EDA

The Voice Of Ontario's Electricity Distributors

October 11, 2006

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

Via email to BoardSec@oeb.gov.on.ca

Dear Board Secretary:

Re: Cost of Capital (EB-2006-0088) and 2nd Generation Incentive Regulation (EB-2006-0089) for Ontario's Electricity Distributors – Responses to Written Questions from other parties

The Electricity Distributors Association ("EDA") is the voice of Ontario's local distribution companies. The EDA's responses to written questions from other parties participating in the Technical Conference for the determination of Cost of Capital, including responses provided by the EDA's expert Mr. Robert Camfield, Christensen Associates Energy Consulting LLC, are attached.

Please direct any questions or comments to Guru Kalyanraman at 905.265.5334 or at gkalyanraman@eda-on.ca.

Yours truly,

Guru Kalyanraman
Analyst

Attachments:
EDA's Responses to Board Staff Questions
EDA's Responses to SEC Questions
EDA's Expert's Responses EB-2006-0088

Electricity Distributors Association
3700 Steeles Ave. W., Suite 1100, Vaughan, Ontario L4L 8K8 Tel 905.265.5300 1.800.668.9979 Fax 905.265.5301 email@eda-on.ca www.eda-on.ca

IN THE MATTER OF
consultation by the Ontario Energy Board on the Cost of Capital and 2nd Generation Incentive Regulation for Electricity Distribution Companies

EB-2006-0088 & EB-2006-0089

EDA's Response to Questions posed by OEB Staff

1. **Access to Capital** (addressed to distributors)
Please provide any information available on situations where your distribution utility has experienced difficulties in obtaining financing for capital investments on reasonable terms. What reasons were given for the inability to raise capital or on unreasonable (i.e. above-market rates)?

Board staff have requested historical examples where distribution utilities have experienced difficulties in obtaining financing for capital investments on reasonable terms. The Association submits that this information is not relevant to an assessment of the future impact on sourcing financing of the OEB staff's current cost of capital proposal. The Board has only recently implemented a full and fair rate of return for LDCs. In responding to a ministerial directive, the Board decided to phase in the return over three years. The phase-in was delayed because of a government decision to freeze rates.

What is relevant is the current reaction of the financial community to the OEB staff proposal for future impacts on LDCs. BMO Capital Markets report and Standard & Poor's Industry Report Card, (included in the submission to the OEB by LDCs), indicate that the proposed cost of capital could negatively impact the sourcing of capital funds by LDCs.

2. **Merger and Acquisition Valuations** (addressed to distributors)
Please provide information available specifically on the valuation (relative to the net book value) of your distribution utility (if you were considering or effected the sale or merger of your utility) or of another distribution utility that you were considering or effected a merger or acquisition with.

This question appears to be based on the suggestion made by Dr. Booth at pages 29 and 30 of his expert report submitted to the OEB that utilities sell at a premium. Whether parties merge or acquire assets will depend upon the individual financial positions of the prospective parties. One would need to have a fulsome understanding of all the factors contributing to each individual transaction before reaching any conclusions about any transaction. Regardless,

it is not clear what relevance this information has to the issue of setting a fair return, given the applicable legal principles that the courts have elaborated.

3. Impact on Sector Rationalization

What impact (positive or negative), if any, might changing capital structure for most Ontario electricity distributors have on the prospects of physical consolidation of electricity distributors?

It is assumed for the purposes of this response that "physical consolidation" is a reference to mergers between LDCs or acquisitions of LDCs or their assets by other LDCs. The methodology adopted by the Board to determine the cost of capital may affect the valuation of any LDC business but will be one of several factors that will be case specific. Regardless, it would be contrary to long-standing legally binding principles for the Board to manipulate the methodology for establishing cost of capital to achieve the ulterior motive of promoting consolidation. The Board is prohibited by the legislation from doing this directly and cannot do it indirectly.

4. Return on Equity – Cannon Methodology

Several parties have suggested that the Board retain the existing method of calculating the ROE as documented in Dr. Cannon's paper "Determination of Return on Equity and Return on Rate Base for Electricity Distribution Utilities in Ontario", dated December 1998, and consistent with the ROE methodology used in rate regulation of natural gas distributors under the Board's "Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities". If the Board was to retain the current methodology:

a. Should the ROE be updated for May 1, 2007 distribution rate adjustments?

The EDA strongly recommends that the determination of cost of capital for LDCs be based on the proposals contained in the Technical Report prepared by EDA's consultants, Christensen Associates and submitted to the OEB.

