2022 to 2024 and separately, 2018-2024

Response:

24.1 The time period used for Figure 16 is 6/7/2019 to 5/31/2024. It represents the 5-year adjusted beta, sourced from Bloomberg.

24.2 Please see VECC-24.2, Attachment 1.

OEA Proxy Group

Atmos Energy Corp.	ATO US Equity
Spire, Inc.	SR US Equity
Northwest Natural Gas Company	NWN US Equity
ONE Gas, Inc.	OGS US Equity
Alliant Energy Corporation	LNT US Equity
Ameren Corporation	AEE US Equity
American Electric Power Company, Inc.	AEP US Equity
Duke Energy Corporation	DUK US Equity
Entergy Corporation	ETR US Equity
Eversource Energy	ES US Equity
Exelon Corporation	EXC US Equity
Evergy, Inc.	EVRG US Equity
NextEra Energy, Inc.	NEE US Equity
OGE Energy Corporation	OGE US Equity
Pinnacle West Capital Corporation	PNW US Equity
Portland General Electric Company	POR US Equity
PPL Corporation	PPL US Equity
Southern Company	SO US Equity
Xcel Energy Inc.	XEL US Equity
AltaGas Limited	ALA CN Equity
Canadian Utilities Limited	CU CN Equity
Emera Inc.	EMA CN Equity
Enbridge Inc.	ENB CN Equity
Fortis, Inc.	FTS CN Equity
Hydro One, Ltd.	H CN Equity

2-Yr Beta	
Start Date:	6/3/2022
End Date:	5/31/2024
Relative Index (US)	SPX
Relative Index (CAI	SPTSX
Period:	W

	Bloomberg Beta	
	Raw	Adjusted
ATO US Equity	0.6301	0.7534
SR US Equity	0.6821	0.7881
NWN US Equity	0.4421	0.6280
OGS US Equity	0.4564	0.6376
LNT US Equity	0.5238	0.6825
AEE US Equity	0.5996	0.7330
AEP US Equity	0.5766	0.7177
DUK US Equity	0.5250	0.6833
ETR US Equity	0.6445	0.7630
ES US Equity	0.6567	0.7711
EXC US Equity	0.6902	0.7935
EVRG US Equity	0.5284	0.6856
NEE US Equity	0.7148	0.8099
OGE US Equity	0.6236	0.7490
PNW US Equity	0.5873	0.7248
POR US Equity	0.5515	0.7010
PPL US Equity	0.7242	0.8161
SO US Equity	0.5241	0.6827
XEL US Equity	0.5530	0.7020
ALA CN Equity	0.9108	0.9405
CU CN Equity	0.5448	0.6965
EMA CN Equity	0.5654	0.7103
ENB CN Equity	0.9615	0.9743
FTS CN Equity	0.4347	0.6231
H CN Equity	0.4875	0.6583
Average	**0.6055**	**0.7370**

5-Yr Beta	
Start Date:	6/7/2019
End Date:	5/31/2024
Relative Index (US)	SPX
Relative Index (CAI	SPTSX
Period:	W

	Bloomberg Beta	
	Raw	Adjusted
ATO US Equity	0.7438	0.8292
SR US Equity	0.7952	0.8635
NWN US Equity	0.6170	0.7446
OGS US Equity	0.7487	0.8325
LNT US Equity	0.8106	0.8737
AEE US Equity	0.7589	0.8393
AEP US Equity	0.7675	0.8450
DUK US Equity	0.7357	0.8238
ETR US Equity	0.9620	0.9747
ES US Equity	0.8526	0.9017
EXC US Equity	0.9738	0.9825
EVRG US Equity	0.8391	0.8927
NEE US Equity	0.8683	0.9122
OGE US Equity	1.0267	1.0178
PNW US Equity	0.9037	0.9358
POR US Equity	0.8183	0.8789
PPL US Equity	1.0995	1.0664
SO US Equity	0.8461	0.8974
XEL US Equity	0.7442	0.8295
ALA CN Equity	1.2336	1.1557
CU CN Equity	0.7882	0.8588
EMA CN Equity	0.5782	0.7188
ENB CN Equity	0.9012	0.9341
FTS CN Equity	0.5836	0.7224
H CN Equity	0.5379	0.6919
Average	**0.8214**	**0.8809**

6-Yr Beta	
Start Date:	6/8/2018
End Date:	5/31/2024
Relative Index (US)	SPX
Relative Index (CAI	SPTSX
Period:	W

	Bloomberg Beta	
	Raw	Adjusted
ATO US Equity	0.6797	0.7865
SR US Equity	0.7364	0.8243
NWN US Equity	0.5786	0.7191
OGS US Equity	0.6951	0.7967
LNT US Equity	0.7575	0.8383
AEE US Equity	0.6961	0.7974
AEP US Equity	0.7069	0.8046
DUK US Equity	0.6695	0.7796
ETR US Equity	0.8794	0.9196
ES US Equity	0.7836	0.8557
EXC US Equity	0.8966	0.9310
EVRG US Equity	0.7591	0.8394
NEE US Equity	0.8008	0.8672
OGE US Equity	0.9418	0.9612
PNW US Equity	0.8163	0.8775
POR US Equity	0.7558	0.8372
PPL US Equity	1.0228	1.0152
SO US Equity	0.7894	0.8596
XEL US Equity	0.6863	0.7908
ALA CN Equity	1.1865	1.1243
CU CN Equity	0.7627	0.8418
EMA CN Equity	0.5651	0.7100
ENB CN Equity	0.8954	0.9303
FTS CN Equity	0.5576	0.7050
H CN Equity	0.5059	0.6706
Average	**0.7650**	**0.8433**

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 69
M1: LEI Report, page 120

Preamble:

The Report states:

"The historical MRP is based on the arithmetic mean of the equity market returns for large company stocks over the income only return on longterm government bonds, based on data from Kroll (formerly Duff & Phelps). In Canada, the historical MRP is based on return data from 1919-2023, while in the U.S., the historical MRP is calculated using return data from 1926-2023."

The LEI Report calculates it historic MRP value using S&P 500 total returns averaged over three time periods."

Question(s):

25.1 In calculating the historical MRP the Report states that Concentric used the equity return for large company stocks. Please explain how (if at all) this differs from the S&P 500 used by LEI. As part of the response, please explain how the "large companies" were chosen.

25.2 Please explain why Concentric chose to use the equity return for large company stocks as opposed to the S&P 500 returns.

Response:

25.1 The historical MRP from Kroll uses the return on the S&P 500 (U.S.) and the TSX (Canada) indexes as the equity return for "large company stocks."

25.2 See response to VECC- 25.1. These returns are the same for the U.S. historical MRP.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 69

Preamble:

The Report states:

"The forward-looking MRP is calculated by subtracting the risk-free rate for each country from the estimated total return for the overall market, as calculated using the DCF methodology for the S&P/TSX Composite Index in Canada and the S&P 500 Index in the U.S."

