

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sch.B, as amended;

AND IN THE MATTER OF a consultation initiated by the Board on the Cost of Capital for regulated entities.

**FINAL SUBMISSIONS
ON BEHALF OF THE
SCHOOL ENERGY COALITION**

October 30, 2009

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1 GENERAL COMMENTS

1.1 Introduction

- 1.1.1** On March 16, 2009 the Board initiated a consultative process to assess how, if at all, it should react to the unprecedented changes in the financial markets in establishing or adjusting the cost of capital for the entities it regulates. While it subsequently determined in June, based on the initial input it had received, that no emergency changes for 2009 should be implemented, it continued the consultation to gain a broader understanding of how the existing methodology performs in unusual financial conditions. The primary purpose of this part of the consultation, as noted by the Board in a number of communications, and reiterated in the stakeholder conference, is to help understand whether the current approach to cost of capital has sufficient robustness to be relied on by the Board in all circumstances.
- 1.1.2** The School Energy Coalition has been active in this process, and this constitutes the Final Submissions of SEC in this matter.
- 1.1.3** SEC was not part of the Consumer Groups and others who retained Dr. Booth, although it is well known that we generally support the approach and views that Dr. Booth has provided in past proceedings. As well, we had the opportunity to review a draft of the final submissions of the Consumer Groups, and that has been of assistance in drafting these submissions.
- 1.1.4** In drafting these submissions, we have also had the benefit of reviewing a draft of the submissions of BOMA/LPMA, which was also of considerable assistance. We note that in certain areas of our submissions, we have relied on the thorough analysis provided to the Board by BOMA/LPMA.
- 1.1.5** The submissions of SEC seek to be in compliance with the Board's stated objectives of this process, and the limitations on the process inherent in the consultative approach. We note that some parties have sought to turn this into a generic hearing on cost of capital, but the Board has been very clear in setting expectations inconsistent with that result. We have relied on the Board's statements in that regard.
- 1.1.6** In this respect, we have read the submissions of VECC/CME/CCC on the possible outcomes of this process, and in general we support their conclusions. Where throughout these submissions we have suggested that the Board consider changes to its current cost of capital approach, we are not in any sense suggesting that those changes should be implemented without a proper proceeding. The cost of capital (including cost of debt, cost of equity, and related PILs) is, for these capital-intensive businesses, one of the largest components of rates, and should be changed only after a rigorous adjudicative process with properly tested evidence.

1.2 Summary of Submissions

- 1.2.1** The Board has asked participants to provide input on three areas, set out in the letter of October 5th and also in the Chair's opening remarks on September 21st. Our submissions focus on those three areas.
- 1.2.2** *Robustness.* The Board has asked whether the current cost of capital methodology needs to be adjusted to produce better results in a wide range of financial market and economic conditions.
- 1.2.3** The clear evidence appears to be that the ROE methodology is not broken, but is in fact producing reliable results even in unusual situations. It is fundamentally constrained by the fact that it is tested at a point in time, yet is applied to a given utility over a period of years, but aside from that concern the results are good. We have proposed, in a later section of these submissions, that the Board explore adjustments to the timing of the calculation to meet concerns expressed by utilities as to the arbitrary nature of the timing for any given utility.
- 1.2.4** There do appear to be very legitimate concerns with respect to the deemed long term and short term debt rates, which have been enunciated by both utility and ratepayer representatives. The sources the Board uses for this purpose did not perform well for the 2009 rates, as is discussed thoroughly in the BOMA/LPMA submissions. We believe that the Board should review how these rates are established, and the related question of the split between short term and long term, so that the anomalies of 2009 in this regard are not repeated in the future.
- 1.2.5** *Reasonableness.* We have interpreted this question to be one of identifying tests the Board can use to determine whether the cost of capital methodology might not be working properly. It is, therefore, a "canary in the mine" question, identifying warning signals that should cause the Board to investigate further.
- 1.2.6** In our submission, the two tests that should be employed for this purpose are:
- (a) M&A premiums.** If the Board sees a trend in M&A applications to valuations or prices for electricity distributors that are less than about 105% of book value, that should prompt a formal review of return on capital for the sector. This is not currently the case, but a shift of this nature would signal that something significant has happened, and that something might be a disjunct between required returns and allowed returns.
 - (b) Capital spending.** If the Board sees a trend in cost of service applications to more modest capital spending programs, that should also prompt a formal review of return on capital for the sector. Right now, all electricity and gas distributors are

investing the maximum they can convince the Board to allow in adding to rate base. If that changes, it could be an indication that regulated distributors are starting to lose the internal contest for capital within their corporate groups, and one of the possible reasons for that could be a “broken” ROE methodology.

- 1.2.7** *Discretion.* The Board has asked for input on how it should exercise its discretion in adjusting the results of the Board’s cost of capital methodology. In our view, the Board should be loathe to react to short-term influences in what is fundamentally a sector with a long-term horizon.
- 1.2.8** Instead, the Board should consider changing how it applies its cost of capital methodology overall, so that it is less sensitive to short-term influences. One way to do that is to change the cost of capital parameters on a less frequent basis, so that there is more stability to the parameters and less risk that a market meltdown will cause unusual results.
- 1.2.9** The Board should also investigate how to better establish and adjust the deemed debt rates, and address the issues of the impact of affiliate debt conditions on the applicable rate, and the appropriate connection, if any, between the nature of the utility’s assets and the relative levels of short term and long term debt.