The Technical Report suggests that there is wide variability among electric distributors in Ontario that can be related to the perceived riskiness of LDCs and thus to the cost of equity and debt capital. The EDA supports the assessment in that report that the electric distribution industry as a whole within the current regulatory environment in Ontario is no less risky than it was in 2000, when the initial determination of the cost of capital was made based on the Cannon methodology. The report also provides recommendations for the components of the cost of capital as well as a flexible capital structure for LDCs.

However, should the Board consider retaining the Cannon methodology, ROE should be updated for May 1, 2007 using the Cannon methodology.

b. What should the starting point for the ROE applicable to electricity distributors (e.g., 9.88% from the first Distribution Rate Handbook or 9.00% as calculated in the 2006 Electricity Distribution Handbook)?

The starting point for the determination of ROE should be the determination of a ROE of 9.88% from the 2000 Handbook, that was based on a proper application of Cannon methodology.

c. If updates to the ROE are not done annually (e.g. under IRM), then how should the ROE update be done at the time that distributors file rebasing applications?

The EDA supports the adoption of an annual adjustment mechanism for the cost of capital under IRM.

5. **Return on Equity and Rebasing**

The staff proposal currently would have the IRM price cap formula applied to existing Board-approved distribution rates, largely set through 2006 EDR applications.

a. Does the change in the inflation or price escalator factor of the price cap index, measured by GDP-IPI (Final Domestic Demand) as proposed by staff, reasonably track or proxy also the changes in the debt rates and market returns (and therefore the distributors ROE) year to year?

The EDA submits that further research should be undertaken to establish whether or not the changes in the price escalator factor of the price cap index measured by GDP-IPI track the changes in the debt markets and market returns.

b. If so, is an ROE adjustment required in 2007 and while a distributor is subject to the price cap index? What are the implications of not changing the Return on Equity (ROE) currently allowed in a distributor's approved distribution rates until the distributor files a Cost of Service (rebasing) rate application during the period 2008 to 2010?

See response provided to Q 5 a) above.

6. **Capital Structure**
Several distributors have raised concerns about migrating quickly to a new capital structure. Consider a scenario whereby the Board were to phase in the change from the existing size-related capital structure to the common structure, for rate-making purposes, over several years. For example, a large distributor with over $1 billion in rate base might move from its deemed 35% equity to 40% over two years, to mitigate possible rate impacts on ratepayers. As another example, a small distributor with a rate base of less than $100 million could migrate from its current deemed 50% equity to 40% equity over three years, to mitigate the impact on corporate restructuring and on the distributor's shareholder(s). This change in the capital structure would be accomplished through the K-factor while the distributor is under an incentive rate mechanism (IRM) scheme, and a distributor migrating to the new capital structure would also factor such migration into its Cost of Service rebasing application.

a. What are the implications, advantages and disadvantages of such an approach?

b. Are there alternative approaches that the Board might consider?

This is not an appropriate question to comment on at this time. We would note that any discussion of phase in periods, etc. to a fixed capital structure for LDC's is premature.

A flexible structure for LDCs is the direction that should be taken in the current review of the process to determine Cost of Capital. We contend that a 'one size fits all' approach for the capital structure of LDCs, as proposed by OEB staff, will be burdensome for many LDCs. We note that the current rate methodology uses rate base size to determine the appropriate capital structure. The reports that have been produced to date demonstrate the need for LDCs to have a flexible capital structure. The Board staff position for a uniform approach is not supported by any expert opinion.

7. Load Concentration-related Business Risk
While Board staff have proposed a common capital structure applicable to all distributors, several stakeholders have commented on business risk, possibly related to a material loss of revenues due to the loss of a customer or business sector served by the distributor and where that customer or business sector constitutes a significant portion of the load and distribution revenues for the distributor.

a. Could any significant risk that might materialize due to the loss of a significant load concentration be mitigated by Z-factor (or analogous) treatment?
b. If yes, then what would be the criteria for identifying an occurrence of such an event (e.g. what percentage of distribution revenue attributable to loss of a single customer should be the threshold for identifying a material revenue loss)?

