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EB-2013-0196 / 0187 / 0198

***EVIDENCE OF PAULA ZARNETT***

***ON BEHALF OF***

***ESSEX POWERLINES CORPORATION,  
BLUEWATER POWER DISTRIBUTION  
CORPORATION,***

***AND NIAGARA-ON-THE-LAKE HYDRO***

***In the Matter of***

***Application by Hydro One Inc. EB-2013-0196***

***Application by Norfolk Power Inc. EB-2013-0187***

***Application by Hydro One Networks Inc. EB-2013-0198***



***Before the Ontario Energy Board  
February 26, 2013***

**BDR**

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## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>2</b>
INTRODUCTION AND SCOPE.....	2
CONCLUSIONS.....	2
<i>Operating and Capital Expenditure Costs.....</i>	<i>2</i>
<b>1 INTRODUCTION AND PURPOSE OF THE REPORT .....</b>	<b>6</b>
<b>2 COST STRUCTURES OF HONI AND NPDI.....</b>	<b>8</b>
2.1 CONCEPTUAL OVERVIEW.....	8
2.2 IMPORTANT BUSINESS CONDITIONS AND OUTPUTS THAT AFFECT THE COSTS TO SERVE NPDI’S CUSTOMERS .....	9
2.3 APPLICANTS’ EVIDENCE AS TO SPECIFIC BENEFITS AVAILABLE FROM THE TRANSACTION.....	10
2.3.1 <i>Local Area Operating and Capital Savings Resulting from a More         Efficient Distribution System due to the Elimination of an Artificial Electrical         Border (i.e. Benefits from Contiguity) .....</i>	<i>10</i>
2.3.2 <i>Savings due to the elimination of redundant administrative and         processing functions (i.e., back office savings or scale efficiencies).....</i>	<i>13</i>
2.3.3 <i>Savings due to lower financing costs.....</i>	<i>16</i>
2.4 SERVICE QUALITY .....	18
<b>3 THE ONTARIO LDC M&amp;A “MARKET”.....</b>	<b>20</b>
3.1 ISSUE CONTEXT .....	20
3.2 HISTORY OF RECENT TRANSACTIONS AND PREMIUMS.....	20
3.3 ABILITY OF PURCHASER TO FUND A HIGH PREMIUM TRANSACTION.....	22
3.4 ASSESSMENT AS TO EFFECT ON THE POTENTIAL FOR COMPETITION IN LDC CONSOLIDATION .....	23
<b>4 COMMENT ON ISSUES RELATED TO RATE HARMONIZATION AND TRANSFER OF COST.....</b>	<b>23</b>
<b>APPENDIX A – COMPLIANCE WITH SECTION 13A.03, ONTARIO ENERGY BOARD RULES OF PRACTICE AND PROCEDURE .....</b>	<b>27</b>

## **EXECUTIVE SUMMARY**

### ***Introduction and Scope***

If the Board approves the applications in the proceeding, HONI will acquire NPDI and partially integrate it with the operation of HONI. NPDI customers will receive the benefit of a 1% reduction relative to 2012 base electricity rates, which reduced rates, if approved, will remain frozen in effect for five years. As with all similar applications, the Board must be satisfied that no harm results to customers in terms of the factors identified in the Board's objectives.

EBN has intervened, and requested BDR to:

- Review evidence as to cost structures to determine whether they are likely to increase or decrease as a result of the intended transaction;
- To comment on non-financial impacts, such as quality of service; and
- To consider and comment on whether the purchase price is set at a level that would create a financial burden on the acquiring utility; and
- To develop and present a possible scenario for estimation of the impacts of harmonization of rates, once the proposed rate freeze period expires.

To carry out the assignment, BDR has reviewed the evidence filed in this proceeding and other information in the public domain, evaluated that evidence and drawn conclusions based on its experience in the electricity sector and in the capital markets sector. In reviewing the information, BDR considered whether it was internally consistent, and also whether it was consistent with other information available to BDR about business in the electricity sector in Ontario.

### ***Conclusions***

#### **Operating and Capital Expenditure Costs**

With regard to operations and capital, it is BDR's conclusion that the Applicants have not demonstrated any changes likely to produce reductions in operations direct staffing, vehicles, or facility costs that flow from the transaction.

Furthermore, the 2012 Statistical Yearbook shows that average OM&A per customer for HONI was \$439.77 per customer as compared with \$333.43 per customer for NPDI. In HONI's response to EBN Interrogatory 13, they claim that the appropriate comparative figure is lower because only costs allocated to urban and medium density customers should be considered, and go further to say that on average, there will be lower costs than HONI's average to serve NPDI's southern Ontario distribution territory. No analysis has been provided to support this statement, and it is noted that HONI has not provided information as to which of its density classes are appropriate to NPDI customers. There is thus no evidence that HONI can achieve a lower

operating cost per customer than NPDI has achieved, and it is noted that NPDI's cost levels appear from the analysis of the PEG report, to be relatively efficient when its business conditions are taken into account.

With regard to capital, the Applicants have forecast lower capital expenditures, without explaining or supporting that the capital expenditure reductions reflect the achievement of system improvements and sustainment as a direct result of the transaction. The Applicants have not provided any asset condition assessment or other evidence that the capital expenditure program planned by NPDI management could be reduced without adverse impacts on the ability to provide reliable service to consumers. In the absence of such support, it is of concern that the reductions are intended to improve cash flow to the shareholder, while potentially causing harm to customers in terms of reliability and/or higher costs in the future. This is occurring at a time when the Board is encouraging LDCs to manage their assets better, and to reinvest prudently in the expansion, modernization and sustainment of their distribution systems.

***BDR therefore concludes that the Applicants have not shown that any significant reductions in costs related to field operations and capital work can be attributed to the transaction, and that potential harm may occur as a result of the planned capital program reductions.***

With regard to administrative and processing functions, HONI has filed plans indicating that it intends to eliminate 30 positions in NPDI, and fulfill the functions using HONI staff, without increasing HONI staff levels relative to levels planned without consideration of the transaction. No information has been provided to show that the costs are truly fixed, so that the addition of customers and distribution system will drive no incremental levels of activity and cost. BDR then reviewed each utility administrative cost function, and determined that under the scenario of separate rates, accounts, etc., many of the activities carried out today in NPDI would continue to need to be carried out. BDR concluded that resources would continue to be necessary to carry out those functions, and that these would be incremental to HONI's status-quo complement, unless that complement is not at the most efficient level (for the status quo). If incremental costs are incurred within HONI to serve NPDI, and not allocated to NPDI, this represents a harm to legacy HONI customers. ***BDR has drawn the conclusion that the Applicants' savings estimate is overstated, and that the benefits that are achievable would not be achieved immediately.***

Financing costs represent the final element of the relevant cost structures. HONI has claimed, but not demonstrated through evidence, that it can provide cost reductions to customers through lower interest rates. As a stand-alone municipally-owned LDC, NPDI can assess cost-effective financing through Infrastructure Ontario. Infrastructure Ontario funding is not available to HONI.

Based on information found in the public domain, it appears that financing rates through Infrastructure Ontario are below the rates that HONI has recently obtained, for loans of similar term. Therefore, by removing accessibility to a less costly source of debt, the transaction increases the cost structure of NPDI and creates a harm to the customers.

Furthermore, even if HONI can provide funding at a reduced cost, it has not made any commitment that it will assume and re-finance NPDI's debt in order to do so.

***BDR concludes that the Applicants have not supported their claim that lower costs of debt are a certain benefit of the transaction, both because NPDI can and has already obtained cost effective debt capital from Infrastructure Ontario, and because there has been no commitment that Hydro One will refinance the higher-cost debt assumed in the transaction.***

***Even if Hydro One's costs of capital could be shown to be significantly lower today (for which there is no evidence), there is no evidence that this will continue into the future, when its cost of capital may be impacted both by increasing demands for borrowing to fund infrastructure and by the effects of having borrowed to fund the premiums of acquisition which may or may not be repaid to the shareholder through cost efficiencies.***

Non-financial impacts on customers, such as quality of service

***With regard to Service Quality, BDR has concluded that information from public sources provides a basis for concern that NPDI customers may experience a decline in levels of service with HONI. This information has not been countered by evidence from the Applicants. Based on the Service Quality Indicators (SQIs) reported by HONI in the 2012 Statistical Yearbook, the overall standard of service by HONI for reliability and emergency response is lower than the standard of service of NPDI. There is no evidence that HONI plans to maintain the historic local service levels in its service to NPDI customers. If HONI allows the level of service to deteriorate to the levels that it maintains for its legacy customers, the NPDI customers will be harmed by the transaction.***

Creation of a financial burden on the acquiring utility

The premium that Hydro One proposes to pay for NPDI is significantly higher than the levels at which LDCs were able to achieve transactions historically. As indicated, there is cause to be concerned that the additional premium will not be recovered for the shareholder through savings gained before the rates are rebased. Hydro One is proposing to extend its credit for acquisitions at the same time that significant funds are needed for investment in the distribution and transmission systems. The Applicants have not provided any information to show that the excess premiums

involved in this transaction, aggregated with the premiums from other transactions in the works or planned, will not affect the capacity of Hydro One to borrow, or increase its cost to do so.

Furthermore, if Hydro One establishes the level of premium paid for NPDI as the standard for acquisitions of Ontario LDCs, some municipal LDCs may decide to compete for acquisitions at these prices. These smaller entities will more quickly reach levels at which their ability to borrow is impacted negatively. As most LDCs have need of higher levels of distribution system investment now, consumers will clearly be harmed if the investments need to be postponed, or incur a higher cost of capital in order to proceed.

### **Impact of Rates on Harmonization**

Using the 2019 rates proposed by HONI in its 2015 Custom IR application, we attempted to quantify the customer impacts of rate harmonization after five years of a freeze of NPDI rates at 2012 base less 1%. The comparison was made separately for each density classification in the residential class, and for the and UGe GSe class of HONI compared with NPDI's GS<50 kW class.

On this basis, an NPDI residential customer would experience a 10% decrease in distribution charges if transitioning to HONI's UR rate; however the customer would receive an increase of 42% if assigned to R1, and a 238% increase if assigned to R2. A general service customer transitioning from NPDI's rate to HONI's UGe or GSe rate would receive an increase of 62% or 218% respectively on this basis. These changes do not include the higher commodity charges each NPDI customer will face due to HONI's higher line losses.

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## **1 INTRODUCTION AND PURPOSE OF THE REPORT**

This evidence is being filed with the Ontario Energy Board (“OEB” or “Board”) on behalf of Essex Powerlines Corporation, Bluewater Power Distribution Corporation, and Niagara-on-the-Lake Hydro (together “EBN”) in the matter of applications filed by Hydro One Networks Inc. (“HONI”) and Norfolk Power Distribution Inc. (“NPDI”), both licensed electricity distributors, and Hydro One Inc. (“Hydro One”), HONI’s parent company (together the “Applicants”), on April 26, 2013 and subsequently amended.

The applications, as clarified by the Applicants in January, 2014 and set out by the Board at page 2 of its Decision and Order and Procedural Order No. 8 dated January 24, 2014, are as follows:

- “1. an application by Hydro One for leave to purchase all of the issued and outstanding shares of Norfolk Power Inc. under section 86(2)(b) of the Act;
2. an application by NPDI seeking to include a rate rider in the 2013 Ontario Energy Board approved rate schedule of NPDI to give effect to a 1% reduction relative to 2012 base electricity delivery rates (exclusive of rate riders) under section 78 of the Act;
3. an application by NPDI for leave to transfer its distribution system to HONI under section 86(1)(a) of the Act; and
4. an application by NPDI for leave to transfer/assign its electricity distribution licence and rate order to HONI under section 18 of the Act.”

EBN has intervened in these applications, stating as its concern that the “no harm” test has not been satisfied, and, along with other parties, submitted interrogatories intended to compel disclosure from the Applicants of additional information regarding impact of the transaction on consumer rates and impact of the purchase price on consumers, and on the efficiency and cost-competitiveness of the industry as a whole.

The Board, in its January 24, 2014 Decision and Order and Procedural Order No. 8, at pages 4, 5 and 6, defined its interest in the information to be provided as follows:

“Therefore, in applying the “no harm” test, it is appropriate for the Board to assess the cost structures which will be introduced as a result of the transfer of NPDI’s distribution system and associated licence to HONI in comparison to the cost structures underpin NPDI’s current rates. A downward impact on the entities’ cost structures would tend to decrease rates, whereas an upward impact on the entities’ cost structures would tend to increase rates. This will occur regardless of whether rate harmonization is ultimately sought.

...In applying the “no harm” test, the Board will consider whether future revenue requirements will unduly burden rate payers.

...The application of the Board’s “no harm” test is intended to ascertain if the transaction will have an adverse effect in terms of the factors identified in the Board’s objectives. The Board intends to do so by comparing prospective cost structures to existing cost structures and in consideration of non-financial impacts as well.”

EBN requested BDR NorthAmerica Inc. (“BDR”), based on its experience in distribution cost analysis, rates and revenue requirements, and LDC mergers and acquisitions, to review the material as to cost structures that is on the record in this proceeding and available through other public sources including the regulatory record in other proceedings, and provide an opinion as to whether this information indicates that the future cost structures of the entities will increase or decrease as a result of the intended transaction. EBN also requested BDR to comment on any information available as to whether the quality of service to consumers was likely to increase or decrease (non-financial impacts).

The Board also indicated that it would consider the issue of “whether the purchase price is set at a level that would create a financial burden on the acquiring utility”. To inform the Board, BDR has provided a summary of purchase and premiums paid in prior LDC acquisition transactions in Ontario. It is of concern to EBN that the size of HONI and the scope of its access to credit make it possible for HONI to finance transactions at excessive prices for these reasons:

- If HONI’s offers are such that other potential consolidators withdraw from the market, it will become impossible for further consolidation in the industry to occur through mergers and acquisitions other than with HONI, even though other possible consolidations might provide better cost efficiencies than a transaction with HONI;
- While the impact of the acquisition of NPDI alone will not be sufficient to impact HONI’s future cost of capital, there will come a point at which the aggregate effect of continued LDC acquisitions by HONI at above-market premiums will increase its cost of capital to the detriment of all HONI consumers, both currently existing and acquired.
- If, rather than withdrawing from competition with HONI, other LDCs pursue acquisitions at prices that would create a financial burden for those LDCs.

Thus, while the Board has said its focus is on the transfer of *NPDI’s* distribution system and licence, and the costs that underpin *NPDI’s* rates [emphasis added], the potential exists for a long term negative effect on the efficiency of the industry and the costs to consumers of a continued program of acquisitions by HONI at prices so considerably above what any other purchaser might be expected to pay.

The report therefore consists of three parts. In section 2, information as to cost structures is reviewed. In section 3, the issue of financing and the competitive market for LDC mergers and acquisitions is addressed, with a view to drawing conclusions about the potential financial burden on the proposed acquirer in this transaction and in transactions that may be expected to follow. In section 4, a computation is presented to estimate the impacts on the bills of NPDI customers what would result from harmonization with HONI rates, once the proposed five-year freeze at reduced rates has expired.

