

August 14, 2006

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, Ontario M4P 1E4

**Re: July 21 2006 Staff Discussion Paper on the Cost of Capital and 2<sup>nd</sup>  
Generation Incentive Regulation for Ontario's Electricity Distributors – EB-  
2006-0088 and EB-2006-0089**

The Power Workers' Union ("PWU") represents a large portion of the employees working in Ontario's electricity industry and has utmost interest in initiatives that impact the energy industry and the provision of ongoing service quality and reliability to customers. Attached please find a list of PWU employers.

The PWU appreciates the opportunity to provide comments on the Ontario Energy Board "Staff Discussion Paper on the Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario Electricity Distributors". The Board's Multi-Year Rate Setting Plan, for which Board Staff's proposal on the cost of capital and 2<sup>nd</sup> Generation Incentive Regulation Mechanism is under consideration, is a major undertaking that will have a significant impact on Ontario's distribution sector's ability to maintain and improve service safety, quality and reliability for many years to come. The Board's consultation on this initiative therefore is key in providing it with an understanding of issues and possible outcomes of Board Staff's proposal. The PWU lauds the Board for its consultations on this initiative. Our submission is attached.

We hope you will consider our comments in your deliberations.

Yours truly,

Don MacKinnon  
President

Att.

## **List of PWU Employers**

Atomic Energy of Canada Limited (Chalk River Laboratories)  
Barrie Hydro  
BPC District Energy Investments Limited Partnership  
Brant County Power Incorporated  
Brighton Beach Power Limited  
Brookfield Power – Mississagi Operations  
Brookfield Power – Lake Superior Operations  
Bruce Power Inc.  
Corporation of the City of Dryden - Dryden Municipal Telephone  
Corporation of the County of Brant  
Electrical Safety Authority  
EPCOR Calstock Power Plant  
EPCOR Kapuskasing Power Plant  
EPCOR Nipigon Power Plant  
EPCOR Tunis Power Plant  
Erie Thames Services Corporation  
Goldman Hotels Inc. - Hockley Highlands Inn & Conference Centre  
Great Lakes Power Limited  
Grimsby Power Incorporated  
Halton Hills Hydro Inc.  
Hydro One Inc.  
Independent Electricity System Operator  
Inergi LP  
Innisfil Hydro Distribution Systems Limited  
Kenora Hydro Electric Corporation Ltd.  
Kincardine Cable TV Ltd.  
Kinectrics Inc.  
Kitchener-Wilmot Hydro Inc.  
London Hydro Incorporated  
Middlesex Power Distribution Corporation  
Milton Hydro Distribution Inc.  
Mississagi Power Trust  
New Horizon System Solutions  
Newmarket Hydro Ltd.  
Norfolk Power Distribution Inc.  
Ontario Power Generation Inc.  
Orangeville Hydro Limited  
PUC Services Inc.  
Sioux Lookout Hydro Inc.  
Sodexo Canada Ltd.  
TransAlta Energy Corporation - O.H.S.C. Ottawa  
Vertex Customer Management (Canada) Limited  
Whitby Hydro Energy Services Corporation

**Power Workers' Union Submission on  
July 21 2006 Staff Discussion Paper on the  
Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation  
for Ontario's Electricity Distributors**

## **1 INTRODUCTION**

On April 27, 2006 the Ontario Energy Board ("OEB" or "Board") issued a letter describing the process it intends to use to review the cost of capital ("COC") and to develop a 2<sup>nd</sup> generation incentive regulation mechanism ("IRM").

On July 19, 2006 Board Staff issued a Draft Staff Report – "Proposals for Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors" ("Draft Report"). In addition, the Board posted on its website two reports prepared by expert consultants retained by Board Staff: a June 14, 2006 report on the cost of capital by Dr. Fred Lazar and Dr. Eli Prisman of the Schulich School of Business<sup>1</sup>; and, a June 13, 2006 report on incentive regulation by Dr. Mark Lowry of Pacific Economics Group<sup>2</sup>. Board staff invited written comment on its Draft Report for its review in consideration of a second Draft Report. The PWU provided written comment on the Draft Report.

On July 25, 2006 Board Staff issued a "Staff Discussion Paper on the Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors" ("Discussion Paper") prepared in light of comments received from interested parties on

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<sup>1</sup> Calculating the Cost of Capital for LDCs in Ontario. Dr. Fred Lazar and Dr. Eli Prisman. York University. June 14, 2006.

<sup>2</sup> Second-Generation Incentive Regulation for Ontario Power Distributors. Mark Newton Lowry. Pacific Economics Group. June 13, 2006.

the Draft Report and on the reports prepared for Board Staff by the expert consultants. The Board invites written comment on all aspects of the Discussion Paper. This submission contains the PWU's comments on the Discussion Paper.

The PWU believes that the regulated network systems should be maintained and operated on in a commercial manner that provides benchmark system safety, service quality and reliability performance, and efficiency through incentives for technical innovation. Implicit in this position is the need to:

- Ensure revenue adequacy for safe and reliable system operations and maintenance;
- Develop meaningful regulatory safety, service quality and reliability performance standards;
- Proper network planning, that gives due and reasonable consideration to generation (including distributed generation) options, network augmentation options and load management options, and results in economically feasible solutions that maximize net benefits and the optimum outcome when planning to overcome network constraints and meet end-user energy requirements;
- Ensure non-discriminatory access to the electricity system; and,
- Attract and maintain a highly skilled workforce.