The EDA offers the following comments:

- *Business risks relating to load concentration or customer loss should not be mitigated by a Z-factor or any other analogous treatment.*
- *Business risks that are internal should be reflected in the capital structure and their related returns.*
- *Load concentration or customer loss risks are a normal business risk and therefore should be reflected in the capital structure and their related returns.*
- *Z-factors are used for risks that are external to the business and are recognized after the occurrence*
    - *Z-factor term of a price cap index adjusts the allowed rate of price escalation for external developments that are not reflected in the inflation and X-factors…One of the primary rationales for Z-factor adjustments is the need to adjust for price caps for the effect of changes in tax rates and other government policies on the company's unit cost…..Another rationale for Z-factors is to adjust for the effect of miscellaneous other external developments on industry unit costs that are not captured by the inflation and X-factors* [1]

- *Z-factors have very limited use as indicated previously by the Ontario Energy Board:*
    - *The Board agrees with the interveners that the use of Z-factors limited to changes in legislative and regulatory requirements and generally accepted accounting principles specific to natural gas business is appropriate*[2]

8. **Short-term Debt** (addressed to distributors)
At the Technical Conference, staff heard that not all working capital is funded by short-term debt and that some may be funded by long-term debt.

a. What percentage of your actual working capital is funded by short-term debt?

b. What percentage of your rate base does short-term debt represent?

The EDA recommends the incorporation of short-term debt and the cost of short-term debt in the overall capital structure, if the utility's rate base is funded by short-term debt. However, the EDA is concerned that OEB staff continues to be led by the notion that short-term debt can be assigned to working capital. As

---

[1] *Mark Newton Lowry, Ph.D., "Second-Generation Incentive Regulation for Ontario Power Distributors", June 13, 2006, page 42*
[2] *Mark Newton Lowry, Ph.D., "Second-Generation Incentive Regulation for Ontario Power Distributors", June 13, 2006, page 43*

pointed out in the discussions on short-term debt cost rate in the EDA's expert report, prepared by Christensen Associates and submitted to the OEB, we reiterate that the notion of assigning short-term debt to working capital ignores the reality of the overall pool of capital funding that is operated by a treasury function. LDCs, as well as most businesses, raise funds from multiple sources and use them for different purposes. It would be impossible to trace or track the sources and the uses of the overall pool of capital funds of all LDCs.

In the short time allowed, the EDA canvassed its members to determine the interest rates that LDCs pay for their short-term debt. From the 24 responses received, the EDA can advise that most LDCs that access short-term debts from the market do so at rates closer to the prime rate. The EDA recommends that in determining the return on short-term debt, the Board should consider the fact that for most LDCs short-term debt is available at rates closer to the prime rate. The EDA submits that the OEB staff proposal (staff paper entitled' Interest Rates for Regulatory Accounts of Utilities' May 26, 2006) for short-term debt rate for variance and deferral account equal to the one-year T-bill rate plus a corporate spread (based on the spread of 3-month prime corporate paper rate over the 90-day Canada T-bill rate) would be lower than the rates at which many LDCs access short term debt capital.

The EDA submits that determination of working capital allowance for LDCs should be stakeholdered as a separate initiative, outside of the current discussions on the Cost of Capital. The EDA considers that the OEB's project on Asset Management, Depreciation and Working Capital (scheduled March to July 2007), as a part of the multi-year electricity plan would be an appropriate forum for discussion on the determination of working capital allowance for LDCs. In the interim, the EDA recommends that working capital allowance be determined in accordance with the guidelines in the 2006 EDR Handbook.

The EDA offers the following comments in regard to the ongoing discussions on the working capital, short-term debt and the associated returns in order to provide some perspective to the determination of the cost of capital for LDCs:

- *Board staff should provide a clear definition of 'working capital' as referred to in the Staff papers as well as the Staff consultant's paper (Lazar and Prisman report). A definition could provide the context as well as clarity for the ongoing discussions. For example, the regulatory concept of working capital is different from the accounting concept. Accountants define working capital as the difference between current assets and current liabilities. The regulatory concept, on the other hand, defines working capital as an allowance for the amount of money which the utility has furnished from its own funds for the purpose of enabling it to satisfy ordinary requirements for minimum bank balances and to bridge the gap*

between the time expenses of rendering utility service are paid and the time revenues from the same service are collected[3]*.*

- *Working capital allowance has generally been recognized as a proper item to be included in the rate base on which the utility is entitled to earn a return. Inclusion of the working capital allowance in the rate base is consistent with the principle of a fair return on investment used and useful in public service*[4]*. It is customary for regulators to include working capital allowance in the rate base on the premise that working capital like fixed assets represents invested capital. Working capital allowance compensates investors for funds provided by them, which are permanently committed to the business for the purpose of paying operating expenses (including the IESO) in advance of receipt of offsetting revenues from its customers and in order to maintain minimum bank balances. Accordingly, the EDA submits that the working capital allowance included in the rate base should earn a return equal to the utility's weighted average cost of capital.*