## **2 COST STRUCTURES OF HONI AND NPDI**

### **2.1 *Conceptual Overview***

This portion of the analysis is intended to draw on filed and other public information in order to assess whether such information supports a conclusion as to whether aggregate future cost structures of HONI and NPDI will increase or decrease as a result of the proposed transaction.

For clarity, it is BDR's view that only changes that result from the proposed transaction should be considered in the "no harm" test. For example, if certain cost efficiencies that are planned following the transaction would otherwise have been achieved or achievable by the acquired LDC on a stand-alone basis (i.e. if no transaction takes place), then these should not be considered as net benefits of the transaction. Furthermore, it is possible, depending on the circumstances of an individual LDC, that existing arrangements creating synergies or cost efficiencies before the transaction will be lost as a result of the transaction. For example, if an LDC shares resources with its municipal shareholder (for example, shared billing of electricity and water), and thereby reduces costs to the electricity ratepayer, these reductions may be lost when the LDC is acquired and transitions to the billing system of the acquiring LDC. Similarly, benefits of synergies with affiliates or through joint action consortia may be lost. If this is the case, then in our view it is the net effect that should be considered.

While the evidence filed by the Applicants in this case points from time to time to the conclusions of the Sector Review Panel to the effect that productivity gains are generally expected from LDC consolidation<sup>1</sup>, it is not necessarily true that a specific proposed merger or acquisition will produce cost efficiencies or produce them in any specific timeframe. Therefore each specific transaction proposal should, in our view, be assessed on its individual merits and not accepted merely because there is a general consensus in favour of consolidation.

Since only the Applicants have access to the detailed internal information and plans that should be gathered and developed in connection with the proposed transaction,

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<sup>1</sup> For example, in Exhibit I Tab 5 Schedule 20 Page 1 of 2

the other participants in this proceeding are restricted to reviewing what has and has not been provided by them as evidence in this proceeding, and any other information in the public domain. BDR has applied these two tests to the evidence filed:

- whether it appears to be internally consistent; and
- whether it appears consistent with what we know of the way business is generally carried on by electricity distributors. Here we drew on our own sector experience, and our consultation with senior management with EBN for facts and experience related to current operations of LDCs.

## ***2.2 Important Business Conditions and Outputs that Affect the Costs to Serve NPDI's Customers***

According to NPDI's most recent cost of service application<sup>2</sup>, we obtained the following data, which we believe would not have changed significantly enough since that time to invalidate their use to draw conclusions about the nature of NPDI's customer base, service territory and operations:

- The LDC serves approximately 19,000 customers
- The service territory is comprised of 144 square kilometres of high density urban area plus 549 square kilometres of low density rural for a total of 693 square kilometers; about 80% of the service territory is therefore rural.
- NPDI's population density (customers per square kilometre) is 27.4 which makes it one of only 8 LDCs in the province with a population density of less than 30 customers per square kilometre (as per the 2009 OEB Yearbook of Electricity Distributors).
- NPDI has a diverse distribution system with a large number of poles (11,020) and transformers (4,469) consistent with low density and multiple distribution voltages (4.16 kV, 8.32 kV and 27.6 kV). On this basis, each pole serves on average 1.7 customers, and each transformer 4.3 customers.
- Its system in 2011 included 765 km of lines, of which 85% were overhead. As reported the following year in the Board's 2012 Electricity Distribution Yearbook<sup>3</sup> the figure was 779 km, with a consistent percentage (about 85%) overhead.

Variables such as customers and service territory were used by the Pacific Economics Group ("PEG") to create a model to evaluate and compare the efficiencies of LDCs in Ontario (the "PEG Report")<sup>4</sup>. Given a reasonable range of values for input variables,

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<sup>2</sup> Norfolk Power Distribution Inc., EB-2011-0272, Exhibit 2, Tab 1, Schedule 1, Page 2 of 9, Filed: August 26, 2011

<sup>3</sup> Obtained in MS Excel form from the Board's website as 2012\_Electricity\_Yearbook\_excel.xls.

<sup>4</sup> Report of Pacific Economics Group Research, LLC, Empirical Research in Support of Incentive Rate Setting in Ontario: Report to the Ontario Energy Board, May 2013

the PEG methodology evaluates distributor efficiency by comparing actual cost results with the results predicted by the model. The analysis ranked NPDI 31<sup>st</sup> of 73 Ontario LDCs, with a value of -4.8%, where negative values indicate a level of cost below the predicted value (i.e. relatively more efficient). While any LDC can theoretically become more efficient, and the regulatory regime is structured to provide incentive for them to do so, by this measure NPDI is a relatively efficient LDC, when its business conditions, especially its relatively low density customer distribution and large rural service territory, are taken into account.

We can therefore assume that very significant reductions in the cost of service to NPDI, if they can be achieved, must come from specifically identified changes in the way business would be carried on following the acquisition. We have therefore reviewed the evidence and considered whether a specific cost reduction plan has been identified, and if so, whether the elements appear to be (a) internally consistent; and (b) consistent with what experienced industry professionals understand as the typical manner in which Ontario LDCs do business.

### ***2.3 Applicants' Evidence as to Specific Benefits Available from the Transaction***

For the convenience of the Board and all parties, these comments are organized consistent with the Applicants' high-level categorization of savings opportunities, as set out in Exhibit I Tab 2 Schedule 2.

#### **2.3.1 Local Area Operating and Capital Savings Resulting from a More Efficient Distribution System due to the Elimination of an Artificial Electrical Border (i.e. Benefits from Contiguity)**

In setting out how they expect efficiencies to be achieved from contiguity, the Applicants say:

Specific to NPDI, Hydro One has an operating centre located less than 2 km from the NPDI operating centre. Hydro One crews travel the same roads and drive by the same facilities as the existing line crews from NPDI. Every day staff in the Hydro One Field Business Centre in Dundas answer calls from local businesses and customers for operational services within the area of Norfolk County served by Hydro One. NPDI has customer service representatives that carry out similar functions for their neighbouring customers within Norfolk County. Rationalizing these functions over a larger service area will yield efficiency savings.”<sup>5</sup>

This statement conveys the impression that redundancies in the resources for field activities (bases of operation, number of staff, vehicles and equipment) will be a source of significant cost reductions following the proposed transaction. However, the transaction will not reduce the major cost drivers, which are number of customers,

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<sup>5</sup> Exhibit I Tab 2 Schedule 2 Page 5 of 8

connections, the system itself (number of poles and transformers, length of lines, etc.) and the events and plans that precipitate activities in the field. LDCs have achieved and can continue to achieve some efficiencies in this aspect of their business with improvements in communications to the field, better dispatch processes, and direct entry of data by field staff to work management systems. However, the Applicants have not identified that HONI brings to the transaction any specific systems that will create efficiencies, or more importantly, that any efficiencies available in this regard could not equally be achieved by NPDI on a stand-alone basis.

In fact, the evidence suggests that field staff levels are planned to remain close to current levels. Exhibit I Tab 5 Schedule 26, Figure 1 tells us that the number of outside staff will be reduced only by 2, from 15 to 13, and that the change in compensation level for these staff (from current NPDI pay rates to HONI rates) will mean higher total costs for the function, despite the reduction in number of positions. If the field staff complement remains approximately the same, it is not clear that there is a basis to assume, as suggested in Exhibit I Tab 2 Schedule 2 that “vehicle fleet” will be an important area for cost reduction. While one would anticipate the possibility that certain specialized equipment could be shared, no evidence has been provided of a plan to do so, perhaps because the two LDCs have already, separately or jointly, optimized this component of their costs.

The paragraph quoted above also suggests that there are redundant buildings and facilities that could be removed from the future cost structure. However, the evidence addresses only one facility closure, and that is the planned move of HONI’s Dundas Field Business Centre from Hamilton to the Town of Simcoe<sup>6</sup>. The question sought to obtain an estimate of the “impact” of the move, and was answered to the effect that there was no “impact” to the change in location (presumably on service, rather than on cost) since it is not a service centre and its effectiveness is not dependent on geography.

In the February 10, 2014 update to this Exhibit, the Applicants state that \$60,000 in rent would be avoided by utilizing the space in the Town of Simcoe, which reduction is included as a savings in the operation of NPDI and neutral to HONI. However, no proof has been offered that a move from the present Hamilton location is required, or that, if a move is required, no other building already owned by HONI could be utilized so as to avoid rent. In our view, therefore, there is no evidence that avoidance of a cost related to building use is dependent on HONI’s acquisition of NPDI.

With regard to capital expenditures, the Applicants have projected significant cost reductions commencing immediately in all 3 scenarios at Exhibit I Tab 2 Schedule 2 Page 7 of 8 in the HONI scenarios as compared with the NPDI scenarios (i.e. HONI

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<sup>6</sup> Exhibit I Tab 1 Schedule 4

is proposing capital spending reductions in the range of \$1.5 to \$2 million annually). In the October 25, 2013, the Applicants refused to answer as to the amount of capital spending in NPDI, as the rates would be lowered and frozen<sup>7</sup>. As a result, the scenarios are the only information provided by the Applicants as to the proposed differences in capital expenditures that they are claiming as benefits of the transaction, despite the efforts of EBN to obtain further information through interrogatories. No asset condition assessment or other detailed review has been provided to satisfy the Board and parties that the planned level of capital spending is adequate to maintain the quality of service to consumers.

In the absence of any explanation from the Applicants, BDR considered the possible reasons why HONI's forecast of capital expenditure might be lower than the capital expenditure plan of NPDI's management. One possible reason is that HONI expects it can deliver the same capital programs planned by NPDI while incurring significantly lower costs. However, HONI has not offered this as an explanation, or provided any evidence that HONI is a more cost efficient constructor than NPDI. The other possible explanation for the lower HONI capital expenditure scenarios is that HONI plans to postpone or cancel specific projects that NPDI had planned to implement. Any management can postpone or cancel a capital project, and NPDI's management could, on a stand-alone basis, have reduced its capital program if they were prepared to live with any consequences in terms of reliability or future costs. Therefore in our view, a reduced capital program is not a cost saving related to the transaction, unless it can be shown that the transaction offered an alternative that would achieve the required result at lower cost. No evidence has been filed to show that the capital expenditure reductions reflect the achievement of system improvements as a direct result of the transaction.

If the capital expenditure reductions are in fact not related to either of these possible explanations, then the situation is simply that HONI has a different opinion of the necessary level of capital level expenditures than NPDI's management. No evidence has been provided as to the review process that HONI carried out to determine the needed level of capital expenditures, or which if any specific projects can prudently be cancelled or postponed. If the capital project being postponed or cancelled are in fact necessary projects, this may result in negative effects on customers, including reduction in reliability and/or higher costs in the future, and cost reductions could not be considered as a saving or benefit.

HONI has not offered any proof that the reduced capital expenditure program constitutes a "saving" (i.e. that it meets the needs of customers for reliable supply at a reduced cost). Until rates are rebased, a reduction in capital expenditures from planned levels provides no benefit to customers, while resulting reductions in service quality or future cost increases resulting from deferral of needed projects can create harm to customers.

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<sup>7</sup> Exhibit I Tab 5 Schedule 2.

***BDR therefore concludes that the Applicants have not shown that any significant reductions in costs related to field operations. The planned reductions in capital work have not been shown to be prudent, and may be the source of harm to customers.***

**2.3.2 Savings due to the elimination of redundant administrative and processing functions (i.e., back office savings or scale efficiencies)**

As filed on February 10, 2014, Exhibit I Tab 5 Schedule 26 Page 2 of 2 tells us that HONI intends to realize more than \$1.9 million annually in savings by the elimination of 30 positions within NPDI, after accounting for compensation scale differences between HONI and NPDI. Schedule 27 of the same Tab goes on to explain that “Hydro One’s plan is to integrate acquired NPDI staff into Hydro One’s combined workforce, thus providing broader career opportunities and allowing for the renewal of Hydro One’s workforce as staff retire.” Our understanding of HONI’s stated expectation is that the current NPDI would thus continue to be employed (within HONI) and enjoy “broader career opportunities”, while achieving, between the two organizations, a net reduction of 30 positions. We are told that “Once integration of Norfolk is completed, the operating systems of HONI, both back office and field, ***which are generally fixed costs***, will be utilized to service an overall larger customer base and therefore reduce the per unit cost to serve for all HONI customers.<sup>8</sup> [emphasis added]. Exhibit I Tab 2 Schedule 2 Page 7 of 8 tells us that HONI expects the full amount of these benefits to be achieved as early as 2015, as indicated by the comparison of the HONI OM&A cost lines with the NPDI cost lines.

HONI has provided no information to support that 19,000 customers, 779 km of line, and one LDC organizational structure with accounts, a licence, rates, etc., is within the relevant range in which its cost of management, professional and “indirect” services are truly fixed in the sense that no incremental effort is required to add their activities to the resources of HONI. If it is assumed that the resource levels included in HONI’s recently filed Custom IR application are efficient levels to carry out the functions of HONI as it now exists, some, and probably most, of the positions now within NPDI would probably continue to be needed.

If this is not the case, and if HONI can add operation of NPDI to its current load without additional staff, it appears clear that HONI must have unused capacity in its staffing. If the transaction scenario is that NPDI staff fills vacancies within HONI as they arise, it seems to us a reasonable conclusion that in the absence of the transaction, HONI could eliminate approximately the same number of positions, thereby reducing future costs to existing HONI customers from currently forecast levels.

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<sup>8</sup> Exhibit I Tab 4 Schedule 4

We then reviewed the evidence to find more specific examples of functions where it is not apparent that the level of work needed to manage, plan and operate what is now NPDI would diminish, at least in the first several years following the transaction.