The PWU's comments on the Discussion Paper reflect its policy position as articulated above.

## **2 COST OF CAPITAL**

The PWU had the opportunity to provide comment on Board Staff 's Draft Report on CoC and 2nd Generation IRM that was released earlier-on June 19, 2006 ("Draft Report"). With respect to CoC, the Draft Report proposed a uniform capital structure for all local distribution companies (LDCs) and a change in the methodology by which returns on equity ("ROE") are calculated - a change that results in lower ROEs. In the

PWU's response to the Draft Report, the PWU clearly expressed its concern with the proposals. The proposals on CoC gave rise to particular concern, as they represented a profound departure from the status quo with far-reaching consequences that can potentially run counter to the objectives of the Ontario Energy Board ("OEB" or "the Board"), which the Board Staff has identified as its guiding objectives in formulating its proposals. These objectives include those which reflect the Board's desired roles and effects of the allowed returns on equity, the allowed returns on total capital and the deemed capital structure ratios.

In addition to issues related to fairness and reasonableness from the perspectives of both owners of LDC's and ratepayers, a major concern raised in the PWU's response was the implications of the proposals to the ability of smaller LDCs to attract debt and equity capital and investment that is needed to ensure system safety, as well as service quality and reliability. In the PWU's view, the Board Staff's main focus in the Draft Report had been simplicity and ease of regulatory process with insufficient attention given to the long-term implications of the proposals for the LDCs' ability to attract investment and access capital, and to maintain service quality and reliability as per the *Ontario Energy Board Act, 1998*.

While the Board Staff has made some changes to the proposal originally presented in the Draft Report, the changes, incorporated in the current Discussion Paper, are not sufficient to address stakeholder concerns identified in submissions on the Draft Report. This is very disappointing particularly considering the Board Staff's comment on the importance of CoC to LDCs: "*The cost of capital is very important for distributors since it represents about half of the revenue requirement. In any business, capital is required to acquire assets that will produce income in the future. There is always some risk that the assets will not generate enough income to recover the operating expenses, cost of assets, debt costs, as well as yielding an acceptable return to shareholders.*" (Page 8 Para 2)

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## **2.1 BOARD STAFF PROPOSAL ON CAPITAL STRUCTURE**

The deemed capital structures for LDCs introduced with the Board's first Electricity Distribution Rate Handbook in 2000 were determined according to the size of the distributor's rate base. The deemed capital structure for the smallest LDCs (with rate base under \$100 million), was set at 50% equity and 50% debt. The proportion of equity decreases<sup>3</sup> as the size of the rate base increases, with the deemed capital structure for the largest LDCs (those with rate base greater than \$1.0 billion), set at 35% equity and 65% debt. The method used to derive the ROE and capital structure was developed by Dr. William T. Cannon (the "Cannon method")<sup>4</sup>.

Board Staff is proposing a common deemed capital structure for all LDCs of 40% common equity and 60% debt financing. Included in the 40% equity would be any preferred shares issued by the distributor up to a maximum of 4% of rate base. This represents a slight change from the Board Staff's earlier proposal. In the Draft Report, it had proposed a split of 36% common equity and 64% debt financing, with the provision that the LDCs would have the option of including a maximum of 4% preferred shares, with 60% debt, effectively capping the proportion of equity at 36%. Board Staff states that its decision to modify its earlier proposal and come up with what it calls "thicker common equity than for Ontario natural gas distribution utilities (which are at a debt-equity ratio of 65/35 and 64/36)" is the result of the concerns that have been expressed by LDCs and the investment community about the credit worthiness of electricity distributors. Board Staff's rationale for a common structure for all LDCs, compared to the Cannon method, is that there is no reasonable way to differentiate LDCs - they are more alike than they are different with respect to the risks that they face.

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<sup>3</sup> In the PWU's earlier comment on the Board Staff's Draft Report, we inadvertently stated "...the proportion of equity increases with the size of rate base..." Instead, "the proportion of equity decreases with the size of rate base."

<sup>4</sup> "A Discussion Paper on the Determination of Return on Equity and Return on Rate Base for Electricity Distribution Utilities in Ontario" prepared for the Ontario Energy Board, December 1998

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## **2.2 PWU's COMMENT ON CAPITAL STRUCTURE**

The PWU regards the 60/40 (Debt-Equity) capital structure as an improvement over the 64/36 capital split that Board Staff proposed in its Draft Report. Concerning its new proposal, the Board Staff is seeking comment on “*justification and supporting arguments for a higher equity thickness...*” and on whether the 40% equity is sufficient. While it might be possible to demonstrate why a 40% equity level may not be sufficient for one particular LDC or a group of LDC’s with smaller rate bases, proposing a particular capital structure for a large number of utilities of different circumstances is meaningless. In the PWU’s view, the introduction of a uniform capital structure across the board regardless of anything that makes one LDC different from the other is fundamentally problematic. The reasons why the proposal, the rationale, and the studies upon which the Board Staff relied on to justify the proposal are inappropriate are discussed below.