9. **Incremental Capital Expenditures**
Some distributors at the conference expressed concern over aging infrastructure and the need for increased investment in that infrastructure to maintain appropriate levels of service.
a. What are your known circumstances of where this could arise (addressed to distributors)?

b. Should incremental capital spending that is not attributable to load growth be treated outside of the price cap index (similar to what is proposed for CDM)? If so, should it be eligible for Z-factor treatment?

c. Are there alternative approaches that the Board might consider?

d. If the Board were to provide for special treatment of these investments, should a threshold apply? If so, how might that be expressed (e.g., percentage of current CapEx budget less depreciation)?

The EDA wishes to provide some background information. LDCs were cautious with capital spending during the initial deregulation period as a level of uncertainty existed. As part of the business cycle, continual replacement of

---

[3] *http://www.cpuc.ca.gov/PUBLISHED/Report/17047.htm (CALIFORNIA PUBLIC UTILITIES COMMISSION)*

4 ***Cash Working Capital as an Element of the Telephone Rate Base.*** Columbia Law Review*, Vol. 52, No. 5 (May, 1952), pp. 673-676 doi:10.2307/1118810.*

infrastructure is required. Replacement cost of aging plant is more expensive today than in the past and new ESA regulations and standards have also increased the cost of replacing assets, thus, the current investment required exceeds the amount of amortization included in rates. LDCs are concerned whether there is enough return on these investments to be able to afford to invest in infrastructure at an appropriate level in order to maintain appropriate levels of reliable service to our customers.

It could be argued that changes to an LDC's allowed return, without a corresponding adjustment to rate base, is rate adjustment in isolation, affecting an LDC's revenue and the ability to continually reinvest in aging infrastructure.

The EDA asserts that LDCs should be allowed to earn an appropriate rate of return on assets as they are placed into service and should not need to wait until the next rebasing period. The mechanism, the CI-factor, as proposed by Mr. Todd, with an adjustment to include lumpy capital expenditures (i.e. Transformer Station), would possibly be a suitable approach, but as noted in answer to question 10 below, the CI factor will require more study. Inclusion of a mechanism, on an ongoing basis, for material capital expenditures will mitigate rate shocks for customers. A Z-factor treatment would not be appropriate for those expenditures.

The demand for capital expenditures will only increase in the future, with the introduction of the Smart Meters, in addition to the aging infrastructure and the requirement by some LDCs to install new Transformer Stations. These capital expenditure investments are needed to meet Regulatory and Conservation mandates, as well as maintaining the supply and reliability of service to our customers. Transformer stations are non-discretionary and are required to service incremental as well as development related growth. Mechanisms need to be in place for all LDCs to earn an appropriate return on these assets on a timely basis in order meet the funding requirements.

The EDA supports a threshold for special treatment of these assets, which should be defined to ensure that the capital expenditures are of a material nature.

10. **CI-factor**

During the technical conference, Mr. John Todd proposed a methodology for a CI-factor as part of the IRM price cap formula as a means for including incremental capital expenditures not related to load growth as an increment to the price cap index.

a. What are the implications, advantages and disadvantages of adopting such an approach?

This will require more study.

b. Mr. Todd suggested that a distributor file an Asset Condition Assessment Study as support for the proposed CI-factor. Such a study does not directly indicate the cost of incremental capital expenditures needed to address deficiencies in the system. What information on the proposed capital expenditures should a distributor be required to file in addition to the Study?

See response provided to Q 10 a) above.

c. What are the implications of adopting this approach where CapEx plans are not reviewed and approved by the Board?

See response provided to Q 10 a) above.

d. The CI-factor methodology as proposed seems to start from a 2006 rate base. Hydro One Networks has a 2006 rate base that has been reviewed during its 2006 distribution rate application by virtue of applying on a forward test year. However, most electricity distributors filed 2006 distribution rate applications on the basis of a 2004 historical test year with allowable adjustments. Hence, the public information for most distributors reflects a 2004 rate base. What changes need to be done to the Ciformula to properly adapt it for when 2006 distribution rates are calculated on a 2004 historical rate base?

See response provided to Q 10 a) above.

e. Should the load growth factor be weather normalized? If so, how should this be done?

See response provided to Q 10 a) above.

f. Some of the parameters for the calculation of the CI-factor, as proposed, may not be readily available from prior filings where the data were subject to review by the Board. By what process would the Board review and test the reasonableness of the parameters if a distributor were to apply for a CI-factor?