<b>Function</b>	<b>Reference and Conclusion</b>
CDM	At Exhibit I, Tab 1, Schedule 6, the Applicants state that CDM targets for NPDI “will remain separate”. While some implementation cost savings should reasonably be expected to be realized, assuming that the activities can be fully integrated with those of HONI, this approach will result in continued separate costs related to administration, monitoring and verification, and compliance reporting related to CDM.
Corporate costs	It has not been stated by the Applicants that following the transaction, HONI would plan to wind up NPDI as a corporation. In that case, there would be continued costs for all corporate compliance filings, financial statement preparation, independent audits, tax returns, etc. The Applicants state that there would be a reduction of \$70,000 in costs now incurred to maintain NPDI’s board of directors, but have not stated how requirements for independent directors would continue to be met at no cost.
Accounting and Service Level Agreements	<p>As long as NPDI continues to exist separately, it would require separate accounts. If the intent is to administer and manage NPDI, and to provide professional services to it with HONI staff (as we understand from Exhibit I, Tab 2, Schedule 2) the provisions of the Affiliate Relationships Code (“ARC”) would require service level agreements to be prepared and administered, and, in the case of “shared corporate services” as defined by the ARC, charges to be made by HONI to NPDI on the basis of fully allocated cost, determined by a reasonable method. This involves, if not an incremental level of effort from current accounting and administrative functions, at least a significant level of effort into the future.</p> <p>The evidence indicates that NPDI costs will continue to be tracked separately from HONI’s “legacy” accounts; that a separate sub-account will be created to track LRAM, and that USGAAP will be adopted.</p>
Taxation	The evidence at Exhibit I, Tab 3, Schedule 16 suggests that a small business tax credit valued at \$33,000 would be lost on acquisition by HONI.
System Planning and Design, Management of System	There is no explicit evidence stating how the work of system planning and design, development of maintenance plans, etc. would be carried out within HONI at the same staffing levels that are adequate in the status quo case. Section 2.2 above quotes

Sustainment	<p>from NPDI's 2012 rate application to the effect that it has a complex urban and rural system with multiple service voltages. To the degree that this system is different from HONI's systems, it would require incremental work to plan and sustain this system, including provision for replacement components as needed.</p>
Local and Field Supervision	<p>Since no provision is made in HONI's staffing plan for a position to supervise and manage field operations related to NPDI, it is assumed that HONI believes the existing supervisory resources can take on this additional responsibility, located in HONI's contiguous area so that adequate field presence and interaction with the staff could be achieved.</p> <p>No information has been provided as to the ratio of supervision to field staff that HONI maintains, or as to why there is reason to believe that existing HONI supervisors in the area could effectively supervise an additional 13 field staff. If the existing HONI supervisors can effectively add 13 staff to their teams, it suggests that the ratio of supervisors to field staff is currently below cost efficient levels.</p>
Call centre	<p>It does not seem clear from the evidence how the call centre requirements of 19,000 additional customers are intended to be added to HONI work load without incremental costs being incurred, whether through additions to HONI staff or through outsourcing.</p>
Rate and Customer Administration	<p>The proposal is for a separate schedule of regulated rates and charges to be applicable to NPDI customers, at least for a five-year period. This entails establishing a separate series of rate classes within HONI's systems to be accounted for, administered, billed and reconciled. While some administrative efforts would be avoided if the Board approves a rate freeze, there would continue to be changes in the charges paid by customers, resulting from rate riders, adjustments to the energy charges and related variances, etc. Each change typically involves the implementation, entry, and verification of rates on the system, advice to customers, updates to websites, printed materials, etc.</p> <p>A related element is the administration of Terms and Conditions of Service. It is not clear at what point HONI intends, or would be permitted under these conditions, to substitute its own Terms and Conditions of Service, contract provisions and other policies for the existing ones applicable to NPDI. Until this is done, separate administration costs can be expected.</p>
Regulatory Filings and	<p>While it is not stated explicitly in the Applicants' evidence, we have assumed that if the Board approves a five-year rate freeze,</p>

Compliance	<p>there will be a saving in the normal costs that an LDC incurs to prepare, file, support and implement the results of its annual rate changes under an IRM regime. However there would be a continuing need for approval of rate riders and other adjustments, which would entail filings with the Board.</p> <p>We have not found in the evidence any reference to the effort required for on-going compliance requirements, such as the filing of RRR data, audits, etc., but in our view it is reasonable to assume that there would be such costs, and that they would be incremental to HONI's status-quo resource requirements.</p>
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Based on the foregoing analysis, which is general and qualitative given the absence of detailed evidence as to the costs involved and the plans to address them, ***BDR has drawn the conclusion that the Applicants' savings estimate is overstated, and that such benefits which may be achievable would not be achieved immediately.*** Furthermore, if HONI is in fact able to eliminate 30 positions within NPDI, while maintaining its own level of FTEs at levels determined for its legacy service territory and customers, it suggests that HONI's resources are above the efficient levels to serve the legacy service territory and customers.

It is noted that HONI appears to be pursuing other LDC acquisitions. Therefore, even if NPDI, an LDC of 19,000 customers, could be operated by HONI without complement additions, this could not be true for an indefinite number of additional acquisitions. If another LDC is acquired, and results in additions of staff in HONI, both of the acquired LDCs must be considered to be incremental in the economic sense, and contribute to the need for staff, since HONI could alternatively have acquired the other LDC first, and then NPDI, resulting in the acquisition of NPDI being the trigger for staff additions.

### **2.3.3 Savings due to lower financing costs**

HONI claims in its evidence that an important benefit to be realized by the acquisition is the more competitive financing costs that it and its parent can obtain from the capital markets by virtue of size, as compared with small LDCs. However, no specific facts or analysis has been presented to substantiate:

- (a) that similar levels of interest rates to those available to HONI would not be available to an LDC, and that NPDI has not obtained capital for similar terms at similar rates;
- (b) that if the transaction takes place, NPDI would in fact receive the benefit of any reductions in financing costs; or

- (c) that there are no other factors which can be expected, over time, to erode the ability of HONI or its parent to finance at favourable rates.

We reviewed NPDI's previous cost of service application EB-2011-0272<sup>9</sup> for information as to NPDI's current sources of financing and the rates that apply. From this, we can see that they include \$28.2 million in long term debt for 2012, of which \$15.2 million is sourced from Infrastructure Ontario. The most recent issue was for \$6 million at a rate of 4.39%, with borrowings in 2010 as low as 3.72%. Rates of course reflect the term of the loan, as well as the credit worthiness of the borrower, and for the past number of years the rate has been higher for longer terms than for shorter terms.

Funding from Infrastructure Ontario is made available to municipalities and their LDCs in order to enable needed infrastructure to be constructed by reducing the cost of borrowing.

Since HONI has provided no analysis or comparisons, public source information was used to compare the rates at which HONI currently or recently obtains funding with the rates at which a municipally-owned LDC can finance through Infrastructure Ontario. The website of the Chicago Tribune newspaper (see attachment) provided the information that last October, HONI obtained financing for a 5-year term at 2.78%, and for a 30-year term at 4.59%. We compared these rates to the rates available to municipal LDCs from Infrastructure Ontario now, which are 2.18% for a 5-year term and 4.18% for a 30-year term—lower than the rates at which Hydro One has recently financed. If the HONI acquisition proceeds, the lower Infrastructure Ontario rates will no longer be available and this will increase NPDI's cost base.

HONI has not been explicit when questioned as to its plans to refinance in order to reduce the cost of debt for NPDI. At Exhibit I, Tab 2, Schedule 2, page 4 of 8, HONI says that one benefit is "Lower overall debt costs on the acquired LDC's existing rate base, relative to the status quo, *assuming Hydro One refinances higher-cost debt assumed in the transaction*". [emphasis added]. HONI has not made any commitment in evidence as to how it or its parent intends to address NPDI's debt.

Furthermore, as discussed in Section 3, the risk exists that significant further acquisitions, combined with the need to fund capital expenditures in the legacy distribution system and in the transmission system, will have a negative effect on Hydro One's future financial costs.

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<sup>9</sup> Exhibit 5, Tab 1 Schedule 2, Page 6 of 6, filed August 26, 2011

***BDR concludes that the Applicants have not supported their claim that lower costs of debt are a certain benefit of the transaction, both because NPDI can and has already obtained cost effective debt capital from Infrastructure Ontario, and because there has been no commitment that Hydro One will refinance the higher-cost debt assumed in the transaction.***

***Even if Hydro One's costs of capital could be shown to be significantly lower today (which has in fact not been demonstrated), there is no evidence that this will continue into the future, when its cost of capital may be impacted both by increasing demands for borrowing to fund infrastructure and by the effects of having borrowed to fund the premiums of acquisition which may or may not be repaid to the shareholder through cost efficiencies.***

## **2.4 Service Quality**

The applicants have not provided any specific evidence as to how and to what extent there will be an impact on the service quality to NPDI customers following the transaction, except that they say at Exhibit I Tab 2 Schedule 2 Page 4 of 8 that HONI will be able to provide extended hours of call centre service and a smart phone application for real time updates on outage restoration.

However, there is no evidence offered that extended call centre hours would be a sufficient service improvement if customers are not satisfied with the timing and accuracy of their bills or the method of handling payments. According to the attached media articles dated February 4, 2014, the Ontario Ombudsman is investigating complaints from HONI customers about delayed bills, incorrect bills, estimated bills, huge and unexpected withdrawals from their bank accounts, and difficulty addressing these issues through HONI's call centre. These indications that NPDI customers may experience lower levels of service with HONI are of additional concern given HONI's evidence that it will not be adding to current staff complement in order to render timely and accurate bills to 19,000 customers, to resolve any errors that occur, and to talk to these customers on the telephone.

Nor is there any evidence that customers would be satisfied with updates on their smart phones if there is a deterioration in time taken to restore service, or an increase in the number of outages. HONI has not presented evidence that it can meet the standards of restoration that NPDI customers are accustomed to, or that it will maintain the standards of reliability (SAIDI, SAIFI, CAIDI) that now prevail in NPDI's service territory.

The Unit SQR tab of the Board's 2012 Electricity Yearbook <sup>10</sup> reports that NPDI in 2012 responded to emergencies in its rural areas within the required two hours 100%

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<sup>10</sup> Obtained in MS Excel form from the Board's website as 2012\_Electricity\_Yearbook\_excel.xls

of the time, while HONI reported responding in its rural areas within two hours only 81.4% of the time. In urban areas, NPDI responds within one hour more than 82% of the time, while HONI, despite having high density service areas, reported “N/A” for that statistic. At the same tab, reliability statistics can be compared as follows:

	<b>NPDI</b>	<b>HONI</b>
SAIDI	2.28	11.29
SAIFI	1.47	3.68
CAIDI	1.55	3.07

When questioned on these matters, as well as on comparative OM&A cost, HONI pointed out that its distribution service territory includes significant rural areas, with low customer density and difficult conditions of access. However, it is of concern that there is no evidence of a commitment and plan to maintain the current service levels for NPDI customers. In fact, the reduction of the capital expenditure plan supports a conclusion that future capital plans for these customers will be designed with reduced service quality objectives in mind. Lower levels of service constitute a harm to NPDI customers.

***With regard to Service Quality, BDR has concluded that information from public sources provides a basis for concern that NPDI customers may experience a decline in levels of service with HONI. This information has not countered by evidence from the Applicants. BDR is also concerned that service quality and reliability may be reduced as a result of lower capital spending on the distribution system, resulting in harm to the customers.***

### **3 THE ONTARIO LDC M&A “MARKET”**

#### **3.1 *Issue Context***

A key factor in the assessment of the purchase prices in corporate acquisition transactions paid is the premium over overall book value (which approximates Rate Base). Purchase prices in excess of overall approved rate base are costs for the shareholder account as the Board does not permit such costs to be included in utility Revenue Requirements at any time (including cost of service applications at re-basing periods). The costs therefore cannot be passed directly to consumers through regulated rates, and it is therefore investors who take the risk associated with recovery of premiums through savings realized during the period allowed before such savings are re-allocated to customers through the rebasing process.

Nonetheless, if excessive borrowing lowers the credit status of LDC owners and thus raises the cost of borrowing, this will be a negative impact to ratepayers as long as the Board approves third party “market” interest in the revenue requirement.

Furthermore, the Board has a mandate to assure a financially viable industry, able to obtain resources to develop and sustain sector infrastructure at reasonable cost. If premiums paid for acquisitions cannot be recovered in reasonable timeframes through savings, the credit of the industry as a whole may suffer. It is also, in our view, important to note that the Board’s regulatory provisions, which put shareholders at risk for the cost of premiums on acquisition, protect the public effectively in the context investor-owned utilities whose equity is provided by private capital. Hydro One and the municipal utilities of Ontario are public sector entities, meaning that taxpayers and municipal ratepayers are at risk if Hydro One or municipal utilities make excessive or imprudent investments in acquisitions. If Hydro One continues a practice of offering high premiums for acquisition, municipal utilities may choose to compete with high offers of their own and thereby create difficulties for their shareholders and customers through reductions in financing capability for rate base investment and/or higher interest costs.

#### **3.2 *History of Recent Transactions and Premiums***

The Ontario Merger and Acquisition market for distribution companies in its “modern” form (following the re-structuring of the electricity industry over the 1998/1999 period) began with the acquisition by Hydro One of some 88 local distribution companies in the first phase which ended at the end of 2001 (with the implementation of the PILS regime).

The Table below is representative of transactions in which government owned utilities purchased 100% interests in LDC’s. It indicates that the average premium

paid by publicly owned distribution companies including Hydro One was about 30-40%. This ratio is on an enterprise basis, which means that the price (the numerator) assumes that the purchaser will take on the existing long term debt (whether or not that is refinanced later), and the book value (the denominator) also includes debt.

In 2013, Hydro One initiated a new era in premiums paid with the announcement of the acquisition of Norfolk Power. BDR calculates that the premium proposed to be paid by Hydro One on an enterprise basis is in excess of 60%, which is substantially higher than premiums previously paid by government-owned entities.

Another way to view the same issue is to compare the premiums paid in relation to only the equity book value of a utility, as is done in the right column of the Table. The equity approach ratios the price paid assuming acquisition of the shares, but not the debt, to the book value of the equity. Until 2013, generally the Hydro One acquisition price amounted to about a 70% premium. BDR calculates that the premium proposed to be paid by Hydro One for NPDI is in excess of 150% which is substantially higher than premiums previously paid by government-owned entities.

In late 2013, Hydro One announced that it has reached an agreement to purchase Haldimand Hydro for a premium that appears to approximate the premium proposed to be paid for Norfolk Power both in terms of premiums to Rate Base and to Equity Book Values. While other acquisition plans by Hydro One are in the rumour stage rather than facts for evidence, there is certainly no evidence that Hydro One would cease its initiative if it successfully acquires NPDI and Haldimand Hydro.

In the following table<sup>11</sup>, Hydro One acquisition transactions are highlighted.

<b>Transaction Date</b>	<b>Utility Acquired</b>	<b>Purchaser</b>	<b>Enterprise price/book</b>	<b>Equity price/book</b>
Jun-00	Carleton Place	Hydro One	1.32	1.73
Apr-01	Owen Sound	Hydro One	1.26	1.65
May-01	Port Hope	Veridian	1.35	1.88
Jul-01	Brampton	Hydro One	1.29	1.72
Aug-01	Caledon	Hydro One	1.25	1.37
Dec-01	Richmond Hill	Markham/Vaughan	1.33	1.79
Sep-05	Gravenhurst	Veridian	1.56	2.40
Sep-05	Aurora	PowerStream	1.29	1.75
Sep-05	West Nipissing	Sudbury	1.28	1.70
<b>Overall Avg</b>			<b>1.35</b>	<b>1.78</b>

<sup>11</sup> Excludes partial acquisitions (including mergers) and excludes any transactions involving private sector participants in the industry. Source is OEB data and information from the companies as to price. The information for this table was compiled on an on-going basis by BDR as transactions occurred in the sector.

The comparable figures for the acquisition of NPDI by Hydro One are 1.63 for the ratio of Enterprise price to book value, and 2.50 for the ratio of Equity price to book value.

The above data (and more recent possible transactions) suggest that substantial risk transfers are taking place between one set of rate-payers/taxpayers and another set of rate-payers.

This analysis is made in the context that municipalities, which are the shareholders of almost all of the non-HONI electricity distribution in Ontario, are governed by strict legislated rules as to the types of businesses they can enter and the level of risk they can assume.

### ***3.3 Ability of Purchaser to Fund a High Premium Transaction***

As of September 30, 2013, Hydro One reports total assets in excess of \$21 billion. Hydro One also reported debt of about \$8.5 billion. In terms of asset allocation, Hydro One has about \$12 billion in transmission assets and about \$9 billion in distribution assets. Hydro One has substantial funding needs in the context of its capital spending program for its legacy system. It is also imperative that Hydro One maintain its current credit ratings so as to minimize its cost of capital in the interests of both its customers (ratepayers) and its owners (tax-payers).

