



The Voice Of Ontario's Electricity Distributors

July 5, 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 and by courier

Dear Board Secretary:

Re: Draft Staff Report: Cost of Capital (EB-2006-0088) and 2nd Generation Incentive Regulation (EB-2006-0089) for Ontario's Electricity Distributors – Comments of the Electricity Distributors Association

The Electricity Distributors Association (“EDA”) is the voice of Ontario’s local distribution companies. Enclosed is a report prepared by the EDA and Christensen Associates Energy Consulting LLC in response to the Board’s Draft Staff Report: Cost of Capital and 2nd Generation Incentive Regulation for Ontario’s Electricity Distributors.

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

Yours truly,

C.C. (Charlie) Macaluso
President and Chief Executive Officer

Encl.

BEFORE THE ONTARIO ENERGY BOARD

**COMMENTS ON DRAFT STAFF REPORT:
COST OF CAPITAL and 2ND GENERATION INCENTIVE
REGULATION FOR ONTARIO'S ELECTRICITY DISTRIBUTORS
EB-2006-0088 (Cost of Capital) and EB-2006-0089 (2nd Generation IRM)**

submitted by:

**ELECTRICITY DISTRIBUTORS ASSOCIATION
and
CHRISTENSEN ASSOCIATES ENERGY CONSULTING, LLC**

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Executive Summary

The Electricity Distributors Association of Ontario (“EDA”) and Christensen Associates Energy Consulting, LLC (“CA Energy”), present comments to the Ontario Energy Board (“Board”) on the proposal contained in the Staff Report¹ regarding Cost of Capital (“COC”) and 2nd Generation Incentive Regulation Mechanism (“IRM”) by the Staff of the Ontario Energy Board (“Board Staff”). EDA and CA Energy appreciate the initiative of the Board to implement the Board’s multi-year electricity distribution rate setting plan (“Rate Plan”), where the IRM and COC projects serve as key elements of the plan. To this end, the Staff Report reflects the institutional history and previously applied methods, and further draws upon studies developed by consultants to Board Staff. The result is a proposed regulatory framework of significant proportions for determining electric distribution charges.

The Staff Report presents an approach to regulatory governance and the determination of electric distribution rates in Ontario that has far reaching impacts and long lasting effects over future years. For this reason, the proposals of Board Staff must be examined with an appropriate level of caution, and we present the following concerns which we elaborate on in detail within the body of the immediate discussion. We highlight below the major findings that have resulted from our review of the Regulatory Plan proposal by Board Staff.

Approach of Board Staff May Not Satisfy Broader Regulatory Objectives

The proposals for cost of capital determination and IRM in the Staff Report are unusually prescriptive in view of the diversity in the needs of the LDCs. Specifically, we encourage the Board and Board Staff to consider and adopt a flexible approach that more fully accommodates the capital risks of Ontario distributors.

¹ OEB, “Draft Staff Report: Proposals for Cost of Capital and 2nd Generation Incentive Regulation for Ontario’s Electricity Distributors,” June 19, 2006 (“Staff Report”).

The Board's Goals and Objectives for the LDCs Should Be Clarified

Notwithstanding the Staff Report's references to guiding principles, nowhere in the Staff Report—or in other documents related to the immediate Board proceeding—has the Board's goals and objectives regarding LDCs been clearly identified. The Board needs to make clear its overall vision for how regulatory governance for Ontario's distributors is to proceed, and how Cost of Capital and IRM policy issues fit within that vision.

The Proposed Approach May Not Satisfy Fairness Standards Common to Regulatory Institutions and Practices

The Board Staff's proposed approach does not align with and satisfy regulatory fairness standards. The heart of utility regulation is the setting of just and reasonable rates by way of fair and reasonable returns to capital. While there are no hard-and-fast rules, two landmark cases define the legal principles underlying the setting of and regulation for a public utility's rate of return and provide the foundations for the notion of a fair return:

Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923).

Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944).

The Staff Report's proposed approach to the estimation of cost of capital does not adhere to the standards established in the *Bluefield* and *Hope* cases, or to those similar standards set in Canadian cases.

The Linkage Among Equity Return, Capital Structure, and Debt Costs Should Be Flexible and Recognized Within the Overall Return Level

The Board Staff's proposed approach appears to be unusually inflexible with respect to the specific needs of the LDCs. We suggest that a more flexible approach be taken that accounts for the linkages between equity and debt participation in total capital, and the impacts on capital cost rates for equity and debt.

Cost of Capital May Be Understated, Impairing the Ability to Satisfy Capital Needs

The Board Staff relies exclusively on the Capital Asset Pricing Model (CAPM) approach for determination of the cost of capital. While the proposed methodology is relevant,

CAPM cannot be used in isolation. Specifically, we suggest that the Board adopt and draw upon several cost of capital methods that, together, provide an improved foundation for determining the costs of equity capital and would reduce the likelihood that the estimate will understate the true market cost of capital.

Changes in Regulatory Governance Increases Uncertainty and Perceptions of Risk

It is important for the Board to remain mindful of the overarching uncertainty that results from the consideration of any transition to a new regulatory plan. It is thus necessary to approach and deliberate on the issue with the appropriate level of caution in order to ensure that the objectives of the Board's Regulatory Plan can be fully satisfied. We generally suggest a "measured step" approach to transitioning to a new regulatory regime.

Cost of Capital and Incentive Regulation Mechanism Cannot Be Developed Separately

We cannot over emphasize the necessity of the Board and Board Staff to closely coordinate the consideration and development of the technical approach to the cost of capital and the incentive regulatory mechanism. While fully appropriate for distribution services, moving to any incentive regulation plan naturally contains explicitly and implicitly higher risks. Thus, the cost of capital and rate of return is dependent upon the features and technical parameters of incentive regulatory plans. In turn, the implication for the underlying cost of capital should be accounted for within the technical design parameters that can both increase and limit capital risks to the LDCs.

Cost of Capital Estimates Should Account for Capital Expenditure Programs, Which Are Vital to Electricity Services In Ontario

The practical realities and capital needs of Ontario distributors need to be recognized and accounted for in the consideration of cost of capital and incentive regulatory plans. Ontario distributors face substantial capital expenditures and adequate returns to capital are necessary to support investment needs.

The Proposed Regulatory Plan and IRM May Create Significant Uncertainty and Risks for LDCs

Specific concerns of EDA members regarding the 2nd Generation Incentive Regulation Mechanism are as follows:

- The proposed IRM does not adhere to incentive regulation principles. As a result, we are concerned that the realized benefits of the approach may fall short of expectations.
- Technical parameters of the proposed IRM are without empirical evidence or analytical support. Concerns about arbitrary selection of key plan parameters will reduce the willingness of parties to try the rate-indexing option and can weaken the incentive benefits of price cap plans substantially.
- The productivity offset in the proposed IRM is beyond the reach of many, if not most, of Ontario's LDCs.

The proposed approach to IRM does not follow the Board Staff's consultant's recommendations.

The Proposed IRM by Board Staff Incorporates No Provision for Interim Relief and Unforeseen Events

The proposed IRM creates significant uncertainty and risk for Ontario LDCs, as there appears to be no means for rate relief in the case of unforeseeable events. This is particularly a concern in view of the capital outlays that the LDCs face in the ensuing future.