### **1. The lack of a common view on how to group LDCs on the basis of risk does not mean that they can’t/shouldn’t be grouped based on risk**

Ideally, deemed capital structures for rate-regulation purposes and/or their allowed returns on equity should vary to reflect the differences in the extent of business risk which each distributor is exposed to. In general, LDCs with higher relative business risks have less debt-carrying capacity and require higher deemed common equity ratios. Moreover, where higher common equity fails to address the relatively higher business risk of a distributor, the ROE (discussed in Section 2.5 of this submission) would also need to be adjusted upward. There is no question that trying to assess an individual distributor’s relative business risk and determine the appropriate adjustments to its deemed capital structure and its allowed ROE would be a costly and time-consuming exercise. The PWU also recognize the challenges of efforts required to cluster LDCs on the basis of risk. This, however, should not be a reason for the Board to opt for simplicity and discard the one reasonable as well as simple to administer approach to assess the risk that LDCs face, viz., grouping LDCs based on the size of their rate base. Board Staff argues “While there are several dimensions of risk that vary across

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utilities....staff finds that there is no reasonable way to differentiate them... they are more alike than they are different with respect to the risks that they face” (Page 13, Para 3). The PWU finds this view of the Board Staff presumptuous on two levels. Firstly, it presumes that lack of a proper way to differentiate LDCs is indicative of absence of any rationale to differentiate them. Secondly, it presumes that all LDCs are similar as far as the risk they face is concerned.

With regard to the second point, the PWU would point out that the Board Staff in its Draft Report had proposed a capital structure that is the same as the natural gas sector assuming that LDCs in the electricity sector faced similar level of risks as those in the natural gas sector. In the Discussion Paper, Board Staff acknowledges that this is wrong: “*Staff believes that there is a need for significant expansion of investment in electricity distribution infrastructure for maintaining, enhancing and expanding the infrastructure and that this poses additional risks as compared to natural gas distributors*” (Page 13, Para 2). This leaves us wondering whether Board Staff has given sufficient consideration to its position that all LDCs face similar risks. The PWU shares the views of parties who in their submissions pointed out that the lack of a common view as to the appropriate capital structure should not be interpreted as meaning that financial markets view all LDCs similarly with regard to risk.

Finally, the PWU notes that while Drs. Fred Lazar and Eli Prisman discuss the limitations of grouping LDCs based on the size of rate base, they ultimately recommend that there be two groupings of LDCs for the purpose of establishing the debt-equity proportions. In particular, they recommend a 50/50 debt-equity ratio for all LDCs with a rate base, excluding working capital allowances, of less than \$300 million, and a 60/40 split for all LDCs with a rate base in excess of \$300 million. Apparently, Drs. Lazar and Prisman, whose report Board Staff relied on to justify its proposal of a common capital structure, ultimately did recognize the need for some sort of classification of the LDCs on the basis of the size of their rate bases as an indicator of the business risks which the LDCs are exposed to. Board Staff gives no explanation why it decided to reject its own experts' recommendation.



## **2. Clustering LDCs based on size of rate-base enhances simplicity and regulatory efficiency in processing applications**

Given the costly and time consuming nature of trying to assess the relative risk profile of each and every single LDC, clustering LDCs into a limited number of rate-base size classes is an acceptable compromise. As Dr. Cannon's 1998 report indicates, the overriding rationale for recommending this approach is the simplicity and ease of administration that it achieves without entirely losing sight of the clear differences that LDCs exhibit with respect to the degree of risk that they are exposed to. Dr. Cannon also indicates that the classification of LDCs solely based on their size as a tool to assess the risk profile of LDCs was chosen as the better approach not only because the net risk impact of the other possible indicators is difficult to measure but also because the size-based approach avoids the need for many of these other indicators, as they are strongly correlated with the size of rate base.

## **3. Smaller LDCs are particularly vulnerable**

For smaller LDCs, particularly for those with rate base below \$250 million, the proposed 40% equity will pose a significant challenge for ongoing investment in their systems and for maintaining system reliability and quality. If funds are insufficient for new investment, for maintenance of the existing system, and for hiring and retaining a skilled workforce, service reliability and quality will deteriorate, perhaps not in the short term, but definitely in the long-term. These costs are in addition to the cost of any mandated expenditures required to meet code requirements concerning service quality and reliability,

## **4. Common Capital Structure vs. Consolidation**

Board Staff states that, in formulating its proposals, it has been guided by a number of objectives including the following:

**Establishing a common capital structure and incentive framework for all distributors:**

The objective is to avoid imposing barriers to consolidation within the electricity distribution sector.

It is not clear how the establishment of a common capital structure can be an objective in itself. Rather, the PWU assumes that the Board's objective is to avoid barriers to consolidation and that the establishment of a common capital structure would be one possible tool to achieve that.

It appears that Board Staff was influenced by the report of Drs. Lazar and Prisman, who essentially argue that clustering LDCs on the basis of size would discourage consolidation because that might lead to a lower risk category and lower weighted average cost of capital. However, the establishment of a common capital structure is likely to do little, if any, to remove barriers to consolidation. Also, it is important to note that significant consolidation has taken place in the distribution sector despite differences in capital structures. LDCs' reluctance to consolidate is likely the result of a host of other factors/barriers, some of which are far more onerous, e.g., transfer taxes. Also, the prescription of a common capital structure for all LDCs would have negative consequences that far outweigh any potential benefits of consolidation. The PWU would like to caution the Board not to consider consolidation as an overriding objective considering what a common capital structure does to the financial, business, and investment health particularly of smaller LDCs that need incentives to become more efficient, to provide reliable and high quality service on their own, before contemplating consolidation.

