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VIA *RESS* FILING AND COURIER

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

Dear Ms. Walli:

Re: Defining and Measuring Performance of Distributors and Transmitters - Draft Report of the Board on Empirical Research to Support Incentive Rate-setting for Ontario's Electricity Distributors (EB-2010-0379)

Attached please find the Power Workers' Union's submissions on the September 6, 2013 *Draft Report of the Board on Empirical Research to Support Incentive Rate-setting for Ontario's Electricity Distributors.* We hope you will find the PWU's comments useful.

The PWU is disappointed at the lack of Board consideration for cost award eligibility for the PWU's expert consultant Dr. Frank Cronin's participation in the September 11, 2013 consultation meeting. The PWU is the party in the OEB forum that constantly forwards the public interest in service quality performance. The PWU's participation and contribution in this consultation has been comprehensive and the PWU's expert consultant has forwarded robust and extensive empirical analyses in support of a complete incentive regulation ("IR") framework.

Dr. Cronin is the only expert to bring service reliability and line loss performance into the IR framework and empirically demonstrate the significance of doing so on the determination of the IR parameters. While the PWU is not normally eligible for cost awards based on criteria set out in section 3 of the OEB's *Practice Direction and Cost Awards,* in the Board's 3rd Generation IRM (EB-2007-0673), the Board made an exception and determined that the PWU was eligible for its experts' attendance and preparation of written comments given Dr. Cronin's knowledge and technical experience with regard to 1st Generation PBR. In the current consultation, the exceptional circumstance is not only Dr. Cronin's knowledge and technical experience on IR, but the comprehensive research that

he conducted that provided enhanced insight on an IR framework for the distributors.

Yours very truly,
PALIARE ROLAND ROSENBERG ROTHSTEIN LLP

Richard P. Stephenson
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Encl.

c: John Sprackett
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Doc 960303v1

EB-2010-0379

Draft Report of the Board on Empirical Research to Support Incentive Rate-setting for Ontario Electricity Distributors

Submission of the Power Workers' Union

1 INTRODUCTION

On September 6, 2013 the Ontario Energy Board ("OEB" or "Board") released for discussions in this consultation its Draft *Report of the Board on Empirical Research to Support Incentive Rate-setting for Ontario Electricity Distributors* ("Draft Report"). The Draft Report sets out the OEB's proposed policies on and approaches to incentive regulation ("IR") and benchmarking for the electricity distributors. In addition the Board posted updated research on the distributors' 2012 data prepared by Pacific Economics Group Research, LLC ("PEG"). The Board invites written comment on the Draft Report and PEG's report.

2 PWU COMMENTS

The Power Workers' Union's ("PWU") positions on approaches to establishing IR parameters and on benchmarking are as articulated in its comments on an OEB Renewed Regulatory Framework for Electricity Distributors ("RRFE") – Defining and

Measuring Performance of Distributors and Transmitters (April 20, 2012)[1] and on *Empirical Research in support of Incentive Rate Setting in Ontario* (June 27, 2013).[2]

The PWU's comments on the Board's Draft Report are based on issues raised at the September 11, 2013 consultation meeting on the proposed policies and approaches for IR and benchmarking, particularly by the PWU's expert consultant, Dr. Frank Cronin.

3 ONTARIO-SPECIFIC INFLATION FACTOR

The Draft Report proposes the use of a 2-factor IPI methodology that excludes a specific capital sub-index and that is comprised of:

> **1. The labour sub-index comprised of the average weekly earnings for workers in Ontario; and**
>
> **2. A non-labour sub-index comprised of the Canada GDP-IPI (FDD).**

In its June 27, 2013 submission the PWU supported the use of the Ontario-Utilities Average Weekly Earnings ("AWE") index for the labour sub-index. The Draft Report purports that the Ontario-utilities AWE index is inconsistent with the Board's RRFE policy. The RRFE policy is that "the component of the inflation factor designed to adjust for inflation in labour prices will be indexed by an appropriate generic and off-the-shelf labour price index (i.e. not distribution industry-specific)". The PWU notes that the Ontario-Utilities AWE index is an Ontario all utility index and is not a "distribution" industry-specific index. Hence, the PWU's proposed Ontario-utilities AWE index is not inconsistent with RRFE policy direction.