See response provided to Q 10 a) above.

11. **Declining Customer Base**
Some distributors have documented declines in their customer bases.

a. Would it be reasonable to adjust the X-factor, for example, to 0.7 for a distributor that has negative growth in its customer base over the period 2002 to 2005?

b. Are there alternative approaches that the Board might consider to address constraints on operating efficiencies possible under declining customer base conditions?

Whereas an appropriate adjustment to the X – Factor may provide a suitable treatment of the impact of a declining customer base on a utility's financial position, it is important to make such an adjustment with full consideration of the individual utility's characteristics. Declining customer base may be linked to a variety of external factors including government policy on international trade or currency agreements making it difficult to forecast the degree of impact on the utility in a generic manner. Therefore, it is suggested that to recommend a generic or nominal specific quantity for the X-factor without considering the unique characteristics of the utility franchise and its overall economic parameters both controlled and uncontrolled by the utility is an inappropriate way to deal with the impact of declining customer base. Rather the Board should be assessing the utility needs on an individual utility basis and maintain flexibility in assessing the impact of declining customer base or any other parameter of utility operations where externalities can significantly contribute to the impact on financial operations. Respectfully, the one size fits all approach is perhaps not conducive to good ratemaking practice for resolving these types of issues. The recommended alternative is that the affected utility should be allowed to present its proposed rate adjustments and recommended X-Factor to the Board without being constrained by preconceived and specific rate making parameters established in a generic process.

12. **Smart Meter incremental funding**
In the July 25, 2006 Staff discussion paper, staff proposed incremental amounts of smart meter funding of $1.00 per month per metered customer for distributors working to achieve the Government's objective of 800,000 smart meters in place by the end of 2007, and $0.30 per month per metered customer for other distributors.

c. Are the proposed increments reasonable?

d. If not, what should they be, and why?

The EDA has already submitted its recommendations on smart meter funding for LDCs in its report filed on August 14, 2006 with the OEB. Key points raised in that submission include the following:

- *The six large distributors are currently working in an RFPQ process. The Ministry of Energy has expressly provided that all other LDCs be given the option of 'piggyback' with the large utilities or Hydro One in order to procure meters. It is anticipated that a number of LDCs may choose to piggyback with these large distributors or Hydro One in the ongoing*

procurement process for smart meters. The initial procurement of smart meters would take place in Fall of this year. LDCs that choose to piggyback with these large distributors in procuring smart meters will not have adequate funding through their OEB allowed revenue requirement to fund procurement, as they have been provided with only a $ 0.30 funding per smart meter per month for their smart meters. In order to ensure that the 'piggybacking' option intended to be given to all LDCs is a real option available to utilities, fulsome funding must be made available.

- *The OEB Staff proposal to provide an additional $ 0.30 for the remaining distributors in 2007 continues to be a barrier to the smart meter installation for many LDCs who would like to piggyback with the larger LDCs or Hydro One. The insufficiency of funding could force LDCs not to move forward on the procurement of meters at this time.*

IN THE MATTER OF
consultation by the Ontario Energy Board on the Cost of Capital and 2nd Generation Incentive Regulation for Electricity Distribution Companies

EB-2006-0088 & EB-2006-0089

EDA's Response to Questions posed by SEC

1. Many parties have raised the issue of whether the proposed changes to cost of capital and to rates will have a negative impact on the financial health of LDCs. Please file your most recent annual audited or unaudited, as the case may be, financial statements. If your LDC represents more than 50% of the assets of a holding company, please file the holding company's most recent annual audited or unaudited, as the case may be, financial statements.

LDCs have filed their audited financial statements with the OEB and this information is publicly available.

2. A number of LDCs have, in their submissions, raised the question of whether the proposed changes in cost of capital are a surprise to LDCs and for that or other reasons will erode the foundation of their current business plans. The PWU has also relied on this proposition in its submissions. Please file your most recent multi-year business plan, if such a document exists and has been reviewed and/or approved by any of your shareholders or your board of directors. If the business plan includes unregulated business activities, please redact all parts of the plan that relate to an unregulated business and don't relate to the regulated utility business. If the business plan includes other confidential information, please file the document in confidence so that the Board's protections for confidential filings can be engaged.

The question is overly broad and irrelevant. Existing business plans will shed no light on the impact of future changes to the cost of capital.