In summary, the Board, Board Staff, the EDA, individual distributors, and other stakeholders face substantial challenges in securing an effective transition from the historical regulatory approach to a new model of regulatory governance. The task of putting in place a well established and sustainable regulatory plan is a major undertaking, which is particularly the case when considering the appropriate structure for Ontario's electricity distribution industry. Ontario's LDCs face substantial variation in business and market conditions and, as with electric distribution generally, exhibit substantial variation in needs for capital. Thus, it is necessary for Ontario's distributors to maintain the ongoing capability to raise capital at fair terms, which means the approach to capital cost estimation must be flexible and well informed.

In the interest of electricity consumers and the Province, the design of a new regulatory plan must be a process of measured steps that resolve to a regulatory plan that satisfies legal statutes and fairness standards, while also supporting broader energy and regulatory policy objectives. The EDA, the EDA members, and CA Energy look forward to working with the Board and Board Staff toward building a fully successful regulatory plan for electricity distribution services in Ontario.

1. Introduction and Objective

The Electricity Distributors Association of Ontario (“EDA”) and Christensen Associates Energy Consulting, LLC (“CA Energy”), acting in the capacity of consultant to EDA, are pleased to have the opportunity to provide comments to the Ontario Energy Board (“Board”) on the proposals contained in the Report² regarding Cost of Capital (“COC”) and 2nd Generation Incentive Regulation Mechanism (“IRM”) by the Staff of the Ontario Energy Board (“Board Staff”). The purpose of our comments is to assist the Board, Board Staff, and other stakeholders to the proceeding to deliberate the immediate issues at hand, which involves the implementation of a fair and effective regulatory mechanism for the determination of electric distribution rates.

The EDA and CA Energy appreciate the initiative of the Board to implement the Board’s multi-year electricity distribution rate setting plan (“Rate Plan”), where the IRM and COC projects serve as key elements of the plan. In particular, we understand and concur with the Board’s intentions: namely, to satisfy its regulatory mandate in a manner that aligns with the regulatory objectives outlined in the Staff Report. To this end, the Staff Report reflects the institutional history and previously applied methods, and further draws upon studies developed by consultants to Board Staff.³ The result is a proposed

² OEB, “Draft Staff Report: Proposals for Cost of Capital and 2nd Generation Incentive Regulation for Ontario’s Electricity Distributors,” June 19, 2006 (“Staff Report”).

³ Lazar, F. and E. Prisman, “Calculating the Cost of Capital for LDCs in Ontario,” June 14, 2006; Lowry, M.N., “Second Generation Incentive Regulation for Ontario Power Distributors,” (“PEG Report”); and Cannon, W. T., “A Discussion Paper on the Determination of Return on Equity and Return on Rate Base for Electricity Distribution Utilities in Ontario,” prepared for the OEB, December 1998.

regulatory framework of significant proportions for determining electric distribution charges.

The Staff Report presents an approach to regulatory governance and the determination of electric distribution rates in Ontario that has far reaching impacts and long-lasting effects over future years. For this reason, the proposals of Board Staff must be examined with an appropriate level of caution and skepticism. Accordingly, we urge the Board to carefully assess the likely impacts of the Staff proposals from the perspective of well established criteria and governance principles.⁴ In particular, we ask that the Board gauge the Report and recommendations of Board Staff from the perspective of 1) just and reasonable prices, and 2) effectiveness and contribution to the strategies of the Board with respect to electricity market and energy policy.

The Board, Board Staff, EDA, individual distributors, and other stakeholders face substantial challenges in securing a transition from the historical regulatory approach to a new model of regulatory governance. Discovering and implementing workable and effective regulatory governance mechanisms is not easy, and our general view is that the proposed approach by Board Staff falls short of the mark. Furthermore, we harbor concerns that the Board Staff's suggested approach is not the appropriate path. Even with significant adjustments, the proposal may not be the vehicle to bridge between a less than fully successful past and a promising future for electric distribution and retail consumers of Ontario.

The proposed approach by Board Staff to the COC and IRM raises a number of concerns. Salient among these is that the proposed rate of return level appears to significantly understate the cost of capital violate well reasoned and long accepted standards for setting just and reasonable rates.⁵ As we detail below, these standards reach back many years in Canada and the U.S., and include the key criteria of *capital attractiveness*,

⁴ Board Staff's proposals are certainly not to be singled out for scrutiny, as it is appropriate and necessary to assess any alternative regulatory plans using a common set of criteria. Assessment criteria should align with the stated goals and objectives of the Board.

⁵ The OEB has a legal obligation for approving or fixing just and reasonable rates for LDCs (Section 78 of OEB Act) (http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/98o15_e.htm#BK97).

financial integrity, and entitlement to returns to capital equivalent to that realized on alternative investments of comparable risks.

We are perplexed by the Board Staff's proposed rate of return levels that would substantially lower the authorized returns of Ontario LDCs. What has changed since Dr. Cannon's analysis? Indeed, what evidence including capital market conditions, interest rates, and business risks, indicates that the cost of capital for Ontario's electricity distributors has declined? We find no observable facts or empirical information which suggests that the cost of capital has decreased. Certainly, the Staff Report and accompanying consultant's paper provides no argument, reasoning, or information that would allow a reasonable person to infer that declines in the cost of capital have taken place subsequent to the analysis conducted by Dr. Cannon.⁶

Absent a reasoned and empirical basis, we suggest that Board Staff is without cause to reduce the underlying rate of return for Ontario distributors, particularly in view of heightened business risks, rising need for capital, and inability of the LDCs to realize adequate returns under the current regulatory structure. In contrast, we find that capital requirements and underlying risks to shareholders of LDCs have risen. Thus, return on equity requirements are at comparatively high levels under contemporary market and business conditions. In addition, given the current needs for capital to support policy initiatives and capital infrastructure investment, it is absolutely necessary for the Board to provide adequate returns to capital.

The task of putting in place a well designed and sustainable regulatory governance plan is a major undertaking and requires consideration well beyond the boundaries defined by the Staff Report and the supporting work of the consultants. This is particularly the case when considering the appropriate structure for regulating Ontario's electricity distribution industry. Ontario's LDCs face substantial variation in business and market conditions and, as with electric distribution generally, also face substantial variation in needs for capital. Thus, it is necessary for Ontario's distributors to maintain the ongoing capability to raise capital at fair terms. Therefore, in the interest of electricity consumers and the Province of Ontario as a whole, the design of a new regulatory plan must be a process of

⁶ Notes describing changes in electricity markets, capital markets, and interest rates since the year 2000.

measured steps that resolves to satisfy legal statutes and fairness standards at the same time supporting broader social and energy policy objectives.

2. Board Staff Recommendations Raise Concerns That Regulatory Objectives Will Not Be Satisfied

The acknowledgement in the Staff Report of the fundamental objectives of the regulatory process in Ontario is encouraging.⁷ However, the process and mechanisms recommended in the Staff Report raise serious concerns among EDA members that the stated objectives, very likely, cannot be achieved absent significant revisions. We believe that the proposals in the Staff Report reveal, at the most basic level, a fundamental disconnect between the stated objectives and the recommendations. The proposal appears to have four fundamental limitations that, taken together, constitute fatal flaws. Without redress of these limits, we believe that the Board Staff's proposed plan cannot be implemented in a satisfactory manner.