Although the proposed acquisition of NPDI involves Hydro One paying a substantial premium, in dollar terms the magnitude of the premium is only about \$40 million, which is not large as a fraction of Hydro One's total capital structure or debt levels. However it appears that Hydro One now has a strategic plan to acquire multiple utilities (especially in Central and Southern Ontario). Therefore, while it is clear that the current transaction alone would not be sufficient to impair Hydro One's credit, the Applicants have not provided any basis for confidence that an aggressive program of acquisitions will not, at some point, be detrimental both to customers and to the public. Since the issue is the aggregate total of acquisitions, and not an individual acquisition, the NPDI customers acquired now (and the legacy HONI customers) could be harmed by a series of high premium acquisitions that take place after this transaction.

### **3.4 *Assessment as to Effect on the Potential for Competition in LDC Consolidation***

In the current environment in Ontario, the strategic action plan by Hydro One in proposing to pay excessive premiums for utility assets is already having an adverse impact on the ability of entities to compete in any auction process.

If Hydro One continues to make offers at the level of the offer for NPDI, one of two outcomes will occur:

- Municipally-owned LDCs will cease to compete for acquisitions or to attempt consolidation through mergers, with the result that Hydro One will be the only purchaser for any willing seller. This raises the risk that HONI will reach a level of acquisitions that could potentially harm its credit rating, while removing the possibility of consolidation transactions that would be as beneficial, or more beneficial to consumers; or
- Municipally-owned LDCs will continue to attempt acquisitions by offering very high premiums in competition with Hydro One. Depending on the relative size of the acquiring and acquired LDCs, these transactions may result in risk of credit issues for LDCs that are successful in competing with Hydro One to make acquisitions.

In either case, the higher premiums create no benefits to consumers, and carry with them a risk of harm as the consolidation process moves forward.

A current example of escalating acquisition premiums may be the recent offer made by Entegrus Inc. to acquire a 14% interest in Essex Power Corporation from the Town of Amherstburg at a premium of more than three times book value, despite the fact that premiums paid for minority interests are typically less than those commanded by full or controlling interest. The existence of the offer and the magnitude of the price have been reported in the media. At the date of this report, the Town of Amherstburg is evaluating the offer and its other options, and no transaction has yet taken place<sup>12</sup>.

## **4 COMMENT ON ISSUES RELATED TO RATE HARMONIZATION AND TRANSFER OF COST**

This section offers for consideration of the Board a possible scenario for the rate impacts that might be experienced by NPDI small (residential and GS<50kW) customers at the end of the five-year distribution rate freeze being proposed by the

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<sup>12</sup> The Town of Amherstburg has retained BDR to assist with valuation of its interest in Essex Power, evaluate the offer of Entegrus, and provide advice to Council.

Applicants. The Applicants have not proposed any specific plan for rates to NPDI customers at the expiration of the freeze. It is possible that by 2019 an entirely different rate proposal may be brought forward by HONI. However, we believe that HONI's custom IR Filing (EB-2013-0416) is the best indication available at present of the potential rate classes into which NDPI ratepayers will be harmonized.

The following table shows the impacts of a transition for NPDI's customers to HONI rates, assuming:

- that the distribution rates approved by the Board for NPDI in its Revised Rate Order dated May 24, 2012 in EB-2011-0272 are reduced by 1% and applied unchanged until 2019; and
- that HONI's rates for 2019 as applied for in EB-2013-0416, Exhibit G1, Tab 4, Schedule 2, Attachment 5 are approved and would then apply.<sup>13</sup>

It is important to note, that although NPDI has a service territory that includes rural areas, unlike HONI it has no density rates. For the analysis, it was not possible to incorporate an estimate of the number of NPDI customers that would transition to each of HONI's UR, R1 and R2 rates, as HONI has said it is unable to provide a breakdown. BDR reviewed EB-2013-0416 Exhibit G1, which at Tab 2 Schedule 1 provides the density related criteria for each class, but does not have the information to make an independent determination as to how many (if any) NPDI customers would qualify for the UR (i.e. lowest) rate.

The analysis has assumed a residential customer with monthly consumption of 750 kWh per month, and a General Service customer with monthly consumption of 7500 kWh (for example, a customer with demand of 25 kW and a load factor of 41%.

The analysis includes only distribution rates, excluding any rate riders or adders or other adjustments that may apply at the time.

On this basis, an NPDI residential customer would experience a 10% decrease in distribution charges if transitioning to HONI's UR rate; however the customer would receive an increase of 42% if assigned to R1, and a 238% increase if assigned to R2. A general service customer transitioning from NPDI's rate to HONI's UGe or GSe rate would receive an increase of 62% or 218% respectively on this basis. These changes do not include the higher commodity charges each NPDI customer will face due to HONI's higher line losses.

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<sup>13</sup> The 2019 HONI rates are those proposed in its EB-2013-0416 recent multi-year custom IR filing and have not been considered or approved by the Board. This includes any proposed changes to the revenue-to-cost ratios and/or the density of the customer classes.

<i>Residential</i>	Rates	Bill Change \$	Bill Change %
<b>Norfolk Base 2012 Rates</b>			
Residential Fixed	20.77		
Residential Variable	0.0217		
Norfolk Base Reduced by 1%			
Residential Fixed	20.5623		
Residential Variable	0.021483		
Assumed Typical Consumption, kWh/Month	750		
Monthly Distribution Bill without Riders or Adders	\$ 36.67		
<b>HONI 2019 UR</b>			
Residential Fixed	19.57		
Residential Variable	0.01779		
Assumed Typical Consumption, kWh/Month	750		
Monthly Distribution Bill without Riders or Adders	\$ 32.91	\$ (3.76)	-10%
<b>HONI 2019 R1</b>			
Residential Fixed	27.89		
Residential Variable	0.03227		
Assumed Typical Consumption, kWh/Month	750		
Monthly Distribution Bill without Riders or Adders	\$ 52.09	\$ 15.42	42%
<b>HONI 2019 R2</b>			
Residential Fixed	81.74		
Residential Variable	0.05637		
Assumed Typical Consumption, kWh/Month	750		
Monthly Distribution Bill without Riders or Adders	\$ 124.02	\$ 87.34	238%

<i>Small General Service</i>	Rates	Bill Change \$	Bill Change %
<b>Norfolk Base 2012 Rates</b>			
GS<50kW Fixed	49.74		
GS<50kW Variable	0.0155		
Norfolk Base Reduced by 1%			
GS<50kW Fixed	49.2426		
GS<50kW Variable	0.015345		
Assumed Typical Consumption, kWh/Month	7500		
Monthly Distribution Bill without Riders or Adders	\$ 164.33		
<b>HONI 2019 Gse</b>			
Fixed	32.47		
Variable	0.06532		
Monthly Distribution Bill without Riders or Adders	522.37	\$ 358.04	218%
<b>HONI 2019 Uge</b>			
Fixed	27.82		
Variable	0.03184		
Monthly Distribution Bill without Riders or Adders	266.62	\$ 102.29	62%

/U

This table sets out the approved line losses for NPDI and HONI. The rate impacts identified in the comparison of distribution charges do not reflect the levels of line losses in the two LDCs. Assuming that HONI's line losses are applied to NPDI's customers on harmonization, the customers will face increases in the amounts that they pay for generated electricity and for transmission services as a result, in addition to increases in the distribution charges.

<b>5 Comparison of Loss Factors, NPDI and HONI</b>		
NPDI – all classes		1.0564
HONI	Residential Urban	1.078
	Medium Density	1.085
	Low Density	1.092
	Urban General Service Energy	1.092
	Other General Service Energy	1.092

## **APPENDIX A – COMPLIANCE WITH SECTION 13A.03, ONTARIO ENERGY BOARD RULES OF PRACTICE AND PROCEDURE**

This evidence has been prepared by BDR NorthAmerica Inc. (“BDR”) on behalf of Essex Powerlines Corporation, Bluewater Power Distribution Corporation, and Niagara-on-the-Lake Hydro for filing with the Ontario Energy Board. In providing this this evidence, BDR and its individual consultants, Paula Zarnett and John McNeil, accept their responsibilities as experts as set out in Section 13A.03 of the Ontario Energy Board’s Rules of Practice and Procedure.

### **(a) Name, Business Name and Address, and General Area of Expertise**

This evidence was prepared by:  
Paula Zarnett, Vice President  
BDR NorthAmerica Inc.  
34 King Street East, Suite 1000  
Toronto, Ontario M5C 2X8

Paula has 30 years broadly based experience specializing in regulatory compliance, regulated rates and pricing issues for electricity and gas utilities.

Paula was assisted in the portions of this evidence related to the history of acquisition transactions in Ontario and to the capital markets by:

John McNeil, President  
BDR NorthAmerica Inc.  
34 King Street East, Suite 1000  
Toronto, Ontario M5C 2X8

### **(b) Qualifications, including relevant educational and professional experience in respect of each issue in the proceeding to which the expert’s evidence relates.**

Paula’s evidence in this proceeding relates to:

- Whether future cost structures of the entities will increase or decrease as a result of the intended transaction;
- whether the quality of service to consumers was likely to increase or decrease (non-financial impacts);
- whether the purchase price is set at a level that would create a financial burden on the acquiring utility; and
- the likely impacts on customers of NPDI if rates are harmonized with HONI’s rates, following the proposed five year distribution rate freeze to NPDI’s customers.

Selected projects illustrating her experience and expertise in analyzing cost information related to the operation of electricity distributors include:

- a study on behalf of the Toronto Hydro-Electric System Ltd. to allocate the costs of service to customers who are individually metered suites in multi-unit residential buildings (2010-2011).
- For the City of Edmundston/Energy Edmundston – a business plan and cost forecast reflecting acquisition of distribution service territory and new supply contracts with NB Power
- Numerous studies to support the allocation of shared costs and to develop transfer pricing in support of regulated revenue requirements.

Selected projects illustrating her experience in analysis of the impacts of LDC mergers and acquisitions include:

- **Markham Hydro Distribution Inc. and Town of Markham** – Due diligence services in support of amalgamation with Hydro Vaughan Distribution Inc. to form PowerStream Inc.
- **City of Guelph** – independent advisor to the City with regard to fairness of ownership proportion in proposed merger; analysis of ownership options, including development of financial projections in support of valuation
- Analysis and support to the City of Edmundston/Energy Edmundston in support of its negotiation to acquire 3,000 customers from the contiguous service territory of New Brunswick Power

With regard to rates and rate design, Paula has a decade of direct experience designing rates for all customer classes for Toronto Hydro, and before joining Toronto Hydro, performed rate analysis and design functions for gas utilities in Manitoba, Albert and British Columbia. As a consultant, she has performed rate design studies for electricity, steam and water.

She participated on behalf of a client in the Ontario Energy Board's stakeholder processes regarding cost allocation for electricity distribution service, and was an instructor in cost allocation and rate design (advanced) at CAMPUT's annual utility regulation course in 2006, 2007 and 2008. She has testified before the regulators in Ontario, New Brunswick, Prince Edward Island and British Columbia, and has been accepted as an expert in cost allocation by the Ontario Energy Board.<sup>14</sup>

Formerly a manager at Toronto Hydro with responsibilities in customer service, CDM, business project analysis and rate designs, Paula is knowledgeable in the

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<sup>14</sup> EB-2010-0142, Transcript dated March 29, 2011, page 20.

typical business processes of distribution utilities and their affiliates, and has direct experience in the analysis and planning carried out in support of reorganizing and reallocating resources following utility consolidation. She prepared evidence in support of FortisOntario's shared cost allocation and transfer pricing approach in successive cost of service applications since 2006, and for Kingston Hydro in an application for its 2011 cost of service, both of which involve allocation of shared costs among different utility operations.

Paula is a Certified Management Accountant, and has an MBA degree (finance) from the University of Calgary.

John McNeil, who assisted Paula in preparation of the portions of the evidence related to acquisition transactions of Ontario LDCs and to the capital markets, is lawyer by training and an independent investment banker by profession. He has over 30 years' experience in the areas of business and enterprise valuations, financing and capital markets activities, and mergers and acquisitions (M&A). In his consulting practice, John has advised Ontario municipalities and utility clients considering mergers, acquisitions and divestitures, joint ventures, and the formation of service affiliates. In addition to his expertise in the business and operational issues associated with combining operations, John has expertise concerning the regulatory issues that arise from mergers and business combinations.

For 20 years, he held senior management and executive positions in major investment banks, with responsibility for merger and acquisition transactions and financing. He has provided advice in financial restructuring and financing strategy to LDCs including PUC Distribution and PowerStream.

John has led teams in many Strategic Options studies for both shareholders and Board of Directors/management teams such as for Burlington Hydro, Centre Wellington Hydro, Fortis Inc., the City of Guelph, the City of Markham, Oakville Hydro, Orangeville Hydro, PowerStream, the Town of Halton Hills, Hydro One, Thunder Bay Hydro and Westario Hydro. His direct experience in merger and acquisition transactions in the sector is listed on his detailed résumé.

### **(c) Instructions provided in Relation to the Proceeding and to the Issue**

EBN has requested BDR to:

- Review evidence as to cost structures to determine whether they are likely to increase or decrease as a result of the intended transaction;
- To comment on non-financial impacts, such as quality of service; and
- To consider and comment on whether the purchase price is set at a level that would create a financial burden on the acquiring utility; and
- To develop and present a possible scenario for estimation of the impacts of harmonization of rates, once the proposed rate freeze period expires.

**(d) Specific Information and Documents Relied on in Preparing the Evidence**

BDR reviewed the record in this proceeding, with particular emphasis on revised interrogatory responses filed on February 10, 2014, as well as information publicly available from the Board's website and information from other public sources. Sources are footnoted in the body of the report. No proprietary or confidential information was obtained or relied on.

**(e) Points of Agreement and Disagreement with other Expert's Evidence**

Not applicable.