3. If your LDC has carried out a merger or acquisition of an LDC since 1999, or has prepared an investment analysis of a proposed merger or acquisition of another LDC, or has prepared an analysis of a potential sale of your LDC to another LDC, please provide that investment analysis, business case, or similar document showing the financial parameters of the deal or proposed deal, including in particular any calculations of expected overall return or return on equity, and advise of the eventual result of the proposed transaction. If any such document contains confidential information, please file the document in confidence so that the Board's protections for confidential filings can be engaged.

LDCs have filed relevant information as a part of the MADD application filings with the OEB and this information is publicly available.

4. Dr. Yatchew posits, at page 16 of his report, that mergers or acquisitions of LDCs may have been cancelled, repriced, or otherwise materially affected by uncertainty about whether the acquiror would be able to receive the benefit of savings generated by the transaction. If your utility has any documents showing that this was a consideration in any transaction, please file those documents. If any such document contains confidential information, please file the document in confidence so that the Board's protections for confidential filings can be engaged.

LDCs have filed relevant information as a part of the MADD application filings with the OEB and this information is publicly available.

5. Several parties have suggested that the proposed changes in the ROE and capital structure may cause LDCs to be offside on their debt covenants. Please advise whether such changes may cause your utility to be offside on your debt covenants, and if so file the text of such covenants, the amounts of borrowing to which they relate, and whether the lender is an affiliate/shareholder or an arm's length third party.

If an individual LDC entered into covenants in reliance on the existing methodology that will be an impact. However the real issue is whether that methodology, which the Board determined produced a fair return, needs to be changed because there is evidence that riskiness has changed in a material way (there is nothing on the record to suggest that this is the case).

6. An important issue in this proceeding is maintaining the creditworthiness of the LDC. If your LDC has been rated by Standard & Poors, DBRS, Moody's, or Dun and Bradstreet within the last 18 months, please file the last full rating from each rating agency, plus any updates since that full rating. If your LDC is rated and you have a public sector shareholder, please also advise the shareholder's debt rating(s) if any.

Credit ratings of LDCs are based, among other factors, on an assessment of the current regulatory environment including the allowed rates of return on capital. Changes in the allowed return on capital have an impact on the credit rating assessments. The BMO Capital Markets report and Standard & Poor's Industry Report Card, (included in the submission to the OEB by LDCs), indicate that the proposed cost of capital could negatively impact the sourcing of capital funds by LDCs. In any event, bond rating services ratings are available to the SEC.

7. The ability of utilities to attract equity investment has been raised as a critical issue by many parties. Please provide the date, amount, investor identity and terms of the last common equity investment in your utility. If there was an offering or disclosure document, please file that document.

Please refer to comments provided in response to question 6.

8. Mr. Camfield believes that inadequate returns will result in lower than required investment in capital assets. Please provide for your utility the opening rate base, capital expenditures, and closing rate base for each year from 2000 to 2005 inclusive, and your current projected numbers for 2006.

The issue that the Board has to determine is what constitutes a fair return. There are established legal principles as to what constitutes this. Mr. Camfield is referencing possible impacts if a less than fair return is established. Much of this information has been filed in the 2006 EDR process and it's not clear what this additional information would add to the determination of a fair return.

9. Please provide a chart showing your fixed asset age distribution measured by dollar amount (e.g. $120 million at 25-30 years old).

See comments about general principles in response to Q 8 above.

10. For each LDC that has debt traded in the public markets, either directly or indirectly, please provide a chart for the period 2003 to date showing the average yield of your debt (broken down by issue if you had more than one outstanding) each month in the market, and for the same month the average yield of 10 year Canadas.

This information is publicly available.

11. At pages 11 and 17 of his report, Dr. Yatchew notes that utilities already have an "informal yardstick competition" currently going on. Please file any efficiency comparisons between Ontario LDCs in the possession of your utility, including any line item or similar benchmarking, any estimates of "best practices" standards, any formal or informal studies, etc.

12. At page 12 of his report, Dr. Yatchew discusses the importance of aligning performance compensation plans to incentive regulation plans. Please provide the performance based compensation plan of your utility, if any, together with a list of any changes to that plan between 2000 and today.

LDCs have filed information as a part of the 2006 EDR application filings with the OEB and this information is publicly available.

13. Please describe any attempts your utility has made in the past to borrow in the market in common or in tandem with other LDCs. If you have proceeded with or proposed any such transaction, please describe the structure, the impact on cost of capital, and the result.

The information requested is not relevant to an assessment of the future impact of OEB staff's current cost of capital proposal on the LDCs ability to source debt financing from the capital markets.