In his September 11, 2013 presentation Dr. Cronin pointed out the recent increases in the CBOE Interest Rate 10-Year T-No and the recent drop in Major US LDCs'

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[1] http://www.rds.ontarioenergyboard.ca/WEBDRAWER/WEBDRAWER.DLL/webdrawer/rec/339284/view/PWU_Comments_RRFE_0379_20120420.PDF

[2] http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/401457/view/PWU_Comments_20130627.PDF

Share Prices that Dr. Cronin suggests is reflective of the market's expected impact of increasing interest rates on the value of these companies.[3] Dr. Cronin stated:

> **We'll probably see a continuing increase in interest rates going forward. If you don't include capital specified like that in the IPI, then you're going to end up… providing insufficient top-line numbers to the LDCs.[4]**

In Dr. Cronin's view the Draft Report's proposed 2-factor IPI, which excludes a capital sub-index could be "a significant error, and it could end up being a huge disincentive to the LDCs going forward". In the PWU's view, with the major challenge of aging assets that a large number of LDCs are facing, the disincentive for capital investments would exacerbate the deleterious impact on the distributors' ability to maintain on-going service quality performance.

Dr. Cronin also provided input on an IPI approach that would result in less volatility than PEG's IPI as a result of a lower capital share and not bringing in salvage value. To ensure that the changes in the distributors' capital costs are explicitly reflected in the IPI and that IR does not create an inappropriate disincentive for distributor capital investments the PWU recommends a 3-factor IPI that includes the capital component used by Dr. Cronin that comes with less volatility than PEG's capital sub-index.

In fact, under cost of service/rate of return regulation, rates are automatically adjusted for changes in the cost of capital that the distributors do not have control over. Including a capital sub-index in the IPI accomplishes the same adjustment. Yet while the Draft Report proposes to exclude the capital sub-index from the IPI in the IR framework, it would be extraordinary if the Board were to propose leaving off adjusting the rate of return on rate base in its cost of service/rate of return regulatory framework for the next five years regardless of the scope of change in the return on common equity and/or debt rate over that period. Given the proposed 5-year IR term the impact of excluding the capital sub-index from the IPI is much more problematic than if the IR term were shorter because of the longer period between rate re-basing.

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[3] EB-2010-0379. Empirical Work in Support of Incentive Rate Setting in Ontario for Electricity Distributors Stakeholder Conference. Transcript Volume 3. September 11, 2013. Page 35, Lines 26-28.

[4] EB-2010-0379. Empirical Work in Support of Incentive Rate Setting in Ontario for Electricity Distributors Stakeholder Conference. Volume 3. September 11, 2013. Page 36, Lines 10-13.

4 LEGACY ISSUES - IMPACT OF OM&A BENCHMARKING

In his presentation Dr. Cronin provided evidence on the incentive created by OM&A-Benchmarking i.e. the increased allocation of costs to capital. The first row in slide 9 compares the ratio of OM&A to Capital ("K") costs for all of the Ontario LDCs for 2000 and 2010. The ratio of OM&A to Capital ("OM&A/K') declined from 130 per cent in 2000 to 75 per cent in 2010. While OM&A increased only *147 percent* between 2000 and 2010, (from $920 million to $1,351 million), in the same time period Capital increased *254 per cent* (from $710 million in 2000 to $1,805 in 2010). Further, on aggregate, labour capitalization increased from 10 per cent to 35 per cent. Dr. Cronin points out that as a result, less of Capital Additions is comprised of hardware and higher amounts of capital additions will be required than previously to remedy degradation of network reliability.[5]

In his September 11, 2013 presentation on behalf of the School Energy Coalition ("SEC") Mr. Jay Shepherd noted a large increase in capital additions (e.g. increase in ratio of Capital Additions to Depreciation) in 2005-2011. This is consistent with Dr. Cronin's observation on increased capitalization.

Analysis on the percent of labour capitalization provided in the PWU's April 20, 2012 RRFE submission[6] showed a massive shift of Labour from OM&A to Capital between 2001 and 2010. In 2001 the distributors' average rate of labour capitalization was 10 per cent with a maximum of 46.2 per cent. In 2010 the average had increased to 34.4 per cent and the maximum to 71 per cent. The rate of Overhead capitalization also increased in this time period: from 8 per cent to 12 per cent. Dr. Cronin concludes that with the change in composition of capital additions a given dollar expenditure in 2010 even if adjusted for inflation is not comparable with historical

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5 http://www.rds.ontarioenergyboard.ca/WEBDRAWER/WEBDRAWER.DLL/webdrawer/rec/339284/view/PWU_Comments_RRFE_0379_20120420.PDF

6 http://www.rds.ontarioenergyboard.ca/WEBDRAWER/WEBDRAWER.DLL/webdrawer/rec/339284/view/PWU_Comments_RRFE_0379_20120420.PDF Page 12.

capital expenditure because it put in less hardware and more Labour and/or Overhead.

On slide 10 of his presentation Dr. Cronin showed the large diversity in 2011 Capital Additions shares amongst selected LDCs. For most of these LDCs Labour and Overhead share was close to or greater than the Equipment and Materials share.