First, the recommended approach greatly undervalues the readily available descriptive information regarding the business context and conditions of Ontario's Local Distribution Companies (LDCs). This information speaks volumes about the underlying capital risks and capital needs of the LDCs in the Province. The LDCs are wide ranging in size, from very small to very large. Some LDCs serve predominantly urban areas while others are rural; some LDCs serve rapidly growing service territories thus suggesting substantial need for new distribution facilities and capital, while others are in the midst of replacing aged systems. Some LDCs have strong financial positions, but others less so. This suggests that a successful rate plan, in the interest of providing fairly priced and reliable electric service, should be sufficiently flexible to accommodate the wide variety of capital and business needs of Ontario's LDCs.

The proposed approach, we believe, will not satisfy flexibility criteria. The proposed Staff approach is unusually prescriptive, particularly with regard to the issues of rebasing, rate of return on equity and recognition of capital risks, and the determination of the appropriate capital structure. In brief, we recommend that the Board and Board Staff

⁷ Staff Report, pp. 4-5.

give full consideration to the need to for flexibility within the rate plan for setting distribution rates. Specifically, we encourage the Board and Board Staff to consider and adopt a flexible approach that more fully accommodates and takes account for:

- (1) LDC context, capital needs, and financial constraints in the determination of the appropriate capital structure for individual distributors; and,
- (2) Utilization of a more complete set of analysis tools for the purpose of estimation of the cost of equity capital and equity rate of return, in order to better and more fully capture capital risks. This may involve the application of an expanded set of methods that have emerged in recent years in the finance literature. We provide more detailed comments regarding our concerns about the proposed approach to determination of the cost of capital in Section 2.3.

Second, the Staff Report treats the COC and the IRM policy issues as though they are independent. In fact, the two issues are highly interdependent and must thus be codetermined; indeed, the COC and IRM projects should be viewed and developed jointly. A new IRM mechanism constitutes a regulatory plan that, as with all systems of regulatory governance, contains explicit and implicit incentive properties, and as an untested approach to governance in Ontario, naturally presents uncertainty that translates into certain risks to capital. Hence, we encourage the Board and Board Staff to determine policy aims for, and subsequently put in place practical mechanisms for, COC and IRM, where the interdependence is fully recognized and captured. We further elaborate on the host of problems with the proposed approach to IRM in Section 2.4.

Third, the recommended approach does not take into consideration the significant capital expenditures Ontario distributors must make in order to fulfill their commitments to electricity consumers, and that Ontario distributors must compete and obtain capital funds in worldwide capital markets.

Fourth, the proposed IRM contained in the OEB Staff Report creates significant uncertainty and risks for Ontario LDCs, even if only that portion of the proposal were being considered. Contributing to this uncertainty and risk is the fact that the proposed IRM is fundamentally flawed in a number of respects. Among its flaws, the proposed IRM is an inappropriate application of incentive regulation, its parameters are largely arbitrary, it does not provides for interim relief for any unforeseen events, it is at odds

with the Board Staff's own consultant's recommendations, and there is no acknowledgement of the strong linkage between IRM and the cost of capital

2.1 The "One Size Fits All" Approach to Cost of Capital and Capital Structure Is Unfair, Burdensome, and Will Be Costly to Retail Consumers

2.1.1 Staff Approach Will Not Align With and Satisfy Regulatory Fairness Standards

As the Staff Report states in making the recommendations, Board Staff was guided by the Board's statutory objective that rates be just and reasonable, and by other objectives pertaining to standards of fairness and reasonableness⁸ for determining the allowed rate of return for distributors, including:

- A standard for capital attraction, which states that utilities are entitled to adequate returns to invested capital, such that they can raise the necessary capital for the ongoing needs of the business at reasonable terms.
- A standard of comparable earnings, where utilities such as Ontario LDCs are entitled to rates of return equivalent to that realized by entities with comparable risk.
- A standard of financial integrity, where the investment community including commercial banks, credit rating agencies, and bond investors have sufficient confidence in the creditworthiness of the LDCs, such that the LDCs can obtain capital when needed.

We believe that, in this regard, Board Staff's proposed approach to both the cost of capital and the IRM will not adequately satisfy these three standards, which are key components of well established principles of regulatory governance.

The heart of utility regulation is the setting of just and reasonable rates by way of fair and reasonable returns to capital. While there are no hard-and-fast rules, no mathematical formula or scientific panaceas that can be mechanically applied, two landmark United States Supreme Court cases define the legal principles underlying the setting of and regulation for a public utility's rate of return and provide the foundations for the notion of a fair return:

⁸ Staff Report, pp. 4-5.

1. *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia* (262 U.S. 679, 1923).
2. *Federal Power Commission v. Hope Natural Gas Company* (320 U.S. 391, 1944).

The *Bluefield* case set the standard against which just and reasonable rates are measured:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties...The return should be reasonable, sufficient to assure *confidence* in the financial soundness of the utility, and should be adequate, under efficient and economical management, to *maintain and support its credit and enable it to raise money* necessary for the proper discharge of its public duties.⁹

The *Hope* case expanded on the guidelines to be used to assess the reasonableness of the allowed return. The Court reemphasized its statements in the *Bluefield* case and recognized that revenues must also cover “capital costs.” The Court stated:

From the investor or company point of view it is important that there be enough revenue not only for the operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock...By that standard the return to the equity owner should be *commensurate with returns on investments in other enterprises having corresponding risks*. That return, however, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to *maintain its credit and attract capital*.¹⁰

The statements of the U.S. Supreme Court in the *Hope* and *Bluefield* cases established the standards that we have stated above. The economic logic underlying these standards is straightforward. There is an opportunity cost associated with the funds that capital suppliers provide a public utility in the form of expected return foregone by not investing in other enterprises of corresponding risks. Thus, the expected rate of return on a public utility’s debt and equity capital should and must be equivalent to that realized by holding the financial instruments (including debt and equity) of other firms having comparable and corresponding risks. Moreover, a utility is entitled to a return that will allow it to maintain its credit so that it continues to have access to capital markets to raise the funds

⁹ Emphasis added.

¹⁰ Emphasis added.

required for investment. In short, the allowed return should be sufficient to assure confidence in the utility's financial health so that it is able to maintain its credit and continue to attract funds on reasonable terms.

The U.S. Supreme Court reiterated the criteria set forth in *Hope* in the *Federal Power Commission v. Memphis Light, Gas & Water Division* (411 U.S. 458, 1973), and *Permian Rate Cases* (390 U.S., 747, 1968) cases. In the latter case, the Court endorsed the standards of *Bluefield* and the end-result standard of *Hope*, and stressed that a regulatory agency's rate of return order should:

...reasonably be expected to maintain financial integrity, attract necessary capital, and fairly compensate investors for the risks they have assumed...

