130 Queens Quay East, Suite 902
Toronto, Ontario M5A 0P6
T 416.926.1907 F 416.926.1601
www.pollutionprobe.org

Ms. Nancy Marconi
Registrar
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

November 7, 2024

EB-2024-0063 OEB Generic Hearing on Cost of Capital Review
Pollution Probe Submission

Dear Ms. Marconi:

In accordance with OEB direction, please find attached Pollution Probe's Submission pertaining to the above noted proceeding.

Respectfully submitted on behalf of Pollution Probe.

Michael Brophy, P.Eng., M.Eng., MBA
Michael Brophy Consulting Inc.
Consultant to Pollution Probe
Phone: 647-330-1217
Email: Michael.brophy@rogers.com

Cc: All Parties (via email)
Richard Carlson, Pollution Probe (via email)

EB-2024-0063

ONTARIO ENERGY BOARD

Ontario Energy Board

Generic Hearing on Cost of Capital

POLLUTION PROBE SUBMISSION

November 7, 2024

Submitted by: **Michael Brophy**

Michael.brophy@rogers.com

Phone: 647-330-1217

28 Macnaughton Road

Toronto, Ontario M4G 3H4

Consultant for Pollution Probe

Context and Background

On March 6, 2024, pursuant to sections 36, 78 and 78.1 of the Ontario Energy Board Act, 1998, the Ontario Energy Board (OEB) issued a Notice of Hearing on its own motion to initiate a generic proceeding to consider the methodology for determining the values of the cost of capital parameters and deemed capital structure to be used to set rates for electricity transmitters, electricity distributors, natural gas utilities, and rate-regulated electricity generators. In this proceeding the OEB is to determine whether its current approach to setting the cost of capital parameters and deemed capital structures continue to remain appropriate and if not, what approach should be used.

As noted in the Notice of Hearing, this proceeding will also consider the methodology for determining the OEB's prescribed interest rates. Also in scope for this proceeding is the question of what type of interest rate, if any, should apply to the generic Cloud Computing Deferral Account.

The current Cost of Capital approach was developed in the EB-2009-0084 Cost of Capital proceeding with a Report of the Board issued in December 2009[1]. In 2014, OEB Staff commenced a review in 2014 of the following[2]:

- the results of the current policy flowing from the formulae for the return on equity and the short-term and long-term debt rates of the period since the inception of the new methodology at the end of 2009
- the actual financial results of rate-regulated utilities (natural gas distributors, electricity transmitters and distributors, and Ontario Power Generation's prescribed generation assets) based on recent available data
- the performance of the existing policy in the context of the expected outcomes.

Based on the results of this review, OEB Staff concluded that the methodology adopted in late 2009 has worked as intended. Movement in the parameters have followed macroeconomic trends and activity, and have not resulted in excessive or anomalous volatility. While there was more volatility observed in the financial performance of utilities, these were largely due to other reasons as outlined in the report.

[1] EB-2009-0084 ReportoftheBoard_CostofCapital_20091211
[2] EB-2009-0084 OEB Staff Report_Cost of Capital Review_EB-2009-0084_20160114, Page 1

Overview

The following provides a high-level overview of important facts and provides a foundation of key details that impact issues in this proceeding. Pollution Probe has provided more details per issue in the next section that discusses each issue following the Issues List for this proceeding.

Firstly, and perhaps most importantly, congratulations and recognition is due to the OEB for the work that was done in EB-2009-0084 to set out an effective and robust Cost of Capital methodology in 2009. This approach has withstood the test of time, even with the most harsh test, using full retrospective hindsight. It would be an obvious sign of failure if regular changes were required to the methodology that made the approach unstable and inconsistent over time. Using mechanistic annual updates has been very efficient and effective, representing regulatory best practice. Adjusting the methodology frequently (without specific reasons) would increase uncertainty, undermine credibility and make the methodology more subjective. Not regulatory best practice.

Regulated utilities in Ontario are stable entities that are subject to five-year incentive regulations terms to make gradual changes to adapt to regulatory and environmental (including customer and Energy Transition) demands. Utilities have the ability to raise significant unforeseen issues on an as needed basis and this tool is not typically used. Changes are evolutionary and not revolutionary[3]. Adjustments, particularly on a short to medium term basis are adequately accommodated using well defined formulaic adjustments rather than reopening the Cost of Capital methodology itself. The OEB has been able to consistently meet the Fair Return Standard on an annual basis by setting the Return on Equity (ROE) and the deemed Long-Term (LT) and Short-Term (ST) debt rates using this approach. The most recent occurrence is outlined in the 2025 Cost of Capital Parameters[4] released October 31, 2024.

The OEB undertook a review and issued its finding in the 2016 Staff Report which reconfirmed the appropriateness and value of the approach that the OEB determined in 2009. Pollution Probe submits that the approach outlined in the 2009 Report of the Board and those complimentary findings in the 2016 OEB Staff Report remain valid and that the OEB should consider an evolutionary, rather than revolutionary approach should any changes be considered to Cost of Capital and related parameters.

[3] EB-2009-0094. Report of the Board, 2009. Page 50 and OEB_Generic Proceeding_Revised_LEI Report (multiple references) and IGUA_AMPCO_Reformatted_EVD_1 of 4_20240722, Page 3.
[4] OEBLtr_2025 cost of capital updates_20241031

Some stakeholders accurately indicated that 'if it is not broken, don't try to fix it', and Pollution Probe agrees. There have been no objective tangible signs since 2009 that the OEB's approach is failing to meet the Fair Return Standard. In fact, there are signs that that excess returns are currently being achieved under this methodology. As outlined in the section below, any failure to meet the Fair Return Standard would be visible in a number of ways. With full certainty based on the facts, the OEB can be assured that this has not occurred. As was outlined by the experts and industry literature, it is more challenging to identify when the methodology is leading to excess returns since there will be no market signals and utilities are very unlikely to recognize excess returns generated by the methodology[5]. Based on the facts available, the OEB can be comfortably assured that the current approach is leading to Cost of Capital parameters that meet or exceed what is required under the Fair Return Standard for Ontario regulated utilities to effectively operate and attract capital[6]. Excess returns further fuel the utility Capex bias and create barriers to an efficient and cost-effective Energy Transition.