Question(s):

26.1 In using the DCF methodology to determine the total return for the entire market, did Concentric use a single-stage DCF model or a multi-stage DCF model?

26.1.1 If a single stage model was used, what would be the MRP and ROE results using a multi-stage model similar to that used by Concentric in its DCF calculations?

26.2 In using the S&P/TSX Composite Index in Canada and the S&P 500 Index in the U.S., did Concentric include in the calculations all the companies listed in each index?

26.2.1 If not, which companies were excluded and why?

Response:

26.1 Concentric used a single-stage DCF model to calculate the projected total market return in Exhibits CEA-6.1 and CEA-6.2.

Please see VECC-26.1, Attachment 1 for the requested calculation using a multi-stage DCF model to calculate the forward-looking MRP for both the S&P/TSX

Index and the S&P500. Concentric notes that the Federal Energy Regulatory Commission ("FERC") specifically rejected the use of a multi-stage DCF approach for the purpose of estimating the forward market equity risk premium and uses the constant growth DCF model for this purpose (see 156 FERC ¶ 61,234, Opinion 551, September 28, 2016, at paras 170 and 171).

Concentric continues to believe it is appropriate to use the constant growth DCF model to perform the calculation of the forward-looking MRP; however, our ROE recommendation is based on the average results of the multi-stage DCF model, the CAPM using a historical market risk premium, and the Risk Premium model. Therefore, Concentric did not rely on the forward-looking MRP for either Canada or the U.S. in recommending our base ROE.

26.2 Concentric included all dividend-paying companies in the TSX and S&P 500 Indexes that have a projected EPS growth rate from Bloomberg. Both dividends and a projected growth rate are required to calculate DCF results.

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Please see Exhibit N-M2-VECC-26.1_Attachment 1.xlsx on the OEB's RDS.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 71

Preamble:

The Report states:

"It is common practice for Canadian regulators to approve an adjustment for flotation costs and financing flexibility, with 50 basis points being the norm."

And

"The adjustment for flotation costs compensates the equity holder for the costs associated with the sale of new issues of common equity. These costs include out-of-pocket expenditures for the preparation, filing, underwriting and other costs of issuance of common equity."

And

"The adjustment also takes 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. The adjustment is particularly necessary because authorized ROEs in Canada tend to be lower and Canadian utilities are more thinly capitalized than US utilities"

Question(s):

27.1 For utilities that actually issue common equity, can Concentric provide an estimate as to the portion of the 50 basis points that would be required to compensate the equity holder for the costs associated with the sale of new issues of common equity?

27.2 For those Ontario-regulated utilities that do not issue common equity (e.g., where the equity is held by the municipality), why is appropriate to include in the ROE an allowance designed to compensate the equity holder for the costs associated with the sale of new issues of common equity?

Response:

27.1 Please see the response to M2-10-OEB Staff-16. Flotation costs typically are in the range of 25 basis points for the companies in Concentric's North American Combined proxy group.

27.2 All utilities incur costs associated with raising debt and equity, even if from a municipal shareholder that incurs these costs on behalf of its utility. The 50 basis points is designed to approximate these costs and provide for financial flexibility. See response to M2-10-OEB Staff-16.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 75 and 78

Question(s):

28.1 With respect to the Risk Premium Results set out in Figures 21 and 22 for US electric and gas utilities respectively, what was the basis for 30-year US Treasury bond associated with each authorized ROE (e.g., was it the current yield at the time the decision was made)?

28.2 With respect to the Risk Premium Results set out in Figure 25 for Canadian electric and gas utilities, what was the basis for 30-year GOC bond associated with each authorized ROE (e.g., was it the current yield at the time the decision was made)?

28.3 Is there any way Concentric can subdivide the results for the over 900 US electric utility cases as between utilities whose assets are primarily related to generation versus transmission & distribution such that separate Risk Premium analyses can be performed for each sub-set?

28.3.1 If yes, please do so and provide the Risk Premium results (per Figure 21) for each sub-set.

28.4 Is there any way Concentric can subdivide the results for the approximately 60 Canadian decisions for electric and gas utilities from 1994 through 2023, as between gas utilities and electric utilities that separate Risk Premium analyses can be performed for each sub-set?

28.4.1 If yes, please do so and provide the Risk Premium results (per Figure 25) for each sub-set.

Response:

28.1 Concentric used the average quarterly yield on the 30-year U.S. Treasury bond during the quarter in which the ROE decision was issued.

28.2 Concentric used the average yield on the 30-year Government of Canada bond during the month in which the ROE decision was issued.

28.3 Concentric cannot provide an analysis sub-dividing between utilities that are primarily generation and those that are primarily T&D. We have, however, provided an analysis of electric utilities that are vertically-integrated (i.e., own generation, in addition to transmission and distribution lines), in comparison to electric utilities that are distribution-only. The vertically-integrated vs distribution-only ROE results are within ten basis points of each other. This analysis is provided in VECC-28.3, Attachment 1.

28.4 Please see VECC-28.4, Attachment 1 for the requested analysis separating electric and gas decisions. Concentric notes that there were 33 data points each for the separate electric and gas analyses (both inclusive of seven generic proceeding decisions), as compared to the 59 data points in our original analysis combining electric and gas.

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Please see Exhibit N-M2-VECC-28.3_Attachment 1.xlsx on the OEB's RDS.

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Please see Exhibit N-M2-VECC-28.4_Attachment 1.xlsx on the OEB's RDS.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 76 and 79

Preamble:

The Report states (page 76):

> *"In order to apply this relationship to current and expected bond yields, we consider three estimates of the 30-year U.S. Treasury yield: the current 30-day average, a near-term Blue Chip consensus forecast for Q3 2024 –Q3 2025, and a long-term Blue Chip consensus forecast for 2025– 2029. We find this five-year result to be most applicable because investors typically have a multi-year view of their required returns on equity."*

Question(s):

29.1 In the case of the US utility analyses, which of the three estimates of the 30-year U.S. Treasury yields most closely matches the basis for the actual yield values used in the estimation of the Risk Premium equations (Figures 21 and 22).

29.1.1 If it was not the historical values consistent with the long-term Blue Chip consensus forecast, why is it appropriate to use this forecast in the equation to estimate the ROE?

Response:

29.1 Actual bond yield values are used as the independent data series in the regression analysis. However, once the regression equation is specified, it is necessary to develop an estimate of the US Treasury bond yield to plug back into the regression equation, to calculate an ROE result. This estimate of the US Treasury bond can be either the current average or a forecast. Concentric finds that using the five-year projected UST is reasonable because investors typically

have a multi-year view of required returns on equity, but all three options were presented for illustrative purposes.