2 CHANGING THE CURRENT METHODOLOGY

2.1 General

- 2.1.1** The Board is seeking “further information...on the potential need to adjust the established cost of capital methodology, based on the ERP approach, to adapt to changes in financial market and economic conditions”.
- 2.1.2** With respect to return on equity, on which most of the focus took place in this consultation, there is a debate about whether the formula is “broken”. If so, the next question is whether this has happened recently, or the Board has simply been wrong all along in how it sets ROE, and thus on the resulting ROE levels the Board has been allowing. We will look below for evidence that the formula is not working.
- 2.1.3** As part of the same question, we will also look briefly at what has changed, between 1994 and today, that could affect the applicability or viability of the ROE formula.
- 2.1.4** With respect to debt rates and capital structure, there was much less discussion, but these are integral parts of the analysis, and so it is important to spend some time discussing how those are panning out as well.

2.2 Is the Formula “Broken”? – The Experts

- 2.2.1** *Positions of the Expert Witnesses.* We have railed on and on in the past about the fundamental futility of listening to expert witness after expert witness expressing their quite predictable opinions on the appropriate return on equity for the entities the Board regulates. This is in no way intended to disparage the expertise of the presenters at the stakeholder conference. However, each of them had a point of view, and before they started their presentations it was well known to everyone in the room what their conclusions would be.
- 2.2.2** We note that many of the same witnesses said the same things, on both sides of the issue, in the 2003 generic hearing on gas utilities’ cost of capital (RP-2002-0158), and in the 2006 consultation on Cost of Capital and 2nd Generation IRM (EB-2006-0088/9), and in the OPG rate case, and in many other proceedings. The spin has changed in some cases, but the conclusions are the same.
- 2.2.3** In our submission, the Board has spent a lot of time and effort to establish an ROE methodology that is widely used, has stood the test of time, and has been debated many times. Every time it is debated, the Board has reaffirmed the results after reviews in proceedings and consultations.

- 2.2.4** The fact is that most of the experts involved in this consultation have been saying for years that the ROE is too low. A number of them said it again this time around, as if this Board is inviting them to take another crack at arguments they have made and lost more than once in the past.
- 2.2.5** In our view, the experts who came to this Board and said that the 75% adjustment factor has always been wrong, or the market risk premium the Board is using has always been a hundred or two hundred basis points too low, or the beta of 0.5 has always been too low, and should be .7, or .8, or .9, are simply not helpful. This Board does not need to continually re-hash those old debates, as if somehow the Board was not listening when the same arguments were made before, but repeating the arguments enough times will cause the Board to understand just how wrong it has been.
- 2.2.6** As will be clear at this point, we do not believe that the Board should put much stock in the views of the experts in this consultation that the ROE methodology is “broken”, as so many of the utility connected experts said. The ROE, and the ROE methodology, are not established by the experts, and at no time has the Board proposed that it will delegate its responsibility to make this decision to the experts. Indeed, the members of the Board, having spent a lot of time engaged in ROE discussions and debates over the years, already have a considerable expertise in this area, and can form their own opinions about the appropriate results, and about whether the current methodology is “broken”.

2.3 Is the Formula “Broken”? - Empirical Evidence

- 2.3.1** While the opinions of the experts are not, in our view, particularly helpful, the empirical data, and analysis of it, that they can provide are helpful, because that is the foundation on which the members of the Board can apply their expertise to make cost of capital decisions.
- 2.3.2** What evidence is there that the ROE methodology is “broken”? Let’s look at it.
- 2.3.3** *Spread.* The spread between the debt rate and the ROE narrowed early this year to a patently ridiculous 39 basis points. We say “patently ridiculous” because, on any assessment of risk, there is more than a 39 basis point difference in risk between utility debt and utility equity. The proponents of this argument say that this is evidence that the ROE at 8.01% is too low, and therefore the ROE methodology couldn’t handle the unusual capital markets of the last year.
- 2.3.4** We agree that 39 basis points is too small, but there are two reasons why that is not evidence that the ROE methodology is broken:
- (a) In any subtraction, there are two numbers. If the difference is counterintuitive,

either of the two numbers could be the culprit. It is equally possible in this case that the debt rate of 7.62% was too high. As BOMA/LPMA point out quite well in their submissions, that was indeed the case early in 2009. The deemed debt rate was too high by at least 90 basis points, and probably more. The Board has ample anecdotal evidence of this as well, because it has seen 2009 rate applications from LDCs in which market rates for term debt were quoted at levels far lower than the 7.62% deemed rate.

- (b) The debt and equity markets, while tied together in some senses, also sometimes react differently to economic influences, and that can produce short-term narrowing of the spread between debt and equity. That is not evidence that the formula is “broken”. At best it could be evidence that there were short-term anomalies in the debt markets. (We say the debt markets only, and not the equity markets, because the ROE formula is not sensitive to short term anomalies in the equity markets. That stability is one of its strengths, not a weakness. The debt rate, though, because it is based on a point in time market metric, is susceptible to short-term anomalies, which on the evidence that has been provided could well have been the case in early 2009.)

2.3.5 Counterintuitive Result. The cost of capital was in fact increasing during the financial crisis in late 2008 and early 2009, say the utility experts, but inexplicably the ROE formula produced a reduction, not an increase. The argument is that if the result was counterintuitive, the formula is not working.

2.3.6 This argument, which we heard in multiple variations from a number of the presenters, is founded on some unproven and likely incorrect assumptions:

- (a) The assumption is that the cost of equity was in fact increasing during the financial crisis. While this is something that is widely believed, what is the evidence that it was true? What we know is that there was a massive drop in the stock markets, and a lower price for the stock would, assuming the underlying dollar return is unchanged, and the perceived risk is unchanged, imply a higher required return for a given risk. But that assumption of an unchanged dollar return is unlikely to be correct. Investors’ perceptions during the crisis were that companies would not be making as much money in the near term, so the lower price is at least in part a reflection of lower expected return. Further, the problems with the banks in the U.S. meant that all investors were perceiving much higher risks for the same companies. Thus, the cost of equity for a given risk was not increasing. The risk was increasing, and the expected dollar return was decreasing, and the markets repriced stock to reflect those factors.
- (b) The assumption is that any increased cost of equity in the market translated into an increased cost of equity for utilities. We do not have any evidence on the record of this proposition, because we have no examples of capital formation or other

valuations of Ontario utility equity during this period. Further, the assumption is more likely to be incorrect than correct. The experts in this proceeding have generally agreed that there was a flight to quality during the financial markets crisis. We saw it in debt, where the yields for risk-free government debt went way down, at the same time as the yields for corporate bonds went up. This reflected investors in debt shifting to safer havens during a crisis. In our submission, equity investors did the same things, and this is borne out by the charts many of the presenters showed of general market levels vs. utility stock prices. What they show, fairly consistently, is that when the market was dropping like a stone, the stock prices for utilities were marginally affected, if at all. As Dr. Booth pointed out quite correctly, this is exactly what is expected in an economic downturn. Utilities are “safe haven” stocks, and the reason is their relative immunity to the market’s gyrations.

- 2.3.7** The bottom line on this issue is that those who relied on the “counterintuitive results” argument did not have any evidence to back it up. Indeed, what evidence could they provide, except what the “correct” ROE should be. Except for those who calculated a “correct” ROE based on the assumption that the Board has been wrong on this all along, no-one was in a position to show that the formula’s 2009 results are in fact counterintuitive, and in our view they are not.
- 2.3.8** In fact, it appears to us that equity investors, faced with their 10-15% returns from investments in “safe” banks suddenly turning sour, may well have seen 8% from a regulated utility with very limited downside risk due to their regulated revenues and returns, and their monopoly positions, being a very good alternative. That does not strike us as being counterintuitive at all given what the market experienced over last winter.
- 2.3.9** *Laggards in the Market Recovery.* Mr. Akman directly, and several others indirectly, argued that ROE must be too low because utility stock prices have languished while the rest of the market has been in a strong bull since the spring. This, it posited, shows that investors are not attracted to utility stocks because the returns are too low.
- 2.3.10** There are many full answers to this, but the easiest one is the same referred to earlier: utility stocks are not supposed to go up and down like a yo-yo. Their attraction – their low risk – is a function of their stability. Just as they didn’t drop much when the market tanked, so too they didn’t rocket upward when the market rose [Mr. Coyne, among others, agrees: Tr.2:47].
- 2.3.11** *The US ROE “Disparity”.* A common theme throughout the discussions was the proposition that the ROEs of U.S. regulated entities are much higher than the Ontario ROEs, yet there is no risk differential to justify that. Concentric did a report for this Board that reached that conclusion, and more recently has participated in this consultation as a utility representative arguing the same thing.

2.3.12 In fact, Concentric's own calculation of appropriate ROE is a combination of CAPM and DCF, with each having equal weight. While they claimed that their approach used both U.S. and Canadian utilities in the DCF component, they admitted in the questioning that in fact they don't use the Canadian data at all in their DCF calculation [Tr.2:58-9]. This, we note, causes them to run afoul of what Dr. Cannon pointed out as the main weakness of the DCF method, the weakness of its application by analogy.

2.3.13 But Concentric were not the only ones to focus on this disparity between U.S. and Canadian ROE. The argument is that Canadian utilities compete for capital on the world markets, and so they have to offer returns to investors that are comparable to their main competitors, the U.S. utilities.

2.3.14 There are at least four reasons why this Board should not give weight to this disparity:

(a) This is a proposition that has been put to this Board more than once in the past, and has also been considered by other Canadian regulators. In every case, it has been rejected. Raising it again in this policy consultation is not helpful to the Board, and if it is the primary basis for the challenge to the current ROE – as it appears to be – that suggests a very weak challenge.

(b) The U.S. markets are in general riskier than the Canadian markets, as evidenced by the fact that the market risk premium in the U.S. is routinely 100 basis points or more higher than in Canada.

(c) The risks faced by U.S. utilities are materially higher than the risks facing the Ontario utilities. That is demonstrated in part by the lower credit ratings of the U.S. utilities on average, something that was discussed at some length in the stakeholder conference. While it is undoubtedly true that credit ratings do not correspond exactly to equity risk, as some of the experts pointed out, it is true that companies with lower investment grades will also typically have higher costs of equity. In addition, CME/VECC/CCC have filed the Moody's August 2009 document entitled "Rating Methodology: Regulated Electric and Gas Utilities". In that detailed analysis, Moody's says that in rating regulated utilities, 50% of the rating is directly driven by the regulatory environment: 25% is a direct assessment of regulatory stability and support, and 25% is "Ability to Recover Costs and Earn Returns", which they say [p.7] is another aspect of regulatory risk. Moody's is clear that Canadian regulated utilities are perceived to have lower regulatory risks than U.S. regulated utilities, and because of that a Canadian utility with a given rating might have worse credit metrics than the U.S. utility with the same rating [p. 27].

(d) The Ontario utilities operate within a much more stable and well-managed economy than in the U.S. Moody's has also commented on this, but as well we

heard the summary from Dr. Booth. It is presumably uncontested that Canada has been more successful over the last decade or more in fighting deficits and controlling inflation and other negative economic impacts, compared to the United States or most other countries. That, coupled with our much stronger banking sector, have limited the damage caused by the U.S. meltdown, notwithstanding the close economic and financial connections between the two countries.