The OEB has seen signs that the current Ontario parameters are actually leading to excess returns and signs of monopolistic behavior where utilities are using every tool available to increase net income and excess Capital spending. One current example is an Appeal filed with the Ontario Divisional Court by Enbridge in January 2024 requesting the court to overturn the EB-2024-0200 OEB Decision in favour of the requested relief which includes increased Capital spending, increased Equity Thickness, and increased Revenue Horizon for Capital assets. If the current returns were not fair and adequate, it is not reasonable to see this aggressive action to spend excess Capital. This is further outlined in the section below and as noted, the problem is even more pronounced in the US[7] which was the primary focus of proxy groups selected by the consultants retained on behalf of the utilities and their associations.

It is critical to focus on the actual intent of this proceeding which is to "consider the methodology for determining the values of the cost of capital parameters and deemed capital structure to be used to set rates for electricity transmitters, electricity distributors, natural gas utilities, and rate-regulated electricity generators"[8]. The focus is only on the specific Ontario utility entities regulated by the OEB, not their affiliates, not the holding

[5] Pollution Probe is unaware of any previous submissions by Ontario utilities to this effect and also in this proceeding, representatives and experts on behalf of utilities have narrowly focus on approaches that attempt to inflate a fair return in the context of a pure play regulated Ontario utility. Also see N.M4.10.OEA14f

[6] Final Transcript for EB-2024-0063 Volume 4 Oct 1 2024, Page 68, lines 5-8 and Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 60, line 12-14 and Page 189, lines 11-18.

[7] K5.5 - PollutionProbe_HearingCompendium2_20241001 and J4.5 Article - Public Utility Beta Adjustment and Biased Costs of Capital in Public Utility Rate Proceedings

[8] EB-2024-0063 PO1_generic cost of capital_20240328, Page 1 and Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66, lines 15-23.

company, not a US holding company and not dissimilar US integrated utilities that are a mixing pot of regulated and (mostly) unregulated business that do not reflect regulated utilities in Ontario[9].

There are 61 electric utilities (LDCs or local distribution companies) and 2 gas distributors in Ontario[10]. The vast majority of the Ontario distribution utilities in Ontario are municipally owned utilities[11]. Ontario regulated utilities are simple, straightforward and homogeneous pure play utilities. In fact, almost all the Ontario regulated utilities have a simple corporate structure with the utility directly owned by one entity (typically a municipality for electric LDCs) and little to no affiliates. This does not match any of the US proxies put forward. Complex corporate holding company structures are an anomaly and not the focus of the OEB's review. In cases where an Ontario utility is part of a complex holding company structure, the OEB must specifically separate the rest of the holding company impacts which are more risky and not analogous, and focus specifically on how the utility would be treated as the Ontario pure play regulated entity[12].

Some parties will encourage the OEB to go down the rabbit hole of comparing Ontario utilities to complex holding company structures (even worse, those outside Canada with distinctly different risk, fiscal policies, interest rates, regulator regimes, etc.) and if the OEB follows that approach, it will be led directly away from the stated purpose of this Cost of Capital review, to consider the specific regulated utilities in Ontario.

Benchmarking and considering external factors is fine at a high level to do a situation analysis of the broader North American or Global environment, but it is not a logical or mechanically sound approach to assess what is right for Ontario's regulated utilities. It is no secret that utilities (particularly those very few in Ontario that are owned by holding companies that are publicly traded) would be happy continuing to earn or increasing excess returns, but the OEB's mandate to protect the public interest is meant to be a balance against these capitalistic monopoly forces. Publicly traded companies have a fiduciary duty to their shareholders, but do not carry the same regulatory duty toward ratepayers. That is the role of the OEB.

The stakeholders that have suggested that Ontario utilities returns are not meeting the Fair Return Standard have leveraged the highest amount of resources in this proceeding in an attempt to increase shareholder returns. The stakes are high for them since this is seen as their chance to set a new bar. For utilities that do not make their full

[9] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 132, line 12 to page 133, line 1.
[10] EXHIBIT K3.3: CCMBC/EP COMPENDIUM OF FOR PANEL 2, page 3
[11] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 128, lines 15-25.
[12] Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66 lines 15-23 and Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, page 132 line 21 – page 133, line 1.

rate of return, raising the cap higher has no real impacts. It would make sense that utilities that are expecting to over-earning (on a sporadic or consistent basis) would push for higher Return on Equity (ROE) since the current approach would be sufficient unless there is an expectation of overearning in the future. The stakes are even higher for ratepayers, since they will be locked into paying excess rates without any upside benefits. Excess returns in the US (the majority of the proxy group for the Concentric and Nexus analysis) is estimated at $6 billion per year[13]. There is a broad array of such concerns based on analysis of utility returns and in particular in attempting to apply US proxies to the Ontario context[14].

A win for ratepayers (and the broader public interest) would represent removal of excess returns which would more accurately represent the fair costs for the services that they are provided. It would also have the benefit of mitigating (at least in part) contributors toward drivers of aggressive monopolistic behaviours. The issues is compounded since excess returns is an enhanced incentive to request and spend excess Capital[15]. Reigning in excess Capital spending will have magnified benefits since it reduces Capital costs, returns/carrying costs and reduces stranded assets. This is a win-win-win scenario.

[13] K5.5 - PollutionProbe_HearingCompendium2_20241001, Page 2.

[14] For example, J4.5 Article - Public Utility Beta Adjustment and Biased Costs of Capital in Public Utility Rate Proceedings and also highlighted in Final Transcript for EB-2024-0063 Volume 1 Sept 25 2024, Page 113, lines 6-16 and REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 55 lines 7 to 10.

[15] Requests for higher Capital have been occurring and overspending of Capital during a rate term has become commonplace.

Submission by Issue per the Issues List

Below are discussion and recommendations per issue identified by the OEB per the Issues List.

A. General Issues

1. Should the approach to setting cost of capital parameters and capital structure differ depending on:

a) The source of the capital (i.e., whether a utility finances its business through the capital markets or through government lending such as Infrastructure Ontario, municipal debt, etc.)?