Concentric notes that the two other views of the UST (current 30-day average and five-quarter projection) both produced higher ROEs than does an analysis using Concentric's recommended five-year UST.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 81 and 136-137
British Columbia Utilities Commission, Generic Cost of Capital Proceeding (Stage 1), Exhibit B1-8-1, Appendix C, Concentric's Cost of Capital Report, pages 4 & 6

Preamble:

The Report states (page 81):

> *"For example, in September 2023, the BCUC issued a decision in the generic cost of capital proceeding for FortisBC Energy Inc. (FEI, a gas utility) and FortisBC Inc. (FBC, an electric utility) in which the authorized ROE was increased to 9.65 percent for both FEI and FBC, while the deemed equity ratio for FEI was raised from 38.5 percent to 45.0 percent and for FBC from 40.0 percent to 41.0 percent."*
>
> *Concentric's evidence in the recent BCUC Generic Cost of Capital Proceeding (Stage 1) states:*
>
> *"In addition, FEI's proposed common equity ratio of 45.0 percent is reasonable, if not conservative" (page 4)*
>
> And
>
> *"In addition, FBC's proposed common equity ratio of 40.0 percent is reasonable, if not conservative" (page 6)*

Question(s):

30.1 What is Concentric's understanding as to why the BCUC only increased the equity ratio for FBC by one percentage point, while increasing the equity ratio for FEI by 6.5 percentage points such that FEI equity ratio now exceeds that of FBC whereas before it was lower?

30.2 In Concentric's view are the business and financial risks similar for electricity generation (in general as opposed to OPG specifically) vs. electricity transmission/distribution?

30.2.1 If yes, why?

30.2.2 If not, which is "riskier" and why?

30.3 Given the Concentric's evidence and the BCUC decision (both of which called for FEI and FBC to have different capital structures) in the recent BCUC proceeding, why is Concentric recommending a common equity thickness (45%) for both gas distribution and electricity transmission/distribution in this proceeding?

Response:

30.1 The BCUC accepted the combined evidence of FEI and Concentric demonstrating that FEI's business risk had increased and reasoned "[i]n the absence of contrary expert evidence and recognizing [that] FEI shareholder's real business risks, such as the impacts from the Energy Transition risk have increased since 2016, we accept Mr. Coyne's recommended 45.0 percent equity thickness for FEI. The Panel finds that the 45.0 percent equity thickness meets the comparable investment and capital attraction requirements in the Fair Return Standard because 45.0 percent is premised on FEI's proxy group and supported by our assessment of FEI's business risk. Further, as compared to FEI's current 38.5 percent equity thickness, an increase to 45.0 percent will maintain FEI's financial integrity."

30.2 Credit rating agencies and equity investors generally perceive integrated electric utilities as having somewhat greater risk than electric T&D companies. Ownership of electric generation assets is generally considered to have greater business and financial risk due to several factors, including the operating risk of building and maintaining the plants, the need to comply with environmental regulations, the need to spend substantial amounts of capital to build and upgrade the plants, and fluctuations in demand for electricity.

30.3 FBC proposed the maintenance of its existing 40.0% equity ratio in the BC proceeding, which Concentric supported. We did note in our evidence that "FBC's core credit ratios provide little cushion for FBC to maintain its current long-term issuer rating of Baa1 from Moody's. Overall, my [Mr. Coyne's] conclusion is that FBC's deemed equity ratio should be maintained at 40.0 percent at a minimum, and that the smaller size of FBC relative to the proxy

group companies in both Canada and the U.S. could justify an increase in the Company's deemed equity ratio." [emphasis added]

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 83

Preamble:

The Report states:

> *"LEI then adjusts these raw betas for differences in financial leverage between the proxy group companies and Ontario's electric and gas utilities. Concentric has performed a similar calculation using the Hamada equation, although we have not relied on that version of our CAPM analysis in our ROE recommendation. If LEI had used Blume adjusted betas calculated weekly over five years in Figure 39 of its report, the weighted average beta for the companies in LEI's three proxy groups (as shown in Figure 40 of LEI's report) would be 0.827, and the average CAPM result (as shown in Figure 41 of LEI's report) would be 10.07 percent, not including an adjustment for flotation costs and financial flexibility." (emphasis added)*

Question(s):

31.1 Please provide Concentric's calculated beta values for each of the three proxy groups in LEI's Figure 40 using the Blume adjusted betas.

31.2 In Concentric's calculation of LEI's results using Blume adjusted betas did Concentric adjust the raw betas (or the Blume adjusted betas) for differences in financial leverage between LEI's proxy groups and Ontario's electric and gas utilities (as was done by LEI)?

Response:

31.1 Please see VECC-31.1, Attachment 1. The five-year Blume adjusted weekly betas from Bloomberg are highlighted in yellow in column E, and the resultant proxy group-weighted average beta is highlighted in yellow in column Q.

31.2 Yes, Concentric allowed LEI's calculations regarding differences in financial leverage (i.e., the unlevering/relevering process) to flow through to the weighted average beta of 0.827, and ultimately to the end CAPM result of 10.07 percent. Concentric only changed the raw betas used by LEI to be adjusted betas; the rest of the methodology stayed the same as that used by LEI.

For reference, there were two further corrections made to the LEI analysis that pertained to other issues:

- The D/E ratio of the Electricity Generation proxy group was corrected from 1.46 to 1.22. The latter represents 55% debt divided by 45% equity. This fix is highlighted in red in cell G6 in VECC-31.1, Attachment 1.
- The re-levering calculations for the Gas Distribution proxy group were corrected to point to the appropriate Gas Distribution D/E ratio. There were previously pointing to the Electricity Generation and Electricity T&D D/E ratios. These fixes are highlighted in red in cells I43-I45 in VECC-31.1, Attachment 1.

The net effect of these two corrections on the weighted average five-year beta was negligible to two decimal places.

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Please see Exhibit N-M2-VECC-31.1_Attachment 1.xlsx on the OEB's RDS.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 85-87 and 93

Preamble:

The Report states:

> *"Concentric's analysis demonstrates that the OEB formula has produced a comparable return for Ontario's electric and gas utilities to the average equity return for Canadian electric and gas utilities in most years since the formula was modified in 2009. The exception is during periods of very low interest rates in 2020-2022 when the COVID-19 pandemic caused central banks in Canada and around the globe to reduce short-term interest rates to near zero and to engage in purchases of government and corporate bonds in order to support the stability of financial markets and stimulate the economy. Because the OEB formula is tied to bond yields, the formula return declined during these years even though the risk premium for equity investors increased substantially." (page 87)*
>
> And
>
> *"The OEB's formula return in most years from 2010 through 2019 was in the range of 20 to 50 basis points higher than the average authorized ROE for electric distribution companies in Canada." (page 93)*

Question(s):

32.1 Does Concentric agree that, except for the 2020-2022 period, Figures 28 and 29 indicate that Ontario's ROE formula produced results that generally exceeded the average authorized returns for Canadian electric and gas utilities?

32.1.1 If not, why not?

32.1.2 If yes, in Concentric's view, what was the reason for this?

32.2 During the 2020-2022 period did the regulators in other Canadian jurisdictions

reset their authorized ROE's annually or just retain the ROEs authorized in previous years?