- 2.3.15** The relevance of the U.S. ROE data appears generally to be directed at the comparable returns test, a component of the Fair Return Standard. It appears clear from the evidence that the U.S. utilities are not in any material way comparable to Ontario utilities, and therefore it is submitted that their returns are not relevant to the Board's analysis. Further, as we note below, on at least two other tests, investors have spoken with their money, demonstrating that given the choice they will provide capital to Canadian regulated entities at current rates.
- 2.3.16** *Capital Attraction – Entity Level.* There seemed to be a complete consensus that Canadian utilities are not having a problem attracting external capital today. There was some suggestion that there may be a problem lurking in the woods, but no evidence was led that any Canadian utility has had any difficulty in getting capital when they need it. More than once, utility experts admitted that there is no current problem with the capital attraction test.
- 2.3.17** *Capital Attraction – Within Corporate Groups.* The more interesting suggestion, by some of the utilities' experts, was that the "low ROE" in Ontario means that the regulated distributors will not be able to get capital internally. They will have to compete for capital from their holding company against other businesses that have higher returns, they will lost that competition, and thus they will become capital constrained.
- 2.3.18** To test this hypothesis, we looked at the Electricity Yearbooks published by the Board for each of 2005 through 2008. Those yearbooks show the Gross PP&E for electricity distributors at the end of each year. The increase each year in Gross PP&E is a rough approximation of the total capital being deployed by electricity distributors in their distribution infrastructure.
- 2.3.19** What we found, and what the Board will find if it reviews it directly, is that electricity distributors were putting about \$1 billion per year into the ground, of which about half was coming from their annual depreciation allowance, and the other half was coming from new capital. In 2008 that has crept up to \$1.1 billion in new investment.
- 2.3.20** We also know, because each year we get a new batch of cost of service applications, that the electricity distributors have consistently been asking the Board for approval to ramp up capital spending at an even more rapid rate than in the past. Even excluding GEGEA spending plans, the 2010 applications continue to show this strong push to

increased capital spending. There is no evidence that any of these utilities are losing the internal battle for capital investment.

- 2.3.21** But it is true that for most of the electricity distributors, while they have affiliates that seek capital internally, the bulk of their corporate focus is on the distribution business. Therefore, perhaps the increasing capital plans of the electricity distributors are not a good example of internal competition for capital.
- 2.3.22** We looked at the gas distributors as well, because clearly they are in a position to compete against other strong business units for internal capital. What appears clear is that the gas utilities also invest almost a billion dollars a year in hard assets, also partly from depreciation allowance and partly from new capital. In their case, however, they appear to be increasing their rate base at a more rapid pace (i.e. higher percentage increase annually) than the electricity distributors. In short, there does not appear to be any evidence there of a constraint on capital.
- 2.3.23** Our conclusion is that all information currently available on Ontario regulated entities is that they are aggressively investing in new capital spending, and to the extent that the capital available is a result of an internal competition, the evidence is that they are successful in that internal competition.
- 2.3.24** *Utility Valuations.* One way to assess investors' perceptions of the adequacies of returns is to look at the market price of the stock. If a income-producing stock is performing well on price, that implies that investors are satisfied with the returns. Unfortunately, we do not have any pure-play Ontario utilities on whom we can apply this test.
- 2.3.25** But the market price is simply a pure and immediate form of valuation. The Board sees valuations of Ontario regulated entities on a regular basis as part of M&A applications. Those valuations are always far in excess of book. In fact, the Board has heard evidence in a number of proceedings that the asset condition of a utility being acquired is terrible, but there is still a valuation well in excess of book.
- 2.3.26** The experts do not all agree on the level of relevance of M&A valuations. Dr. Booth and Dr. Schwartz both made clear that high valuations provide comfort that ROE is not understated. Mr. Coyne, on the other hand, was more cautious. Questioned about using this type of information, he said that if it is handled properly, and you understand the assumptions built into the valuations, it could have value to the Board [Tr.2:64].
- 2.3.27** In our submission, there is insufficient evidence to derive the actual, revealed fair return from utility valuation information, even if it were all publicly available. (It is not. It is almost always filed in confidence.) The work involved to disaggregate the data so that the true expected ROE assumed on the investment is known is beyond what is realistic given the resources available.

2.3.28 However, what we know about that valuation information is that the values are too high to support the “low ROE” proposition. Put another way, if ROE were in fact lower than investors want, the values we see regularly in M&A valuations would not be possible.

2.3.29 *Conclusion.* The Board has an ROE methodology. A number of utilities have sought to convince the Board that the methodology produces numbers that are too low, and should be fixed. Have they provided evidence to back up that proposition? The answer is that they have not. All of the evidence that points in any direction at all suggests that the ROE is enough, or even more than enough.

2.4 Changes from 1994 to Today

2.4.1 The other way to look at the current ROE methodology is by assessing whether the economic situation and financial market climate today is different – in some relevant and material way - from that in place at the time the methodology was first introduced in 1994. If the answer is yes, the question is raised whether the change makes the methodology no longer valid.

2.4.2 In our submission, there are considerable differences in the current situation as opposed to that in 1994, including:

(a) The Canadian federal and provincial governments were in deficit in 1994, and there was significant concern whether Canada in general was living beyond its means. It was a legitimate fiscal crisis. Today, even with current year deficits, Canada is in the strongest fiscal shape of any of the G8 countries, and has been for several years. The strength and stability of our economy is a direct result of this fiscal probity.

(b) The Canadian dollar was under pressure in 1994, and imported goods were costly because of the exchange rate. In 2009, the Canadian dollar is at risk to move to par, seriously hurting our exporting businesses, but also a testament to our strong economy and the desire of investors to invest in Canada.

(c) Inflation was a considerable threat in 1994, affecting investor expectations and perceptions of risk. That is not true in 2009, where the Bank of Canada, having successfully kept inflation to 2% per year for a number of years, now is seeking an effective way to get inflation back up to that level without negative exchange rate impacts. One of the reasons that the long Canada rate is lower today than in 1994 is that investors are no longer concerned that Canada will have high inflation, so the inflation component of the bond rate is less.

(d) In 1994 the electricity distributors in Ontario were still regulated by Ontario Hydro,

and did not have a MARR. The gas distributors were within the OEB's purview, but they were still digesting policy changes that arguably made them somewhat riskier than they are today. Today both sectors have gone through significant change successfully, and are now settling into a stable regulatory environment.