## **5. No impact assessment carried out**

The proposed common capital structure would result in a significant negative impact on the value/revenue of LDCs and on the ability of LDCs to maintain system safety, and service quality and reliability. Stakeholders would have been greatly assisted had Board Staff developed impact scenarios using empirical data for representative LDCs. In this respect, the PWU would like to point Chatham-Kent Hydro Inc.'s submission which

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demonstrates the impact of the proposed changes in capital structure on the company's net income, even assuming the currently approved ROE of 9% remains intact.

### **2.3 BOARD STAFF PROPOSAL ON THE EQUITY RISK PREMIUM (ERP)**

Board Staff is proposing the use of only the Capital Asset Pricing Model ("CAPM") to determine the appropriate equity risk premium ("ERP") which in turn is used to determine the appropriate return on equity ("ROE") for LDCs. Board Staff acknowledges the limitations of the CAPM; nevertheless, asserts that these limitations are far less serious than the shortcomings of the two other common methods: the Comparable Earnings (CE) and the Discounted Cash Flow (DCF) methods. The CAPM is, it is argued, the common method that has the soundest theoretical basis in the financial literature.

### **2.4 PWU'S COMMENT ON THE EQUITY RISK PREMIUM (ERP)**

#### **1. A combination of methods helps to expose gaps in selected methods**

While sharing Board Staff's assertion about the limitations of each of the three methods (CAPM, DCF & CE), the PWU considers the choice of the CAPM as the sole method for estimating the ERP worrisome. There is no doubt that Board Staff's preference for a single test precludes the need to determine a set of weights accorded to results produced by multiple tests. On the other hand, the use of a combination of more than one method would help to expose, and make up for, the gaps that would be left if only one method were to be used. The challenge then becomes one of determining the weight that is accorded to the results of each method. Such weights shouldn't be determined arbitrarily. The PWU therefore would suggest that the correct path would be for the Board to develop a uniform set of weights. The Board may consider the use of a panel of independent experts for this purpose. Once again, the PWU would remind the Board that complexity should not be shunned to achieve robustness.

#### **2. Experience in other jurisdictions**

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On Page 14 of the Discussion Paper, Board Staff states the following:

*“The common approach in North America appears to be to use some combination of these methods. A recent Decision of the British Columbia Utilities Commission (BCUC) preferred to exercise judgment on cases using estimates from all three methods. However, there are also jurisdictions that use only CAPM, for example, a recent Decision of the Alberta Energy Utilities Board (AEUB) endorsed CAPM as the preferred method.”*

If the experience of other jurisdictions were to be given any weight, Board Staff’s own evidence stated above would lead it to choose the common approach of using multiple tests over the use of a single method.

### **3. Some LDCs could be disadvantaged**

Drs. Lazar and Prisman, in their elaborate discussion of tests used to derive the ROE, make the following comment on page 51 of their report:

*“...there is no reason to favour the use of one test one day, and then to favour all three tests or perhaps two tests on another day, other than to produce the results that are most favourable for a client...”*

If the choice of one test over the other can be used to deliberately skew results to make them favourable to clients, the proposal to use the CAPM alone to derive the ERP can advantage some LDCs and disadvantage others. The proposed change can therefore result in inequitable regulatory treatment of the LDCs.

### **2.5 BOARD STAFF PROPOSAL ON RETURN ON EQUITY (ROE)**

Board Staff’s approach to determining the ROE, which is based on the ERP, the riskless rate (based on the zero-coupon bond yields) and the parameters used to calculate them, is to develop different scenarios for the ERP component. The ERP, estimated based on CAPM, has two elements: the average market return and the “beta”, which is

the measure of the relative risk of the assets of the regulated company. Board Staff considers three factors which in turn have bearings on the two elements of the ERP: the sample of firms from which to estimate the average market return; the sample of firms from which to estimate the beta; and the relevant time frames for each. As such four scenarios are developed based on two sets of time frames (long-term and short-term) and two groups of companies that could serve as a proxy for Ontario electricity LDCs:

- Companies listed on the Toronto Stock Exchange (TSE) that are engaged, at least in part, in the electricity sector (“Electric”); and
- TSE companies that are rate-regulated (including those that are also in the electricity sector (“Rate Regulated))

The four scenarios produced four corresponding ROE values: 6.61%, 6.65%, 7.50%, and 8.37%. While Board Staff regards the four scenarios as plausible, has expressed its preference for the long-term time frame and the Rate Regulated companies as a proxy for the Ontario electricity LDCs and therefore recommends an ROE of 8.37%.

## **2.6 PWU’S COMMENT ON RETURN ON EQUITY (ROE)**

Of the four ROE values derived under the different scenarios (6.61%, 6.65%, 7.50%, and 8.37%) Board Staff recommends the scenario that produced the 8.37% ROE. This is an improvement over its earlier proposal of an ROE range of 7.52% to 8.36%. However, this is still a significant reduction from the original 9.88% ROE set out in the 2000 Rate Handbook and from the ROE of 9.00% (which should have been 9.13% according to Kathleen McShane<sup>5</sup>) set out in the 2006 Rate Handbook. The PWU believes that most of the potential negative impacts of the proposed common capital structure which the PWU identified earlier are equally applicable to the proposed lower ROE as well.