Response:

32.1 Yes. However, it's important to note that during the 2020-2022 period, the Ontario ROE formula produced results that were well below – up to 56 basis points below, as was the case for electric returns in 2021 – the average authorized returns for electric and gas utilities in other Canadian jurisdictions. Over the entire period from 2009-2024, the average OEB formula return was 9.04%, the average authorized ROE for electric utilities in other Canadian jurisdictions was 9.03%, and the average authorized ROE for gas distribution companies in other Canadian jurisdictions was 8.83%.

32.1.1 Not applicable

32.1.2 The reason is that the Ontario formula relies primarily on changes in government bond yields and utility credit spreads. Due to low interest rates in 2019-2021, the Ontario formula produced an ROE in 2020-2022 well below the average authorized ROE for other Canadian electric and gas utilities, even though the risk for equity investors increased during this period.

32.2 Ontario was the only Canadian jurisdiction which set the authorized ROE using a formula during the 2020-2022. Several other Canadian jurisdictions, however, have issued ROE determinations in recent years. Those decisions have generally resulted in higher authorized ROEs and/or higher deemed equity ratios. These include the BCUC Generic Cost of Capital and the AUC Determination of Cost of Capital Parameters.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 87

Preamble:

The Report states:

> *"Market data indicate that the cost of capital has increased for all North American utilities, including those in Ontario since the Board last examined this issue."*

Question(s):

33.1 In the quoted sentence, is the reference to "Ontario since the Board last examined this issue" referring to 2009 or 2016?

33.2 What market data is Concentric referring to that demonstrates the point being made?

Response:

33.1 The quoted sentence refers to the OEB's prior decision in December 2009.

33.2 Concentric is referring to the market data used in our ROE analysis in this proceeding, which supports a base authorized ROE of 10.0% as compared to the current base of 9.75%. In addition, Figure 3 in Exhibit M2 shows that utility betas (both raw and Blume adjusted) have increased since 2009, as have government and utility bond yields in the U.S. Each of these factors support the conclusion that the cost of capital has increased for North American utilities since 2009, including those in Ontario.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 95

Preamble:

The Report states:

> *"The second approach is to use a 30-year bond yield forecast, which is the method recently adopted by the AUC in October 2023 and that was recommended by LEI in this proceeding. 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. Based on the most recent information available as of May 31, 2024, using the Alberta methodology, the LCBF would be set at 3.36 percent. If the OEB adopts this recommendation, we suggest updating these data closer to when a final decision is made in this proceeding."*

Question(s):

34.1 If the ROE is being set for the coming year, why is it appropriate to give a 25% weight to the current 90-day average 30-year GOC bond yield?

34.2 Does Concentric consider forecasts from just three Canadian investment banks to be appropriate or should forecasts by other Canadian banks also be included?

Response:

34.1 Please see response to N-M2-AMPCO/IGUA-14(a).

34.2 Concentric relied on forecasts of 30-year GOC bonds from the same three Canadian banks as were used by the Alberta Utilities Commission in its October

2023 decision in Proceeding 27084. However, Concentric is not opposed to including additional forecasts from other major Canadian banks, as recommended by LEI, if the OEB finds that additional information to be useful.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 97-98

Preamble:

The Report states:

> *"To determine updated adjustment factors for both the LCBF and utility credit spread, Concentric ran a multivariate regression analysis using historical data between January 1, 1993 and May 31, 2024. The regression tested U.S. authorized ROEs for electric and gas utilities, as the dependent variable, against both U.S. government bond yields and utility credit spreads as the independent variables."*
>
> *And*
>
> *"The regression yielded a government bond yield coefficient of 0.3984 and a utility credit spread coefficient of 0.3340, with an R-squared of 0.5445. Based on this analysis, Concentric recommends lowering the LCBF adjustment factor from 0.50 to 0.40 and the utility credit spread adjustment factor from 0.50 to 0.33. These changes recognize that the relationship between ROEs and government bond yields has weakened slightly over the past fifteen years, while still maintaining the formula's ability to be sufficiently sensitive to changes in interest rates and utility credit spreads."*

Question(s):

35.1 How were the U.S. government bond yields and utility credit spreads associated with each authorized ROE determined? Note: The question is no seeking the sources used but rather the basis for the value (i.e., was it the yields and spreads at the time of the decision, was it the yields and spreads for the first year the authorized ROE would apply, or some other basis?).

35.2 Please re-estimate the equation using: i) just US electric utilities and ii) just US gas utilities.

35.3 Given that the weights have been estimated using US government bond yields, why is it appropriate to use GOC bond yields spreads when applying the formula?

35.4 Is the data available to estimate as similar equation using authorized ROE for Canadian utilities and GOC bond yields?

35.4.1 If not, why not?

35.4.2 If yes, please do so.

Response:

35.1 The Concentric analysis uses the six-month daily average of the U.S. government bond yield and utility credit spread at the time the ROE decision was issued.

35.2 Separating out the analysis into U.S. gas and U.S. electric decisions produces substantially similar results as the combined analysis.

Dependent Variable	**Coefficient of Independent Variable 1 (30-Year US Government Bond Yield)**	**Coefficient Independent Variable 2 (A-Rated Utility Bond Yield Spread)**	**R^2**
US Electric & Gas Authorized ROEs, 1993-2024 (Original Analysis)	0.40	0.33	0.545
US Electric Authorized ROEs, 1993-2024	0.41	0.34	0.537
US Gas Authorized ROEs, 1993-2024	0.39	0.33	0.556

35.3 It is appropriate to still apply the U.S.-derived weights to the OEB formula because the relationship between U.S. authorized ROEs, government bond yields, and utility credit spreads are expected to mirror the relationship between Canadian authorized ROEs, government bond yields, and utility credit spreads, because

North American regulatory authorities rely, in part, on the same interest-rate based models in determining the authorized ROE in their respective jurisdictions.

35.4 Concentric does have a dataset available, but the data are not sufficient to produce meaningful or statistically significant results. The R^2 was 0.2452 and the 95% confidence intervals around the resultant coefficients were extremely wide. Please see VECC-35.4, Attachment 1 for the attempted analysis.

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Please see Exhibit N-M2-VECC-35.4_Attachment 1.xlsx on the OEB's RDS.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 105

Preamble:

The Report states:

> *"Concentric finds the following flaws with LEI's analysis:*
>
> *- The LEI regression considers BBB-rated corporate bond yields rather than A-rated utility bond yields;*
>
> *-The LEI regression considers the absolute level of corporate bond yields rather than spreads over government bond yields;*
>
> *-As such, LEI's multivariate regression suffers from multicollinearity issues, in which the two independent variables are highly correlated, leading to results that are imprecise and subject to large volatility if presented with small variations in input data."*

Question(s):

36.1 Given that not all Ontario utilities have an A-rating (per page 96), why is the fact LEI regression considers BBB-rated corporate bond yields rather than A-rated utility bond yields considered to be a "flaw".