With the RRFE policy for Total Cost benchmarking, going forward the perverse incentive created by the OM&A benchmarking will be removed. However, as Dr. Cronin noted, the legacy issues (e.g. impact of OM&A benchmarking) need to be recognized and carried forward into the future IR frameworks.

In the PWU's view, in doing so the Board must be cautious not to penalize the distributors for legacy issues that are a result of the Boards past IR incentives. Doing so is likely to create further perverse incentives and legacy issues and take the Board yet farther from its objective of protecting consumers' interest with respect to reliability and quality of electricity service.

SEC's proposed solutions to the increase in capital additions include the reduction of the basic IRM increase (e.g. increase in productivity factor; increase in stretch factor; applying IRM escalator to percentage of costs) and to limit the Incremental Capital Module (e.g. increase the threshold to industry average; limit eligible capital spending). However, SEC's proposed solutions were made independent of the legacy issues created by the Board's OM&A benchmarking brought to light by Dr. Cronin and penalize the distributors for the legacy issues. The PWU submits that in recognizing the legacy issues, the Board ought not to consider SEC's proposed solutions.

5 TOTAL FACTOR PRODUCTIVITY

The Draft Report states that:

> **The Board acknowledges that achieved productivity growth in the Ontario distribution sector has slowed in recent years. However, the Board does not believe it appropriate for its regulation to project and through rate-setting entrench a decline in productivity into the future. The productivity component of the X-factor is intended to be the external benchmark which all**

distributors are expected to achieve. Furthermore, the productivity factor is used in the rate-setting formula as an offset to inflation. Setting a productivity benchmark for the industry that would not encourage productivity gains is counter to the Board's policy direction – doing so would be counter to facilitating a culture of continuous improvement. As a consequence, the Board has determined that where the estimate of achieved long-run Industry TFP is negative, the productivity factor used in the rate-adjustment formula to set rates should be set to zero. The Board acknowledges that achieved Industry TFP may be negative due to unforeseen events and/or situations in which costs may be incurred with no corresponding increase in output. However, rate setting tools exist in the Board's Price Cap IR framework to deal with these circumstances (i.e., cost of service rebasing at start of term; and Off-ramp; Z-factor, LRAM, deferral and variance to deal with Government policy directives, and the ability to apply for an Incremental Capital Module during term).

Accordingly, the Board has determined that the appropriate value for the productivity factor (Industry TFP) for Price Cap IR is zero.

The Draft Report proposes policy that would set the productivity factor at zero any time the achieved long-run industry TFP is negative because the Board believes that setting a negative productivity factor would not encourage efficiency gains.

The PWU submits that depending on the circumstance, setting a negative productivity factor when the achieved long-run industry TFP is negative may or may not encourage efficiency gains. As an example, where the average annual long-run industry TFP is -1.0 per cent and TFP for the three most recent years is -2.0 per cent the productivity factor at -1.0 per cent could encourage the distributors to seek, on average, efficiency gains of 1.0 per cent. This is because the annual IR adjustment would fall 1 per cent short of recent costs.

In this example, setting the productivity factor at zero could encourage the distributors to seek efficiency gains of 2 per cent per year over the five-year IR term since the IR adjustment would fall 2 per cent short of recent costs. The efficiency gains required for the utility to maintain financial health when the productivity is set at zero is aggressive and is therefore likely to result in lower financial health and/or cost cuts that result in reduced investment in on-going service reliability.

On the other hand, there are circumstances when negative productivity factors may not encourage efficiency gains. For example, where the average annual long-run industry TFP is -2.0 per cent and -1.0 per cent for the most recent three years, setting the productivity factor at - 2.0 per cent could on average provide for a drop of

1.0 per cent in efficiency. In this example, setting the productivity factor at zero could provide for a drop in efficiency of 2 per cent.

Hence, in setting the productivity factor, regardless of whether the long-term TFP is negative or positive, it is necessary to factor in the historic TFP trend and the circumstances that lead to the trend. Dr. Cronin raises questions that the Board should address on the historic negative TFP trend:

> **-- when you look at the data for the LDCs, there seemed to be over a majority that had negative growth. So more like 60 percent. So you had 60 percent with negative growth, you had about a fifth with growth around zero, and then a fifth with more positive, stronger growth and productivity, and we think it would be useful for the Board to understand why there was this difference and then build results of that information into the incentive structure.**[7]

Policy should therefore ensure that the historic TFP trend and the basis for that trend are analyzed and factored into the determination of the productivity factor and avoid broad policy that would preclude consideration of critical information.

6 SERVICE RELIABILITY

The Draft Report's proposals constitute a one-sided and incomplete IR framework that is focused on cost performance without consideration of service reliability performance.