- 2.4.3** It is, of course, possible to list many more differences between 1994 (or 1997, if that year is preferred) and 2009. What is striking about the list, though, as these examples above show, is that the changes from then until now are all in the direction of lower risk, more stability, and thus lowered investor expectations of utility returns.
- 2.4.4** But then, the argument will be that the ROE methodology indeed decreased the allowed ROE over that time, but it did so more than the changes in the economy and the markets would justify. This is the argument that the 75% factor in the formula is too high, and it should be 50% or something like that.
- 2.4.5** The first answer to that is the same as we have discussed in detail in the previous section, i.e. there is no evidence that the current ROE is too low, and all the indicative evidence points the other way.
- 2.4.6** The second answer, though, is that this Board has recalibrated the ROE several times over the last fifteen years in response to claims that it was too low. Each time, the Board confirmed that the formula was still getting the right answer.
- 2.4.7** So, unless all of the previous Board decisions on ROE are to be rejected as simply wrong, the "change" argument has to proceed from the last ROE review, which is 2006. Have there been changes since 2006?
- 2.4.8** The answer is yes, there was a financial meltdown over the winter of 2008/9 which, while not as severe in Canada as the U.S., was still a significant change. But that meltdown is over, and all of the economic and financial metrics that would be relevant are back to roughly the place they were at more than a year ago, when everyone in the utility business thought things were pretty "normal". In short, there was a big change, but is over now.
- 2.4.9** In our submission, there is no good argument for fixing a "problem" that no longer exists. If there was a problem over the last winter, which in our view is not indicated given the facts as we know them, that problem in any case doesn't exist any more. Therefore, unless the events of last winter allow us to learn something new about the ROE methodology that allow us to improve it, that experience last year is just that, an experience, and we should move on.
- 2.4.10** What the utilities' experts want the Board to learn from what happened last winter is that the ROE formula has been wrong all along, and the Board just didn't know it. We have not been able to identify even one shred of connection between the financial

meltdown and any problems in the formula.

2.4.11 It is therefore submitted that there are in fact no changes in circumstances since the introduction of the current methodology that would imply that changes to that methodology are needed.

2.5 Alternate Approaches Proposed

2.5.1 The utilities' experts have proposed a number of alternatives to the current ROE methodology. In general, we are not going to respond to them; first, because new methodologies were not really part of the scope of this proceeding, and second, because on our view of the empirical data available to the Board, the current methodology still appears to be getting the job done just fine.

2.5.2 We will comment specifically on one proposal that was put forward by a number of the utilities' experts: replacement of the long Canada rate with a corporate bond rate in the calculation of ROE.

2.5.3 The conceptual difficulty we have with that is that the cost of any capital is comprised of three components: a) the expected inflation rate, since inflation erodes the true value of the amount invested, b) a pure economic rent for the use of the funds, and c) an additional payment to reflect the risk. In the CAPM approach, and in most ERP formulations including that used by the Board, the starting point is a risk free rate, in this case using long Canadas. That risk free rate represents the first two components of the ROE, i.e. inflation and pure economic rent. Except for the inflation risk implicit in the expected future inflation rate, the risk free rate does not compensate the investor for risk. Build on top of that is a premium to reflect the risk of the particular asset class, in this case utility equities.

2.5.4 In this classic approach, all of the risk is in the equity risk premium, and that risk is in fact calculated as a general market risk, adjusted for the relative riskiness of utilities compared to other equities (i.e. the beta).

2.5.5 In the alternative formulation proposed by some, the ROE is calculated as a premium over a corporate (or utility) bond rate. No risk free rate is being used at all. The base of the calculation, the bond rate, already includes a risk component. Further, that risk may not be identical to, or additive with, the equity risk for the same companies.

2.5.6 Therefore, in order to consider a proposal like this, the Board must move from an equity risk premium approach to a completely new approach, in which parties are positing a correlation between utility equity returns and utility debt returns. Instead of building up the components of ROE in a conceptually sound way, as ERP does, the proposed approach would create an algorithm to derive utility equity return from utility

debt return based on a statistically significant correlation between the two in the past [see e.g. Tr.2:39-40].

- 2.5.7** To the best of our knowledge, no-one in this proceeding has provided a rigorous study showing a valid correlation between utility debt and equity returns from past data, and showing predicted results that can be verified by third party data through backcasting or other tests.
- 2.5.8** You can't just insert corporate bonds into the ERP formula, tweak it a bit, and go away happy. This is a conceptually different exercise than the ERP approach the Board has taken in the past. If utilities are going to propose it, it should be in the context of a hearing (individual or generic) in which the new theory/methodology can be reviewed and tested.
- 2.5.9** While that is the primary concern with this proposal, there is a secondary one that is also of some importance. The corporate bond rate or any subset of it will be much more volatile than the long Canada rate. This is in part because of the inherent stability of a risk free bond in a stable inflation environment, and in part because of the much greater liquidity that long Canadas exhibit over all other bonds in Canada. A move to any formula based on a corporate bond rate is thus inevitably a move to a much more volatile allowed ROE.
- 2.5.10** It is therefore our submission that, for the two reasons cited above, this alternative is not a viable option within the context of this consultation. In the context of a generic hearing, for example, an expert witness could propose this result, and the proposal could be tested for these things, and other issues like them. Until that time, in our view this Board has no basis on which to adopt this proposal, or any part of it.

2.6 Cost of Debt and Capital Structure

- 2.6.1** All of the participants in this consultation appear to agree that the ROE, the long term debt rate, the short term debt rate, and the capital structure are closely linked, and for the utility shareholder to have a fair return, and the utility's ratepayers to have just and reasonable rates, all four components must be appropriate. Mr. Aiken of BOMA and LPMA has provided the Board with a thorough review of these other components, with which we agree, and in these submissions we will only highlight some of the relevant points.
- 2.6.2 *Short Term Debt Rate and Capital Structure.*** Mr. Sardana made a presentation expressing concern about the deemed rate for short term debt. His general thrust is correct. The short term debt rate currently in place, and the rate that would be calculated today, are both less than the actual rate that utilities have to pay for short term money. This appears to us to be a flaw in how this rate is derived. In our

submission, the Board should initiate a formal review of this rate.

