OEB Generic Cost of Capital Proceeding: Concentric Report

Presentation Day
Thursday September 5, 2024





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Agenda

- 1. Key Concentric Findings and Recommendations
- 2. Return on Equity
- 3. Equity Thickness
- 4. Carry Costs on DVAs and CWIP
- 5. Appendix Issues List Summary

Key Concentric Findings and Recommendations

Key Concentric Findings and Recommendations

- 1. The OEB is investigating the cost of capital at an inflection point.
- 2. Ontario utilities raise capital in an integrated North American market in which U.S. and Canadian utilities are viewed as comparable by investors.
- 3. The current Ontario formula ROE and equity ratios are insufficient to meet the requirements of the Fair Return Standard.
- 4. An <u>ROE of 10% and a minimum equity ratio of 45% will satisfy the</u> <u>requirements of the FRS</u> and allow Ontario's utilities (excluding OPG) to effectively compete for capital with their North American peers.
- 5. Ontario utilities are not recovering their full costs of capital through DVAs and on CWIP. Concentric's recommendations address this imbalance.
- 6. A cap would not fully recover the prudently incurred debt costs for all Ontario utilities.
- 7. Taken together, these recommendations will provide continued access to capital at reasonable rates and financial flexibility for Ontario's utilities to meet the current and foreseeable challenges facing the industry.

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.

(DBRS Morningstar, "Losing Steam: Weakening Credit Metrics in the North American Utilities Sector," May 15, 2024.)

Fair Return Standard

Fair Return Standard

All three requirements must be met; none ranks in priority to the others

Comparable Investment Standard

Financial Integrity Standard

Capital Attraction Standard

The return should be comparable to the return available from the application of the invested capital to other enterprises of like risk.

The return must enable the financial integrity of the regulated enterprise to be maintained.

The return must permit incremental capital to be attracted to the enterprise on reasonable terms and conditions.

Alignment with the Public Interest

- Setting the appropriate return on capital for Ontario's utilities is more than meeting the threshold requirements of the FRS. These recommendations are also aligned with the Public Interest:
 - Providing a solid financial foundation for Ontario's utilities.
 - Allowing Ontario's utilities to compete for capital on favorable terms with their North American peers.
 - Assuring that Ontario's utilities will have the resources required to meet the current and foreseeable challenges
 facing the industry.
 - Recognizing that Ontario operates in a North American economy, utilities industry, and capital markets.
 - Balancing the interests of consumers who benefit from investments to meet Energy Transition needs for demand growth and that modernize the energy production and delivery infrastructure in Ontario, and the transition from a primary reliance on fossil fuels to a lower carbon resource mix – and shareholders who require a compensatory return.

Alignment with the Public Interest (cont'd)

Regulators have identified the customer benefits of investments in energy infrastructure at this critical juncture in the Energy Transition, but progress toward policy goals has been challenging.

While significant progress has been made in developing and deploying some of these technologies, notably solar and wind, for which installed capacity has risen sharply over the past 15 years, a significant gap has emerged between the actual results and the expected ones. The atscale deployment of all these technologies is still not happening as fast as needed to reach 2030 targets. (McKinsey & Company, Global Energy and Materials Practice, "The energy transition: Where are we really?" August 2024)

The ESMPs [Electric Sector Modernization Plans submitted by Massachusetts utilities] establish net benefits to ratepayers through proposed investments to meet the statutory objectives. (Massachusetts Department of Public Utilities, "DPU Approves Plans to Modernize Electric Sector to Accelerate Clean Energy Transition," August 30, 2024.)

Return on Equity

Base ROE

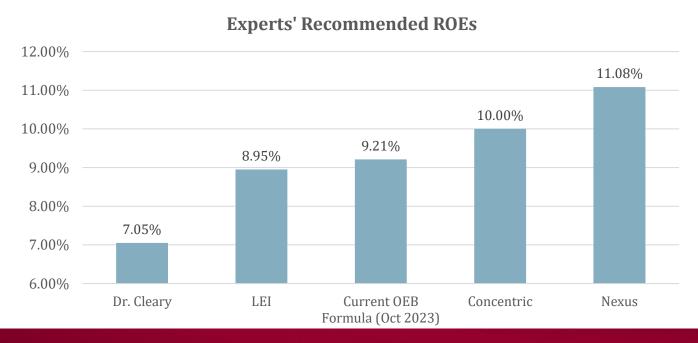
- *Concentric recommends a 10% base ROE* for Ontario's regulated utilities. Our analysis:
 - Is based on multiple analytical models used by practitioners and regulators across North America.
 - Considers six proxy groups comprised of North American electric and gas utilities.
 - Reflects current market inputs relied on by investors in utility infrastructure.