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<sup>5</sup> See Appendix A of the submission on the Draft Report by Toronto Hydro-Electric System Limited

Any consideration of implementing the proposed method should take into account the impact of what may be a significant revenue drop from the LDCs' planning assumptions. This would be especially onerous where a distributor's financial plan contemplates re-investment of its net income into its system. This proposal is counter to the stated objective of predictability and stability that is supposed to provide for an environment that allows LDCs and consumers to better plan and make decisions. In this respect, the PWU would remind the Board that the determination of the 2007 ROE as proposed could result in lower than expected 2007 revenue requirements for the LDCs. Given that the LDCs can be expected to have included ROE projections based on the existing methodology in their multiyear business plans and in carrying out their financial planning, the revenue shortfall can have a significant impact on their operations. Therefore, mitigation of the significant regulatory risk related to the possible imminent implementation of such a significant change to the ROE must be considered by the Board.

Concerns have also been expressed by LDCs about access to capital and therefore the proposed lower ROE means that LDCs, particularly the smaller ones, might be seen by the investment community as even riskier. According to the Board Staff, "... *the investment community indicated that a higher ROE is necessary to attract investment in distribution as opposed to competing investment opportunities.*" (Page 9, Para. 1). Moreover, BMO's paper filed as an attachment to THES' submission prepared by Mr. P. Sardana, suggests that Board staff's proposal would not incent investment in Ontario's distribution sector. It is inevitable that a change in ROE of this magnitude will change the risk profile of most LDCs. That could also have a negative impact on their credit ratings.

Board Staff has invited comments as to whether a premium in the range of 50 to 150 bps would be required to provide an incentive for new infrastructure investment, indicating that such a premium for new distribution infrastructure added to rate base in 2007 and beyond could be at an ROE of between 8.87% to 9.87%. (Page 17, Para 3).

While the PWU appreciates the need to incent investment in new infrastructure, it would also call the Board's attention to the need for a fair ROE for LDCs in order to enable them achieve system safety, reliability and service quality standards on their existing systems.

## **2.7 PWU'S COMMENT ON DEBT RATE**

On Page 18, Para 4 of the discussion Paper, Board Staff states that:

*“Concerns have been expressed by distributors about access to capital. However, to date, very few Ontario electricity distributors have attempted to issue debt in financial markets. Those that have do not appear to have had difficulty in doing so; nor does there appear to be difficulty in attracting bank financing for capital investments.”*

Our understanding is that those that have presumably have done so under the existing ROE guidelines rather than the proposed guidelines. In assessing whether they would have difficulty doing so under the proposed ROE guidelines, the Board should take into account BMO's paper referenced earlier in the PWU's submission.

Similarly, on Page 18, Para 5, Board Staff says:

*“Staff is sensitive to the likelihood of substantial financing needs for the introduction of smart metering. Staff is therefore proposing an adjustment to all distributors' fixed distribution rates (see section 4.3.1 entitled “Allowance for Smart Meter Implementation”) to ensure financing does not impose constraints to the smart metering program.”*

The Board should be sensitive to financing needs for system investments in general, not just for smart metering, and ensure financing does not impose constraints on general investment in the system to maintain system reliability and quality. Board Staff's

proposal to provide separate treatment for smart metering financing appears to be a result of a lack of confidence in the proposed common capital structure and ROE as a capable instrument to meet financing requirements.

## **2.8 PWU's COMMENT ON APPENDIX B: COMPARISON OF APPROACHES TO COST OF CAPITAL**

The PWU notes some gaps and lack of clarity in the presentation of information in Appendix B: Comparison of Approaches to Cost of Capital. First, unlike in the Draft Report, the Board Staff's proposal column is missing. It would be helpful to have the Board Staff's proposals summarized in Appendix B. Second, it would provide more clarity if the information in Appendix B were to be grouped under the three major categories: Capital Structure, Debt, and Return on Equity, like in the Draft Report. Finally, the rate base ranges (Risk Profiles) proposed by Lazar & Prisman are given as ">\$299 million-max 40%" and "<\$300 million-max 50%". Apart from the obvious overlap, nowhere in the Lazar & Prisman report is there a mention of \$299 million range (the ranges are given as >\$300 million and <300 million).

## **3 INCENTIVE REGULATION MECHANISM**

### **3.1 BOARD STAFF PROPOSAL**

Board Staff's proposed IRM rate adjustment for 2007, 2008 and 2009 is the following price cap mechanism:

$$\% \Delta P = K + \% \Delta \text{GDP-PIPI} - X + Z$$

Where:

- $\Delta P$  is the annual percentage change in price;
- K is the adjustment for cost of capital in 2007 (ROE) and in 2008 (capital structure);



- $\Delta$ GDP-IPI is the percentage change in Canada GDP-IPI for final domestic demand;
- X is the 1% adjustment with implicit input price differential, productivity differential, and stretch factor; and,
- Z may allow for adjustment due to unusual events and additional Board-approved costs outside of the formula.