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

The principles applied to setting cost of capital parameters and capital structure should not differ and must be common. Any deviation from this approach would lead to distortions across Ontario, inconsistencies and potential for inequity.

Similarly, it is appropriate to apply a similar approach across Ontario regulated utilities regardless of ownership. If ownership skews application of cost of capital parameters and capital structure, it would result in distortions across Ontario, inconsistencies and potential for inequity. London Economics (LEI) confirmed that "Allowing uniform ROE regardless of ownership is also consistent with the comparable investment standard of the FRS. The comparable return standard requires the allowed ROE to be comparable to the return available from the application of invested capital to other enterprises of like risk [emphasis added]. The comparable investment standard implies risk determination based on the utilities' business/investment activities, and not the ownership type[16]". Similarly, LEI put forward that "The overall ROE must be determined solely on the basis of a company's cost of equity capital, regardless of equity ownership, and any resulting rate increase must be an irrelevant consideration in determining the appropriate ROE for regulated utilities."[17]

As noted, it is critical to focus on the actual intent of this proceeding which is to "consider the methodology for determining the values of the cost of capital parameters and deemed capital structure to be used to set rates for electricity transmitters, electricity distributors, natural gas utilities, and rate-regulated electricity generators"[18]. The focus is only on the (like risk) specific Ontario utility entities regulated by the OEB,

[16] OEB_Generic Proceeding_M1 - Revised_LEI Report, Page 52.
[17] OEB_Generic Proceeding_M1 - Revised_LEI Report, Page 38.
[18] EB-2024-0063 PO1_generic cost of capital_20240328, Page 1

not their affiliates, not a holding company, not a US holding company, and not an integrated utilities that are a mixing pot of regulated and unregulated business that do not reflect any regulated utility in Ontario. Ontario regulated utilities are simple, straightforward and homogeneous pure play utilities. In fact, almost all the Ontario regulated utilities have a very simple corporate structure with the utility directly owned by one entity (typically a municipality for electric LDCs[19]) and little to no affiliates. Complex corporate holding company structures are an anomaly and not directly relevant to the OEB's review as stated. In cases where an Ontario utility is part of a holding company structure, the OEB must specifically separate the rest of the holding company impacts which are more risky and not analogous, and focus specifically on how the utility would be treated as the Ontario pure play regulated entity[20].

Pollution Probe has not developed a specific proposal or recommendations related to Indigenous ownership (in part or whole). The same principles should apply, but there could be a mechanism available for specific proposals to be brought before the OEB in cases where adjustments are appropriate. Indigenous/utility partnerships are not homogeneous and it would be difficult for the OEB to develop a special set of rules that would properly apply across the board. It is also common for preferential lending to be made available as part of Indigenous partnerships which would skew the normal assessment and comparison to benchmarks. Certain thresholds could be put in place before the opportunity was available to make an application to the OEB for different treatment. For instance, would a 5% partnership stake warrant different treatment or should it be more material at a limit of 33% or 50%. It will be important that any rules developed are not subject to gaming by utilities. Given the large number of issues covered in this proceeding and the expert evidence focus, there is not a sufficient record to support a detailed approach on this topic.

Experts have agreed that Ontario is considered a consistent and low risk jurisdiction and attracting Capital and debt for Ontario regulated utilities is not a challenge[21]. Some sources of Capital are more transparent and less subject to gaming at the expense of ratepayers. This includes government lending vehicles (typically used by municipal electric utilities) where information is easily accessible and applicable. Municipal debt is very similar to this since municipal ownership of utilities is less complex and more transparent than other complex holding companies[22].

[19] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 128, lines 15-25.
[20] Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66 lines 15-23 and Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, page 132 line 21 – page 133, line 1.
[21] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 64 lines 18 to page 65, line 2 and Final Transcript for EB-2024-0063 Volume 3 Sept 27 2024, Page 62, lines 13-15 and page 61, lines 18-24 and Final Transcript for EB-2024-0063 Volume 4 Oct 1 2024, Page 188, lines 8-13.
[22] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 132, line 12 to page 133, line 1.

The outlier for Ontario is capital market debt since debt raised on capital markets is not reflective of the vast majority of Ontario regulated utilities. Capital market debt is raised by publicly traded companies which include a broad range of companies and activities in the corporate holding company structure. The Ontario regulated utility is typically the most financially conservative and least risky part of the holding company and will attract capital at a rate lower than other more risky businesses in the holding company[23]. US holding companies are typically more problematic, but Canada has some examples as well. One example relevant to Ontario is the Enbridge holding company which includes a large number of US and Canadian affiliates under the same corporate umbrella as the Ontario regulated utility[24]. Not only does the business profile and risk vary, but not all holding company entities are even profitable[25]. As noted, the US proxies used are even more problematic. Not only are the structures and holdings in the holding companies not 'apples to apples' to the Ontario context, there are also totally unrelated businesses included[26].

Having the Ontario regulated utility in the holding company benefits the holding company, but the utility may end up with higher cost of capital when secured through a holding company given that the blended risk profile is higher than the stand alone utility[27]. This benefits the holding company at the cost of ratepayers[28]. This problem increases the larger the holding company and the more unrelated and risky the other business are in the holding company compared to the Ontario regulated utility component company[29].

LEI accurately summarized that rate-regulated entities earn ROE on their regulated asset base ("RAB"). The regulated return to equity and debt investors is based on the value of RAB (the value of "investment" on which the return is made) and the weighted average cost of capital ("WACC"), i.e., the combined rate of return on equity and debt. The operating costs are recouped on a pay-as-you-go basis (with pre-defined performance incentives allowed in advanced regulatory jurisdictions such as Ontario)[30].