Filed: February 26, 2013  
EB-2013-0196 / 0187 / 0198  
BDR Report Attachments

<b>Unitized Statistics and Service Quality Requirements For the year ended December 31, 2012</b>	Hydro One Networks Inc.	Norfolk Power Distribution Inc.
# of Customers per sq km of Service Area	1.88	27.52
# of Customers per km of Line	10.32	24.48
<b>Average Power &amp; Distribution Revenue less Cost of Power &amp; Related Costs</b>		
Per Customer Annually	\$ 1,032.86	\$ 621.43
Per Total kWh Purchased	\$ 0.050	\$ 0.031
<b>Average Cost of Power &amp; Related Costs</b>		
Per Customer Annually	\$ 1,976.31	\$ 1,783.50
Per Total kWh Purchased	\$ 0.096	\$ 0.090
Avg Monthly kWh Consumed per Customer	1,719.03	1,648.80
Avg Peak (kW) per Customer	2.50	3.22
OM&A Per Customer	\$ 439.77	\$ 333.43
<b>Net Income Per Customer</b>	\$ 211.70	\$ 77.21
Net Fixed Assets per Customer	\$ 4,811.59	\$ 2,824.30
<b>Service Quality Requirements</b>		
Low Voltage Connections (OEB Min. Standard: 90%)	95.70	91.70
High Voltage Connections (OEB Min. Standard: 90%)	95.70	100.00
Telephone Accessibility (OEB Min. Standard: 65%)	83.40	84.10
Appointments Met (OEB Min. Standard: 90%)	98.60	94.10
Written Response to Enquiries (OEB Min. Standard: 80%)	99.80	87.50
Emergency Urban Response (OEB Min. Standard: 80%)	N/A	82.40
Emergency Rural Response (OEB Min. Standard: 80%)	81.40	100.00
Telephone Call Abandon Rate (OEB Standard: not exceed 10%)	1.30	5.10
Appointments Scheduling (OEB Min. Standard: 90%)	98.50	96.00
Rescheduling a Missed Appointment (OEB Standard: 100%)	97.60	31.60
Reconnection Performance Standard (OEB Min. Standard: 85%)	97.60	100.00
<b>Service Reliability Indices</b>		
SAIDI-Annual	11.29	2.28
SAIFI-Annual	3.68	1.47
CAIDI-Annual	3.07	1.55
<b>Loss of Supply Adjusted Service Reliability Indices</b>		
SAIDI-Annual	10.58	1.78
SAIFI-Annual	3.15	1.19
CAIDI-Annual	3.36	1.49

N/A - Denominator is zero.

Filed: February 26, 2013  
 EB-2013-0196 / 0187 / 0198  
 BDR Report Attachments

Rate Design

Filed: 2013-12-19  
 EB-2013-0416  
 Exhibit G1-4-2  
 Attachment 5  
 Page 1 of 1

**2019 Rate Design**

				A	B	C	D=A-C	E	F=A/B	G	H=B*G	I=H-A	J=I/D	K	L=J-K-C				
	Number of Customers	GWh	kWs	Revenue	Allocated Cost	Misc Revenue	Revenue from Rates	2018 R/C Ratio	R/C Ratio from the CAM	Target 2019 R/C Ratio	Total revenue to be collected	Shift in Revenue	% Change in revenue from rates	Fixed Charge (\$/month)	Revenue from Fixed Charge	Revenue from Volumetric Charge	Volumetric Charge (¢/kWh)	Volumetric Charge (\$/kW)	% Fixed Revenue
UR	218,777	1,988	-	\$ 95,306,404	\$ 89,482,887	\$ 4,520,949	\$ 90,785,455	1.06	1.07	1.02	\$ 91,272,545	\$ (4,033,859)	-4%	19.57	\$ 51,377,965	\$ 35,373,630	1.779		59%
R1	462,189	5,101	-	\$ 344,989,533	\$ 325,438,899	\$ 12,691,159	\$ 332,298,373	1.06	1.06	1.02	\$ 331,947,677	\$ (13,041,856)	-4%	27.89	\$ 154,673,253	\$ 164,583,265	3.227		48%
R2	346,430	4,719	-	\$ 615,452,250	\$ 627,126,359	\$ 16,015,559	\$ 599,436,692	0.98	0.98	0.99	\$ 621,792,962	\$ 6,340,712	1%	81.74	\$ 339,786,285	\$ 265,991,119	5.637		56%
Seasonal	146,063	428	-	\$ 107,793,630	\$ 109,745,486	\$ 3,028,674	\$ 104,764,955	0.98	0.98	0.99	\$ 108,812,155	\$ 1,018,526	1%	31.55	\$ 55,292,445	\$ 50,491,036	11.810		52%
GSe	94,827	2,109	-	\$ 179,232,849	\$ 178,506,435	\$ 4,553,231	\$ 174,679,618	1.01	1.00	1.00	\$ 179,232,849	\$ -	0%	32.47	\$ 36,947,944	\$ 137,731,674	6.532		21%
GSd	6,463	2,396	8,162,219	\$ 169,994,665	\$ 177,648,555	\$ 2,531,257	\$ 167,463,407	0.98	0.96	0.99	\$ 176,137,742	\$ 6,143,078	4%	106.94	\$ 8,293,244	\$ 165,313,241	6.900	20.253	5%
UGe	17,974	588	-	\$ 24,872,399	\$ 25,592,334	\$ 651,932	\$ 24,220,467	0.98	0.97	0.99	\$ 25,374,684	\$ 502,285	2%	27.82	\$ 5,999,564	\$ 18,723,188	3.184		24%
UGd	1,929	1,042	2,882,415	\$ 35,034,472	\$ 36,594,657	\$ 411,984	\$ 34,622,488	0.98	0.96	0.99	\$ 36,283,438	\$ 1,248,966	4%	111.74	\$ 2,585,963	\$ 33,285,491	3.193	11.548	7%
StLgt	5,074	127	-	\$ 15,079,008	\$ 15,404,291	\$ 321,946	\$ 14,757,062	0.98	0.98	0.99	\$ 15,273,285	\$ 194,277	1%	5.03	\$ 306,156	\$ 14,645,183	11.526		2%
Sen Lgt	29,411	22	-	\$ 8,217,571	\$ 8,520,956	\$ 3,050,055	\$ 5,167,516	0.96	0.96	0.99	\$ 8,448,490	\$ 230,919	4%	3.83	\$ 1,352,428	\$ 4,046,007	18.044		25%
USL	5,828	25	-	\$ 3,607,245	\$ 3,390,083	\$ 104,467	\$ 3,502,778	1.06	1.06	1.02	\$ 3,457,884	\$ (149,361)	-4%	37.47	\$ 2,620,676	\$ 732,742	2.972		78%
DGen	1,909	26	255,585	\$ 8,515,952	\$ 9,050,529	\$ 180,300	\$ 8,335,652	0.91	0.94	0.99	\$ 8,973,559	\$ 457,607	5%	285.98	\$ 6,551,237	\$ 2,242,022	8.671	8.772	75%
ST	835	15,673	28,874,041	\$ 57,879,971	\$ 59,474,479	\$ 954,764	\$ 56,925,208	0.98	0.97	0.99	\$ 58,968,678	\$ 1,088,706	2%	1,053.88	\$ 10,563,777	\$ 47,450,137	0.303	1.643	18%
<b>Total</b>	<b>1,337,709</b>	<b>34,242</b>	<b>40,174,260</b>	<b>\$ 1,665,975,948</b>	<b>\$ 1,665,975,948</b>	<b>\$ 49,016,278</b>	<b>\$ 1,616,959,671</b>				<b>\$ 1,665,975,948</b>	<b>\$ (0)</b>			<b>\$ 676,350,935</b>	<b>\$ 940,608,736</b>			

Phase-in Complete

Total Rev \$ 1,616,959,671  
 Misc Rev \$ 49,016,278  
 Total Rev Req \$ 1,665,975,948  
 2019 Revenue at 2018 rates \$ 1,569,305,970  
 3.0366%

Filed: February 26, 2013  
EB-2013-0196 / 0187 / 0198  
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## NEWS

All Sections

Home > Featured Articles > Royal Bank

### **Hydro One sells C\$1.185 notes in two parts - term sheet**

October 02, 2013 Reuters

Recommend <sup>0</sup>4 0 Tweet 0 6

Oct 2 (Reuters) - Hydro One on Wednesday sold C\$1.185 billion (\$1.15 billion) of medium-term notes in two parts, according to a term sheet seen by Reuters.

The sale consisted of C\$750 million in 2.780 percent notes due Oct. 9, 2018, which were priced at 99.995 to yield: 2.781 percent, according to the term sheet.

The sale also included \$435 million in 4.590 percent notes due Oct. 9, 2043, which were priced at 99.984 to yield 4.591 percent.

The joint lead managers on the sale were the investment 21 dealer arms of Bank ↗ of Montreal, Canadian Imperial Bank of Commerce, and Royal Bank of Canada.

(\$1=C\$1.03)

(Reporting by Caryn Trokie)

EB-2013-0196 / 0187 / 0198

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# \$12M offer takes town by surprise

## Utility selloff called 'huge' decision

BRIAN CROSS  
*The Windsor Star*

For a town that's financially hurting, Tuesday's \$12 million offer for Amherstburg's 14-per cent share of Essex Power "is putting a big steak in front of the guard dog," says Coun. Bart DiPasquale.

He and other councillors were surprised by the size of Chatham-based Entegrus offer, triple the book value for the town's shares.

The question now being asked around town is whether council should chomp down on that \$12 million. Some residents are telling councillors the cash infusion would help solve the town's money problems — a debt load of at least \$44 million and reserves that

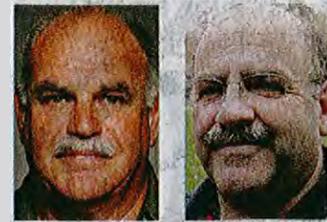
have been vacuumed dry to pay day-to-day expenses. But others view it as selling off a goose that lays annual golden eggs and is bound to keep rising in value.

"The majority (of residents) I've seen don't want it sold because it is probably the only thing that makes the town money," DiPasquale said Wednesday.

Coun. Bob Pillon said that up until Wednesday, what he heard from residents was, "don't do it." But some attitudes changed when they heard the dollar amount, much higher than earlier estimates between \$3.9 million and \$5.6 million.

"I said, if it's not between \$10 million and \$15 million, I wouldn't even consider it," said Pillon. "And there it is at 12, so I'm considering it. Anyone who wouldn't consider it is a fool."

The town's CACI Mike Phipps told *The Star* last week that selling the shares to Entegrus [could be](#) the financial "saviour," perhaps preventing a double-digit tax increase.



Bob Pillon

Bart DiPasquale

But Deputy Mayor Ron Sutherland says that despite the surprising size of the offer, he's maintaining his opposition. Selling off the shares "will make our financial problems worse," said Sutherland, who is running for mayor in the fall election.

"Twelve million sounds like a great deal," he said. But it would be a one-time infusion of cash at the expense of annual dividends that — if they were gone — would amount to two per cent of the tax base, he said.

While the information provided Tuesday was that Amherstburg received a \$200,000 dividend in 2012, Sutherland said he's received information from Essex Power that the

town has received an average of \$300,000 annually since the company was created in 2000.

Officials from Essex Power weren't available Wednesday to confirm that figure.

Tecumseh Mayor Gary McNamara, who chairs the Essex Power board, said Amherstburg council is facing a "huge" decision. "Do I give up my yearly dividends for one time? Once you sell it, it's gone."

The utility is jointly owned by the towns of Amherstburg (14 per cent), Tecumseh (about 27 per cent), LaSalle (about 29 per cent) and Leamington (about 27 per cent).

"The company is continuing to grow, it creates value for the shareholders, it pays dividends on a yearly basis and when you look at \$12 million, it's a one-shot deal," McNamara said.

He said if Amherstburg does decide to sell its shares, the other shareholder towns have first right of refusal, meaning they could decide to match the offer. Either an individual town could match it or they could decide to share the costs. In ad-

dition to the annual dividend, Tecumseh reaps other benefits from owning shares of the utility, including holding a note bearing four per cent interest and green municipal projects (such as rooftop solar projects at the arena) that bring in revenue, he said.

He said last year Essex Power paid out \$1.6 million in dividends to its shareholders, most of it coming from the unregulated side of its business that doesn't involve providing electricity to its customers. This includes a company called Utilismart, which develops electricity market software for about 80 per cent of the utilities in the province.

The town has 60 days to decide and is awaiting an expert's report on the fair market value of its shares, expected in April, which will be followed by a public meeting. Mayor Wayne Hurst said he's reserving judgment until he sees the report. He said everyone following the issue was probably "taken aback" by the size of the Entegrus offer.



1 Table 1.3 — Cost of Long-Term Debt

Weighted Debt Cost								
Description	Debt Holder	Affiliated with LOC?	Date of Issuance	Principal	Term (Years)	Rate%	Year Applied to	Interest Cost
Bank Loan 7580201	TD Bank	No	September 20, 2007	1,957,000	25	6.17%	2008	120,747
Bank Loan 682491T	TD Bank	No	September 20, 2004	1,257,000	15	6.02%	2008	196,071
Bank Loan 682495T	ID Bank	No	September 20, 2004	9,971,000	25	7.00%	2008	697,970
Debtenture	Infrastructure Ontario	No	December 3, 2007	1,958,514	25	5.01%	2009	98,122
Bank Loan 758020T	ID Bank	No	September 20, 2007	1,909,000	25	6.17%	2009	117,785
Bank Loan 6824911	ID Bank	No	September 20, 2004	1,040,000	15	6.02%	2009	183,008
Bank Loan 682495T	ID Bank	No	September 20, 2004	9,751,000	25	7.00%	2009	682,570
Debtenture	Infrastructure Ontario	No	December 3, 2007	1,914,923	25	5.01%	2009	95,938
Bank Loan 7580201	TD Bank	No	September 20, 2007	1,859,000	25	6.17%	2010	114,700
Bank Loan 682491T	ID Bank	No	September 20, 2004	2,811,000	15	6.02%	2010	169,222
Bank Loan 682495T	TD Bank	No	September 20, 2004	9,518,000	25	7.00%	2010	666,120
Debtenture	Infrastructure Ontario	No	December 3, 2007	1,869,121	25	5.01%	2010	93,643
Debtenture 09-01-2010-2	Infrastructure Ontario	No	September 1, 2010	5,600,000	25	4.73%	2010	284,880
Debtenture 09-01-2010-1	Infrastructure Ontario	No	September 1, 2010	2,400,000	15	17.2%	2010	89,280
Debtenture 09-01-2010-2	Infrastructure Ontario	No	September 1, 2010	5,540,286	25	4.73%	2011	262,056
Debtenture 09-01-2010-1	Infrastructure Ontario	No	September 1, 2010	2,299,839	15	3.72%	2011	85,554
Bank Loan 7580201	TD Bank	No	September 20, 2007	1,805,100	25	6.17%	2011	111,369
Bank Loan 682491T	TD Bank	No	September 20, 2004	2,568,000	15	6.02%	2011	154,594
Bank Loan 682495T	713 Bank	No	September 20, 2004	9,268,000	25	7.00%	2011	648,620
Debtenture	Infrastructure Ontario	No	December 3, 2007	1,620,995	25	5.01%	2011	91,232
Debtenture 09-01-2010-2	Infrastructure Ontario	No	September 1, 2010	5,416,589	25	4.73%	2012	256,205
Debtenture 09-01-2010-1	Infrastructure Ontario	No	September 1, 2010	2,093,895	15	17.2%	2012	77,893
Bank Loan 758020T	ID Bank	No	September 20, 2007	1,734,000	25	6.17%	2012	106,988
Bank Loan 682491T	713 Bank	No	September 20, 2004	2,243,000	15	6.02%	2012	135,029
Bank Loan 682495T	ID Bank	No	September 20, 2004	8,929,000	25	7.00%	2012	825,030
Debtenture	Infrastructure Ontario	No	December 3, 2007	1,770,428	25	5.01%	2012	88,696
New Debt	Infrastructure Ontario	No	June 30, 2012	6,000,000	25	4.39%	2012	263,400
2008 Total Long Term Debt				17,143,514	Total Interest Cost for 2008			1,112,910
Weighted Debt Cost Rate for 2008								6.49%
2009 Total Long Term Debt				16,614,923	Total Interest Cost for 2009			1,079,301
Weighted Debt Cost Rate for 2009								6.50%
2010 Total Long Term Debt				24,055,121	Total Interest Cost for 2010			1,397,845
Weighted Debt Cost Rate for 2010								5.81%
2011 Total Long Term Debt				23,300,120	Total Interest Cost for 2011			1,353,423
Weighted Debt Cost Rate for 2011								5.81%
2012 Total Long Term Debt				28,106,911	Total Interest Cost for 2012			1,553,242
Weighted Debt Cost Rate for 2012								5.51%

# Oinbudiprobingitydro One billing practices

Filed: February 26, 2014  
 EB-2013-0196/0187/0198

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SIARTINURIBM89/WIIIe'S PARK BUREAU CHIEF

'Certain conditions

POSTED: TUESDAY, FEBRUARY 04, 2014 10:40 AM EST | UPDATED: TUESDAY, FEBRUARY 04, 2014 11:37 PM EST  
 SUN\* LOGIN



**Ontario Ombudsman Andre Marin announces an investigation into Hydro One billing practices at a Queen's Park media conference on Tuesday. Marin compared the utility, owned by Ontario taxpayers, to a "slippery pig." (ANTONELLA ARTUSO/Toronto Sun)**

TORONTO - Ontario's crusading ombudsman will investigate Hydro One's billing and customer service practices after receiving hundreds of complaints from its customers.