36.2 On what information does Concentric conclude that "LEI's multivariate regression suffers from multicollinearity issues"?

Response:

36.1 The current OEB formula considers the spread between 30-year GOC bond yields and A-rated utility bond yields. Since the formula is based on A-rated utility credit spreads, the adjustment factors should be derived from a regression analysis based on A-rated utility bond yields, rather than BBB-rated corporate

bond yields. In conducting its analysis, LEI is not correspondingly recommending that the BBB-rated corporate bond yield be used in the Ontario ROE formula.

36.2 Multicollinearity is a statistical issue in which several independent variables are highly correlated or linearly dependent. Multicollinearity will lead to less reliable statistical inferences. It is much better to use linearly independent (or uncorrelated) independent variables; an analogy is placing legs in a three-legged stool at spread-out locations and at different angles (uncorrelated), rather than placing legs in the same location and at the same angle (correlated). One could certainly balance the stool with correlated legs, but it would respond with more volatility if subjected to a small variation in the input (e.g., tipping it over).

LEI uses the 30-Year UST and Moody's Baa Corporate bond yield as independent variables. These series are typically highly correlated, as if the 30-Year UST increases, the Moody's Baa Corporate bond yield will invariably increase by a similar amount, as corporate bonds immediately factor in the new government bond yield. It is better to use a bond yield spread for the second independent variable, because spreads are much less correlated with government bond yields. Spreads are more defined by the specific characteristics of the bond and are largely agnostic to the government bond yield level itself.

Put another way, LEI's two independent variables can be defined as 1) Gov't BY and 2) Gov't BY + Corp Spread. This specification double-counts the importance of the government bond yield. On the other hand, Concentric's two independent variables of 1) Gov't BY and 2) Utility Spread do not double-count any particular series.

Finally, Concentric regressed LEI's two independent variables against each other, using LEI data, and found an R^2 of 0.77, indicating reasonably high levels of correlation and therefore reasonably high multicollinearity. On the other hand, Concentric regressed its own two independent variables against each other, and found an R^2 of 0.005, indicating near-zero levels of correlation, and therefore near-zero multicollinearity.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 112-115

Preamble:

The Report states (page 114):

> *"In summary, increased climate risk and the energy transition require utilities to be financially prepared and flexible to withstand financial pressures associated with response to these risks, whether in the form of after-the-fact action or proactively increased resilience."*

Question(s):

37.1 Have risks related to climate increased for both Ontario'-regulated utilities and the relevant peers in the US and Canada?

37.1.1 If yes, in Concentric's view has the change in risks related to climate been similar for both Ontario-regulated utilities and their relevant peers? If not, why not?

Response:

37.1 Climate related risks have increased for utilities across the entire industry. Risks related to climate change and severe weather are unique to each utility depending on its service territory. Please see the response to N-M2-11-CME-9(c) for more information regarding Ontario in particular.

37.1.1 Yes. While the specific impacts on utilities of climate-related risks may differ based on jurisdiction-specific geographies, climate patterns, policies and regulations, Concentric views the change in climate-related risks for Ontario utilities to have been generally similar to those experienced more broadly in the North American utilities industry.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 114 and 115-118

Preamble:

The Report states:

> *"In summary, increased climate risk and the energy transition require utilities to be financially prepared and flexible to withstand financial pressures associated with response to these risks, whether in the form of after-the-fact action or proactively increased resilience." (page 114)*
>
> And
>
> *"Uncertainty about the pace of the Energy Transition will also increase planning risk in the near-term for electric distributors and transmitters." (page 116)*
>
> And
>
> *"Investors are acutely aware of the Energy Transition risk that natural gas utilities currently bear and seek returns commensurate with the increased risk of uncertainty resulting from environmental policy and increased focus on ESG."*

Question(s):

38.1 Have risks related to energy transition increased for both Ontario' electricity transmitters/distributors and the relevant peers in the US and Canada?

38.1.1 If yes, in Concentric's view has the change in risks related to energy transition have been similar for both Ontario's electricity transmitters/distributors and their relevant peers? If not, why not?

38.2 Have risks related to energy transition increased for both Ontario' gas distributors and the relevant peers in the US and Canada?

38.2.1 If yes, in Concentric's view has the change in risks related to energy transition have been similar for both Ontario's gas distributors and their relevant peers? If not, why not?

Response:

38.1 Yes.

38.1.1 Yes. While the specific impacts of the Energy Transition on electric utilities may differ based on jurisdiction-specific policies and regulations, Concentric views the change in risks related to Energy Transition for Ontario's electric transmitters and distributors to have been generally similar to those experienced more broadly in the North American utilities industry.

38.2 Yes.

38.2.1 Yes. While the specific impacts of the Energy Transition on gas utilities may differ based on jurisdiction-specific policies and regulations, Concentric views the change in risks related to Energy Transition for Ontario's gas distribution utilities to have been generally similar to those experienced more broadly in the North American utilities industry, and certainly more acute that in several other provinces and states. For instance, Enbridge Gas is currently on negative credit watch from S&P, reflecting "the uncertainty around upcoming regulatory outcomes related to EGI's gas utility operations and the potential for increased business risk from the energy transition." (see, S&P Global Ratings, "Enbridge Gas Inc. 'A-' Rating Affirmed; Outlook Remains Negative," June 28, 2024), but has not taken that action universally across the LDC industry.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 121-122

Preamble:

The Report states (page 121):

> *"As owners and operators of critical infrastructure, utilities face a heightened risk from cyber security breaches, in addition to the typical risks borne by all other sectors (e.g., personal information and data breaches, ransomware attacks, etc.)."*

Question(s):

39.1 Have risks related to cyber security increased for both Ontario'-regulated utilities and their relevant peers in the US and Canada?

39.2 If yes, in Concentric's view has the change in risks related to cyber security been similar for both Ontario-regulated utilities and their relevant peers? If not, why not?

Response:

39.1 Yes.

39.2 Yes, it is Concentric's view that the risks related to cyber security have increased for both the Ontario utilities and their North American peers, and these risks are similar. Please see the response to N-M2-2-OEB Staff-2 for more information.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 124

Preamble:

The Report states:

> *"UBS placed British Columbia in tier one, Ontario, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island in tier three, and Alberta in tier five."*

Question(s):

What is Concentric's understanding as to why British Columbia received a higher rating than Ontario?

Response:

40.1 The criteria that are used by UBS to assess the regulatory environment are provided at pages 123-124 of Concentric's report, Exhibit M2. However, the December 2023 UBS report does not indicate why one jurisdiction is ranked higher or lower than another.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 126

Preamble:

The Report states:

> *"The average S&P Global credit rating for the operating utilities held by the North American proxy group is A-. Credit ratings take into account both business and financial risk from the perspective of debt investors, who are concerned with the timely repayment of debt obligations. By comparison, S&P Global credit ratings for Ontario's electric and gas utilities range from BBB+ to A."*

Question(s):

What is the range of the S&P Global credit rating for the operating utilities held by the North American proxy group?