In its Multi-Year Rate Plan (“Rate Plan”) for the LDCs, the Board intends to separate the LDCs into three tranches. The first tranche will have their 2006 approved rates rebased in 2008, the second tranche in 2009, and the third tranche in 2010. Therefore a LDC’s 2<sup>nd</sup> Generation IRM term will be one, two or three years depending on the tranche that the Board assigns it to.

### **3.2 PWU COMMENTS ON BOARD STAFF PROPOSAL**

Board Staff’s proposal on IRM in the July 25, 2006 Discussion Paper while improved compared to the proposal in the June 19, 2006 Draft Report, in terms of the inclusion of a Z-factor, still falls significantly short of a robust incentive regulation plan.

#### **3.2.1 OBJECTIVES OF 2<sup>ND</sup> GENERATION IRM**

Board Staff’s stated objectives for the 2<sup>nd</sup> Generation IRM are to:

*“provide regulatory certainty to distributors during the Rate Plan as several rate-related studies are carried out; drive efficiency improvements in the distribution sector; and lay a foundation for the 3<sup>d</sup> Generation IRM.*

In the PWU’s view, the Discussion Paper does not demonstrate how the proposed IRM meets the stated objectives.

With regard to the objective of providing regulatory certainty to distributors during the Rate Plan, the K-factor proposed to accommodate the proposed changes to the determination of the cost of capital embeds uncertainty into the plan. The uncertainty

results from the unknown impact of the financial community's reaction to the changes in the regulatory framework embedded in the K-factor.

There is also uncertainty for both the LDCs and their customers related to the lack of insight on how the GDP-IPI compares to an industry specific inflation index and on how the productivity improvement requirement relates to the LDCs' historic and potential productivity. In the absence of this information, it is not known whether the proposed 2<sup>nd</sup> Generation IRM will drive efficiency improvements.

The PWU would point out that the requirement of maintaining or improving service reliability and quality needs to be incorporated into the objectives for 2<sup>nd</sup> Generation IRM. Efficiency assessment requires consideration of both input and output. Consideration of efficiency in an IRM in terms of input alone, in the PWU's view is a recipe for cost cuts, which result in the deterioration of service safety, quality and reliability that will not be prevented by codifying service quality performance requirements.

With regard to the objective of laying a foundation for the 3<sup>rd</sup> Generation IRM, it is clear that the implementation of 2<sup>nd</sup> Generation IRM will provide the Board with the time required to develop a 3<sup>rd</sup> Generation IRM. What is not clear is how the proposed 2<sup>nd</sup> Generation IRM builds a foundation for 3<sup>rd</sup> Generation IRM. Board Staff indicates it believes its current proposal is an effective transitional methodology to 3<sup>rd</sup> Generation IRM that balances short-term efficiency, simplicity and time management to allow the Board to approve just and reasonable rates. In the PWU's view, the effectiveness, efficiency, simplicity and time management addressed in the Discussion Paper focuses too heavily on the efficiency of regulatory process and not enough on regulatory effectiveness.

### **3.2.2 ANNUAL PROXY ADJUSTMENT FOR COST OF CAPITAL – K-FACTOR**

Board Staff proposes that the 2<sup>nd</sup> Generation IRM include a K-factor to recognize the proposed changes in the cost of capital. While the proposed K-factor adjusts rates for the proposed changes in the cost of capital, the PWU submits that in proposing a K-factor, Board Staff does not "recognize" the impact of the proposed changes.

Recognition of impacts of the proposed changes would require consideration of the revenue impact of the K-factor as a component of the 2<sup>nd</sup> Generation IRM and the LDCs ability to maintain service safety, quality and reliability. While the PWU does not support the proposed changes to the CoC, should the Board's deliberations compel it to consider the proposal, such considerations should include the phasing-in of the proposed changes to the CoC. The lack of consideration for the phasing-in of the proposed CoC changes would be inconsistent with Board Staff's portrayal of 2<sup>nd</sup> Generation IRM as a transition plan.

The PWU recommends that the Board, in its deliberation on the proposed CoC changes recognize the impact of the proposal on revenue and service safety, quality and reliability within the context of the proposed 2<sup>nd</sup> Generation IRM.

The PWU assumes that, in the absence of an explicit statement, Board Staff's proposal for exemption from the K-factor adjustment in 2007 for distributors that selected a zero ROE or a ROE below the allowed level of 9% for their 2006 rates, is at the LDC's option and not as a requirement.

### **3.2.3 TERM AND STARTING BASE**

The PWU understands that the term of one to three-years, depending on which of the three tranches an LDC is assigned to, and the starting base of 2006 have already been determined for the Rate Plan.

While the PWU understands that, in approving the 2006 rates, the Board determined that the approved rates are just and reasonable for 2006, there may be LDCs that will be facing circumstances significantly different from 2006 in 2007-2009, for whom therefore, 2006 as a base year for 2007-2009 may result in financial hardship. To enable LDCs in this circumstance to maintain service safety, quality and reliability, the Board should allow these LDCs the opportunity to apply for first tranche consideration. This addresses, to some extent the lack of off-ramp provisions in Board Staff's 2<sup>nd</sup> Generation IRM proposal. The Board should therefore consider developing guidelines that LDCs could use to demonstrate hardship that will qualify them for first tranche rate rebasing in 2008. As an example, such guidelines would include the requirement to

demonstrate why the circumstance the LDC faces cannot be managed through the Z-factor.