Andre Marin said he was met with stonewalling while trying to get answers for members of the public about excessive, delayed or inaccurate bills.

"That's why my heart goes out to those average citizens who try to take on the Goliath that is Hydro One," Marin said Tuesday, comparing the process to wrestling with a "slippery pig."

The Special Ombudsman Response Team (SORT) will focus on the publicly owned utility's billing system and how it responds to concerns raised by customers.

Marin said his office has received more than 600 complaints about Hydro One since April 1, including some from vulnerable people who face significant financial hardship as a result of their dealings with the electricity distribution company.

Hydro One clients have told the ombudsman about receiving skyrocketing "estimated" bills despite having smart meters in place.

"We are hearing from the public that they are quite prepared to be socially re-engineered as electrical trained seals doing their laundry at certain times to avoid excessive billing but on the other hand, they want to be able to understand their billing, they want accuracy in their billings," Marin said.

Customers with automatic bank withdrawal have been shocked to find Hydro One has removed \$10,000 to \$20,000 from their accounts, sometimes mistakenly, he said.

They're told that they will get a credit for future bills but it would take a lot of loads of laundry to use up a \$20,000 overpayment, he said.

"I certainly would not advise it," Marin said, when asked if he believes it's a good idea to give Hydro One automatic withdrawal privileges.

404 Capital Property Assessment Corporation (MPAC), and said the "anaemic" response of Hydro One reminds him of the  
STIRMINN 41REIMPACCESS priority on public service.

Filed: February 26, 2013  
EB-2013-0196 / 0187 / 0198

Premier Kathleen Wynne said the Ontario government will work closely with the ombudsman to resolve the issues with  
STARIJI6NOM \$0.99/MONTH\*

\*Certain conditions apply

"I am confident that Hydro One is already aware that there are problems and they are working to ameliorate the situation,"  
Wynne said.

Hydro One president and CEO Carmine Marcello wrote an open letter to more than 1.3 million customers Tuesday in  
which he said the company transitioned to a new billing system last May to provide an improved level of service.

"Like other companies who have changed large, complicated billing systems in recent years, we have experienced some  
challenges in this conversion," Marcello said. "We know that approximately three per cent of our customers have received  
estimated bills for too long and about another two per cent have gone for more than 90 days without receiving a bill.

"While the vast majority of our customers continue to receive normal bills, some of our customers have not had a positive  
experience."

Marcello said Hydro One is taking aggressive steps to fix these problems.

Progressive Conservative MPP Vic Fedeli said the Ontario government would have known about these concerns for years.

"Hydro One issues are the number one complaint that I receive in my office," Fedeli said.

NDP Leader Andrea Horwath said she has also been pressing for action because the electricity system is not meeting the  
needs of citizens.

"This investigation, I hope, will help get to the bottom of why these bills are so out of whack," she said.

Filed: February 26, 2013  
EB-2013-0196 / 0187 / 0198  
BDR Report Attachments

## News/Canada

### Ombudsman to probe Hydro One's 'baffling' billing practices

Ombudsman Andre Marin says long suffering Hydro One customers are victims of "egregious errors and baffling bills."



RICHARD J. BRENNAN / TORONTO STAR

Ontario Ombudsman Andre Mahn Marin noted Tuesday that complaints about Hydro One to his office have more than doubled since the fiscal year 2011-2012

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**By:Richard J. Brennan**Provincial Politics,John SpearsBusiness reporter, Published on Tue Feb 04 2014

Ontario Ombudsman Andre Marin says long-suffering Hydro One customers are victims of "egregious errors and baffling bills" inflicted on them by an uncaring Crown corporation.

Marin announced Tuesday he is launching an investigation into Hydro One's billing practices that result in cases of customers being billed thousands of dollars for unclear reasons.

"(There) are stories of huge unexplained catch-up bills, multiple bills or estimated bills with no rhyme or reason. And when customers try to get answers from Hydro One they are stymied just as my office has often been stymied when we intervened," Marin told a Queen's Park news conference.

"With Hydro One . . . we feel we get the runaround. Sometimes it's like wrestling with a slippery pig and that's why my heart goes out to those average citizens that try to take on the Goliath that is Hydro One," he said.

Hydro One spokesperson Tiziana Baccega Rosa, acknowledged the level of service — the result of a \$153.7-million customer system changeover in May — is "unacceptable."

"We know we need to fix the mess and those plans are in place," she said.

Hydro One is Ontario's largest electricity company with about 1.3 million customers.

Filed: February 26, 2013  
EB-2013-0196 / 0187 / 0198

Jim and Lynn Ellis from Southgate Township, near Attleboro, told the Star they know exactly what Marin is talking about.

After complaining in May about not getting bills, more than six months later they received a notice that they owed \$3,477.57, due by Dec. 3. Two weeks later another arrived for \$1,097.27.

Jim Ellis said his normal bill is \$200 to \$300 a month.

"I don't think we were treated very well by the system at all," he said, noting that whenever he tried to get answers he would have to deal with a different person at the Hydro One call centre.

Ellis said a Hydro One executive, who finally called at one point to apologize, told him there were "tens of thousands (of customers) in the same boat."

"I'm angry that it's a monopoly and you can't seem to get (anywhere) with it," he said.

"If there was an alternative, we'd be checking it out."

Marin noted that complaints about Hydro One to his office have more than doubled since the fiscal year 2011-2012 when 232 complaints were received, which then grew to 328 in 2012-2013 and jumped to 600 between April 1, 2013 and now.

"This all points to a systemic problem that warrants an in-depth investigation by my special ombudsman's response team," he said, noting that the probe should take about nine months.

Toronto resident Jim MacLean, who owns a cottage north of Huntsville, said Hydro One installed a smart metre two years ago at his cottage and the provincially-owned utility has never once used it because there is no reliable cell connection.

"Why would they even put them in if they can't use it," he said, noting that he keep getting bills "estimating" what his power consumption is.

Baccegga Rosa acknowledged there "are areas where the meters can't communicate — the actual infrastructure is just not there" but insists Hydro One hopes to eventually hook them up.

She said that of Hydro One's customers, 3.2 per cent are still receiving frequent estimated bills. Another 2 per cent haven't received any bill at all for more then 90 days.

Marin said part of his office investigation is to look at the transparency and reliability of the billing system.

"We are hearing from the public that they are quite prepared to be socially re-engineered as electrical trained seals doing their laundry at certain times to avoid excessive billing but on the other hand they want to be able to understand their billing, they want accuracy in their billing," he said.

The ombudsman said a common complaint from customers is that they don't get bills for months and months and "suddenly because they have direct withdrawal from the bank account, they wake

Filed: February 26, 2013

up and their bank account is depleted and into their overdraft by \$10,000, \$20,000 . . . and then they can't get through to Hydro One." BDR Report Attachments

And he said then there are the customers who have that much money "skimmed" off their bank account by error. "And in that case Hydro One will simply say 'we can't return the money, we will simply give you a future credit.'"

Baccega Rosa disputed that assertion, saying the provincial utility will refund the money and any related overdraft bank charges.

Marin said the whole thing is leaving a "bad taste in the mouths of the citizens of Ontario and that why we are going to look at those two issues."

He described Hydro One's response to questions from his office as "anemic."

"We will be looking at whether that culture of public service is there at Hydro One or not and taking it from there."

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EB-2013-0196 / 0187 / 0198  
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**THE GLOBE AND MAIL** O

February 4, 2014

## Hydro One to face major investigation as billing complaints mount

By Adrian Morrow

*Complaints against the electricity giant have more than doubled in the last two years*

A rapidly rising number of complaints about shoddy billing practices and poor customer service at Hydro One has prompted a major review of the Crown corporation.

While the ombudsman's investigation is expected to focus on accusations the agency overcharged hundreds of people — in at least one case by tens of millions of dollars — it will also probe how and why customers have trouble getting problems fixed after bringing them to Hydro's attention.

The transmission company is only the latest Ontario electrical organization to come under fire, after an audit that revealed generous pensions and big bonuses at Ontario Power Generation late last year.

"With Hydro One, it takes two, three, four calls, a couple of weeks, and then we don't get straightforward answers. We get the runaround," Ombudsman Andre Marin said at Queen's Park Tuesday. "It's like wrestling with a slippery pig."

The agency responded that many of its delays dealing with customer complaints are the result of switching to a new billing system last May. The changeover entailed setting up an entirely new computer platform, and Hydro One is still working out the bugs, said Laura Cooke, vice-president of corporation relations.

"The glitches that we expected to be able to resolve in a timely manner are taking much longer to resolve from a technology standpoint," she said. "As a result, it's taken longer for us to manage or resolve certain customer complaints."

Some customers charge that Hydro One sends them an "estimated" total on their bill, but won't explain how the estimates are arrived at, Mr. Marin said. In some situations, smart meters fail to give accurate readings because of interference from trees and hills. In other cases, he said, the utility stops billing a customer for a long period of time, then suddenly withdraws thousands of dollars from their bank account in one go.

In one extreme situation, which The Globe and Mail first revealed last month, Hydro mistakenly charged Beaver Valley Ski Club for \$36-million.

For Raymond and Judy Muldoon, retirees who live in the countryside near Sydenham, Ont., the trouble started innocuously enough. Last May, they noticed Hydro One was charging them \$20.87 for a sentinel light, a device they did not actually have. They told Hydro One about it. E-mails show it took the entire summer — and several reminders — for the utility to remove the charge from their bills. And nine months after their initial complaint, Mr. Muldoon said, they are still waiting to be reimbursed.

"I'm thinking: 'Come on, guys, you can do better than this,' " he said in an interview.

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EB-2013-0196 / 0187 / 0198

In an open letter to customers Tuesday, Hydro One President Marcello promised to co-operate with Mr. Marin's investigation and use his suggestions to "do better." He said only a small percentage of the agency's 1.3 million customers have had problems.

Even before the problems of the past year, Hydro was a steady source of complaints. New Democratic Leader Andrea Horwath urged Mr. Marin in 2010 to look into the agency.

"This is a problem that, four years later, is obviously still occurring," she said.

"All members of our caucus have received complaints of the unfair treatment people are experiencing in this province. This is not an isolated issue," Energy Critic Lisa MacLeod said in a statement.

For now, Mr. Mahn said, his investigation will remain narrowly focused on billing and customer-service problems, and will be completed in nine months. But he said he might revisit other issues at the agency in future.

"If need be, we'll do a second Hydro investigation," he said. "There's a tremendous amount of grief over hydro rates, compensation, pensions, this kind of thing. But one step at a time."

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BDR Report Attachments

# Ontario ombudsman to probe Hydro One's use of smart meters

BY MATTHEW PEARSON, OTTAWA CITIZEN FEBRUARY 3, 2014



Ontario ombudsman Andre Marin is putting Hydro One's billing practices and time-of-use smart meters under his microscope, the Citizen has learned.

**Photograph by:** James Park, Ottawa Citizen

OTTAWA — Ontario ombudsman Andre Marin is putting Hydro One's billing practices and time-of-use smart meters under his microscope, the Citizen has learned.

Marin is expected to announce Tuesday that his office's next high-profile investigation will focus on the hydro utility. .

Time-of-use pricing coupled with so-called smart meters is supposed to give customers more control over their monthly electricity bill.

Smart meters are meant to record how much electricity is used and when, typically hourly, then send the information automatically to Hydro One through a wireless communications network.

But that's not always happening.

The meters have caused huge billing headaches for some customers in rural areas because many of the machines cannot transmit billing data properly to utility hubs. Hilly topography and tall trees interfere with the signals.

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EB-2013-0196 / 0187 / 0198

So unless affected customers can get through to Hydro One by phone or email to provide their meter readings, bills are based on estimates and often arrive irregularly.

As a result, many customers have received bills with outstanding balances in the thousands of dollars.

These are the issues that Marin, an independent officer of the legislature who investigates complaints from the public about Ontario government services, is expected to probe, several sources told the Citizen on Monday.

Hydro One customers currently have no practical way of independently verifying their hydro bills. Time-of-use meters only display aggregated energy consumption in the form of a numerical display, as opposed to a detailed summary.

Consumers also do not receive bills while their smart meter is out of the service, which has resulted in some facing huge bills once their meter is back online (again, without any ability to scrutinize the bills in a detailed fashion).

And there are reports of long wait times to fix faulty meters and network failures, often lasting up to a year.

Marin, who was appointed in 2005, is not known to go easy in his critiques.

His look into the use of force in provincial jails last year, for example, painted an ugly picture of the Ottawa-Carleton Detention Centre.

It prompted Community Safety and Correctional Services Minister Madeleine Meilleur to later pledge to implement his 45 recommendations to ensure incidents are properly investigated and guards appropriately disciplined.

"He's done some fairly explosive investigations into the operations of government agencies," said one source.

Last fall, after a Public Citizen column highlighted a couple's problems with billing errors and poor customer service, Hydro One's boss apologized.

In a letter to the Citizen, Carmine Marcello promised, "We will learn from this and we will do better."

Marcello said in the same letter that issues with smart meter communication should be resolved by mid-2014.

Hydro One says it has already installed more than 1.3 million smart meters and met the provincial government's target of having a smart meter in every home and small business by the end of 2010

All Hydro One customers are currently paying \$3.92 per month to recover smart meter-related costs, according to the utility's website.

Filed: February 26, 2013

A spokeswoman for Energy Minister Bob Chiarelli said late Monday she wouldn't "pre-empt the ombudsman," but noted Hydro One introduced a new billing system last year that has caused a "small number" of Hydro One customers to experience sub-par service.

"Hydro One has been working to address outstanding issues as quickly and efficiently as possible," said Beckie Codd-Downey in an email.

"They have made a lot of progress in the past few months. Delivering value to energy consumers is a priority for our government."