It is important that additional costs are not incurred by an Ontario regulated utility due to the fact that it is owned by a publicly traded holding company. To illustrate the point, imaging if one of the many municipal owned Ontario LDCs is bought by a publicly traded company. What financing costs would change and why should ratepayers pay

[23] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 54 line 8 to page 55, line 10
[24] K4.2 - PollutionProbe_HearingCompendium_20240926
[25] EB-2024-0111, Exhibit I.1.18-HRAI-5, Attachment 3
[26] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 14, line 28 to page 25, line 8.
[27] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 54 line 8 to page 55 line 10
[28] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 54 line 8 to page 55, line 10
[29] Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66 lines 15-23.
[30] OEB_Generic Proceeding_M1 - Revised_LEI Report, Page 52.

more for the same service? Having controls in place to benchmark financing raised through capital markets and to ensure that addition costs are not added is important. In some cases the holding company also adds additional charges to funds access by the utility, even though the utility could have accessed those funds directly.

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

There has been a decrease in Ontario utility risks since the 2009 Cost of Capital methodology was established, in part due to the increase in variance accounts to mitigate risk and uncertainly[31]. Ontario utilities also have a stable regulatory environment with regular rate case proceeding and inclusion of off-ramps as appropriate. Not only has risk decreased for Ontario utilities, but the relative risk compared to other jurisdictions such as the US has also declined. Of course, comparisons to other jurisdictions is particularly dangerous and inappropriate when using an 'apples to oranges' comparison since there are significant and important differences in the regulatory environment, fiscal metrics (e.g. Canadian vs. US benchmark rates), and also the specific business models of companies operating in other jurisdictions (e.g. integrated vs. non-integrated utilities, pure play vs. holding company, nature and focus of the utility business including scope of regulated and unregulated activities)[32]. Even comparing to more similar pure play regulated utilities in Canada needs to be considered carefully since even it is not an 'apples to oranges' comparison, they are at least different types of apples[33]. Dragging in proxy companies just to increase a sample size is not actually improving the analysis, it is actually tainting the sample. Once a sample is tainted, it is not prudent to use it as an accurate comparator.

The variance can easily be seen when comparing jurisdictions and the proxies used by each consultant. As confirmed by Concentric (and supported by LEI and Dr. Cleary), the ROE in Ontario is closer to other Canadian jurisdictions, slightly higher than the average, slightly lower than the medium, for US utilities it's materially lower in Ontario[34]. This is not surprising given that the farther you move from an Ontario regulated pure play utility, the greater difference that is expected. In the proxy groups selected by Concentric and Nexus, the US companies (holding companies and not actually including pure play regulated utilities) selected do not actually resemble the Ontario

[31] N-M1-2-EP-4c
[32] Final Transcript_Presentation Day_20240905, Page 101, lines 5-11 and Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66, lines 15-23.
[33] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 54 line 8 to page 55, line 10
[34] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 169, lines 11-15

context at all[35]. The proxy group has been selectively tainted to the point that it provide no value other than a contextual comparison of what is happening in other jurisdictions. Using the biased approach outlined by Concentric and Nexus is equivalent to adding jet fuel to a cars gas tank. It will certainly boost the (financial) octane for the vehicle, but is inappropriate, dangerous and will overheat the engine (i.e. excess returns and excess Capital spending). Otherwise, not recommended. LEI confirmed that using dissimilar US proxies results in higher ROEs that are too high for the Ontario context and result in higher ratepayer costs than appropriate[36]. This is as expected and also supported by industry literature[37]. The most objective approach is proposed by Dr. Cleary and it aligns with using real market information rather than creating artificial constructs using 'apples to oranges' proxies to predict the future. All experts agree that using real information is the best approach if it can be done. This avoids a race to excess returns and excess Capital spending.

Pollution Probe agrees with the experts that no adjustments need to be made to the Cost of Capital methodology related to Energy Transition. Although there is consensus agreement that the Energy Transition is underway and that there is some uncertainty over the long term, it can be accommodated within the approach already used by the OEB for the reasons already noted. In fact, the current approach has enabled alignment with Net Zero for one of the most aggressive Energy Transition targets, Net Zero by 2040[38], far exceeding the average targets of Net Zero by 2050[39]. This is achieved through smart integrated planning, rather than blindly spending excess Capital.

These changes are not impacting Ontario utilities' ability to attract appropriate financing. No expert included any additional modifications to their analysis and modelling based on the Energy Transition. LEI further recognized this in the LEI Report which stated: "…the focus when considering cost of capital implications is not whether and how fast the industry is changing but whether, for regulated businesses, the volatility of net cash flows is changing or there is an increased risk of inability to attract capital or recover associated investments. Neither appears likely in the forthcoming regulatory period"[40].

[35] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 54 line 8 to page 55, line 10; and Final Transcript for EB-2024-0063 Volume 6 Oct 10 2024, Page 66, lines 15-23; and Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 132, line 12 to page 133, line 1.
[36] REVISED Final Transcript for EB-2024-0063 Volume 2 Sept 26 2024, Page 55 lines 7 to 10 and Final Transcript for EB-2024-0063 Volume 1 Sept 25 2024, Page 113, lines 6-16.
[37] K5.5 - PollutionProbe_HearingCompendium2_20241001 and J4.5 Article - Public Utility Beta Adjustment and Biased Costs of Capital in Public Utility Rate Proceedings
[38] K4.2 - PollutionProbe_HearingCompendium_20240926, Page 5, paragraph 23.
[39] Final Transcript for EB-2024-0063 Volume 4 Oct 1 2024, Page 57, lines 6-14.
[40] N-M1-2-PP-1b and N-M1-2-EP-1 and Final Transcript for EB-2024-0063 Volume 1 Sept 25 2024, Page 93, line 27 to page 94, line 2.

To the extent that Energy Transition increases or decreases the need for Capital investments, this is dealt with through the regular rate cases and related OEB initiatives[41] based on specifics rather than a generic consideration. This provides a more integrated and balanced approach. Even in the case of gas utility Capital, Enbridge has undertaken analysis which it suggest that Energy Transition factor are not likely to impact their Capital recovery until past the year 2100[42], much further than the timeframe being assessed in this proceeding. All real information available today makes no suggestion the Energy Transition will increase utility risks over their next rate terms, particularly since utilities have the ability to mitigate any risks through their planning and implementation. In fact, the Energy Transition has the potential to decrease utility risks since the system will be much more distributed and provide more opportunity to manage demand through tools like DERs on a local basis. The transition is more about adapting planning and implementation to take advantage of modern opportunities that spending excess capital on old school approaches. The Province and OEB has a significant focus on unlocking those future opportunities and benefits. It is important to ensure that excess returns and excess Capital spending do not continue to create barriers to this progress for the future.