Concentric Summary of ROE Results (Figure 1 in Concentric Report)

Proxy Group	Canadian Combined	U.S. Electric	U.S. Gas	North American Electric	North American Gas	North American Combined
Multi-Stage DCF	10.38%	9.87%	9.60%	9.83%	10.21%	9.95%
CAPM – Hist. MRP	9.36%	10.62%	10.00%	10.23%	9.89%	10.22%
Risk Premium	9.44%	10.36%	10.30%	9.90%	9.87%	10.03%
Average	9.7%	10.3%	10.0%	10.0%	10.0%	10.1%

Base ROE (cont.)

- Concentric's base ROE recommendation is grounded in current market inputs and reflects investor perceptions of increased risk for utilities since 2009.
- By contrast, Dr. Cleary's recommendation of 7.05% is 145 bps below the lowest authorized return for any other Canadian utility and does not meet the requirements of the Fair Return Standard.
- LEI's recommendation is based on only a single model (the CAPM), rendering conclusions overly reliant on the inputs and specifications of that model while disregarding the results of other models.
- Nexus relies on a less conservative set of market inputs but uses standard models and arrives at the upper end estimate.



Base ROE (cont.)

Concentric presents a robust analysis that combines Canadian and U.S. inputs and incorporates multiple analytical approaches. The following table highlights key differences in approaches between experts.

Method	Concentric	NEXUS	LEI	Dr. Cleary
Proxy Group	North American 25 companies	North American 46 companies	North American 28 companies	Canadian only 5 companies
DCF	Current Market data Multi-stage model EPS growth and GDP growth	Current Market data Single-stage model EPS growth	Current Market data Single-stage model EPS growth	Average Market data Sustainable growth GDP growth rates
CAPM	Forecast risk-free rate, Blume betas, Historical MRP for US and Canada	Forecast risk-free rate, Blume betas (adjusted for financial leverage), Forward MRP	Forecast risk-free rate, Raw betas (adjusted for financial leverage), US based historical MRP	Spot risk-free rate Judgmental beta Canadian survey MRP
Risk Premium	US Gas, Electric & Canadian	US Gas and Electric	Risk-free rate + updated ERP of 5.5%	A-rated utility bond + 2.5% RP
Flotation & Flexibility	50 bps	50 bps	No adjustment	50 bps
Basis for Recommendation	Multiple models	Multiple models	CAPM only	Multiple models
Recommendation	10.0%	11.08%	8.95%	7.05%

North American Perspective

- Equity investors and credit analysts consider the utility industry as a North American industry, with Canadian companies competing for capital with similar risk companies in both Canada and the U.S.
- The industry has witnessed proliferation of cross-border investments in past 20 years, with Canadian companies acquiring US utilities and, to a lesser degree, US companies acquiring Canadian utilities.
- Regulators in both BC and Alberta have recently used a North American proxy group to set the authorized return.

...we find that having a proxy group of North
American comparators trumps any
jurisdictional or structural differences. In
making this determination, we rely on the
facts that financial and capital markets
are highly integrated and that utility
regulatory regimes in North America are
sufficiently similar for the purpose of
establishing a comparable ROE.

(British Columbia Utilities Commission, Decision and Order G-236-23, September 5, 2023)

OEB ROE Formula Parameters

Current:

$$ROE = 9.75\% + 0.50 * (LCBF - 4.25\%) + 0.50 * (Utility Credit Spread - 1.415\%)$$

Recommended:

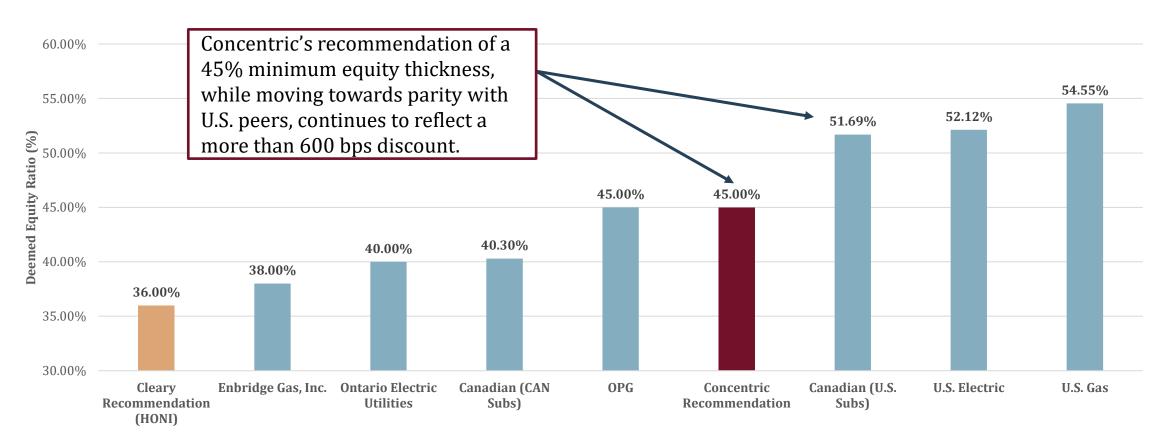
$$ROE = 10.00\% + 0.40 * (LCBF - 3.36\%) + 0.33 * (Utility Credit Spread - 1.371\%)$$

- *Update to LCBF based on:*
 - 75% weight on average forecast Gov't of Canada bond yields from three major banks
 - 25% weight on current 90-day average GOC bond yields
- Update utility credit spread to reflect market data as of Sept 2024:
 - 90-day average as of May 2024 was 1.371%
- Revise adjustment factors based on multi-variate regression analysis:
 - 0.40x change in LCBF
 - 0.33x change in utility credit spread

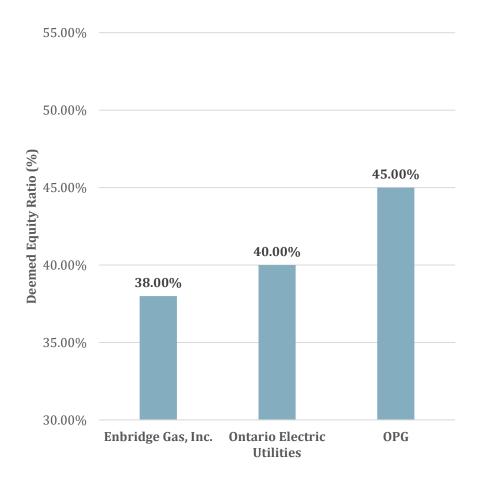
Equity Thickness

Equity ThicknessOverview

The Fair Return Standard encompasses both the ROE and deemed equity ratio. *The deemed equity ratios in Ontario are low* compared to North American peers and do not meet the Fair Return Standard.



Equity ThicknessRisk Considerations



- Based on industry-segment-specific risks, and, in particular the risks to the natural gas distribution segment caused by the Energy Transition, natural gas distribution is riskier than electric distribution operations from an investor's perspective.
- OPG, as the only regulated pure-play generation company in North America, with large investments in nuclear projects and significant exposure to volumetric revenue risk, has a distinct and elevated risk profile that sets OPG apart from other Ontario utilities.
- Concentric disagrees with Dr. Cleary's recommendation to reduce Hydro One's deemed equity ratio. Such an action would:
 - Establishes a negative precedent (and financial disincentives) at a time when capital investment in electricity infrastructure is needed to achieve policy goals related to decarbonization.
 - Ignore that Hydro One's risk has increased, not decreased.
 - Cause credit metric deterioration and threaten negative credit actions.

Carrying Costs on DVAs and CWIP

Carrying Costs on DVAs and CWIP

- Utilities fund their operations with a mix of debt and equity. At the most fundamental level, the appropriate carrying cost on DVAs and CWIP should reflect the cost of capital associated with the period of recovery.
- The WACC appropriately reflects the remuneration for regulated utilities that finance projects and fund operations and aligns with the approach taken by other jurisdictions.
- Concentric recommends that the WACC be applied in order to provide for recovery of the utility's full financing cost.