- 2.6.3** However, Mr. Aiken's discussion of the 4% deemed short term debt level, and the applicability of the short term debt rate, rather than the long term, to certain kinds of affiliate debt, are also spot on. The 4% deemed level does not bear any reasonable relationship to the short term borrowing requirements of the electricity distributors. As well, the application of the long term debt rate to affiliate debt instruments whose terms and conditions are clearly short-term in nature results in ratepayers paying a long term rate premium without getting the normal market benefits (e.g. protection against rate increases) that are supposed to come with paying that higher rate.
- 2.6.4** Therefore, in our submission the proposed review of the short term interest rate should also include the deemed short term debt level, and the applicability of the short term interest rate to certain types of affiliate debt.
- 2.6.5** ***Long Term Debt Rate.*** The deemed long term debt rate applies to a large percentage of the debt of electricity distributors. There are two main problems with it. First, the method for determining it has been shown to produce inaccurate results, and should be fixed. Second, it is in the interests of the sector to encourage LDCs to borrow in the market place, rather than solely from their municipal shareholders, but the current approach by the Board appears to penalize utilities for doing so,
- 2.6.6** On the first point, there is ample evidence that even at the height of the market meltdown, when the credit markets were essentially catatonic, the borrowing rate for utilities was well below the 7.62% deemed rate. It would appear that the meltdown was useful to the Board in this respect, by pointing out a problem with the methodology for setting this deemed rate. The problem is that utilities are resistant to market swings, so while in the normal course the interest rate on a utility bond of a given rating would be similar to the interest rate for a general corporate bond with the same rating, in extreme market conditions the two rates will diverge. As Mr. Aiken points out, at the height there was a 90 basis points difference, i.e. utilities were borrowing in fact at no more than 6.7% when the deemed rate was 7.62%. The Board is now aware, from many subsequent filings by LDCs, that a number borrowed at less than that from banks and other third party lenders.
- 2.6.7** In our view, the solution to this is to base the deemed rate on a measure of utility borrowing rather than rated debt of all corporations. This could be done as Mr. Aiken suggests, or it may be possible to take the suggestion of Mr. Sardana – to poll Canadian banks to get their indicative short term borrowing rates for utilities – and apply that to utility term debt as well. This question, we believe, could be usefully included in the review of debt rates we have recommended, above.
- 2.6.8** On the second point, we continue to be concerned that LDCs are not asked by the Board to seek third party lending arrangements, but are instead allowed to accept the

deemed rate for affiliate debt without any market investigation. Not only is this contrary to the Board's normal expectation that utility management act prudently by seeking the best prices for the things they need, but more third party debt by utilities would expand the sector's access to capital at a time when more financing will be required for the GEGEA changeover, and would give the Board additional information on market rates for utility debt.

- 2.6.9** We therefore recommend that the Board establish a policy requiring utilities that want to rely on affiliate debt at the deemed rate to show that they have taken appropriate steps to obtain debt at market rates, and the provision of affiliate debt is the least cost option. In this respect, it should be no different than buying any other service from an affiliate.

3 REASONABLENESS TESTS

3.1 What Tests are Available?

- 3.1.1** The Board has sought input on what tests it should consider as a way of determining whether the Board’s cost of capital methodology is still functioning properly. We have called this the “canary in the mine”, because what would be useful to the Board is some category or categories of empirical data, readily available to the Board, that is a reliable warning signal that the cost of capital may be awry.
- 3.1.2** To our mind, the purpose of an early warning is not to be definitive, but only to sound the alarm, and the Board’s response would not be to change the rules, but to investigate further. Any test could end up having a different cause than wonky capital rates, but the value of the test is to initiate a more thorough review. The review then identifies the cause of the alarm being triggered. It is like the smoke alarm in your house. If it goes off, it could be faulty wiring igniting a real fire, or it could be a teenager and an illicit cigarette.
- 3.1.3** The various experts have applied formal economic tests to see whether in their view the Board’s methodology is producing the right results. In our view, an early warning test should be simpler than that. You should not have to keep recalculating your basic results to see if they are still accurate. What’s the point of the formulaic approach if you still have to do the whole exercise every time anyway? We do not believe this approach is helpful.
- 3.1.4** As well, there are tests that can be applied to individual aspects of the cost of capital. We have just used one, earlier, by comparing the deemed debt rate to anecdotal and systematic evidence of what utilities have actually been paying, or quoted, for long term debt in the market. Tests like these can be useful, but that is not the kind of test we are seeking here.
- 3.1.5** The fact is that the utilities are pretty well constantly telling the Board, publicly and privately, directly and through the views of those who make their living in utility finance (like investment bankers, portfolio managers, analysts, etc.), that they are being undercompensated for their capital. Every time the Board receives such a message, it can’t rush off and have another hearing or investigation of the cost of capital. The primary beneficiaries of that are the myriads of people who get paid by the hour, on both sides of the debate.
- 3.1.6** Instead, we believe that the Board should have one or more warning signs that allow the Board to identify when the “we want more” that they hear is the normal complaint, or is actually something that needs a review or investigation.

3.1.7 In our view, the two tests that meet these requirements are:

- (a) Are the utilities continuing to push for increases in their approved capital spending plans?
- (b) Are the valuations the Board is seeing in M&A transactions still well in excess of book value?

If either of these circumstances is no longer true, then the Board has legitimate reason to find out why that is the case.