In the *Duquesne Light Company et al. v. David M. Barasch et al.* (488 U.S. 299, 1989) decision, the Court not only reasserted the standards of *Hope* and *Bluefield*, but also established a number of important new guidelines in setting rates for regulated utilities. The Court introduced the concept of *regulatory risk*, which is defined as the risk of a particular regulatory approach and plan in a given jurisdiction, as a distinct risk to be recognized by regulators in setting a fair rate of return.

The notion of financial integrity permeates the aforementioned landmark cases. There are many dimensions and factors that determine a utility's financial integrity. The return on equity should certainly be designed, at a minimum, to keep the stock price at or slightly above the book value on average. If replacement costs of capital are taken into account, the return should be high enough to produce a Q-ratio¹¹ equal to that of comparable risk companies if regulation is to emulate the competitive result. The return should also be high enough to produce interest coverages consistent with that of maintaining adequate debt ratings, as determined by financial rating agencies and commercial lending institutions.

Similar standards as those contained in *Hope* and *Bluefield* were promulgated by the high courts in other nations, particularly Canada. For example, the concept or standard of just

¹¹ The notion of a Q-ratio is the ratio of the market valuation of the outstanding financial securities of a firm or industry to the replacement costs, at market value, of the bundle of resources employed by the firm.

and reasonable rates of return are clearly evident in Canadian regulatory policy. In the setting of rates, it was argued in *Northwestern Utilities v. City of Edmonton* (2 D.L.R. 4, p. 8, 1929) that rate levels should be *just* and *reasonable* to the consumer as well as to the utility and in the latter case, the earnings should yield a *fair* rate of return on money invested. Clearly, if rates are to be just and reasonable to the utility and yield a fair return, the allowable return on common equity should be commensurate with returns on investments in other firms having corresponding risks, and sufficient to assure confidence in the financial integrity of the firm. Otherwise, the utility will be unable to maintain creditworthiness and attract capital on reasonable terms. The concepts of justice, fairness, and reasonableness are intimately related to comparability of returns, financial integrity, and creditworthiness.

As was the case in *Hope and Bluefield*, *Northwestern* makes frequent references to returns on investments in other firms. For example, the Court stated:

By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise.

The principle of capital attraction was further enunciated in *British Columbia Electric Railway v. Public Utilities Commission of British Columbia, et al.*, (25 D.L.R. (2d)689, pp.697-698, 1961), where it was stated that "earnings should be sufficient...to enable [the utility] to...attract capital either by the sale of shares or securities." Clearly, if earnings are to be sufficient for a firm to attract capital on reasonable terms, the firm must offer a return that is comparable to that offered by competing investments. One interpretation of the latter point is that a utility must provide returns achieved on its past investments comparable to those achieved in enterprises of comparable risk.

It is clear from the *Hope-Bluefield* and *Northwestern-British Columbia Railway* pronouncements that among the factors to be considered in determining a fair return are: 1) earnings necessary to assure confidence in the financial integrity of the utility and to maintain its credit standing, 2) the payment of dividends and interest, and 3) the amount of risk. In summary both capital attraction standards and financial integrity standards

must be fulfilled in determining a fair rate of return. Despite a deterioration in credit standing, a utility may be able to attract capital temporarily, but at prohibitive costs and under unfavorable terms. Eventually, the utility will face hard funds rationing or the costs of financing will become prohibitive, and the utility will no longer be able to attract capital at a reasonable price.

Though it is unintended, the apparently narrow and rather prescribed nature of the Board Staff's proposed approach is very likely to unnecessarily burden Ontario's regulatory environment with heightened uncertainty. It is our view that Board Staff's proposed approach will fail to fulfill the capital attraction standards and the financial integrity standards that have been established in the *Hope-Bluefield* and *Northwestern-British Columbia Railway* decisions. The result is increased capital risks, which translate directly into higher interest rates and rates of return on debt and equity capital. Higher capital costs, in turn, will lead ultimately to higher rates for electricity consumers. We do not believe that the Board or Board Staff have this potential outcome in mind, as they deliberate over and determine the appropriate structure for regulatory governance going forward.

Particular features of the proposed approach that tend to increase the capital risks attending Ontario LDCs are as follows:

- A fixed capital structure that utilizes a common level of debt financing for all distributors set at 64%;
- A "locked in" cost rate for common equity, where the resulting cost rate is determined exclusively by an application of the Capital Asset Pricing Model (CAPM), as proposed by consultants; and,
- Long-term debt rates determined strictly by the spread between "A/BBB" corporate bonds and Canada's long bond rate.

We find that the proposed approach to the determination of the cost of capital to be highly prescriptive and, when coupled with the inflexible nature of the approach for determining the capital structure, it is burdensome and unfair to many LDCs, thus breaching standards of fairness and reasonableness. In contrast, we suggest that the Board's overall approach to the cost of capital should be governed by consideration of an array of business factors and risks unique to each LDC. LDCs can potentially be

clustered into risk classes. Such an approach potentially provides the vehicle and bridge to align capital markets' perception of the relevant risks of individual entities relative to the risks of alternative investment opportunities.¹²

We found the Staff Report surprising in that it did not address the issues identified in the Board's "kick off" letter (April 27, 2006) ("Letter"). The EDA and the LDCs expected that the Board Staff paper would review the impact of changes to the economic and financial environment since the issuance of Dr Cannon's report, and that a detailed review of the changes to the business risks faced by LDCs would be provided, as suggested by the Letter. In contrast, however, the Staff Report and the consultant's (Lazar and Prisman's) discussion paper do not provide an evidentiary review and assessment of the financial and economic issues at hand, where such factors impact LDCs regulated lines of business. Furthermore, the Staff Report does not provide the necessary detailed assessment of business risks faced by LDCs within the contemporary timeframe.

In short, the Staff Report and supporting consultant papers do not provide sufficient empirical support for the proposed approach to the estimation of the cost of capital or the proposed reductions in the rate of return for Ontario LDCs. Thus, the Board is left with virtually no record upon which to base a decision regarding moving forward with the either the COC project or, for that matter, the IRM project. The absence of substantive evidence leads immediately to the question: Should Ontario's LDCs have the allowed return on capital reduced, particular at a time when access to capital is vital to the LDCs in order for them to implement stated public policy objectives and meet advancing needs for infrastructure investment to continue the high quality of service to electricity consumers? The answer is a resounding no.

¹² We fully appreciate the challenges associated with empirically understanding and discerning the inherent and relevant risks of non-traded equities, and then estimating the cost of equity for publicly traded entities of comparable risks. We intend to focus on this important issue within the August 14 discussion paper, which will include, on behalf of EDA, the proposed methods for the determination of the Cost of Capital and possible methods for the Incentive Regulation Mechanism.

2.1.2 The Proposed Cost of Capital Significantly Understates the True Cost of Capital, Impairing the Ability to Satisfy Capital Needs

The implied impact of Staff Report's proposals on cost of capital and capital structure will be to reduce the overall rate of return on rate base for Ontario distributors, with corresponding reductions in revenue flows. The current net Return on Equity ("ROE") is officially set at 9%. Under the Staff Report proposal, the range for net ROE would range from 7.52% to 8.36%.¹³ At the lower level of the range, the net official ROE would be lowered for all distributors by more than 15%. The impact of a reduction of this magnitude would be a substantial decline in revenue flows in the face *rising* capital needs.