*With files from Hugh Adami*

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EB-2013-0196 / 0187 / 0198  
BDR Report Attachments

## MPP Randy Hillier says Hydro One probe provides vindication to frustrated customers

BY MICHAEL WOODS, OTTAWA CITIZEN FEBRUARY 5, 2014



MPP Randy Hillier, the MPP for Lanark-Frontenac-Lennox and Addington, said he first met with Hydro One and the Ministry of Energy about the problems with smart meters in 2011. Since then, his office has fielded more and more complaints about what he calls "administrative and technical problems" at Hydro One.

**Photograph by:** Julie Oliver, Ottawa Citizen

OTTAWA — An MPP who has long voiced concerns about Hydro One's billing practices says he's pleased that Ontario ombudsman Andre Marin is launching an investigation into the government-owned hydro utility.

Randy Hillier, the MPP for Lanark-Frontenac-Lennox and Addington, said he first spoke with Marin in August about investigating the government-owned hydro utility's billing practices.

"This is a good day for Ontario. It's a good day for Hydro One customers," he told the Citizen on Tuesday. "I have a great deal of confidence that the ombudsman ... will be able to compel Hydro to divulge what actually is going on, and come up with some real practical solutions to end this travesty."

Marin announced Tuesday he will conduct a "systemic investigation" into complaints about billing and customer service at Hydro One.

Filed: February 26, 2013

Time-of-use pricing, coupled with so-called smart meters, is supposed to give customers more control over their monthly electricity bill. Smart meters are meant to record how much electricity is used and when, then send the information to Hydro One through a wireless communications network.

But that doesn't always happen. The meters have caused huge billing headaches for some customers in rural areas because many of the machines cannot transmit billing data properly to utility hubs.

That means bills are based on estimates and often arrive irregularly, resulting in customers receiving bills with outstanding balances in the thousands of dollars.

Hillier said he first met with Hydro One and the Ministry of Energy about the problems with smart meters in 2011. Since then, his office has fielded more and more complaints about what he calls "administrative and technical problems" at Hydro One.

Hillier said the investigation provides vindication for the hundreds of people who have registered complaints.

"Dealing with government can be a very agonizingly slow, drawn out and frustrating process, and many people lose faith because of the slowness and the complexities of it. This, he said, shows that "yes, you should speak out, and you will be heard."

In a release, Marin's office said complaints about Hydro One to the ombudsman have risen steadily in recent years. The office has received more than 600 complaints since April 1, up from 328 in the 2012-13 fiscal year and 232 the year before.

Marin said his office has experienced "stonewalling" from Hydro One in trying to help Ontarians resolve problems with their bills.

"Our experience reflects what we are hearing from people across the province, and it is alarming. Many of those who have contacted us are in vulnerable situations and say they have faced significant financial hardship and stress because of their dealings with Hydro One," he said in a release.

Hydro One admitted it was not providing adequate customer service, which it contracted out to call centre operator Vertex, and said it would provide more training for the Vertex staff who answer the Hydro One phones.

"We know that the level of service we've been providing to customers is not acceptable," said Hydro One spokeswoman Tiziana Baccega Rosa. "It's not what they deserve, and it's not what we want to give them." The Ministry of Energy also admitted Hydro One had problems with customer service, and promised full co-operation with the ombudsman's investigation.

Marin's office said the investigation will be completed within nine months, after which he will produce a report with recommendations.

Filed: February 26, 2013

Hillier said he has offered some solutions, such as giving customers the ability to monitor their meter's transmissions online, and sending customers immediate notifications when there are unexplained spikes in electricity.

Hillier launched the website brokenhydro.ca on Tuesday, which features a petition and means for people to contact the premier and energy minister. He said the ombudsman's contact information will be added to the website.

*With files from Matthew Pearson and the Canadian Press*

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[twitter.com/michaelwoods](https://twitter.com/michaelwoods)

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\*Home / Canada / Hydro One probe by ombudsman gets 2,500 more complaints

## Hydro One probe by ombudsman gets 2,500 more complaints

Posted by: Lokalee Reporter M Canada 13 days ago 0 9 Views



Ontario ombudsman Andre Marin says the complaints continue to mount against Hydro One.

Since Ontario's ombudsman announced an investigation into Hydro One's billing practices and customer service last week, his office has received almost 2,500 more complaints.

With the total now at 3,100, Ontario's ombudsman has told his followers on Twitter not to despair.

Andre Mann said his staff is meeting weekly with the utility in an effort to sort out individual cases - customers who have had issues ranging from no bills for months, to unusually steep bills.

**II Ontario Ombudsman**  
@Ont\_Ombudsman

Follow

We now have weekly meetings w/OpHydroOne to move the individual cases along. Don't despair, we'll get you thru this.

5:24 PM - 11 Feb 2014

2 RETWEETS

In some cases, Mann said, customers' houses burned down and they continued to receive hydro bills.

As for the number of complaints, Marin said they continue to rise.

Prior to the investigation, Marin said he had about 650.

**N Ontario Ombudsman**  
@Ont\_Ombudsman

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Most bizarre @HydroOne complaints? Those whose houses burnt down. Completely. And they still were having actual use bills.

5:56 PM - 11 Feb 2014

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Article source: <http://www.cbc.ca/news/canada/sudbury/hydro-one-probe-by-ombudsman-gets-2-500-more-complaints-1.2533523?cmp=rss>

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## Ontario Ombudsman launches Hydro One investigation



Dave Reaney checks smart meter



Joanne Schnurr, CTV Ottawa

Published Tuesday, February 4, 2014 5:07PM EST

Last Updated Tuesday, February 4, 2014 5:09PM EST

Ontario's ombudsman has launched an investigation into Hydro One after hundreds of complaints to his office. CTV Ottawa highlighted many of these stories of people close to bankruptcy, unable to pay their utility bill. Andre Marin decided to launch his investigation after years of trying to resolve hundreds of complaints on an individual basis. He says dealing with Hydro One has been extremely difficult, like trying to catch a slippery pig.

David Baker knew there was something wrong with his smart meter. He's been heating his house near Prescott only with wood and couldn't understand why his hydro bill was so high.

"I have energy efficient everything in the house," said Baker in an earlier CTV story from December.

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Smiths Falls family cancels Christmas to pay hydro

Prescott family pulls the plug on Hydro One

The Bakers weren't the only Hydro One customers complaining about high bills. Hundreds of them turned to Ontario's Ombudsman for help after getting nowhere with the utility company.

"Stories of huge unexplained catch-up bills, multiple bills or estimated bills with no rhyme or reason," said Andre Marin at a news conference this morning in Toronto.

The ombudsman has now launched a full investigation. He says it's not about the price of electricity but about billing and communication problems; problems his own office has experienced firsthand.

"Sometimes it's like wrestling with a slippery pig," says Marin, "that's why my heart goes out to the average citizens who try to take on the Goliath that is Hydro One."

The ombudsman says complaints to his office about Hydro One have continued to mount. They more than doubled in the last year to 600. Most of those complaints were about bills being wrong or excessively high. Dave Reaney was one of those customers trying to get answers from Hydro One. He works in heating and cooling and knows the industry. He knew his bill for \$2800 over a 200-day period was way out of line.

"Their billing was completely erroneous," says Reaney, "they were billing me three times what my actual consumption was."

He says he fought Hydro One and won. David Baker is still fighting but hoping the ombudsman will help hundreds of customers like him struggling to just to pay their utility bill.

"It was in 2005 when I started complaining," said Baker today, "and here it is 2014 and yeah it is frustrating but I'm glad finally somebody listened."

Reaney welcomes the ombudsman's investigation but says is much deeper investigation is needed.

"I think it should be a criminal investigation at this point," says a frustrated Reaney, "I think the ombudsman is a good step but I think there's been some criminal activity and fraud, period."

Filed: February 26, 2013

EB-2013-0196 / 0187-0198

Ombudsman Andre Marin is asking anyone who has information pertaining to the investigation to contact his office at 1-800-263-1830, file an online complaint at [www.ombudsman.on.ca](http://www.ombudsman.on.ca) or email his office at [info@ombudsman.on.ca](mailto:info@ombudsman.on.ca). If you have information that the investigation will be conducted by the Special Ombudsman Response Team (SORT) and will be completed within nine months. Mann will then produce his report and recommendations.

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# **EMPIRICAL RESEARCH IN SUPPORT OF INCENTIVE RATE SETTING IN ONTARIO:**

## **REPORT TO THE ONTARIO ENERGY BOARD**

May 2013



**Pacific Economics Group Research, LLC**

## Unit Cost Evaluations

Company Name	2009-2011 Average / 2009-2011 Group Average	Efficiency Ranking
HYDRO HAWKESBURY INC.	-49.8%	1
HEARST POWER DISTRIBUTION COMPANY LIMITED	-29.1%	2
HALDIMAND COUNTY HYDRO INC.	-24.8%	3
KITCHENER-WILMOT HYDRO INC.	-23.8%	4
LONDON HYDRO INC.	-22.0%	5
PUC DISTRIBUTION INC.	-20.5%	6
HALTON HILLS HYDRO INC.	-19.0%	7
SIOUX LOOKOUT HYDRO INC.	-18.4%	8
HORIZON UTILITIES CORPORATION	-18.3%	9
NORTHERN ONTARIO WIRES INC.	-16.8%	10
E.L.K. ENERGY INC.	-16.2%	11
HYDRO 2000 INC.	-14.1%	12
VERIDIAN CONNECTIONS INC.	-12.4%	13
CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.	-11.9%	14
LAKEFRONT UTILITIES INC.	-11.5%	15
WASAGA DISTRIBUTION INC.	-11.4%	16
BURLINGTON HYDRO INC.	-11.2%	17
GRIMSBY POWER INCORPORATED	-11.1%	18
OSHAWA PUC NETWORKS INC.	-10.9%	19
BLUEWATER POWER DISTRIBUTION CORPORATION	-10.6%	20
WELLAND HYDRO-ELECTRIC SYSTEM CORP.	-10.3%	21
KINGSTON HYDRO CORPORATION	-9.5%	22
ESSEX POWERLINES CORPORATION	-8.0%	23
RIDEAU ST. LAWRENCE DISTRIBUTION INC.	-7.8%	24
HYDRO OTTAWA LIMITED	-7.3%	25
NORTH BAY HYDRO DISTRIBUTION LIMITED	-7.1%	26
CENTRE WELLINGTON HYDRO LTD.	-7.0%	27
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION IN	-6.3%	28
HYDRO ONE BRAMPTON NETWORKS INC.	-6.3%	29
POWERSTREAM INC.	-4.9%	30
NORFOLK POWER DISTRIBUTION INC.	-4.8%	31
LAKELAND POWER DISTRIBUTION LTD.	-4.5%	32
NIAGARA PENINSULA ENERGY INC.	-4.3%	33
BRANTFORD POWER INC.	-4.1%	34
ESPANOLA REGIONAL HYDRO DISTRIBUTION CORPOI	-3.9%	35
ENERSOURCE HYDRO MISSISSAUGA INC.	-3.5%	36
INNISFIL HYDRO DISTRIBUTION SYSTEMS LIMITED	-3.3%	37
WATERLOO NORTH HYDRO INC.	-2.2%	38
ST. THOMAS ENERGY INC.	-2.0%	39
COLLUS POWER CORPORATION	-1.8%	40
NEWMARKET-TAY POWER DISTRIBUTION LTD.	-1.6%	41
GREATER SUDBURY HYDRO INC.	-1.4%	42
TILLSONBURG HYDRO INC.	-0.2%	43

**PAULA ZARNETT**

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Paula Zarnett has 30 years broadly based experience in utility customer service, customer research, rates, and regulation.

Following a series of rate specialist positions in both the electricity and natural gas sectors, she was promoted to the position of Manager of Marketing and Energy Management at Toronto Hydro. There, her responsibilities included all rate and regulatory issues, customer research including load research and forecasting, and customer program design with a focus on conservation and demand management. She was responsible for establishment of the utility's Key Account group, which focused on assessing and meeting the service needs of the utility's largest customers.

During her career at Toronto Hydro, Paula carried out rate-related customer research, including questionnaire and interview research to select residential customers for a time of use rate pilot program, and to select commercial-industrial customers for load research. For two years, she led an organization-wide program of performance improvement, which included implementation of employee surveys as to overall employment satisfaction and satisfaction with the services provided by other departments (i.e. as internal customers).

In her consulting practice, Paula provides a variety of advisory and analytical services to clients facing the challenges of both traditional and restructured energy markets, with a focus on issues impacted by regulatory policy and process. Her work includes business case and project feasibility analysis, cost allocations and pricing designs, energy sector mergers and acquisitions, and expert testimony before regulators. She is a skilled hands-on analyst, experienced in handling large data sets.

She has performed assignments for clients in North America, China, Ghana, and Barbados.

**SELECTED EXPERIENCE BY SUBJECT AREA**

(INCLUDES PROJECTS UNDERTAKEN AS A CONSULTANT, AND IN THE COURSE OF RESPONSIBILITIES WITHIN ORGANIZATIONS)

*Rate Designs and Pricing Studies*

**IGPC Ethanol Inc.** – supported the intervention of this industrial consumer in the rate application of its gas supplier, Natural Resource Gas

**Rogers Cable and Communications Inc.** – representation at Ontario Energy Board staff consultation process with regard to rate designs for Ontario's electric distribution utilities; development of policy and position documents, attendance at stakeholder meetings, analysis in support of positions on rate design for General Service classification and unmetered scattered loads; distribution cost allocation stakeholder process and 2006 distribution rate handbook.

**City of Markham (Ontario)** – recommendations for restructuring water and wastewater rates

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**BDR Report Attachments**  
**Oklahoma Gas and Electric** – review of results of residential time of use rate pilot including estimation of impact of the rate design on total customer consumption and peak hour consumption (load shifting).

**Summerside Electric/City of Summerside** – advisory and analysis service with regard to proposals of Maritime Electric for an Open Access Transmission Tariff.

**Nova Scotia Department of Energy** – advisory and analysis services to support intervention in Nova Scotia Power’s request to the regulator for approval of a fuel adjustment mechanism.

**BC Hydro** – assisted a staff team in development of a Phase I report on long-term rate strategy; research on rate designs in several North American jurisdictions.

**Energy East (RGE and NYSEG)** – analysis as to the potential value of load shifting which might take place as result of rate-driven (time of use or critical peak pricing) programs supported by universal interval metering in the State of New York; regulatory precedents as to cost recovery for advanced metering and meter reading technology

**East China Grid Company** – advice in developing and simulating an unbundled electricity distribution tariff for Shanghai Municipal and four provincial electric power companies

**British Columbia Ministry of Energy and Mines** – advisory and due diligence services with regard to recommendations by the British Columbia Utilities Commission for implementation of proposed Heritage Contract and stepped rates to wholesale and industrial customers.

**Perth-Andover Electric Light Commission** – long-term rate strategy and detailed bundled retail rate designs for all electricity consumer classifications.

**Toronto Hydro-Electric System** – development of market-based transfer pricing proposal for services to the regulated distribution utility, from a proposed competitive business affiliate.