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

Please refer to Issue 2 for a summary of risks and related impacts.

Although adequate processes are in place to mitigate risks, it is important to consider how these risks impact ratepayers, Ontario's energy sector and the ability for utilities and Ontario to adjust as the Energy Transitions continues to unfold. As noted above, applying a Cost of Capital methodology that locks in 'excess returns' and incents excess Capital spending is contrary to the public interest, will result in higher costs, lower future benefits and create additional barriers to efficiently and effectively innovate or introduce modern technologies. Overspending Capital today creates higher stranded asset risk and forms a barrier to enable modern and innovative approaches to be used in the future. The Capex bias has been noticeably presents in the slow adoption of non-pipe and non-wires alternatives. Why would utilities adopt to modern approaches if the OEB continues to provide incentives to overspend on old school Capital investments (e.g. pipes and wires)? The OEB and Province has spent significant effort to enable and promote modern alternatives, but the incentive to put in traditional Capital solutions has been a significant barrier. This barrier is increased by the incentive that comes from excess returns on spending. OEB decisions collectively send messages to utilities

[41] Examples include BCA Framework, IRP Framework, DER initiatives, etc.
[42] K4.2 - PollutionProbe_HearingCompendium_20240926, Page 9

whether status quo is acceptable or if more modern integrative planning and implementation is required.

The most effective way to mitigate those risks is to adopt the recommendations made by Dr. Cleary. This provides a setting of parameters based on real market information[43] and avoids the risks and issues outlined in this submission. This also enables the time-tested benefits of the existing Cost of Capital framework to be leveraged.

B. Short-Term Debt Rate

4. Should the short-term debt rate for electricity transmitters, electricity distributors, natural gas utilities, and OPG continue to be set using the same approach as set out in the OEB Report? [EB-2009-0084, Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (OEB Report), December 11, 2009, pp. iii, 55-59]

Pollution Probe recommends that the OEB retain the current approach to setting the short-term debt rate as set out in the OEB methodology, with a minor adjustment recommended by LEI and Dr. Cleary.

As noted above, this approach has been effective. The OEB can be assured with a robust 15 years of history that this approach has provided a sufficient approach to determine the short-term debt rate. Any change would introduce uncertainty given that there is no evidence supporting a change. There is no basis for any increase which would result in increasing ratepayer costs without any incremental benefit. There is a benefit to continuing to harmonize the approach across the energy value chain, including electricity transmitters, electricity distributors, natural gas utilities, and OPG. It sets a level playing field and removes unintended incentives or disparities across the integrated energy system in Ontario. There is a desire to move to even more enhanced integrated energy planning in Ontario and this approach would align with that policy direction. The sector is converging over time since cost-effective energy solutions require an integrated approach. Using common financial treatment supports that objective.

5. If no to Issue #4, how should the short-term debt rate be set ?

N/A, see above.

[43] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 153, lines 8-15.

C. Long-Term Debt Rate

6. Should the long-term debt rate for electricity distributors, natural gas utilities, and OPG continue to be set using the same approach as set out in the OEB Report and as set out in the Staff Report for electricity transmitters? [OEB Report, pp. 50-55, 59; EB-2009-0084, OEB Staff Report, Review of the Cost of Capital for Ontario's Regulated Utilities (Staff Report), January 14, 2016, p. 3 Table 1]

Pollution Probe recommends that the OEB retain the current approach to setting the long-term debt rate, with minor adjustments recommended by LEI. This includes[44]:

- LEI recommends considering publicly available reputable sources for 30-year bond yield forecasts for Long Canada Bond Forecast (LCBF)/risk-free rate.
- Deemed long-term debt rate (DLTDR) to be applied as a cap for all utilities.

7. If no to Issue #6, how should the long-term debt rate be set?

See above for minor adjustments recommended.

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

The OEB currently does not consider transaction/financing costs associated with obtaining debt when determining the DLTDR/DSTDR[45].

For ROE determination however, the current methodology includes an implicit 50 basis points for transaction costs[46]. As the OEB is aware, the 50 basis point adder was an interim placeholder meant to be used in the absence of anything better. In jurisdictions such as BC, utilities come forward with evidence to support the real transaction costs[47]. Typical floatation costs have been estimated at approximately 25 basis points[48]. The OEB could decide to leave the 50 basis point adder in place for convenience or use a 25 basis point adder and allow utilities to come forward with evidence in their rates proceeding should they want to request approval of a higher value (i.e. the difference). The value would pertain to the delta over a specific timeframe (i.e. the rate term) based on real evidence and perhaps a materiality threshold. It should be noted that most utilities in Ontario are owned by municipalities and the approach is much more simple than complex holding companies. For holding companies, it will be important that any cost differential claimed be clearly related to utility operations and not transaction costs

[44] OEB_Generic Proceeding_Revised_LEI Report, Page 93.
[45] OEB_Generic Proceeding_Revised_LEI Report, Page 93.
[46] OEB. EB-2009-0084. Report of the Board on the Cost of Capital for Ontario's Regulated Utilities
[47] Final Transcript for EB-2024-0063 Volume 4 Oct 1 2024, Page 83, lines 10-17
[48] Exhibit N-M2-10-OEB Staff-16

related to more risky and complex affiliates. The structure that parent companies choose for their holding companies should not disadvantage the pure play regulated Ontario utility or its ratepayers.

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

Pollution Probe recommends continuation of the current approach, i.e. considering deemed capital structure regardless of the actual capital structure. This approach was supported by LEI and Dr. Cleary. The approach is administratively efficient for the OEB while maintaining a balance of equity and fairness for the utilities and Ontario ratepayers[49].