Capitalization Equation

Liabilities

- Short-Term Debt
- Long-Term Debt

Equity

CWIP

Assets

- Rate Base
- Deferred Costs



- Common Stock
- Retained Earnings

Rate base is defined as the: (1) net plant in service; (2) property held for future use; (3) working capital; and (4) construction work in progress (CWIP) – no AFUDC. The capital structure represents the funds used to finance the rate base. **The sources, not the uses, of funds (debt, equity, deferred taxes, and other capital structure components) are not easily traceable.**

(Bonbright, Danielsen, & Kamerschen, Principles of Public Utility Rates)

Appendix – Issues Summary

Issue	Positions of Other Experts	Response
#1 Source of Capital and Types of Ownership	 LEI finds that the OEB's existing methodology implicitly accounts for differences in sources of funding when approving rate application. LEI states the approach to setting the cost of capital parameters and capital structure should not depend on a utility's ownership structure. Dr. Cleary recommends maintaining the existing OEB methodology that uses the actual debt rates as well as the existing policy of not considering ownership structure in determining cost of capital parameters. 	Concentric recommends determining the cost of capital based on the use of funds and not the source of funds when setting just and reasonable rates. Concentric does not recommend that the approach to determining the authorized ROE or capital structure be differentiated by ownership type.

Issue	Positions of Other Experts	Response
#2 Risk Factors to be Considered	 LEI supports reviewing business and financial risk factors if there is a significant change from the status quo. Dr. Cleary concurs with LEI but believes there should be consideration of risks that may not neatly fall into business or financial risks. Nexus adds "strategic risk" and recommends that the OEB revisit the issues in this proceeding every 3 years rather than every 5-years to address industry changes. 	• Risk factors that should be considered include business risk, including the Energy Transition, regulatory risks (encompassing regulatory lag, timely recovery of OpEx, fuel costs, and capital costs, volumetric risk, and others), and other business risks (including severe weather events, technology risks, and others), as well as financial risk (encompassing a utility's solvency, liquidity, and ability to attract capital and raise debt). Whenever possible, risk factors should be considered quantitatively with both current and projected values. Concentric recommends that utility-specific factors be focused on in determining whether a utility's equity thickness, in combination with the generic ROE, meets the Fair Return Standard. In addition, Concentric recommends that the OEB modify its approach to assessing utility risk to incorporate comparative risk and comparable return assessment, regardless of whether a significant change in risk has been demonstrated.

Issue	Positions of Other Experts	Response
#3 What regulatory and rate setting mechanisms affect utility risk	 LEI and Dr. Cleary recommend the continuation of the status quo consideration of regulatory mechanisms that may impact the stability of future cash flows or any significant change in business and/or financial risks. Nexus found that the regulatory environment in Ontario is comparable to its peers. 	• A variety of mechanisms, including DVAs, should be included in the review of risk factors. Concentric recommends that the assessment of regulatory and rate setting mechanisms should be based not only on the consideration of such mechanisms on an absolute basis, but also based on a comparison of Ontario's regulated utilities to the proxy group of companies used to determine the cost of equity. This is an important distinction that is necessary to meet the Fair Return Standard, as 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.

Issue	Positions of Other Experts	Response
#4 - #7 Short-term and Long-term debt rates	LEI and Dr. Cleary recommend that the DSTDR and DLTDR should be applied as a cap for all utilities.	 Concentric does not agree with the automatic application of a cap on debt costs. The rejection of a uniform application of the cap would be consistent with prior OEB findings. A cap would not be reflective of the spectrum of credit ratings assigned to regulated utilities, or differences in credit spreads for similarly-rated utilities (see, e.g., Concentric's response to N-M2-7-OEB Staff-6); or changes in the market between actual debt issuances and the time of the projection, and it may not be reflective of different debt terms that may be issued for various utility/business specific reasons.

Issue	Positions of Other Experts	Response
#8 Transaction costs - debt	 LEI recommends that transaction costs should be considered as operating expenses. Dr. Cleary and Nexus recommend that debt transaction costs be amortized over the life of the debt. 	 The common approach in North America to accounting for transaction costs is through the effective interest method, and LEI's jurisdictional review supports that conclusion. The fact that debt issuances may be irregular or of different amounts is irrelevant to the recovery of prudently-incurred transaction costs, which, like the interest paid over the life of borrowings, are part of the cost of debt and should be recognized over the life of the debt for which the costs were incurred.

Issue	Positions of Other Experts	Response
#9 Variances from deemed capital structure	 LEI and Dr. Cleary recommend the continuation of the status quo, considering deemed capital structure regardless of the actual capital structure. 	 Concentric recommends maintaining the status quo. For rate setting purposes, the deemed capital structure should determine the debt and equity costs that are recovered in rates. Ontario's regulated utilities continue to be given the discretion to manage their actual capital structure.