Response:

Please see VECC-M2-41.1, Attachment 1.

Proxy Group Regulatory Risk Assessment

Company	Ticker	Operating Subsidiary	Service Type	Jurisdiction	[1] Credit Rating	[2] Credit Rating (numerical)
Canadian Proxy Group						
AltaGas Limited	ALA	ENSTAR Natural Gas Company	Natural Gas	AK	NR	
		Washington Gas Light Company	Natural Gas	DC	A-	7
		Washington Gas Light Company	Natural Gas	MD	A-	7
		SEMCO Energy, Inc.	Natural Gas	MI	BBB	9
		Washington Gas Light Company	Natural Gas	VA	A-	7
Canadian Utilities Limited	CU	ATCO Electric	Electric	Alberta	NR	
		ATCO Gas	Natural Gas	Alberta	NR	
Emera Inc.	EMA	Tampa Electric Company	Electric	FL	BBB+	8
		Peoples Gas System [3]	Natural Gas	FL	A-	7
		New Mexico Gas Company, Inc.	Natural Gas	NM	NR	
		Nova Scotia Power Inc.	Electric	Nova Scotia	BBB-	10
Enbridge	ENB	Enbridge Gas	Natural Gas	Ontario	A-	7
		Gazifere	Natural Gas	Quebec	NR	
Fortis Inc.	FTS	Central Hudson Gas & Electric Corp.	Electric	NY	BBB+	8
		Central Hudson Gas & Electric Corp.	Natural Gas	NY	BBB+	8
		Tucson Electric Power Company	Electric	AZ	A-	7
		UNS Electric, Inc. [4]	Electric	AZ	A3	7
		UNS Gas, Inc. [4]	Natural Gas	AZ	A3	7
		FortisBC	Electric	British Columbia	A-	7
		FortisBC Energy	Natural Gas	British Columbia	A-	7
		Newfoundland Power Inc [4]	Electric	Newfoundland & Labrador	Baa1	8
		Maritime Electric Company Ltd.	Electric	Prince Edward Island	BBB+	8
HydroOne Inc.	H	Hydro One Inc.	Electric	Ontario	A-	7

Company	Ticker	Operating Subsidiary	Service Type	Jurisdiction	Credit Rating	Credit Rating (numerical)
U.S. Electric Proxy Group						
Alliant Energy Corporation	LNT	Interstate Power and Light Company	Electric	IA	A-	7
		Interstate Power and Light Company	Natural Gas	IA	A-	7
		Wisconsin Power and Light Company	Electric	WI	A	6
		Wisconsin Power and Light Company	Natural Gas	WI	A	6
Ameren Corporation	AEE	Ameren Illinois Company	Electric	IL	BBB+	8
		Ameren Illinois Company	Natural Gas	IL	BBB+	8
		Union Electric Company	Electric	MO	BBB+	8
		Union Electric Company	Natural Gas	MO	BBB+	8
American Electric Power Company, Inc.	AEP	Southwestern Electric Power Company	Electric	AR	BBB+	8
		Indiana Michigan Power Company	Electric	IN	BBB+	8
		Kentucky Power Company	Electric	KY	BBB	9
		Southwestern Electric Power Company	Electric	LA	BBB+	8
		Indiana Michigan Power Company	Electric	MI	BBB+	8
		Ohio Power Company	Electric	OH	BBB+	8
		Public Service Company of Oklahoma	Electric	OK	BBB+	8
		Kingsport Power Company	Electric	TN	NR	
		AEP Texas Inc.	Electric	TX	BBB+	8
		Southwestern Electric Power Company	Electric	TX	BBB+	8
		Appalachian Power Company	Electric	VA	BBB+	8
		Wheeling Power Company	Electric	WV	BBB+	8
Duke Energy Corporation	DUK	Duke Energy Florida, LLC	Electric	FL	BBB+	8
		Duke Energy Indiana, LLC	Electric	IN	BBB+	8
		Duke Energy Kentucky, Inc.	Electric	KY	BBB+	8
		Duke Energy Kentucky, Inc.	Natural Gas	KY	BBB+	8
		Duke Energy Carolinas, LLC	Electric	NC	BBB+	8
		Duke Energy Progress, LLC	Electric	NC	BBB+	8
		Piedmont Natural Gas Company, Inc.	Natural Gas	NC	BBB+	8
		Duke Energy Ohio, Inc.	Electric	OH	BBB+	8
		Duke Energy Ohio, Inc.	Natural Gas	OH	BBB+	8
		Duke Energy Progress, LLC	Electric	SC	BBB+	8
		Duke Energy Carolinas, LLC	Electric	SC	BBB+	8
		Piedmont Natural Gas Company, Inc.	Natural Gas	SC	BBB+	8
		Piedmont Natural Gas Company, Inc.	Natural Gas	TN	BBB+	8

Company	Ticker	Operating Subsidiary	Service Type	Jurisdiction	Credit Rating	Credit Rating (numerical)
Entergy Corporation	ETR	Entergy Arkansas, LLC	Electric	AR	A-	7
		Entergy New Orleans, LLC	Electric	LA	BB	12
		Entergy New Orleans, LLC	Natural Gas	LA	BB	12
		Entergy Louisiana, LLC	Electric	LA	BBB+	8
		Entergy Mississippi, LLC	Electric	MS	A-	7
		Entergy Texas, Inc.	Electric	TX	BBB+	8
Eversource Energy	ES	The Connecticut Light and Power Company	Electric	CT	A	6
		Yankee Gas Services Company	Natural Gas	CT	A-	7
		Eversource Gas Company of Massachusetts	Natural Gas	MA	A-	7
		NSTAR Electric Company	Electric	MA	A	6
		NSTAR Gas Company	Natural Gas	MA	A-	7
		Public Service Company of New Hampshire	Electric	NH	A	6
Evergy, Inc.	EVRG	Evergy Kansas Central, Inc.	Electric	KS	BBB+	8
		Evergy Kansas South, Inc.	Electric	KS	BBB+	8
		Evergy Metro, Inc.	Electric	KS	A-	7
		Evergy Metro, Inc.	Electric	MO	A-	7
		Evergy Missouri West, Inc.	Electric	MO	BBB+	8
Exelon Corporation	EXC	Delmarva Power & Light Company	Electric	DE	A-	7
		Delmarva Power & Light Company	Natural Gas	DE	A-	7
		Potomac Electric Power Company	Electric	DC	A-	7
		Commonwealth Edison Company	Electric	IL	A-	7
		Baltimore Gas and Electric Company	Electric	MD	A	6
		Baltimore Gas and Electric Company	Natural Gas	MD	A	6
		Delmarva Power & Light Company	Electric	MD	A-	7
		Potomac Electric Power Company	Electric	MD	A-	7
		Atlantic City Electric Company	Electric	NJ	A-	7
		PECO Energy Company	Electric	PA	BBB+	8
		PECO Energy Company	Natural Gas	PA	BBB+	8
NextEra Energy, Inc.	NEE	Florida Power & Light Company	Electric	FL	A	6
		Pivotal Utility Holdings, Inc.	Natural Gas	FL	NR	
		Lone Star Transmission, LLC	Electric	TX	NR	
OGE Energy Corporation	OGE	Oklahoma Gas and Electric Company	Electric	AR	A-	7
		Oklahoma Gas and Electric Company	Electric	OK	A-	7