A reduction in revenue flows is problematic because costs are increasing, not decreasing. Ontario's distributors face substantial rising capital and operating costs in the near term.¹⁴ The effective reductions in revenues vis-à-vis costs of service would likely be exacerbated because rebasing and the speed of rate adjustments may cause revenues to lag costs driven by expanding capital requirements and rapidly growing plant accounts with corresponding increases in the net rate base of the LDCs. The effect translates into very significant reductions in revenue and cash flows, which are vital to Ontario distributors.

Fairness concerns aside, the consequence may be to impair the ability of Ontario's LDCs to obtain the necessary capital for service expansion, infrastructure improvement, and other mandated requirements, thus violating the standard of financial integrity. As mentioned above, significant investment in infrastructure to ensure continued reliability

¹³ Staff Report, Appendix: Comparisons of Approaches to Cost of Capital.

¹⁴ In particular, Ontario distributors will be incurring substantial costs associated with the mandated Smart Metering initiative. In addition, LDCs are obliged to serve and connect all customers. The cost sharing of the installation of plant for new customers is determined by the Economic Valuation Model as defined in the Distribution System Code. These capital expenditures are outside the control of the LDCs and can be significant. These requirements are in sharp contrast to the gas distributors who do not have the same obligation to serve and have choices regarding whether to install plant (cost sharing is determined by the gas version of the Economic Valuation Model) and, as a result, do not service many areas serviced by LDCs. Finally, Ontario's LDC's face municipal mandates with respect to the types of distribution facilities, CDM capital expenditures and, in contrast to natural gas distributors, to the sometimes burdensome default service obligations. Thus, significant differences exist between the LDCs and gas distributors of Ontario.

of the aging distribution network is needed. In such circumstances, reduced revenue requirements have serious consequences and impair interest coverage on outstanding debt. Consequently, LDCs squeezed by higher costs and lower revenues will likely be viewed by the investment community as riskier under the Board Staff's proposed approach.

If the proposed approach were to be implemented, we believe it will increase overall capital risks, as perceived by capital markets, thus reducing the competitiveness of Ontario's LDCs, and raise the capital charges borne by Ontario LDCs and their electricity consumers over ensuing years.

Higher debt charges and interest rates for capital because of reduced or lower interest coverage raises the cost of capital to the LDCs. Consequently, LDCs will ration capital resources because capital attraction and accessibility have been compromised. Because capital is used less intensively than the optimal level, LDCs are effectively denied access to capital. This approach addresses the issue of capital attraction more generally, and focuses the capital attraction and accessibility issue on the interest costs paid for capital, and the implications that result from it. In this view, the issue of capital attraction is forward looking and attempts to anticipate the impacts of proposed changes in regulatory governance rather than backward looking that is limited to the narrow question of whether the LDCs were denied access to capital in the past.

2.1.3 A Fixed Capital Structure Is Inflexible and Does Not Align Debt and Equity With Relevant Capital Risk Factors of Individual LDCs

The Staff Report proposes to apply to all distributors a common, fixed capital structure that utilizes 64% debt participation (60% debt, allowing for 4% preferred equity shares).¹⁵ This approach is based on two arguments: (1) that there is no material difference between the natural gas distribution industry and the electric distribution industry in Canada, and (2) there is "no compelling evidence to suggest materially different risk profiles of electricity and natural gas distributors in Ontario."¹⁶ We believe

¹⁵ Staff Report, p. 8.

¹⁶ Staff Report, p. 8.

that an empirical record can be established that shows these two arguments to be incorrect. We will provide that record in our paper to be filed with the Board on August 14.

The proposed approach by Board Staff is also consistent with their consultants' recommendations that all LDCs be treated similarly because there is no discernable relationship between distributor size (size being a proxy for business and capital risk) and certain other business risk metrics typically used by debt rating agencies.¹⁷ Furthermore, the Staff Report states that the consultants [Lazar and Prisman] "note that there is no common view as to the appropriate capital structure when viewed from a financial market perspective."¹⁸ We believe this lack of a common view regarding the appropriate capital structure argues for greater flexibility with regard to capital structure, in contrast to the conclusion implicitly reached in the Staff Report. In short, Board Staff reaches precisely the wrong conclusion and recommendation: in the absence of a common view, a more prescriptive approach will fully achieve the regulatory standards of capital attraction and sustain financial integrity of Ontario's distributors.

We note that substantial empirical evidence suggests that size may be an important capital risk metric, in essence capturing a major attribute of overall business risks. Nonetheless, an approach that admits a broader array of metrics to help establish an appropriate capital structure for Ontario's distributors should be developed. The Staff Report proposal appears to overlook the fact that there exists a vast array of metrics employed by the rating agencies that lead to significant variations in debt ratings for publicly traded utilities, including differences between gas and electric utilities. Those ratings exhibit sensitivity to the changes in the riskiness of utilities throughout the business cycle, appear to be increasingly sensitive to capital needs and regulatory initiatives and the potential uncertainties that arise from changes in the business context of utilities particularly the underlying regulatory environment.

¹⁷ Lazar and Prisman, p. 22.

¹⁸ Staff Report, p. 9.

2.1.4 CAPM Should Not Be the Only Tool Used for Imputing ROE

The Staff Report's proposal regarding the determination of ROE follows the recommendation of the Board Staff's consultants to use a single estimate for the Equity Risk Premium (ERP) based on the Capital Asset Pricing Model. Such an approach may reflect the theoretically relevant measure of capital risk, and CAPM is a widely recognized method for deriving estimates of the cost of capital. However, CAPM should not be employed in isolation of other methods. Moreover, many if not most regulatory agencies utilize and accept a broader array of methods to estimate the cost of equity capital for public utilities. Thus, we suggest that the Board and Board Staff consider establishing a framework that accepts and takes account of a range of tools that, together, represent a cost of capital toolbox that is commonly used by experts in the field.

Before the mid-1960s, regulators generally placed almost exclusive reliance on the Comparable Earnings approach. Because of several problems encountered in implementing the approach and because, as implemented, the approach focused on book returns to capital, market-based tools were adopted, in particular the constant growth formulation of Williams' Discounted Cash Flow (DCF).¹⁹ The Capital Asset Pricing Model developed originally by William Sharpe and John Lintner (1963-1964) followed from the pathbreaking mean-variance theory of portfolio design of H. Markowitz (1952).²⁰ In the early 1990s, the DCF approach experienced frontal attacks regarding the realism of its assumptions and the difficulty of implementing the model given current capital market conditions, where the prospective outlook (appears to) depart from historical norms, and CAPM has managed to achieve a limited degree of presence in regulatory proceedings. More recently, advances in financial economics of recent years have resulted in the Q-ratio criteria of capital attraction, Arbitrage Pricing Theory

¹⁹ As originally developed by Myron Gordon (1957).

²⁰ References include Sharpe, William, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *Journal of Finance*, vol. 19, 1964, pp. 425-442; Lintner, John, "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets," *Review of Economics and Statistics*, vol. 47, 1965, pages 13-37; and Markowitz, Harry, "Portfolio Selection," *Journal of Finance*, vol. 7, page 1952, pp.