Issue	Positions of Other Experts	Response
#10 Setting ROE	 LEI recommends a base ROE of 8.95% (in a range from 8.23% to 10.22%), excluding 50 bps for transaction costs, based on the Capital Asset Pricing Model ("CAPM") Dr. Cleary recommends a base ROE of 7.05% (based on equal weights of the CAPM, single and multi-stage DCF, and BYPRP models). Nexus recommends a ROE of 11.08% including the base ROE of 10.58% and 50 bps for transaction costs, based on a weighted average of CAPM, single-stage DCF, and risk premium models. 	 The OEB's ROE formula currently is not producing an authorized ROE that meets the Fair Return Standard. Our recommendation is that the Board re-set the authorized base ROE to 10.0%, based on the results of the DCF, CAPM and Risk Premium models described in our Report. Should OPG bring forward a proposal and evidence in its payment amounts application regarding whether and what amount of additional ROE risk premium should be applied, the OEB consider that proposal at its discretion. The differences between the experts are broad, and reflect disparities in the choice of ROE models, model inputs, and the inclusion of a 50 bp adjustment for flotation costs and financial flexibility. Concentric's approach is based on multiple proxy groups and three models broadly relied upon by North American regulators, and market data from credible third-party sources relied upon by investors. LEI relies on a single model and model inputs that limit the reliability of their results. If LEI had based its ROE recommendation on Alternative #6, which uses multiple methodologies, the authorized ROE for Ontario's utilities would be 9.46%. Adding 50 bps for flotation and financial flexibility would bring their recommendation in alignment with Concentric's.

Issue	Positions of Other Experts	Response
#10 Transaction Costs	 LEI recommends considering the transaction costs associated with equity issuances as operating costs. Dr. Cleary adds 50 basis points for financial flexibility, consistent with OEB practice. Nexus includes 50 basis points for transaction costs associated with acquiring the equity as a continuation of existing OEB policy. 	 Flotation costs are the costs associated with the sale of new issues of common stock. These costs include out-of-pocket expenditures for preparation, filing, underwriting, and other costs of issuance of common stock, as well as price discounts and premiums. Various studies indicate flotation costs for utilities are within a range from 2% to 10%, with an average of around 5%. Flotation costs of 5% of the gross proceeds equates to an ROE adjustment of 25 basis points for companies, and flotation costs at the higher end of the range (i.e., 10% of the gross proceeds), equate to an approximately 45 basis points adjustment. The 50 basis point adjustment approved by Canadian regulators, including the OEB, also includes financial flexibility.

Issue	Positions of Other Experts	Response
#11 Perspectives of debt and equity investors	 LEI recommends the status quo and suggests the OEB can slightly modify the reporting requirements to enable better monitoring of the actual cost of capital. Dr. Cleary recommends the status quo and notes the current OEB approach considers the perspectives of both equity and debt investors and comfortably satisfies the FRS. Nexus recommends that a 3-year review period, as it is a step toward ensuring that equity holders' interests are represented. 	 Concentric recommends that the OEB consider Ontario's utilities within the context of similarly-situated companies; for example, the proxy group companies. 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. As such, we recommend that the OEB set a minimum deemed equity ratio for Ontario utilities of 45 percent, which is at a point approximately halfway between the Ontario level and the U.S. average, in the interest of gradualism in rates. Concentric does not agree with LEI that perspectives of debt and equity investors are the same.

Issue	Positions of Other Experts	Response
#12 Setting the deemed capital structure	 LEI recommends the OEB continue the current approach of revising capital structure upon application if warranted due to increase in business/financial risk AND applicants should be required to include forward cash flow modeling and scenario analysis showing impact on credit metrics to support their case. Dr. Cleary recommends reducing both Enbridge Gas's and Hydro One's equity thickness to 36%. Nexus recommends retaining the existing policy, but notes that i.) a 50:50 debt:equity ratio for regulated electric utilities is common in the US; ii.) debt ratios greater than 60% are fairly rare; and iii.) Ontario's deemed debt ratio of 60% is higher than those of the comparable states (NY and CA) identified by LEI. 	 The Fair Return Standard encompasses both the ROE and equity thickness and deemed equity ratio. The deemed equity ratios in Ontario are low compared to North American peers and do not meet the Fair Return Standard. Concentric recommends that the OEB consider Ontario's utilities within the context of similarly situated companies; for example, the proxy group companies. 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. As such, we recommend that the OEB set a minimum deemed equity ratio for Ontario utilities of 45 percent, which is at a point approximately halfway between the Ontario level and the U.S. average, in the interest of gradualism in rates. Concentric's recommendation of a 45% minimum equity thickness, while moving towards parity with U.S. peers, continues to reflect a more than 600 bps discount.