To date the Board has not provided incentives for service reliability performance in its IR framework and the fundamental link between cost and service reliability performance therefore has been ignored. Analysis of service reliability information for 16 Ontario distributors indicates a significant decline in service reliability performance over the 2007/2008 to 2011 period relative to 2005-2007.[8] The paucity in the Board's IR framework can be expected to have significantly contributed to this outcome.

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[7] EB-2010-0379. Empirical Work in Support of Incentive Rate Setting in Ontario for Electricity Distributors Stakeholder Conference. Transcript Volume 3. September 11, 2013. Page 15 Lines 5-13.
[8] http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/PWU_submission_20130614.pdf

The Draft Report does not respond to the PWU's submissions on the need to factor in service reliability performance in TFP analysis. With regard to incorporating service reliability performance in benchmarking it states:

> **Future work will involve comprehensive benchmarking (i.e., model(s) that combine standards for customer service, including distribution system reliability, and cost performance).**

Despite the results of the Pollara surveys conducted for the Board that indicate the high value that customers place on service reliability,[9] the Draft Report does not recognize and address the impact of its lack of consideration of service reliability performance and incentives in the IR framework.

Dr. Cronin provided evidence on the significant impact of service reliability performance that incorporates customer value on TFP. In doing so he illustrated how customer valuation of service reliability performance can be incorporated into TFP. [10]

While data issues may impact the confidence in the precision of the level of service reliability performance reported, it is doubtful that the data issues would have significantly contributed to the substantial performance deterioration trends observed.

It is time for the Board to recognize the urgent need for effective service reliability regulation in both its cost of service and IR frameworks. In addition to setting standards this requires service reliability performance incentives and consideration of service reliability performance based on customer value in TFP analysis and benchmarking. The PWU is of the view that the implementation of robust service reliability regulation will help sort out data issues expeditiously as distributors accept that service reliability regulation is in effect.

[9] http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/RRFE_PWU_Presentation_20130911.pdf slide 15

[10] http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/PWU_submission_20130614.pdf

7 LINE LOSSES

The Draft Report does not address the issue of line losses, an issue that has a substantial impact on consumers' electricity bills.

Dr. Cronin conducted analysis that illustrates the significant impact of line losses on TFP.[11] He also provided evidence on the effectiveness of incentives in reducing line losses.

Line loss management should be included in the IR framework to proactively incent the distributors to find the optimal level of line losses that provides the right balance of losses, capital and O&M for their circumstances.[12] To do otherwise would be a non-green outcome.

8 BENCHMARKING

The Draft Report states that the Board has determined that PEG's econometric model will be used for benchmarking the distributors' cost performance and assigning stretch factors.

The PWU identified significant data issues implicit in PEG's econometric analysis that compromises PEG's benchmarking outcome.[13] Further, the PWU proposed Data Envelopment Analysis ("DEA") as a simpler alternative to the econometric approach that avoids some of the data issues and forwarded that the Board use DEA to test the reasonableness of PEG's model. Dr. Cronin conducted illustrative DEA for seven distributors and found very large differences between the DEA and PEG's results.[14] Compared to the DEA estimates, PEG's relative efficiency is understated

[11] http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/PWU_submission_20130614.pdf

[12] EB-2010-0379. Empirical Work in Support of Incentive Rate Setting in Ontario for Electricity Distributors Stakeholder Conference. Transcript Volume 3. September 11, 2013. Page 29 Lines 23-25.

[13] http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/401457/view/PWU_Comments_20130627.PDF

[14] http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/PWU_submission_20130614.pdf

by 39 per cent while PEG's relative inefficiency is overstated by 40 per cent. The response in the Draft Report is "DEA may be considered in the future". The possible consideration of DEA in the future does not address the fairness issues related to PEG's model for the coming IR plan.

At the September 11, 2013 meeting a table titled "Comparison of Econometric Rankings between PEG, PSE, and the EDA" was distributed. While the table indicates that the differences in rankings between the three analytical sources are generally not substantially different, the PWU would note that the three analytical approaches used the same date set that includes PEG's estimated data. Dr. Cronin's data set on the other hand differs from PEG's data set in that it consists entirely of the original data filed by the distributors under the Board's Reporting and Record Keeping Requirements.

The Draft Report does not address the incentives that result from setting flawed benchmarks. The PWU submits that given the legacy issues related to the OM&A benchmarking, it behooves the Board to consider the incentives created by flawed total cost benchmarking and to take steps to avoid creating perverse incentives.

Further, benchmarking needs to recognize the legacy issues to ensure that distributors are not penalized for having reacted to the incentive created by O&MA benchmarking in the past.

All of which is respectfully submitted.