14. If your utility has a holding company of which at least 50% of its consolidated assets are assets of the LDC, please advise whether the debt rating of the holding company is different from the debt rating of the LDC, and if so advise the two ratings.

See response provided to Q 6 and 7 above.

15. Please provide the "Bill Impacts" pages of the 2006 EDR Model for your utility, and comparable calculations using the year 2000 and 2003 approved distribution rates.

Not relevant- see 2006 EDR filings and Board's decisions.

16. Please provide a list of the Tier 1 adjustments sought by your utility in your 2006 rate application, the dollar amount of each, and the total revenue requirement applied for.

Not relevant- see 2006 EDR filings and Board's decisions.

Electricity Distributors Association

17. If EDA has any of the information requested from the utilities in questions 1 through 16, either in detail or in aggregate, please file that information.

18. Please provide EDA's study of allowed vs. achieved returns on equity by Ontario LDCs.

Some initial work was undertaken by the EDA but the work may not provide useful information as it covers a period when LDCs were allowed a rate of return less than the Market Based Rate of Return and, as well, their distribution rates were frozen.

19. Please provide EDA's study of dividends paid by LDCs. Please advise whether the study includes LDC holding companies.

A total of 273 financial statements of LDCs (for the period 2001 to 2003) that were filed with the OEB were reviewed to determine the total number of declaration of dividend payouts by LDCs. A total of 36 financial statements recorded the declaration of dividend payout by LDCs to their shareholders.

	2003	*2002*	*2001*
Total Number of annual financial statements wherein the LDCs have declared dividends	*17*	*12*	*7*
Total Number of annual financial statements wherein the LDCs have not declared any dividends	*74*	*79*	*84*

IN THE MATTER OF
consultation by the Ontario Energy Board on the Cost of Capital and 2nd Generation Incentive Regulation for Electricity Distribution Companies

EB-2006-0088 & EB-2006-0089

Reponses provided by EDA's expert Mr. Robert Camfield, Christensen Associates Energy Consulting : OEB Technical Conference

Reference to Question: Bluewater Power's Questions, September 27, 2006
"Rate of Return For Ontario's Electricity Distributors" prepared for the EDA by Christensen Associates Energy Consulting, LLC at page 53

"A flexible approach suggests that the Board codify policy that finds acceptable, for use in determining electric distribution rates, an overall capital structure of individual LDCs in which the capital structure is found to be reasonable and consistent with prudent financial management. We recommend the Board establish five principles to define the policy for capital structure, as elaborated below."

Questions:

1) *To Dr. Camfield:* Your proposal allows LDCs the fettered discretion to choose their capital structure within the range of 42-52%, but what mechanics do you propose for that discretion to be implemented?

2) *To Dr. Camfield:* You suggest that the Board should "define criteria for defining the reasonable and prudent capital structure". Can you advise as to your recommendations to the OEB for what those criteria should be?"

RESPONSES :

The notion of a flexible capital structure, as a matter of Board policy for Ontario LDCs, is the use of the observed capital structure. Implementing a flexible capital structure approach requires that protocols and working mechanics be defined. To this end, I set forth five principles:

> First, that the observed capital structure of individual LDCs be used for purposes of determining electric distribution rates, providing that the observed structure be consistent with reasonable and prudent financial management.
>
> Second, that a prudent capital structure is defined as one that utilizes an acceptable level of overall debt leverage, where leverage is defined as 58% - 48%

debt participation within total capital which implies equity participation of 42% - 52%.

Third, that the acceptable level debt leverage includes both short- and long-term debt components.

Fourth, where the observed capital structure of an LDC resides outside the range defined as reasonable and prudent, the Board at its discretion, for purposes of determining the LDC's distribution rates, should consider pursuing one of two options:

- Utilize a higher authorized rate of return on equity, where the debt participation is unusually high. Conversely, where debt participation within total capital resides at unusually low levels, employ a lower cost of equity for the determination of the authorized rate of return, *or*
- Impute a hypothetical capital structure, where such structure stands within the capital structure bounds identified in the second point, above. Departures from the observed capital structure may imply the application of different cost rates for debt and for equity components of the capital structure.

Fifth, in cases where an electricity distributor's observed capital structure does not fall within the acceptable ranges, the distributor should be given the opportunity to demonstrate that the observed (or proposed) structure is reasonable and appropriate.