D. Return on Equity

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

LEI identified 5 overarching principles in their report which set a sound foundation for considering the cost of capital parameters and capital structure. These include[50]:

1. Meeting the FRS, which is a legal requirement;

2. Simple to administer relative to the status quo, i.e., the costs (if any) of transitioning away from the status quo and administering the recommended alternative are reasonable;

3. Transitioning away from the status quo only if the associated benefits are material as there is limited merit in modifying aspects of the methodology that have worked well;

4. Fairness in approach to consumers and utilities, consistent with the OEB's mission and mandate, to ensure efficient investments; and

5. Predictability and transparency in the recommended approach to ensure that the outcomes from the proposed methodology are relatively stable over a long-term time horizon.

Pollution Probe supports the continuation of the equity risk premium based model (with adjustments) and applying it on an annual basis, as has been done in the past. No approach is perfect, but this approach avoids additional risk and potential for negative

[49] OEB_Generic Proceeding_Revised_LEI Report, Page 101
[50] OEB Staff Ltr_Issues List_CoC_20240422_circ, Page 12.

outcome outlined in this submission. This approach was also supported by LEI and Dr. Cleary.

Pollution Probe agree that it makes sense for the OEB to take this opportunity to update the base ROE from the 9.75% established in 2009, to a base ROE that reflects current capital market conditions and avoids excess returns and the negative impacts during the Energy Transition. LEI recommends that the base ROE be set at 8.95%, which equals their CAPM average estimate. The base ROE recommended by Dr. Cleary is 7.05%. This represents a reasonable range for the OEB to consider and would help mitigate some of the excess returns currently provided. Pollution Probe is aware that other intervenors intend to go into the equity thickness discussion in more details and Pollution Probe support maintaining the current OEB approach which aligns with the LEI, Nexus and Dr. Cleary recommendations.

As noted previously, the approach used by Concentric and Nexus overinflated the ROE (11.51%[51] and 11.8%, respectively based on 40% equity thinkness) by introducing calculations based on proxies that do not accurately reflect (or in most cases, do not reflect at all) the pure play Ontario regulated utilities that are the focus in this proceeding. Pollution Probe recommends that those inflated estimates not be adopted for the reasons previously noted above. The long term negative impacts and excess costs to ratepayers would be significant. It is not surprising that the high ROE recommendations have come from the utility commissioned experts and that those recommendations align with the excess return biases identified (e.g. up to 4% in excess ROE[52]).

In 2006, the OEB set the deemed capital structure at 60% debt and 40% equity for all electricity distributors and transmitters. The capital structure is set on a case-by-case basis for other regulated entities. A 40% equity thickness cap is appropriate and consistent with current practice and meets the range of utility needs. No practical or prudent rational has been provided for adjusting the cap upward. A fully custom approach would not be efficient and would not lead to material benefits[53].

If a utility is to apply to increase its equity thickness, it should apply to the OEB similar to what was done in the recent Enbridge Rebasing case[54]. OPG is currently an anomaly and although it appears reasonable to migrate OPG toward the consistent cap, it is

[51] Adjusted from 10.8% to 11.51% based on 40% equity thickness vs. Concentrics use of 45% equity thickness. Reference: Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 166, lines 12-20.
[52] Final Transcript for EB-2024-0063 Volume 5 Oct 2 2024, Page 168, line 26 to page 170, line 5 and K5.5 - PollutionProbe_HearingCompendium2_20241001 and J4.5 Article - Public Utility Beta Adjustment and Biased Costs of Capital in Public Utility Rate Proceedings
[53] OEB_Generic Proceeding_Revised_LEI Report, Page 139
[54] EB-2022-0200

reasonable to review the equity thickness as part of it rates case to determine if it should decrease. OPG details were not specifically reviewed in this proceeding and adding an item to the next appropriate rates case would be an efficient and reasonable approach.

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

Ontario's regulated utilities are less risky than they were in 2009 and certainly less risky than the average company in the market as a whole[55]. Investors also differentiate between types of utilities (e.g. pure play vs. integrated), where they operate[56] and their regulatory jurisdiction. If this was not true, investing would be a generic random activity with no difference between publicly trade holding companies on any exchange. This issue is particularly relevant to pure play regulated utilities in a stable regulatory environment like Ontario in comparison to diverse holding companies operating in a different geographic and regulatory environment. As previously noted, the problems become even greater as the composition of a holding company used for comparison deviates from the pure play regulated Ontario utility that is the focus of this proceeding. It is important to use an 'apples to apple' comparison when considering the perspective of debt and equity investors. This is the approach used by Dr. Cleary, who is the only expert witness in this proceeding that actually works directly with relevant current debt and equity investors.

As noted, almost all of Ontario regulated utilities are not publicly traded, do not issue equity and issue debt only in Canada. Although there are a few publicly traded holding companies that own Ontario utilities, this is the anomaly and more related to their holding company structure rather than the Ontario utility. It is important to avoid mistaking debt and equity investor positions on US holding companies with Ontario regulated utilities. As noted earlier, the further a proxy is from an Ontario pure play regulated utility, the less relevant the comparison and the perspectives of debt and equity investors related to those proxies.

[55] Hence, a Beta less than one which is expected.
[56] Country differences, but also environmental factors.

E. Capital Structure

12. How should the capital structure be set for electricity transmitters, electricity distributors, natural gas utilities, and OPG to reflect the FRS?

The Fair Return Standard (FRS) is a legal requirement. Although there is significantly more detail in the 2009 OEB Report on the Cost of Capital, a concise summary is provided by LEI[57] which indicates that the Fair Return Standard is a legal framework for setting the return on capital for regulated electricity and gas utilities; the FRS states that three requirements must be satisfied in order to determine a fair and reasonable return on capital:

- comparable investment standard: a fair or reasonable return on capital should be comparable to the return available from the application of invested capital to other enterprises of like risk;
- financial integrity standard: should enable the financial integrity of the regulated enterprise to be maintained; and
- capital attraction standard: should permit incremental capital to be attracted to the enterprise on reasonable terms and conditions.

Pollution Probe recommend that the OEB retain the current approach. As noted previously, as this approach has withstood the test of time and meets the FRS. The OEB's current approach of reviewing the capital structure on an occasional basis or as required is a reasonable practice. The OEB correctly noted the evolutionary approach in the 2009 Report of the Board and the 2016 Staff Report, that risks are not expected to change meaningfully in a short to medium period of time[58]. This approach is appropriately endorsed by both LEI and Dr. Cleary.