(APT),²¹ and more elaborate Risk Premium approaches, all of which are gaining a limited level of acceptance and interest in regulatory proceedings. Some methods treat risk explicitly and directly as a separate variable in the model, while other techniques treat risk implicitly and indirectly as somehow subsumed in observed security prices and historical market returns. One can point to a voluminous record of court cases that indicate there is no specific rule or model for determining a fair rate of return.

Despite the expansion of plausible methods, the *relevant* underlying cost of equity capital is not observable from market information, insofar as cost of capital embodies the prospective expectations of investors that cannot be readily known or understood. Hence, regulators, in the setting of the rate of return, face inherent limits that are likely to remain over the foreseeable future.

In light of the foregoing remarks, it is inadvisable for the Board to rely on only one methodology in determining the cost of equity capital, such as CAPM, as it may contain a substantial level of systematic error in the form of estimation bias. The regulator's hands should not be bound to one methodology of estimating equity costs, nor should the regulator ignore relevant evidence emanating from the investment community. In summary, we encourage the Board to remain open to an array of plausible approaches, and to set the authorized return at a level that, in addition to satisfying the needs of Ontario distributors, is in full compliance with established legal and regulatory statutes, guidelines, and criteria.

At a practical level, we believe that reliance on a single approach to estimating the ERP will lead to further erosion in the market's confidence in the Board to fairly determine ROEs and, hence overall rates of return for Ontario's distributors, particularly in view of heightened capital requirements of Ontario's LDCs. The Board Staff's consultants, while pointing out the limitations of other methods for imputing ROEs, point out one of the fundamental flaws of the CAPM in this particular context:

²¹ Ross, Stephen, "The Arbitrage Theory of Capital Asset Pricing," *Journal of Economic Theory*, vol. 13, 1976, pp. 341-360.

the difficulty we are presented with is that most LDCs are not public companies and market prices of their values are not readily available. Hence, we cannot estimate their beta and consequently their risk premiums.²²

While this concern is equally applicable to other market-based approaches, the Staff Report proposal is nonetheless undaunted by this limitation and accepts the notion that a *single* CAPM-derived risk premium based on publicly traded utilities, assumed to be similar to the LDCs, will be adequate to the task at hand. This limitation of the CAPM leads us to precisely the opposite conclusion: namely, that a single CAPM-based risk premium will be largely inadequate in discerning risks, as perceived by equity markets. Further, we harbor concerns with the application of the CAPM model suggested by Board Staff consultants, as follows:

- Inconsistency in time horizons used for assessing CAPM beta (5 years) and bond rates (10 years). Generally, observation periods should preferably be as long as the life of the asset being valued or observed (i.e., 30 years).
- Using a group of proxy companies that may not face the same risks as electricity distributors. ‘Proxy’ companies include income trusts. Volatility in their stock prices is different (i.e., less) than the volatility of equity stocks of corporations, suggesting a downward bias in the estimated CAPM beta and therefore risk assessment of LDCs.

2.1.5 The Board's Goals and Objectives for the LDCs Should Be Clarified

Notwithstanding Staff Report’s references to guiding principles, nowhere in Staff Report—or in other documents related to the immediate Board proceeding—has the Board’s goals and objectives regarding LDCs been clearly identified. The Board needs to make clear its overall vision for how regulatory governance for Ontario’s distributors is to proceed, and how COC and IRM policy issues fit within that vision. In short, how do the pieces of the overall program of regulatory reform in the Province fit together in order to achieve the regulatory objectives reiterated in Staff Report? In particular, does the proposal by Board Staff ensure that reliable distribution service to retail consumers will be sustained, in light of the potential for heightened capital risks during a timeframe of rising needs for capital?

²² Lazar and Prisman, p. 34.

2.1.6 Changes in Regulatory Governance Increases Uncertainty and Perceptions of Risk

Within the Board Staff's recommended approach, there appears to be no recognition of the significant impact that the structure of regulatory governance may have on the capital markets' perceptions of risk, and the ultimate effect on the cost of capital. Such sweeping and, to us, short-sighted changes in regulatory governance as proposed in the Staff Report are likely to increase risks and harm the financial viability of LDCs, rather than providing for a sense of confidence and stability.

2.1.7 Understating the Cost of Capital Gives Rise to Inefficient Use of Resources

Understating the cost of capital within LDC distribution rates under-prices resources and, in the current context, gives rise to inefficient use of distribution services at a time when additional infrastructure resources are needed. Understating distribution resource costs does not obtain cost savings to electricity consumers as a whole.

2.2 Cost of Capital and Rate of Return Should Enable LDCs to Compete In Worldwide Capital Markets

The Board Staff's proposed approach to cost of capital uses a fixed capital structure and relies solely on the CAPM to estimate the ERP, couched within the context of implementation of the proposed IRM, does not offer the prospect of adequate assurance and consistency in financial results in order to improve the financial stability for Ontario's distributors. Today, the LDC's must compete for capital sources in the face of vastly expanded opportunities for capital as a result of globalization and reduced barriers to capital flows among nations, and markets with increased return opportunities. Capital markets are much more integrated now than in 2000, which was the setting for Cannon's paper on cost of capital for Ontario LDCs. In particular, Canada has removed the Foreign Property Rule, and has experienced substantial growth in income trust vehicles to place capital. One can only conclude that Canadian electric service providers include Ontario's LDCs must participate in significantly more competitive capital markets where investors have a substantially larger set of opportunities to place capital, including other utility regulatory jurisdictions.

2.2.1 Cost of Capital Estimates Should Account for Capital Expenditure Programs, Which Are Vital to Electricity Services In Ontario

Cost of capital estimates, including estimates of ERP should recognize and account for the implications of the significant capital expenditure programs that will be initiated by the electric distributors in order to replace an aging infrastructure and to comply with a host of governmental policy directives. To ensure capital attraction, cost of capital estimates cannot be seen as declining during this critical period.

2.2.2 The Linkage Among Equity Return, Capital Structure, and Debt Costs Should Be Incorporated Into the Overall Return Level

The Staff Report fails to recognize the strong links among allowed equity return, capital structure, and the cost of debt. These links are particularly strong during times when distributors face substantial capital needs, as they will be doing in the very near future. Consequently, the disconnect in the treatment of the three components of the cost of capital in the Staff Report runs counter to the approaches taken in other jurisdictions in Canada as well as in North America in general.

2.2.3 Practical Realities of the Financial Picture for Distributors Must Be Accounted For

Staff Report's proposed approach appears to ignore or significantly discount the practical realities of the financial picture for distributors. For example, bond covenants with explicit interest coverage requirements can be severely threatened by the reduction in the revenue requirements that are implied by the proposed approach. The implications for attracting capital, should declining revenues fail to provide adequate coverage, are not positive.