3.2 The Internal Capital Attraction Test

- 3.2.1** The first of the two tests arises out of the suggestions by a number of the utility presenters that utilities within corporate groups today, or in the future, will have a problem getting sufficient investment from their parent company because they compete against other businesses for the deployment of the group's capital. This is, in essence, the capital attraction test applied within the corporate group.
- 3.2.2** As we have discussed above in section 2.3, the evidence is that utilities in Ontario continue to invest in their PP&E at increasing rates, and the Board has in rates cases generally had to hold them back from overly aggressive capital spending, rather than encouraging them to spend more. We estimate that, between the electricity and gas distributors, more than \$2 billion was spent in Ontario in 2008 (the last full year for which the Board has data) on capital spending. When transmission investments are added, that figure is higher still, and of course in 2009 the capital spending plans already before the Board demonstrate that this year's spending will be considerably higher still.
- 3.2.3** Since much of the debt and equity needed for this spending comes from internal sources – corporate groups, in gas, and municipal shareholders or holding companies, in electric – this is a clear indication that the relevant investors are willing to invest significant dollars on the basis of the current cost of capital rules. (Those who raise some of their capital on the markets, like Hydro One and Toronto Hydro, have shown no reluctance to do so either, but that is a separate issue.)
- 3.2.4** But what if that were not the case? What if the Board started seeing a trend to rate applications with insufficient capital spending proposals? What if the Board started seeing the kind of harvesting the assets that went on to a limited extent during the rate freeze? Of course, the Board would take steps to encourage the utilities to spend more, perhaps even strongly so. The inappropriate behaviour would be corrected.
- 3.2.5** Yet that kind of reluctance to invest would be a symptom of some underlying cause,

which could be that returns on invested capital were not competitive. In our view, the Board not only has to insist that utilities invest as much as necessary, but also has to investigate the root cause of the trend and fix that cause.

- 3.2.6** We therefore propose that the first test be whether the Board sees a trend to insufficiently proactive capital spending plans from utilities in their rate applications. If such a trend starts to emerge, the Board should investigate the cause, and correct it. If the cause is non-competitive returns, that cause should be fixed.

3.3 The Valuations Test

- 3.3.1** The second test comes from classic finance theory. Dr. Schwartz gave a presentation essentially focusing on this area, and we hear it from Dr. Booth as well, with some debate and agreement from others. If the market price of an investment asset (like a bond or share) is in excess of book value, that is an indicator that the returns the asset is expected to generate are sufficient, or more than sufficient, to meet investor expectations. The market speaks through price, expressing the collective view of investors.
- 3.3.2** In the context of Ontario regulated entities, none of them can be valued directly on the stock market, because we have no pure-play regulated utilities. However, we do have arms-length valuations of utilities filed with the Board on a regular basis in M&A proceedings. In purchases, there is an actual purchase price, often supported by a formal valuation. In mergers, there is usually a formal valuation to determine the merger terms. Sometimes there is a negotiation as well. Right now, these valuations are consistently showing values for Ontario utilities well in excess of book value.
- 3.3.3** But, as with the first test, what if that is no longer the case? What if valuations are less than book value? If there are one or two anomalies, that could well be utilities in very poor shape changing hands. But, if the Board starts to see a trend, that suggests either a problem with the financial integrity of the sector overall, or a return that has fallen below investor expectations, or some other serious problem that needs attention. In this circumstance, the Board should be investigating to determine the cause of this change, and correct it.
- 3.3.4** We note that Dr. Schwartz and Dr. Booth, both supported by other presenters, agree that valuations should not get down to equality with book. That gives the utilities insufficient breathing room relative to required returns and therefore the ability to attract capital. In our view, the Board should use a rough indicator of 105% of book as the threshold. If utility valuations start to turn up below that level on anything more than an exceptional basis, this is in our view a test showing that something is amiss, and the Board needs to hunt down the root cause.

4 THE BOARD'S DISCRETION – A POSSIBLE ACTION PLAN

4.1 Introduction

- 4.1.1** In previous sections, we have concluded that the ROE methodology is working well, but that the debt rates, and the split of short and long debt, have methodological problems that should be addressed. We have recommended that those components be the subject of a review by the Board.
- 4.1.2** We do, however, feel that there are two aspects of the ROE that may be worthy of investigation in the near term as well. They are the interaction of ROE-setting with IRM, and the question of whether there is a continuing need for annual ROE changes. These two questions are linked.

4.2 Timing and The Impact of IRM

- 4.2.1** During the stakeholder conference, Ms. Anderson from Hydro Ottawa expressed a concern that we have heard from a number of LDCs. Discussing with Dr. Booth the impact of the business cycle on ROE, Ms. Anderson said [Tr.3:85]:
- “I guess what this has led to is a situation where, depending on when you rebase, when you do your cost of service, you have electric utilities that have a 1 percent difference in their current allowed ROE, simply because of timing of the fact that when they entered into incentive regulation.”*
- 4.2.2** We believe this concern is well-founded. While we understand that IRM is intended to decouple the annual “revenue requirement” from rates, giving the utility a predetermined budget and more freedom to manage within it, it is also true that a major part of that budget for four years should not be driven by an accident of timing.
- 4.2.3** The cause of this problem is that ROE is a point in time calculation. The current ERP methodology alleviates that to a great extent, because the formula is driven by the least volatile of the components of the market (long Canadas), and is not sensitive to any of the more volatile rates. The market risk premium and the beta are not re-estimated annually, for example, but are kept at long term numbers. The application of the 75% adjustment factor mutes the change further.
- 4.2.4** However, there is still a potential difference of 50 to even as much as 100 basis points in a given four year period, the IRM term. Further, if the Board were to adopt any of the revisions to the ERP methodology that have been proposed by the utility experts, all of which are considerably more volatile, this effect of timing could be seriously exacerbated.