### **3.2.4 FORM**

The proposed form of the 2<sup>nd</sup> Generation IRM is a price cap mechanism.

The PWU agrees with Board Staff that the lack of data and modeling requirement precludes a yardstick mechanism for 2<sup>nd</sup> Generation IRM. However, the PWU does not agree with Board Staff's characterization of a price cap as a "simple approach". While it is apparent that Board Staff has taken a simple approach in coming up with a proposed price cap mechanism for 2<sup>nd</sup> Generation IRM, the derivation of a robust price cap mechanism based on considerations of an LDC's cost structure, fluctuation in costs and historic productivity gains requires what the PWU would describe as a highly sophisticated approach.

### **3.2.5 PRICE ESCALATOR**

While Board Staff is proposing the use of the GDP-IPI as the price escalator in the 2<sup>nd</sup> Generation IRM, the PWU notes that Board Staff does so while making the point that "an industry-specific input price tracks industry input price fluctuations better than an economy-wide measure". The PWU agrees with Board Staff's expert consultant, Dr. Lowry, that the industry specific input price index ("IPI") therefore better mitigates the significant gains and losses that result from the failure of a broad economy-wide index (e.g. GDP-IPI) to track changes in industry specific input prices.

Board Staff identifies the following as advantages of using the GDP-IPI as the price escalator: it is published by a trusted source; is readily available; and is likely more easily understood by the public than an industry-specific measure would be.

In using the industry specific IPI approach, the Board could develop the index with transparency through the Board's consultation process. The updating of the industry

specific IPI in the Board's 1<sup>st</sup> generation PBR<sup>6</sup> demonstrates that once a robust price cap mechanism has been developed, the Board can readily derive the IPI for the annual rate adjustments. With regard to public understanding, in the PWU's view it is likely more difficult for the public to understand the concept of using an inflation measure that does not directly reflect the industry's circumstances than the concept of using a measure that does directly reflect the industry's circumstances.

Board Staff states that it may review and refine, where appropriate, the industry specific IPI methodology employed in the Board's 1<sup>st</sup> generation PBR for consideration in the 3<sup>rd</sup> Generation IRM. However, in section 3.3.3 of the Discussion Paper Board Staff indicates that some form of benchmarking and/or comparators and cohorts analysis is anticipated in 3<sup>rd</sup> Generation IRM. If this means that Board Staff is contemplating a hybrid form of IRM for 3<sup>rd</sup> Generation IRM that incorporates elements of both benchmarking and a price cap mechanism, it would seem that the approach to 3<sup>rd</sup> Generation IRM would be overly complex. While getting an incentive mechanism wrong can result in perverse outcomes, the chances of getting the incentive mechanism wrong may be exacerbated with a hybrid IRM approach that incorporates two forms of incentive regulation mechanisms.

### **3.2.6 X-FACTOR**

Board Staff proposes a 1% productivity factor for 2<sup>nd</sup> Generation IRM.

Board Staff states that like the inflation measure, the selection of the X-factor "is a function of simplicity and transparency". While Board Staff's approach to the selection of the proposed X-factor was obviously simple, this simplicity precludes transparency in that it sets the X-factor in the absence of any evidence on how it relates to the LDCs historic productivity and productivity potential. This point also speaks to the inappropriateness of Board Staff relying on the deliberations of a productivity factor carried out in North American jurisdictions outside of Ontario to provide relevant precedent for the X-factor proposed for Ontario's LDCs in 2<sup>nd</sup> Generation IRM.

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<sup>6</sup> [http://www.oeb.gov.on.ca/documents/backgrounder\\_ipi\\_210102.pdf](http://www.oeb.gov.on.ca/documents/backgrounder_ipi_210102.pdf)

The PWU notes that the Discussion Paper lacks consideration of the combined impact of the proposed K-factor and X-factor. The combined impact may be one that requires cost cutting beyond a level that can be compensated for through efficiency measures. These cost cuts can be expected to result in cuts in system maintenance and investment that will result in lower service safety, quality and reliability performance. This system deterioration will require LDC's to play catch up in future years possibly at higher cost given that maintenance generally costs less than rehabilitation. Having service performance requirements in place, whether codified or not, will not guard against system deterioration if the LDC does not have sufficient funds to carry out the required system maintenance and investment.

### **3.2.7 CONTINGENCIES AND MID-TERM ISSUES**

Board Staff is proposing to include a Z-factor to allow for adjustments for unusual events beyond the control of the LDC's management.

The Z-factor proposed by Board Staff in the Discussion Paper is a much-needed addition to the price cap mechanism proposed by Board Staff in the Draft Report.

Board Staff suggests that there is no need for off-ramp provisions given the varied and relatively short term of 2<sup>nd</sup> Generation IRM. In the PWU's view, the maximum term of three-years for 2<sup>nd</sup> Generation IRM is not a short term for Ontario's distribution sector, which has and continues to be subjected to major government energy policy initiatives. As an example, the pricing changes that accompany the smart metering initiative is expected to have a significant impact on consumption. This decline in consumption will have a major impact on the LDCs' revenue over the course of the Rate Plan (see section 3.2.9 below).