2.3 The Proposed IRM Creates Significant Uncertainty and Risks for LDCs

An overarching consideration in the development of a regulatory plan is an adequate recognition and accommodation of context, including the major aspects and features of the utility market governed by the plan. Context, and a full accounting of it, is vital to the design and implementation of successful regulatory plan for electric distribution services in Ontario, at least if the plan is to be a workable mechanism that is a sustaining and

contributing structure to electricity services over the long term. The proposed IRM contained in Staff Report is a core element of the proposed Rate Plan, and we are concerned that the proposed approach is not sufficiently sensitive to market context. When coupled with scheduled rebasing, the proposed plan gives rise to heightened uncertainty and risks for Ontario LDCs at a time that revenue sufficiency and stability is vital. In addition, the proposed schedule for rebasing is not consistent with the November 2004 Board decision, which stated that the setting of 2008 rates will involve rebasing for all utilities.

We harbor several specific concerns that lead us to conclude that the proposed IRM possesses several technical features that are worthy of the Board's attention and may require revision or correction. First, because the proposed IRM plan is temporary, the LDCs face considerable uncertainty following its expiration. Consequently, the proposed plan does not appear to follow the underlying tenets of incentive regulation and, thus is not likely to produce the level of benefits commensurate with a well-designed regulatory plan. Second, the technical parameters of the proposed IRM appear to be set at arbitrary and ad hoc levels without a specific reference to or basis in empirical evidence or analysis. Third, the proposed IRM does not provide for interim relief for unforeseen events. Fourth, in important respects, the proposed IRM appears to be at odds with the Board Staff's own consultant's recommendations. Fifth, as we discuss further below, there is no acknowledgement of the strong linkage between IRM and the cost of capital.

2.3.1 The Proposed IRM Does Not Adhere to Incentive Regulation Principles

An incentive regulation mechanism, such as the price cap approach of proposed IRM, provides the regulated firm with incentives to operate much like a competitive firm, producing high-quality services in an efficient, least-cost manner. The incentives inherent to price cap plans can be forceful. Under price caps, the regulated firm can retain the profits directly attributable to the cost savings that arise from efficient, least-cost production of services, prudent investment, a high level of responsiveness to customer needs, and from product and service innovations. The end result, from a societal and macroeconomic perspective, are a number of desirous economic benefits—for example, higher productivity and reduced levels of resource inputs, improved returns

to resource inputs including capital, lower prices to consumers, and expanded service offerings. In addition, price cap forms of incentive regulation can reduce transaction costs in the form of reduced resources committed to the process of regulatory governance. For such incentives to obtain the desired behavior and realize the claimed benefits, stability and predictability of regulatory structures are vital. Where the regulated firm faces considerable uncertainty regarding the sustainability of the regulatory plan—i.e., risk associated with features of technical parameters, possibility of regulatory intervention and takeback, or unexpected overhaul and revision—the power of the incentives inherent to price caps are significantly blunted or, at worst, non-existent.

Unfortunately, the proposed IRM is not likely to produce the expected level of benefits that might normally attend price cap plans, or other forms of incentive regulation. A primary reason for the likely shortfall of benefits is the temporary, stop-gap nature of proposed IRM, after which Ontario's LDCs face, once again, an uncertain regulatory future. Under the Staff's proposal, 1/3 of the LDCs would be under the proposed IRM for 3 years, 2007-2009; 1/3 of the LDCs would be under the proposed IRM for 2 years, 2007-2008; and the remaining 1/3 would be subject to the proposed IRM for only one year, 2007. After expiration of the plan, the LDCs then have their revenue flows rebased under conventional cost of service principles. Following that, a 3rd Generation IRM, that has yet to be specified, is to be put in place.²³

Building the expectation that a regulatory plan has the long-term commitment from the regulator, with pre-defined and predictable features is vital to the success of any regulatory plan. Conversely, a regulatory plan, including well-tailored and discretely designed incentive plans, that is expected to be short-lived and temporary, and then followed by another approach to regulation that is not pre-defined and fairly certain, will likely fall woefully short in delivering any of the benefits alleged by the proponents of the plan. In short, uncertainty severely dampens the power of incentives provided to the regulated firm, particularly as it relates to long-term resource commitments and investment decisions. This amounts to significant regulatory risk of a serious degree.

²³ Staff Report, p. 2 and p. 21.

In summary, the design of the proposed IRM appears to be a contradiction to the *Guiding Objectives* stated in Staff Report that call for “predictability and stability,” and the promotion of “economic efficiency by providing the appropriate pricing signals and a system of incentives for distributors to maintain an appropriate level of reliability and quality of service.”²⁴

2.3.2 Technical Parameters of the Proposed IRM are Without Empirical Evidence or Analytical Support

In addition to stability and predictability, the success of an incentive regulation plan depends on the appropriate selection of plan parameters, such as the X factor in the proposed IRM. As the Board Staff’s consultant asserts:

Concerns about arbitrary selection of key plan parameters reduce the willingness of parties to try the rate-indexing option and can weaken the incentive benefits of price cap plans substantially.²⁵

The Staff Report proposes an X factor of 1% for proposed IRM.²⁶ In support of this X factor level, the Staff Report refers to Table 1 of the PEG Report²⁷ and notes the 1.01% average produced in Table 1 on page 55 of the PEG Report.²⁸ The X factors cited in Table 1 of the PEG Report cover many gas and power distribution companies, presumably of various sizes, across numerous regulatory jurisdictions and regions, under several regulatory governance structures, and over a wide variety of years. This vast range of companies does not provide an empirical foundation for the Board Staff’s choice of 1% for the X factor.

No analysis has been performed by either Board Staff or their consultant specifically for Ontario LDCs, and one cannot discern whether the cases cited in the PEG Report have relevance for X factors for Ontario LDCs. The PEG Report notes, moreover, that the most recent evidence contained in the report for power distributors is an X factor of

²⁴ Staff Report, p. 5.

²⁵ PEG Report, p.31.

²⁶ Staff Report, p. 14, p. 18.

²⁷ PEG Report, p. 55.

²⁸ Staff Report, p. 18.

0.63%,²⁹ and notes that, for the most recent years contained in the PEG Report, the X factor for gas distribution is 0.0%.³⁰

A major concern is that the productivity offset is beyond the reach of most of Ontario's LDCs. Our assessment of total factor productivity of the four unbundled electricity services, including studies for the industry as a whole and for various peer groups, suggest sharply lower levels of realized productivity. Specifically, our studies suggest that distribution wires services have obtained total factor productivity of less than 1.0% over the long term, and virtually zero productivity during the more recent 1998-2004 period. Because of capital indivisibility (i.e., the physical capital and costs of distribution facilities is lumpy and cannot be broken into small increments), and because of substantial investment by the LDCs in resources over the near term future, achievable productivity may be even less.

As noted above, the Board Staff's own consultant warns that concerns about arbitrary selection of key plan parameters can substantially weaken the incentives with corresponding limits to potential benefits that may otherwise be available from the implementation of a price cap plan. We urge Board Staff to give stronger consideration to this point.

In summary, we suggest that, at the very least, a more informed selection of the X factor is appropriate. Absent specific information and/or studies of the productivity performance of Ontario's LDCs, the selected value for the X factor should be better-aligned with the market context and performance of Ontario's LDCs.