Issue	Positions of Other Experts	Response
#13 Single- vs. multi-asset transmitters	 LEI recommends the same approach for single- and multi-asset transmitters. Dr. Cleary recommends reducing Hydro One's equity thickness to 36%. 	 Concentric does not make specific recommendations at this time regarding a risk premium that may be warranted for single-asset transmitters. Such a differential should be supported in the context of utility specific rates applications. Concentric disagrees with Dr. Cleary's recommendation to reduce Hydro One's deemed equity ratio. Such an action would: Establishes negative precedent (and financial disincentives) at a time when capital investment into electricity infrastructure is needed to policy goals related to decarbonization. Ignore that Hydro One's risk has increased, not decreased. Cause credit metric deterioration and threaten negative credit actions.

Issue	Areas of Disagreement	Response
#14 - #17 Monitoring, Reporting, and Updating	 LEI recommends the provision of credit ratings and debt and equity issuances. Dr. Cleary recommends that if the Canadian A-rated utility yield spreads exceed 2%, the OEB should undertake an immediate and thorough assessment of existing market conditions, which could lead to a full regulatory review, depending on the results of this assessment. Nexus recommends that a litigated cost of capital proceeding should occur every 3 years. 	 In addition to monitoring credit ratings of Ontario's rateregulated utilities, Concentric recommends that the OEB also annually monitors: Authorized ROEs and equity ratios in other Canadian jurisdictions (individually) and the U.S. by industry (electric, gas) as reported by the RRA 10- and 30-year Treasury Bond Yields (Canada and U.S.) A- and BBB-rated Utility Bond Yields (Canada and U.S.) Betas for the North American Proxy Group Monitoring the relevant capital market signals, as listed above, would mitigate deviation of the existing returns and deemed capital structures between the periods of full cost of capital evaluation every 5 years.
#18, #19 Mechanics of Implementation	 LEI recommends that, with certain exceptions, changes from this proceeding be reflected in the next rebasing application. 	 ROEs and deemed capital structures for all utilities in this proceeding should be updated and rebased according to Concentric's recommendations at the start of the next rate year for each utility. Depending on the magnitude of change, the Board and utility may agree to a gradual implementation of the deemed capital structure over a three-year period.

Issue	Areas of Disagreement	Response
#20 Prescribed Interest Rates on DVAs and CWIP	LEI recommends the status quo for the prescribed interest rate and carrying charges on CWIP.	 The approach to determining the appropriate carrying costs to apply to DVAs and CWIP should be based on regulatory and corporate finance principles. At the most fundamental level, the appropriate carrying cost on DVAs should reflect the cost of capital associated with the delay in recovery. Those principles support the conclusion that the WACC appropriately reflects the appropriate remuneration for regulated utilities that must finance investments and operations. Concentric recommends the WACC be applied to long-term DVAs, and that the OEB retain the prescribed interest rate for short-term DVAs. Concentric recommends that the WACC be applied in order to provide for recovery of the utility's full financing cost, particularly given the need to attract significant capital in support of the Energy Transition.

Issue	Areas of Disagreement	Response
#21 Prescribed Interest Rates on DVAs and CWIP	 LEI and Dr. Cleary recommend aligning the DVA prescribed interest rate to the DSTDR methodology utilizing the 3- month CORRA rate, and maintaining the current approach for estimating the prescribed interest rates for CWIP. 	 Concentric agrees with the recommendation for short-term DVA accounts (i.e., accounts that will clear within one year – see response to Exhibit N-M2-21-OEB Staff-27) but recommends that each utility's WACC be applied to long-term DVA accounts. Similarly, each utility's WACC should be applied to its CWIP in order to provide recovery of the utility's full financing cost, particularly given the need to attract significant capital in support of the Energy Transition.

Issue	Areas of Disagreement	Response
#22 Carrying Charge on Cloud Computing DVA	 LEI recommends that the OEB employ a deemed capital additions approach, which allows deemed WACC on the unamortized portions of the cloud computing contracts. 	Concentric agrees with this recommendation.

Authors

Daniel Dane President ddane@ceadvisors.com James Coyne Senior Vice President jcoyne@ceadvisors.com John Trogonoski Assistant Vice President jtrogonoski@ceadvisors.com

Analytical and Research Assistance

Bryan Hu Senior Consultant bhu@ceadvisors.com Viktoriya Rutkovskaya Senior Consultant vrutkovskaya@ceadvisors.com Declan McCarthy
Senior Analyst
dmccarthy@ceadvisors.com