13. Should the OEB take a different approach for setting the capital structure for electricity transmitters depending on whether they are a single versus multiple asset transmitter?

Pollution Probe recommends a consistent approach as outlined throughout its submissions above. To be consistent the OEB should not take a different approach for setting the capital structure for electricity transmitters depending on whether they are a single versus multiple asset transmitter. There does not appear to be any compelling evidence provided in this proceeding that would substantiate a different approach.

[57] OEB_Generic Proceeding_Revised_LEI Report, Page 148
[58] EB-2009-0094. Report of the Board, 2009. Page 50

F. Mechanics of Implementation

14. What on-going monitoring indicators to test the reasonableness of the results generated by its cost of capital methodology should the OEB consider, including the monitoring of market conditions?

As outlined throughout the proceeding and also in this submission, the Cost of Capital Report of the Board issued in December 2009 has withstood the test of time even with the most harsh test, using full retrospective hindsight. It would be an obvious sign of failure if regular major changes were required regularly that made the approach unstable and inconsistent over time. This has not occurred and is clearly not expected. Adjusting the methodology every few years (i.e. 5 years or less) would increase uncertainty and make the methodology more sporadic. It is not needed an would be an extra administrative burden that exceeded any small benefits gained. The OEB has the mechanisms in place to identify any interim review that may be required. Also, utilities or other stakeholders have the ability to flag to the OEB any exceptional circumstances that require a reassessment of the Cost of Capital methodology.

On that basis, Pollution Probe recommends that the OEB use a rolling[59] 10 year review period for a scheduled review of the Cost of Capital methodology, with the appropriate ability for interim action if warranted. Based on that cycle, the OEB could test whether an extensive review is required. Undertaking a detailed review as done in this proceeding is a complex and costly undertaking, which must be warranted. Even though the utility costs (directly or via their associations) are not recorded, it is fair to say that the overall efforts and requirements across all participating parties has been significant. Using a 10 year review period would have the added benefit of ensuring that all Ontario utilities would have a chance to have completed at least one five-year incentive term before the next review is undertaken. Undertaking a review before there is experience in using the outcomes of this proceeding would be challenging and suboptimal.

Regulated utilities in Ontario are stable entities that use five-year incentive regulations periods to make gradual changes to adapt to regulatory and environmental demands. Changes are evolutionary and not revolutionary. Adjustments, particularly on a short to medium term basis are meant to be dealt with using well defined formulaic adjustments rather than reopening the methodology itself. The OEB has been able to meet the Fair Return Standard on an annual basis by setting the Return on Equity (ROE) and the deemed Long-Term (LT) and Short-Term (ST) debt rates using this approach.

The OEB's policy/guidelines correctly assumed that the base capital structure will remain relatively constant over time and require undertaking a full reassessment of a

[59] i.e. if there is a reason to conduct a detailed generic review in year 8, the 10 year cycle would reset from that.

utility's capital structure only in the event of significant changes in the company's business and/or financial risk[60].

15. How should the OEB regularly confirm that the FRS continues to be met and that rate-regulated entities are financially viable and have the opportunity to earn a fair, but not excessive, return?

As noted in Issue 14 above, the OEB has effective procedures in place to monitor and confirm that FRS continues to be met. Ontario utilities are regularly reviewed through rate cases and have the ability to flag to the OEB any exceptional material issues that occur between rate cases. There have been no tangible signs since 2009 that the OEB's approach is failing to meet the Fair Return Standard. As previously outlined, any failure to meet the Fair Return Standard would be visible in a number of ways and with full transparency to the OEB. The OEB can also take comfort that this has not occurred and is not expected to occur.

This reinforces the importance to ensure that the outcomes of this proceeding do not continue the any excess returns that are occurring. A utility will reasonably flag any issues to the OEB if there is a circumstance that arises that is affecting their ability to earn a fair return. However, the opposite is not true. Utilities have not been interested to have an OEB review when they are overearning (in total or on specific activities). This is one of the reasons behind the overearning trend occurring with US utilities[61]. In many cases these utilities have been able to stay out of rate cases to avoid being cut back.

Similar to this proceeding, it is more beneficial to review systematic issues that affect utilities in a generic hearing format. For utility specific issues, those are most appropriately review during their rate case or interim application, if required.

16. What should be the timing of the OEB's annual cost of capital parameters updates, including the timing, as required, of the underlying calculations?

The current approach for the OEB's annual cost of capital parameters updates is appropriate. Under this approach the 2025 Cost of Capital Parameters were released October 31, 2024. This approach has provided adequate time for development and implementation and no specific issues with this timing were identified during this proceeding.

17. What should be the defined interval (for example, every three to five years) to review the cost of capital policy (including, but not limited to, a review of the ROE

[60] EB-2009-0094. Report of the Board, 2009. Page 50
[61] K5.5 - PollutionProbe_HearingCompendium2_20241001

formula and the capital structure)? Should the OEB adopt trigger mechanism(s) for a review and if so, what would be the mechanisms?

It has been 15 years since the Board Report on Costs of Capital and almost 10 years since the review and OEB Staff Report. Reviewing too often would be trying to solve a problem that does not exist. In Pollution Probe's view, there is no need to add a specific trigger mechanism for a review. Using the rolling 10 year approach outlined under Issue 14 and knowing that there are a variety of ways to identify interim issues, is adequate and administratively efficient. If interim reviews are triggered more often than expected, then it would warrant a review of why. At that time guidance could be put in place to ensure that reviews are not requested without proper rationale.

As outlined throughout the proceeding and also in this submission, the Cost of Capital Report of the Board issued in December 2009 has withstood the test of time even with the most harsh test, using full retrospective hindsight. It would be an obvious sign of failure if regular major changes were required regularly that made the approach unstable and inconsistent over time. Adjusting the methodology every few years would increase uncertainty and make the methodology more sporadic and less credible. It is not needed and would be an extra administrative burden that would exceed any small benefits gained.