In the absence of off-ramp provisions, the PWU would encourage the Board to consider individual LDC's need for early rebasing in its determination of rate plan groupings (see section 3.2.10 below).

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### **3.2.8 SERVICE QUALITY**

The PWU supports Board Staff's recommendation that the Board resume its Service Quality Regulation ("SQR") review to refine the Board's SQR regime and to include the indicators and standards in the Distribution System Code ("DSC"). However, as the PWU indicated in its comments on the Draft Report, given that distribution service safety, quality and reliability is what customers are paying for in their distribution rates, it is essential that interested parties have the opportunity to address an LDC's service performance relative to the LDC's proposed rates. Therefore, despite the codification of SQR, the PWU would ask the Board to explicitly recognize the need for service performance to remain within scope in a LDC's rate proceedings.

Board Staff states that it "believes that making the SQR regime mandatory through the Distribution System Code will effectively discourage distributors from short-term reductions in maintenance expenditures and capital investments that will affect quality of service". The PWU assumes that it is the Board's authority to impose penalties related to DSC non-compliance that Board staff contemplates in making this contention. If the PWU's assumption is correct, then in the PWU's view, the Board Staff's contention is credible for LDCs that have sufficient funds to maintain system safety, quality and reliability within the Board's SQR, assuming that the penalty levels are set appropriately. However, in assessing non-compliance the Board should consider that there might be circumstances where the price cap mechanism is excessively onerous for an LDC, and results in funding shortfall for required system maintenance and investments that cannot be addressed through efficiency measures. In such circumstances, the penalty will only exacerbate the LDCs financial hardship, resulting in a downward spiral in service performance. The PWU notes that such a circumstance speaks to the risk of setting price cap mechanisms using a broad economy-wide index and in the absence of evidence on an LDC's productivity history and potential.

### **3.2.9 DETERMINATION OF RATE PLAN GROUPINGS**

Board Staff identifies the following criteria for the selection of LDCs for each of the three tranches:

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- Comparators and cohort information screening (e.g. costs and rates);
  - Urgency of cost allocation issues;
  - Prior direction in a Board decision;
  - Need and ability to implement new rate design; and
  - Financial viability and realized earnings (e.g. significant over/under)

Board Staff indicates that some form of benchmarking and/or comparators and cohorts analysis is anticipated for 3<sup>rd</sup> Generation IRM. The Board has determined that re-basing of the LDCs will happen in three tranches, which would result in three different time frames for the 3<sup>rd</sup> Generation IRM. Given that the term for 2<sup>nd</sup> Generation IRM will vary for the LDCs, the Board will need to consider whether benchmarks and/or cohorts established in 2008 would still be appropriate for LDCs entering 3<sup>rd</sup> Generation IRM in 2009 and 2010. Alternatively, the Board would need to establish benchmarks and/or cohorts for each of the three tranches of LDCs. In this case, in addition to the above criteria, the Board would need to be mindful of the subset of LDCs included in each tranche given the requirement for suitable LDC groupings in determining appropriate benchmarks and in establishing cohorts.

### **3.2.10 ALLOWANCE FOR SMART METER IMPLEMENTATION**

Board Staff is proposing an increase in 2007 of \$1.00 to the fixed distribution rate of LDCs currently working to achieve the 2007 target of 800,000 smart meter installations and \$0.30 for the remaining distributors that will meet the 2010 target for all smart meter installations. In addition to the allowances for smart meters, the PWU believes that a Smart Meter Lost Revenue Adjustment Mechanism (“SMLRAM”) is required for 2<sup>nd</sup> Generation IRM to address the impact of lower consumption related to the new pricing that will accompany the installation of smart meters on distribution throughput. The SMLRAM will ensure that the LDCs remain revenue neutral with regard to the smart metering initiative.



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### 3.2.11 LOOKING FORWARD TO 3<sup>RD</sup> GENERATION IRM

Board Staff indicates that it is working on details for the 2008, 2009 and 2010 rebasing review. Figure 2 in the Discussion Paper indicates that rebasing will be accomplished through a cost of service review and proposes the following for planning purposes:

- The review will be based on a forward test-year cost of service filing;
- Benchmarking evidence may be used as an input to the review;
- The benchmarking method may differ from the current comparators and cohorts approach; and,
- Benchmarking may be applied to the proposed costs in any forward test year as well as to costs in recent historical years.

Board Staff agrees with Dr. Lowry that the timing or periodicity of maintenance and capital replacement activities is an issue in incentive regulation. The PWU believes that this periodicity is also an issue in the use of benchmarking in a cost of service review as proposed by Board Staff in the second and fourth bullets above.

As a matter of fact, in the PWU's view, the use of benchmarking in a cost of service rebasing review while of interest in understanding an LDC's costs relatively to those of similar LDCs, should not be used to limit the LDC's revenue in the cost of service rebasing process. Rather, it is the IRM that follows the rebasing process that ought to provide the incentive for the LDC to achieve the benchmark over the term of the IRM plan. This provides the LDC with the opportunity to incorporate the benchmark into its planning process based on a reasoned approach to achieving, or move towards the benchmark, through efficiency measures. If a LDC's approved revenue is set below its revenue requirement based on a benchmarking review in the cost of service re-basing process, the lack of planning opportunity may result in unreasoned cost cutting measures that compromise service safety, quality and reliability.