2.3.3 The Proposed IRM Incorporates No Provision for Interim Relief and Unforeseen Events

There appear to be no mechanisms within the proposed IRM for Ontario's LDC's to seek interim relief for unforeseen events. It is common practice for price cap plans to explicitly account for the potential cost impacts for limited range of events that are external to the control of the service provider. Referred to as Z factors, these adjustments

²⁹ PEG Report, p. 87.

³⁰ PEG Report, p. 60.

can cover unexpected changes in the customer base, new government policy and mandates, changes in tax policy, major failures of equipment due to accidents, force majeure and weather phenomena, and unusually large expenditures on capital equipment that, in total or in part, may adversely impact the ROE for the shareholder. Our concern is that, absent provisions within the proposed regulatory plan, Ontario's LDC are without a mechanism in place to approach the Board, when unusual and unpredictable challenges arise. Thus, the LDCs are left with no apparent vehicle for relief and protection from unusual events.

We suggest that, within the context of price cap regulatory plans, that the Board incorporate Z factor mechanisms or off-ramps where the LDC can seek relief from a structured incentive rate mechanism to protect itself from such unforeseen incidents. Absent such mechanisms, the Board Staff's proposal, through denial of just and adequate rate relief, significantly impacts the capital of Ontario's LDCs.

2.3.4 The Proposed IRM Does Not Follow the Board Staff's Consultant's Recommendations

In several respects, the proposed IRM is inconsistent with the recommendations contained in the PEG Report. For example, as we noted above, the PEG Report warns against the arbitrary selection of key plan parameters as is done in the case of the proposed IRM. Additionally, the PEG Report states a preference for X factors based on a regional rather than a national TFP trend.³¹ As we have documented above, the X factor of the proposed IRM is an arbitrary number and its relationship to regional or national TFP trends is unknown. The PEG Report also stresses "the importance of encouraging energy utilities to undertake initiatives that involve up-front cost to achieve long-term performance gains."³² In contrast, a stop-gap approach to incentive regulation, particularly in view of the uncertainty beyond the near term application of the proposed IRM, provides only limited incentives to LDCs to undertake such initiatives. Finally, the proposed IRM does not appear to take account of its consultant's recommendations about tailoring incentive regulation plans to the circumstances of a utility:

³¹ PEG Report, p. 85.

³² PEG Report, p. 85.

The importance of tailoring plans to fit the circumstances of a utility must also be stressed. When it comes to PBR plan design, one size does not fit all. Utilities vary in their productivity growth expectations, risk exposure, and need for marketing flexibility. Different plans are therefore indicated if all are to properly balance risk, return, and customer benefit considerations.³³

If implemented as proposed, it substantially limits incentives for desired behavior by Ontario's LDCs resulting in a substantially reduced outcome.

2.3.5 Cost of Capital and Incentive Regulation Mechanism Cannot Be Developed Separately

The Staff Report makes separate proposals for the determination of the cost of capital and the implementation of the proposed IRM. The only linkage that Staff Report appears to make between the two is in Section 2.4, where the Report states that “during 2nd Generation IRM, distribution rates [are to] be adjusted by an incentive formula, (i.e., the introduction of the “k” factor) that will include as one adjustment factor recognition of changes to the existing capital structure, ROE and debt rates.”³⁴ The introduction of the “k” factor to account for the changes in the rate base and cost of capital from current levels in distribution rates, as implied by proposal in the Staff Report, amplifies perceived capital risks, and may not provide an adequate regulatory platform to enable the LDCs to obtain sufficient revenue flows to fully cover total costs including interest service charges, and to also raise the necessary capital for ongoing business needs.

The Board should not separately revise the rate of return and implement a new IRM. These central elements of the overall regulatory plan are so strongly interconnected that they must be jointly analyzed and developed. Staff Report fails to recognize that the implementation of proposed IRM creates additional uncertainty. Absent an adequate accounting for impacts on the cost of capital of the proposed IRM, it will likely result in higher capital costs and regrettably higher prices to electricity consumers for delivery services.

³³ PEG Report, p. 85.

³⁴ Staff Report, p. 13.

2.3.6 In Summary, the Proposed IRM Creates Significant Uncertainty and Risk for LDCs

For all of the reasons we have discussed, the proposed IRM should be cautiously approached by the Board. The proposed IRM parameters are largely arbitrary, and the proposed IRM is sharply at odds with the Board Staff's own consultant's recommendations. Indeed, the proposed IRM may create substantial risk for Ontario LDCs and fail to develop the benefits commonly associated with incentive regulation. Most importantly, there is no recognition of this added risk in the determination of the cost of capital.

3. Conclusions and Recommendations

EDA and its consultants, Christensen Associates Energy Consulting, LLC, are concerned with Board Staff's proposed regulatory plan and overall path for rate setting for Ontario's electricity distributors, as proposed Board Staff in its recent Draft Report. Accordingly, we recommend that the Board approach Board Staff's proposal with sufficient caution and skepticism. As we elaborate above, our review of Board Staff's proposal leads to the following findings:

1. The recommendation by Board Staff for a reduced level of rate of return does not have an empirical basis. Nor is there support for the view and conclusion that the underlying cost of capital facing Ontario LDCs has declined in any appreciable way with respect to the level last established by the Board.
2. The proposal by Board Staff does not satisfy established regulatory governance principles including capital attractiveness, just and reasonable rates, and allowed returns to capital equivalent to that realized on other investments of comparable risks. Yet, these principles have served as the legal groundings for economic utility regulation for years in Canada, the U.S., and elsewhere.
3. The proposed approach to the determination of the underlying cost of capital will, mostly likely, systematically understate the cost of capital to Ontario LDCs in a significant way. We suggest that the Board give consideration to the application of a broader array of cost of capital methods.

4. The proposed regulatory plan by Board Staff is inconsistent with the overall policy objectives of the Province of Ontario and the Board, including the recognized need for capital funding of infrastructure for reliability of delivery services, real time metering, and general ongoing maintenance of capital plans.
5. The proposed regulatory plan, including the key features of the Cost of Capital and the proposed IRM, is unusually prescriptive and fails to account for the widely-varying business and market conditions of the LDCs, which have corresponding differences in needs for capital and regulatory support.
6. The proposed IRMI is not fully specified at a technical level and does not comply with well-founded incentive regulatory principles. Further, the proposed IRM does not contain appropriate incentives to realize benefits for Ontario, in the form of efficient operation and design of delivery services, and innovation in delivery and customer services. Not does it provide opportunities for the LDCs to share in such benefits.

At this early juncture, the EDA and its consultants encourage the Board, Board Staff, and stakeholders and other concerned parties to the instant proceeding to place these deliberations in the proper context and appreciate the consequences of any decisions which are forthcoming. We suggest that parties to the proceeding deliberate over the substantive issues through taking full account of the standards of just and reasonable rates, of the needs of the LDCs and electricity consumers for capital infrastructure, and of the needs to put in place a flexible regulatory plan that is effective, incentive compatible, and is sensitive to the needs of Ontario's energy markets as a whole.

The purpose of our comments has been to review and critique Board Staff's Draft Report. Subsequently, we will offer our own recommendations for the structuring of the regulatory plan for Ontario LDCs that will achieve the objectives that have been set forth.