18. How should any changes in the cost of capital parameters and/or capital structure of a utility be implemented (e.g., on a one-time basis upon rebasing or gradually over a rate term)?

If a utility just entered a five-year rebasing term, it would be approximately four years from the OEB's decision in this proceeding before they would be back for another rebasing proceeding. It would make sense to apply any changes in an orderly manner and set a deadline for them to be implemented for all utilities. This could be done by requiring them to be implemented via a utility's rate case (term or annual update) no later than two years following the issuance of the OEB decision. Alternatively, the OEB could delay implementation to enable a specific year where they apply and utilities could plan on that basis using the rebasing or annual rate case process.

It is important to note that some Settlement Agreements for utilities that have recently completed rate cases may have wording that require implementation of the results of this Cost of Capital review. Wording in the OEB's decision will need to be conducive with those agreements. If the OEB includes timing details in the decision, it would also apply in these cases.

19. Should changes in the cost of capital parameters and/or capital structure arising out of this proceeding (if any) be implemented for utilities that are in the middle of an approved rate term, and if so, how?

Please see response in Issue 18 above.

G. Other Issues

a) Prescribed Interest Rates

20. Should the prescribed interest rates applicable to DVAs and the construction work in progress (CWIP) account for electricity transmitters, electricity distributors, natural gas utilities, and OPG continue to be calculated using the current approach? [OEB website; EB-2006-0117, OEB Letter, Approval of Accounting Interest Rates Methodology for Regulatory Accounts November 28, 2006; Accounting Procedures Handbook For Electricity Distributors, Issued: December 2011, Effective: January 1, 2012, Article 220, p. 200; Article 410, pp. 27 & 28]

Pollution Probe recommends that the OEB retain the current approach as recommended by LEI and Dr. Cleary. It is noted that one of the metrics will no longer be published in 2025 and beyond and the recommendation for an equivalent replacement is included under Issue 21.

21. If no to Issue #20, how should the prescribed interest rates applicable to DVAs and the CWIP account be calculated?

As outlined in Issue 20, Pollution Probe supports the approach recommended by LEI and endorsed by Dr. Cleary. This includes the following adjustment:

The prescribed interest rate for DVAs should be revised to align with the recommended DSTDR methodology by using CORRA as the base rate instead of the BA Rate, where the base CORRA rate is estimated as the average of 3-month CORRA futures rates over the next 12 months, and the spread added to it is determined by sampling 6-10 banks to determine the appropriate R1-low rated utility spread.

b) Cloud Computing Deferral Account

22. Should carrying charges and/or another type of rate apply to the Cloud Computing deferral account? If so, what rate should be applied? [Please refer to the OEB's Accounting Order (003-2023) for the Establishment of a Deferral Account to Record Incremental Cloud Computing Arrangement Implementation Costs, issued November 2, 2023.]

Cloud computing has become a standard approach, including for Ontario utilities. There are still some Ontario utilities using internal systems (utilities or affiliates) given that it was not long ago that utilities supported their own computing needs internally and some of those costs were capitalized. This is no longer a common approach since external

cloud vendors can accommodate those services in a more efficient and cost-effective manner. This should decrease internal IT costs (Capital and Operating) for utilities into the future, particularly as technology continues to improve and decrease in cost. On the other hand, it is expected that technology will be leveraged in more areas going forward (also reducing costs compared to traditional approaches). Prior to the cloud computing accounting order, the OEB did not distinguish the accounting treatment for cloud computing related operating/capital expenses and general operating/capital expense[62].

In some cases, Ontario utilities previously retained cloud computing solutions from vendors as part of a packaged delivery service to the utility. An example would be the Accenture delivery of Enbridge's work and asset management system (EnVision) approved by the OEB. It is no longer typical for a utility to be allowed to capitalize cloud computing under current accounting standards unless specifically approved by the OEB.

The design of the IRM is tailored to accommodate approved material incremental capital expenses, but not incremental operating (or O&M) expenses. Regulated utilities can earn an ROE on their rate base (which is primarily made up of capitalized assets in use) but cannot earn a return on their operating expenses. As such, the current IRM design incentivizes utilities to make in-house infrastructure investments for their computing and storage needs, rather than opting for a cloud computing service (as it is categorized as an O&M expense). The cloud computing costs cannot be amortized over a longer time horizon, despite the long-term benefits of switching to this model[63].

Best practice in variance accounts (when a traditionally Capital investment is being replaced by a more cost-effective O&M solution) is to account for both sides of the equation (costs and benefits). For example, if a cloud computing solution is being put in place which increases costs on one side of the ledger, there should be an accounting of the reduction in traditional Capital or Operating cost savings occurring from the activity or asset being displaced. It is recommended that this principle be applied for Cloud Computing[64]. It is also important to ensure that the legacy systems meant to be displaced by the Cloud Computing expense (and business case) are actually decommissioned or at least removed from Capital and O&M budgets already included in rates. Without that occurring, ratepayers are paying twice for the same benefit.

[62] OEB_Generic Proceeding_Revised_LEI Report, Page 30.
[63] OEB_Generic Proceeding_Revised_LEI Report, Page 37.
[64] Example of principle is included in EB-2022-0200 Exhibit O1, Tab 1, Schedule 2, Accounting Orders - Phase 1, Page 40

By their very nature, cloud computing solutions are less risky and more cost-effective than typical utility delivery of internal IT services. IT is a support service in a utility and it is not possible to scale or maintain service quality in the way external service providers can (e.g. Microsotf, Amazon Web Services, etc.). This comes with cost efficiencies, improved quality and added risk mitigation such as regular back-up and disaster recovery, which was a historical cost to utilities. Relative ratepayer costs should decrease due to the transition to Cloud Computing. Ratepayers should see decreasing Capital and Operation Costs related to those IT activities in rate cases and sustainable reductions should occur from IT staff decreases compared to when the utility ran all the IT services internally. Like all services procured by a utility, the utility must ensure due diligence in vendor procurement and contracting terms (including service level metrics).

Given that Cloud Computing is less cost and risk than traditional utility IT (Capital and Operating), there is no basis for a risk premium over and above the carrying charges (i.e. prescribed interest rates).