Should the Board have interest in or adopt the flexible capital structure, the above principles need to be defined using sufficiently explicit and exacting language within the electric distribution code or elsewhere. In addition, the Board and Board staff would need to establish the appropriate protocol and filing requirements under which the LDCs would 1) set forth the observed capital structure and 2) its reasoning why the Board should adopt the observed capital structure, where the observed financial structure departs from the acceptable range.

Reference: "Rate of Return For Ontario's Electricity Distributors" prepared for the EDA by Christensen Associates Energy Consulting, LLC at page 51
"It is worth noting that progressively higher equity risk premia attend small-sized companies, particularly micro-sized companies like the Canadian distributors."

Question:
1) *To Dr. Camfield:* Please provide the references, data and analyses relied upon in reaching this conclusion.

RESPONSE TO Q2:

Risk premia associated with small size, referred to as small capitalization risk premia, reflect intuition, well established principles that serve as the foundation of finance theory, and the observed realities of capital markets. First, ordinary common sense would lead one to recognize that small entities face higher business risks than large entities. Higher risks attending small risk come about from the principle of large numbers. Specifically, the financial impacts of random business events, which occur over the course of business enterprise, cannot be diversified as well by small entities as large entities. Essentially, the impacts of business events within larger enterprises get absorbed within a pool of other events, both positive and negative, with the result that such events are substantially muted in their total impacts on the financial results of the enterprise.

The intuitive idea of diversification of business activity is reflected in portfolio theory. In this regard, the larger entity can be viewed as, essentially, a larger portfolio of individual business activities with the attending diversification effects, providing that individual business activities have less than perfect correlation.

The facts of capital markets reveal that, among other factors, the variability of the returns to capital for small entities, reflected as operating income, will typically be higher for smaller entities than larger entities. Second, historically market returns for entities with smaller market capitalization, will have higher variation than for entities with higher market capitalization. Within the context of Capital Asset Pricing Model (CAPM) theory, the core of modern finance theory, the relevant and well known measure of risk is the covariation of market returns of individual equities with the market as a whole, normalized by the variance of the overall market, referred to as CAPM Beta. Insofar as

this notion of risk – i.e., systematic risk – is the only relevant measure of risk given optimal portfolio theory, competitive capital markets would ensure that equities would be priced at levels such that the realized market returns of individual equities would be ordered according to CAPM Beta.

Essentially, CAPM theory would then suggest that, to the degree that the higher risks of small capitalization entities can be diversified – i.e., are non-systematic – CAPM Betas would still reflect the most relevant risks. To the degree that higher risks of small capitalization entities cannot be full diversified – i.e., are systematic – higher risks are reflected in higher CAPM Betas.

Empirical evidence suggests that CAPM Betas do not explain market returns of small capitalization entities. Indeed, a substantial body of evidence suggests that CAPM under estimates and thus understates historical market returns of small firms. In one interpretation, the difference between the realized market returns of small capitalization firms and the estimated market returns under CAPM constitutes the small-capitalization risk premia. A second interpretation is that, after accounting for various factors, it appears that size, as reflected in capitalization, is inversely related to historical market returns and that the relationship is systematic – both repeatable and non-random. The magnitude of small capitalization risk premia is large, as best demonstrated by the analytical work of Ibbotson Associates and that of Eugene Fama and Kenneth French. In the latest published work,[1] these analyses show that for entities organized into deciles according to capitalization, as a measure of size, size-related risk premia assume the following magnitudes:

Size Decile[2]:	**Size-related Risk Premia:**
Decile 1	-0.37%
2	0.67
3	0.85
4	1.10
5	1.49
6	1.73

[1] SBBI Valuation Edition 2006 Yearbook by Ibbotson Associates, 2006

[2] The deciles organize equities into capitalization groups, where the largest entities are within Decile 1, and the smaller entities are within Deciles 9 and 10.

7	1.67
8	2.33
9	2.76
10	6.36

It is useful to mention that, as reported, decile 9 includes entities with market capitalization of $265.1 - $586.4 million, while decile 10 includes entities with market capitalization of $1.1 – 265.0 million.

CAPM theory can be challenged for a number of reasons that warrant our full consideration for purposes of setting the rate of return for Ontario's LDCs, and these reasons can, in the large, be viewed as fatal flaws. In terms of size-related risk premia, the understatement of market returns by CAPM for small-sized entities is perhaps not fully understood. My personal view is that, for small entities, the cost of acquiring information regarding the prospects for future returns and assessment of risks are unusually high. Because less information is available and because small entities are less known, and because the acquisition of information is costly, holders of small entities inherently incur higher risks. For small-sized entities, higher returns are thus the compensation for the assumption of higher risks.