Company	Ticker	Operating Subsidiary	Service Type	Jurisdiction	Credit Rating	Credit Rating (numerical)
Pinnacle West Capital Corporation	PNW	Arizona Public Service Company	Electric	AZ	BBB+	8
PPL Corporation	PPL	Kentucky Utilities Company	Electric	KY	A-	7
		Louisville Gas and Electric Company	Electric	KY	A-	7
		Louisville Gas and Electric Company	Natural Gas	KY	A-	7
		PPL Electric Utilities Corporation	Electric	PA	A	6
		The Narragansett Electric Company	Electric	RI	A-	7
		The Narragansett Electric Company	Natural Gas	RI	A-	7
		Kentucky Utilities Company	Electric	VA	A-	7
Portland General Electric Company	POR	Portland General Electric Company	Electric	OR	BBB+	8
Southern Company	SO	Alabama Power Company	Electric	AL	A	6
		Atlanta Gas Light Company	Natural Gas	GA	A-	7
		Georgia Power Company	Electric	GA	A	6
		Northern Illinois Gas Company	Natural Gas	IL	A-	7
		Mississippi Power Company	Electric	MS	A-	7
		Chattanooga Gas Company	Natural Gas	TN	NR	
		Virginia Natural Gas, Inc.	Natural Gas	VA	NR	
Xcel Energy Inc.	XEL	Public Service Company of Colorado	Electric	CO	A-	7
		Public Service Company of Colorado	Natural Gas	CO	A-	7
		Northern States Power Company	Electric	MN	A-	7
		Northern States Power Company	Natural Gas	MN	A-	7
		Southwestern Public Service Company	Electric	NM	BBB	9
		Northern States Power Company	Electric	ND	A-	7
		Northern States Power Company	Natural Gas	ND	A-	7
		Northern States Power Company	Electric	SD	A-	7
		Southwestern Public Service Company	Electric	TX	BBB	9
		Northern States Power Company	Electric	WI	A-	7
		Northern States Power Company	Natural Gas	WI	A-	7

Company	Ticker	Operating Subsidiary	Service Type	Jurisdiction	Credit Rating	Credit Rating (numerical)
US Gas Proxy Group						
Atmos Energy Corp	ATO	Atmos Energy Corporation	Natural Gas	KS	A-	7
		Atmos Energy Corporation	Natural Gas	KY	A-	7
		Atmos Energy Corporation	Natural Gas	LA	A-	7
		Atmos Energy Corporation	Natural Gas	MS	A-	7
		Atmos Energy Corporation	Natural Gas	TN	A-	7
		Atmos Energy Corporation	Natural Gas	TX	A-	7
Northwest Natural Holding Company	NWN	Northwest Natural Gas Company	Natural Gas	OR	A+	5
		Northwest Natural Gas Company	Natural Gas	WA	A+	5
ONE Gas, Inc.	OGS	Kansas Gas Service Company, Inc.	Natural Gas	KS	NR	
		Oklahoma Natural Gas Company	Natural Gas	OK	NR	
		Texas Gas Service Company, Inc.	Natural Gas	TX	NR	
Spire, Inc.	SR	Spire Missouri Inc.	Natural Gas	MO	BBB+	8
		Spire Alabama Inc.	Natural Gas	AL	BBB+	8
		Spire Gulf Inc.	Natural Gas	AL	NR	
Proxy Group Results				**Total:**	**Average:**	7
				130	A-	

Notes:

[1] Bloomberg Professional. S&P Rating, unless noted. May 31, 2024

[2] Bloomberg Professional

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

CONCENTRIC Report, pages 134-136

Preamble:

The Report states:

> *"As shown in Figure 35 below, the deemed equity ratio for Ontario's electric distribution and transmission utilities of 40 percent is slightly lower than the Canadian average of 41 percent but substantially lower than the U.S. average of approximately 51 percent. The deemed equity ratio for OPG of 45 percent falls in between. Similarly, the deemed equity ratio for Enbridge Gas of 38 percent is slightly below the Canadian average of*
>
> *39.9 percent (which includes the BCUC's recent increase to FortisBC Energy Inc.'s deemed equity ratio from 38.5 percent to 45.0 percent due primarily to risks associated with Energy Transition) and significantly lower than the U.S. average of slightly more than 52 percent." (page 134)*
>
> *And*
>
> *"Based on our analysis, we find that Ontario's regulated distribution and transmission utilities generally have comparable business risk to the companies in the North American Electric and Gas comparator groups. We also conclude that Ontario's utilities have similar financial risk to other electric and gas utilities in Canada and substantially greater financial risk than their U.S. peers due to the relatively low deemed equity ratios of 38 percent for Enbridge Gas, 40 percent for electric distribution and electric transmission, and 45 percent for OPG." (page 136*)

Question(s):

42.1 Contrary to the above reference, Figure 35 does not include historical data regarding the equity ratio for Canadian utilities. Please provide a revised version of Figure 35 that includes the results for Canadian utilities.

42.2 At the time the OEB approved the current equity ratio of 40% for Ontario electric

distribution and transmission utilities, how did this value compare with the average for US electric utilities?

42.3 In comparing the equity ratios for Ontario's electricity transmitters and distributors with the ratios for either Canadian or US electric utilities, how does Concentric account/adjust for the fact that the latter typically also include generation operations?

42.4 Please provide a version of Figure 36 based on 2009 data (i.e., at the time the OEB issued its 2009 Generic Cost of Capital Report).

Response:

42.1 Please see VECC-M2-42.1, Attachment 1 for the requested revision to Figure 35.

42.2 The equity ratio for Ontario's electric distribution and transmission utilities of 40% was approved in 2006. The U.S. electric utility average equity ratio in 2006 was 48.54%, per Regulatory Research Associates.