**Volta River Authority (Ghana)** – development of tariff structure and preliminary rates for open access use of the national electric transmission system in Ghana.

**Enwave District Energy Limited** – determination of appropriate customer classification and pricing design alternatives for a district steam system in a context of competitive electricity and gas markets and wider service choices for existing and potential customers.

**Toronto Hydro** – development and initial implementation of time of use rates for residential and large industrial customers; development of pricing strategies and policies for all customer classes.

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**Toronto Hydro** – development of all customer rate designs, implementation strategy, and preparation of annual submissions for approval of the rates. Managed a team of specialists in the preparation of associated detailed studies, load forecasts and load research.

**ORAL:**

*Testimony before Regulators*

**Toronto Hydro-Electric System** – Testified before the Ontario Energy Board in support of the allocated costs of service to customers that are individually metered suites in multi-unit residential buildings.

**Saint John Energy** – Testified before the New Brunswick Public Utilities Board in support of intervention in the Cost Allocation and Rate Design application of New Brunswick Power Distribution and Customer Service Corp.

**ICG Utilities** – coordinated preparation of applications, supporting materials, and other aspects of regulatory process for regional gas utility managements, as member of a head office specialist team; provided expert technical services in rate design, cost allocation, and working capital allowance determination (lead-lag); testified in three hearings before British Columbia regulator on the subject of lead-lag studies.

**Rogers Cable and Communication Inc.** – Testified before Ontario Energy Board in support of consensus for treatment of certain unmetered electricity loads in the development of guidelines for electricity distribution rates.

**WRITTEN:**

**Greater Sudbury Hydro** – study to allocate costs of services purchased from affiliate

**Bluewater Power** – study to allocate costs of services provided to and purchased from affiliates

**Kingston Hydro** – study to review transfer pricing methodologies and allocation of shared costs for services provided by non-regulated affiliates.

**FortisOntario** – Three studies to allocate corporate and shared costs among regulated and non-regulated affiliates

**EnWin Utilities** – study to allocate corporate and shared costs among corporate affiliates

**Ontario Power Authority** – model development and analysis in support of evaluation of a potential generation, transmission and demand response alternatives in York Region; report in support of generation alternative to the Ontario Energy Board.

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**City of Summerside** – testimony in support of intervention in the application of Maritime Electric to the Island Regulatory and Appeals Commission for approval of an Open Access Transmission Tariff.

*Cost Allocation and Load  
Research*

**Rogers Cable and Communications Inc.** – represented this consumer stakeholder in a regulator-driven process to resolve issues regulator-mandated methodology for the allocation of costs to street lighting and other unmetered loads

**Toronto Hydro-Electric System** – Study to allocate the cost of service to customers that are individually metered suites in multi-unit residential buildings.

**Rogers Cable and Communications Inc.** – represented a consumer stakeholder in a regulator-sponsored stakeholder process to determine a cost allocation methodology and analysis approach for information filings by all electric distribution utilities in Ontario.

**FortisOntario** – methodology review of allocation of shared costs to regulated and non-regulated business units and preparation of evidence for application to Ontario Energy Board for approval of 2006 electricity distribution rates

**Perth-Andover Electric Light Commission** – study to allocate the bundled costs of electricity service to customer classes and assess the impacts on cost allocation of changes to the wholesale rate structure.

**Saint John Energy** – two studies to allocate the bundled costs of electricity service to customer classes; one of these studies included analysis of metered system load profiles and publicly available typical customer profiles to develop demand allocation factors (new study now in progress)

**Enwave District Energy Limited** – study to allocate costs of service for a district steam system as a basis for pricing redesign; study included analysis of detailed time-related customer consumption data as a basis for allocation of costs, as well as operating and financial data.

**Toronto Hydro** – planning and execution of customer load research projects, including deployment of research metering, load data analysis and related customer research and surveys.

**Toronto Hydro** – coordination of first comprehensive cost of service study, a one-year cross-functional project, including in-depth data collection, selection of allocation methodologies and development of computer-based analytical tools. Led subsequent updates and refinements to the study.

**ICG Utilities Ltd.** – fully allocated cost of service studies for natural gas distribution systems in Manitoba and Alberta, including data analysis and development of computer-based analytical framework.

**City of Edmundston/Energy Edmundston** – business plan reflecting acquisition of distribution service territory and new supply contracts with NB Power

**City of Edmundston/Energy Edmundston** – analysis and strategic support in negotiation of contracts with NB Power for:

- Acquisition of 3,000 customers within the territorial boundaries of the City of Edmundston
- Purchase of wholesale electricity supply
- Sale of output of the City's hydro generators; and
- Sale of a portfolio of rental water heaters.

**City of Sault Ste. Marie** – review of municipally-owned electricity distribution company with regard to ownership options, capital structure and financing.

**Brantford Power** – facilitation of strategic planning session for Board of Directors.

**Orillia Power** – facilitation of strategic planning session for Board of Directors and key staff

**Oakville Hydro** – facilitation of regulatory strategic plan

**Burlington Hydro Inc.** – advisory services and analysis in connection with bid to acquire a local distribution utility.

**Markham Hydro Distribution Inc. and Town of Markham** – Due diligence services in support of amalgamation with Hydro Vaughan Distribution Inc. to form PowerStream Inc.

**City of Guelph** – independent advisor to the City with regard to fairness of ownership proportion in proposed merger; analysis of ownership options

**Township of King** - advice to municipality staff with regard to potential construction of a peaking generator in response to a contract award from Ontario Power Authority. This assignment included design, implementation and analysis of a web-based survey to determine attitudes of residents to the project.

**Hydro Ottawa Holdings Inc.** – as part of a larger project to provide strategic advice on four business units, provided financial modeling for valuation of Energy Ottawa Generation.

**Town of Markham, City of Vaughan and City of Barrie** – analysis, due diligence and advisory services in evaluation of potential investment in the solar business of PowerStream Inc.

**PUC Distribution Inc.** – advisory services and analysis in connection with certain issues of new assets and affiliate relationships

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**BDR Report Attachments**  
**Ontario Energy Board** – cross-jurisdictional review and assessment of regulatory approaches to the issue of farm stray voltage across North-America

**Ontario Energy Board** – comparison of heritage contracts and similar arrangements in leading jurisdictions

**Ontario Energy Board** – identification of appropriate roles and responsibilities for the OEB under alternative industry and market structure scenarios, including default supply arrangements

**Barbados Public Utilities Board** – study to recommend procedures, rules and systems for oversight of the natural gas sector by a new regulatory agency.

**Toronto Hydro** – testimony in public hearings before the Ontario Energy Board on subjects of wholesale and retail rate policy and electricity market development; advised management in strategy related to regulatory compliance and industry regulatory issues.

**Electricity Distributors Association** -- analysis of cash flow patterns of electricity distribution utilities in Ontario reflecting customer payment patterns and market settlement requirements

**Electricity Distributors Association** – study to determine the financial benefit to municipalities of ownership of local distribution companies (LDCs).

**National Grid Co.** -- Assessment and overview report on regulatory framework and issues in Ontario.

**Bruce Power** – Assessment and overview on industry structure, generation and transmission capacity, pricing and issues in New Brunswick

**CMS Energy** – report on Ontario electricity industry structure, market, and regulatory environment, in support of decision to respond to RFP for new generation in the province

**New Brunswick Municipal Electric Utilities Association** – cross jurisdictional survey with respect to policy as to regulation of municipal utilities and rural cooperatives.

## CAREER HISTORY

*2001 – Present*

**BDR** – consultant specializing in rate designs, cost and financial analysis, business planning and energy market restructuring issues.

*1998 – 2001*

**In association with Acres Management Consulting** – consultant specializing in rate designs, cost and financial analysis, business planning and energy market restructuring issues.

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1995 – 1998	<b>Toronto Hydro</b> – Manager, Marketing and Energy Management (responsible for demand management programs, customer rates, water heating programs, key account services, emergency telephone response, customer and load research and special projects)
1993 – 1995	<b>Toronto Hydro</b> – Special Assistant to the General Manager (responsible for organizational performance improvement initiatives)
1986 – 1992	<b>Toronto Hydro</b> – Supervisor of Rates and Cost Analysis
1984 – 1986	<b>Toronto Hydro</b> – Senior Rate Analyst
1981 – 1984	<b>ICG Utilities Ltd.</b> – Coordinator, Rate Administration
1979 – 1981	<b>H. Zinder &amp; Associates Canada Ltd.</b> , Senior Analyst

### EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

<i>Degrees and Designations</i>	Society of Management Accountants of Manitoba, CMA University of Calgary, Masters of Business Administration (Finance) University of Toronto, Bachelor of Arts (Hon), Anthropology
<i>Professional Association</i>	Society of Management Accountants of Manitoba
<i>Continuing Professional Development</i>	Queens University School of Business, Marketing Program Queens University School of Business, Sales Management Program Society of Management Accountants of Canada—Customer Profitability Analysis Society of Management Accountants of Canada—Strategic Cost Management Society of Management Accountants – Auditing I

### PROFESSIONAL INVOLVEMENT

<i>Teaching and Training, Industry Committees</i>	Instructor in Cost Allocation and Rate Design for Annual Energy Regulation Course, CAMPUT (Canadian Association of Members of Public Utility Tribunals) 2006, 2007, 2008. Member and present Vice-Chair, Electricity Distributors Association Commercial Members Steering Committee (2007 to present) Member – Ontario Energy Board Cost Allocation Working Group (2003 and 2005-6) Member – Ontario Energy Board Working Group on Cost Allocation for Unmetered Electricity Loads (2012-2013) Member – Municipal Electric Association Cost of Service Sub-Committee (1986-1988)
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## BDR Report Attachments

John is a lawyer by training and an independent investment banker by profession. He has over 30 years experience in the areas of business planning and enterprise valuations, financing and capital markets activities, and mergers and acquisitions (M&A). He has worked extensively throughout North America and over the past ten years he has specialized in the energy sector.

In his consulting practice, John has advised many Ontario based entities considering mergers, acquisitions and divestitures, joint ventures, and strategies re affiliates. In addition to his expertise in the valuation of utility businesses, John has expertise concerning the regulatory issues that arise from utility activities including problems arising from the inclusion of premiums over Rate Base in the prices paid for regulated utilities. John has led teams in many Strategic Options studies for both shareholders and Board of Directors/management teams such as for Burlington Hydro, Centre Wellington Hydro, Fortis Inc., the City of Guelph, the City of Markham, Oakville Hydro, Orangeville Hydro, PowerStream, the Town of Halton Hills, Hydro One, Thunder Bay Hydro and Westario Hydro.

John's diversified experience, over many years, includes advising both public and private sector entities as owners or developers of energy businesses in terms of policy, ownership and valuation of the various options open to them.

John is a member of the Board of Directors of Atlantic Power Corporation. Atlantic Power is a publicly traded company listed on the New York and Toronto Stock Exchanges. Atlantic holds some 28 investments in generation plants located in both the US and Canada.

He holds degrees from Queens University, Bachelor of Arts (BA Hons), from the University of Toronto Bachelor of Laws (JD) and from the University of British Columbia a Masters degree in Business Administration (MBA).

**REPRESENTATIVE DISTRIBUTION PROJECT EXPERIENCE**

<i>Burlington Hydro Inc</i>	Retained as an advisor to complete a Strategic Options Study.
<i>Centre Wellington</i>	Valuation in the context of a possible merger with a number of different utilities including Orangeville Hydro
<i>Guelph</i>	Led the team which advised the City of Guelph as to their strategic options and provided the "Fairness Opinion" regarding the proposed transaction with Horizon Utilities which ultimately did not close.
<i>Halton Hills</i>	Led the team which advised the Town of Halton Hills as to their strategic options
<i>Hydro Ottawa Holdings</i>	Assessed financing options for Hydro Ottawa Holdings As part of the study we developed a multi-year discounted cash flow valuation model for the distribution business, and advised on the impact of alternative hold/merge/sell options and sensitivities on shareholder value.

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*Hydro One*

Advised Hydro One regarding various “consolidation” options which might be available both specifically to Hydro One and generally as part of an overall policy which the Province might adopt.

*Hydro One and Northwestern Ontario LDCs (Zone 7)*

Facilitated a feasibility study for the potential amalgamation of the distribution utilities in Northwestern Ontario. The project included assessment of synergies, evaluation of impacts on shareholder values and identification and analysis of potential challenges and potential barriers.

*Hydro One*

In the 1999/2000 timeframe, Mr. McNeil had a series of contracts with Hydro One involving advisory services on a wide range of confidential projects relating to M & A, cost of capital, valuation, capital markets and regulatory matters. Publicly announced assignments include the acquisition of Brampton Hydro for \$260 million.

*Markham*

Led the team which has advised Markham re a number of matters relating to their investment in PowerStream including the assessment of its position as a major shareholder of PowerStream in relation to merger discussions with Barrie Hydro. The transaction closed on January 1, 2009

*Oakville Hydro*

Retained as an advisor to complete a Strategic Options Study.

*Orangeville Hydro*

Valuation in the context of a possible sale and valuation re merger with a number of different utilities including Centre Wellington Hydro

*PowerStream*

Valuation of COLLUS as part of an acquisition of up to 50% equity interest Transaction closed in mid-2012.

Advised the City with respect to a comprehensive assessment of its options re its electric distribution utility.

*PUC Distribution (Sault Ste Marie)*

Retained as an advisor to complete a Strategic Options Study

*Thunder Bay Hydro*

Retained as an advisor to complete a Strategic Options Study

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*Westario Hydro*

Valuations and structural advice in the context of a possible sale and valuations and structural advice re possible mergers with a number of different utilities

### **REPRESENTATIVE DISTRIBUTION AFFILIATE PROJECT EXPERIENCE**

In recent years John has also focused on facilitating M&A projects for Ontario LDC's with respect to essentially unregulated affiliate businesses. This work included developing valuations and facilitation of competitive bid processes for several clients including

*Fibre Networks*

- Sale of Simcoe County Broadband Networks
- Sale of PowerStreams fibre portfolio
- Sale of Veridian Telecom
- Sale of PUC Telecom
- Sale of Burlington Hydro Telecom

*Water Heater Portfolios*

- Sale of Veridian Water Heater portfolio
- Oakville Hydro (Sandpiper) acquisition of Horizon Water Heater portfolio
- Sale of Norfolk Energy Services Rental Equipment portfolio
- Sale of St Thomas (Ascent) Water Heater portfolio

### **PREVIOUS FIRMS**

*2002-Present*

Co –Founder and since 2005 President of BDR.

*1998-2001*

Executive Consultant, Acres Management Consulting, Toronto, Ontario

*1991–1998*

Managing Director, Scotia Capital Markets, Investment Banking Division, Toronto, Ontario

*1989–1990*

Consultant, NCL Investments Ltd., London, England  
Advised/executed merchant banking transactions.

*1987–1989*

Managing Director, Merrill Lynch Capital Markets  
Senior Vice President & Director, Merrill Lynch Canada  
Executive Director, Merrill Lynch Europe, Investment Banking Division

*1985–1987*

Executive Director, Union Bank of Switzerland (Securities) Investment Banking Division, London and Zurich

*1973–1979*

Vice President, Wood Gundy, Investment Banking Division, Toronto

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