- 4.2.5** Obviously one potential solution to this is to adjust rates each year during IRM for changes in ROE (or perhaps all components of cost of capital). This, unfortunately, does violence to the concept that is the underlying foundation of IRM, decoupling, and is not really a preferred option. You could also use some kind of averaging mechanism, so that ROE changes are smoothed and changes in a given year are muted further by the smoothing. This adds a level of complexity, but would improve fairness over time.
- 4.2.6** In our view, and subject to our comments on the fixed rate, below, this is an issue that the Board should investigate.

4.3 The Fixed Rate Approach

- 4.3.1** The other thing that was particularly telling in the presentations was the common thread, expressed directly by Dr. Booth but implied in the presentations of many others, that the ERP methodology produces very stable results year to year, in a narrow range. As we note above, this is in part the result of a stable formula. On the other hand, in volatile economic conditions a decade or more ago, that formula did produce broader fluctuations. What has changed is that the Canadian economy, and in particular the inflation rate and the debt markets, is now significantly more stable than it ever was. The targeting by the Bank of Canada of the 2% inflation rate has, with the reduced government deficits and thus the stronger fundamentals in the Canadian economy, produced over time a long term stability in rates of return.
- 4.3.2** In this situation, we believe that it may be time for the Board to consider adjusting ROE not annually, but less often.
- 4.3.3** There is no magic in the annual adjustment. Utilities do not have a window once a year in which they go out for equity capital. (In fact, they never go out for equity capital, but if they did, it would not be on an annual timing.) Investors' expected rates of return do not change on an annual date. They change daily, and the choice to capture those cumulative changes once a year is a function of convention, not external reality.
- 4.3.4** One way to address this is to move to a less frequent adjustment, like every two years. However, given the high level of stability in ROE already, we believe that it is now worth investigating fixing the ROE for much longer periods of time, perhaps five years or even ten years.
- 4.3.5** In our submission, the benefits that would come from long-term predictability of ROE, coupled with the existing benefits of the IRM approach, would far outweigh any temporary disparities between the fixed rate and the calculated rate in any given year.

It facilitates longer term investments (since the equity rate is known in advance, as would a term debt rate be known when it is put in place), and it ameliorates the current unproductive focus by people within the sector on ROE debates and complaints. Further, with solid early warning tests in place, the Board would be in a position to revisit the decision at any time if those predetermined warning bells start to sound.

- 4.3.6** Dr. Booth accepted this idea as being worth considering [Tr.3:97-8], going so far as to say that an annual adjustment mechanism may simply not be required any more. On the other hand, it is clearly an approach that has not been considered by many of the other participants, and so has not really been tested. There are a number of issues that would be raised if the Board were to consider it.
- 4.3.7** In any case, like all of the other items discussed in these submissions, and in keeping with the opening remarks of the Chair in this consultation, we are not proposing that the Board simply “lurch” in this direction because it may sound good. What we are proposing is that this possibility be pursued as a possibility, with a final decision on this and other issues in an appropriate process..

4.4 Proposed Action Plan

- 4.4.1** Subject to our comments below, we are proposing that the Board re-affirm its existing ROE methodology, and acknowledge that it has now performed admirably in extreme market conditions, and should be retained.
- 4.4.2** We have suggested that certain issues should be reviewed further. In our view, the first step in that review is not a generic hearing, although that may well be the end point. In our view the first step in that review is a Staff Discussion Paper, establishing a range of options for debate and consideration.
- 4.4.3** We therefore propose that the Board ask Staff to do an investigation, perhaps with the assistance of outside advisors, of the following questions:
- (a) What are the options to prevent utilities during IRM from being stuck with different ROEs in the same year due to accidents of timing? In this context, what are the advantages and disadvantages of moving to a fixed ROE for an extended period of time, and what are the implementation issues (and potential solutions) that would arise if the Board goes in that direction?

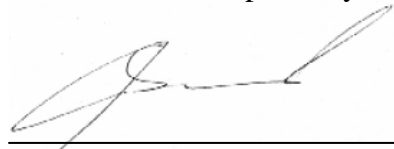
- (b) What alternative methodologies are available to establish the deemed short term debt rate? How would each of those methodologies have performed had it been in place in the last few years, and how do the calculated results compare with actual experience? This would include consideration of the suggestions made by Mr. Sardana, Mr. Aiken, and others.
 - (c) What alternative methodologies are available to establish the deemed long term debt rate? How would each of those methodologies have performed had it been in place in the last few years, and how do the calculated results compare with actual experience? This would include consideration of the suggestions made by Mr. Shepherd [Tr.3:151], Mr. Aiken, and others.
 - (d) What is the appropriate level of deemed short term debt in the capital structure, given the nature of the assets on the regulatory balance sheet? What are the options for establishing that deemed level? Should that level be different for different utilities? This would include consideration of the proposals made by Mr. Aiken.
 - (e) How should the terms of affiliate debt influence whether the short term or long term deemed rate, or some other rates, applies to that debt?
- 4.4.4** Depending on the contents of the Staff Discussion Paper, and any comments on it, the Board would then be in a position to consider whether a formal process, such as a generic hearing, should be initiated to make a formal determination on any of these issues.
- 4.4.5** In our submission, these are the parts of the cost of capital issue that, on the information before the Board in this consultation, appear to need reconsideration. Conversely, except for the possibility of fixed rates, it would appear to us that the ROE methodology, the most discussed aspect in the consultation, has been shown to be robust.

5 OTHER MATTERS

5.1 Costs

5.1.1 The School Energy Coalition hereby requests that the Board order payment of our reasonably incurred costs in connection with our participation in this consultation. It is submitted that the School Energy Coalition has participated responsibly in all aspects of the process, in a manner designed to assist the Board as efficiently as possible.

All of which is respectfully submitted.



Jay Shepherd, Shibley Righton LLP
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