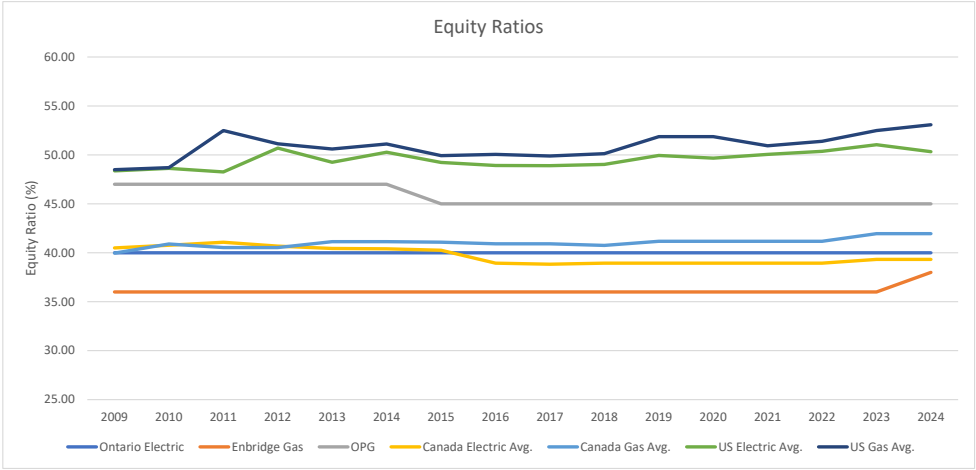
42.3 Authorized equity ratios for U.S. electric T&D utilities are generally 1-2 percentage points lower than equity ratios for integrated electric utilities. Concentric does not find it necessary to adjust for differences in equity ratios between T&D utilities and electric utilities that own generation in the U.S.

42.4 The table below shows the deemed/authorized equity ratios for U.S. Electric, U.S. Gas, Canadian Electric, and Canadian Gas based on 2009 data.

Proxy Group	**Deemed/Authorized Equity Ratio**
U.S. Electric	48.44%
U.S. Gas	49.08%
Canadian	48.05% (US Subs) 38.80% (Canadian Subs)

Deemed Equity ratio in Ontario Compared to Canadian and US Averages 2009-2024

	Ontario Electric	Enbridge Gas	OPG	Canada Electric Avg.	Canada Gas Avg.	US Electric Avg.	US Gas Avg.
2009	40.00	36.00	47.00	40.50	39.97	48.36	48.49
2010	40.00	36.00	47.00	40.78	40.89	48.63	48.70
2011	40.00	36.00	47.00	41.08	40.54	48.26	52.49
2012	40.00	36.00	47.00	40.69	40.54	50.69	51.13
2013	40.00	36.00	47.00	40.44	41.14	49.25	50.60
2014	40.00	36.00	47.00	40.40	41.14	50.28	51.11
2015	40.00	36.00	45.00	40.27	41.08	49.23	49.93
2016	40.00	36.00	45.00	38.93	40.92	48.91	50.06
2017	40.00	36.00	45.00	38.83	40.92	48.90	49.88
2018	40.00	36.00	45.00	38.94	40.75	49.02	50.12
2019	40.00	36.00	45.00	38.94	41.18	49.94	51.86
2020	40.00	36.00	45.00	38.94	41.18	49.67	51.87
2021	40.00	36.00	45.00	38.94	41.18	50.06	50.94
2022	40.00	36.00	45.00	38.94	41.18	50.36	51.38
2023	40.00	36.00	45.00	39.33	41.95	51.04	52.49
2024	40.00	38.00	45.00	39.33	41.95	50.32	53.08



Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 137

Preamble:

The Report states:

> *"The Fair Return Standard requires consideration of both changes in the utility's risk profile over time, as well as how the utility's business risk and deemed capital structure compares to the proxy group companies."*

Question(s):

Rather than considering "how the utility's business risk and deemed capital structure compares to the proxy group companies", would it be appropriate to consider: i) how the utility's business risk has changed over time relative to changes in business risk for the proxy group's companies and ii) whether the deemed capital structure of the proxy group has changed over time?

Response:

No, this would be an incomplete picture without a comparison of the allowed equity ratios for the subject utility and the peer group. If there is a difference in the baseline allowed capital structure, which is not justified by a risk differential, the suggested comparisons would miss this important difference and place the subject utility at a competitive disadvantage (or advantage if the allowed equity ratio was greater) from a financial risk and capital raising standpoint. Such a gap exists today for Ontario's utilities, which is addressed in Concentric's recommendations.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, pages 138, 142 and 144

Preamble:

The Report states:

"Concentric does not support LEI's recommendation to modify annual reporting to include results of recent credit and equity issuances as this information would be retrospective for the prior year. Independently, these reports would not provide sufficient indication of future costs of capital or business risks on the horizon." (page 138)

And

"Concentric recommends the OEB track and compare the following key utility and broader macroeconomic parameters:

- *Authorized ROEs and equity ratios in other Canadian jurisdictions (individually) and the U.S. by industry segment (electric, gas) as reported by RRA*
- *10 and 30-year Treasury Bond Yields (Canada and the U.S.)*
- *A- and BBB-Rated Utility Bond Yields (Canada and the U.S.)*
- *Betas for the North American Proxy Group as defined in Section V This comparison should be done on an annual basis." (page 142)*

And

"so in addition to the monitoring outlined in Issue #14, Concentric recommends monitoring:

- *Credit ratings from each agency covering Ontario's rate-regulated utilities." (page 144)*

Question(s):

Apart from the items mentioned on pages 142 and 144, in Concentric's view what should the OEB assess and include in its annual reporting?

Response:

44.1 The OEB collects a significant amount of information from its regulated utilities today, and publishes summaries or provides online access to this information for stakeholders. These reports include:

Natural Gas and Electricity Utility Yearbooks

Electric Utility Scorecards

Electric Utility Performance Dashboard

In Concentric's experience, the OEB's information gathering and reporting is among the most comprehensive in North America. We believe the additional reporting and monitoring recommended on pages 142 and 144 of our report, in addition to the recommended periodic reviews of the formula, will be sufficient to monitor the authorized returns for Ontario's utilities. Concentric's ROE and capital structure recommendations outlined in Sections VI and VII are based on a full evaluation of capital market information necessary to meet the standards of the FRS. These recommendations should be adopted so that the base ROE and deemed capital structures meet the FRS at the outset. Thereafter, Concentric's monitoring recommendations outlined in response to Issue #14 should be sufficient to detect any material deviations from the FRS over the period between full reviews (e.g., every 5 years).

Ontario Energy Association (OEA)

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition (VECC)

INTERROGATORY

Reference:

M2: CONCENTRIC Report, page 148

Preamble:

The Report states: "Depending on the magnitude of change in the deemed capital structure, the Board may want to consider changes in capital structure implemented over a period of up to three years. This incremental approach would serve two purposes: 1) to allow the utility treasury functions to manage the transition (e.g., retiring debt and investing new equity as appropriate), and 2) to mitigate the effects of any rate impacts. Unlike ROE and debt rates, changes in the capital structure can require time to implement." (emphasis added)

Question(s):

Please explain why implementing changes in the deemed capital structure can require time.

Response:

Depending on the magnitude of the change and the company's ability to raise new equity either from its primary shareholder or in public markets, it may take time to implement approved changes in the actual capital structure, but the deemed capital structure may be changed as Concentric recommends in the next effective rate year.