

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act 1998*, Schedule B to the *Energy Competition Act*, 1998, S.O. 1998, c.15;

AND IN THE MATTER OF an Application by Hydro One Networks Inc. for an Order or Orders approving or fixing just and reasonable rates and other service charges for the distribution of electricity as of January 1, 2015.

**SCHOOL ENERGY COALITION CROSS-EXAMINATION COMPENDIUM
(Panel 1)**

Jay Shepherd P.C.

2300 Yonge Street, Suite 806
Toronto, Ontario M4P 1E4

Mark Rubenstein

Tel: 416-483-3300
Fax: 416-483-3305

Counsel to the School Energy Coalition

2015-2019 Custom Distribution Rate Application

**Executive Panel
May 12, 2014**

Sandy Struthers, Chief
Administration & Chief
Financial Officer

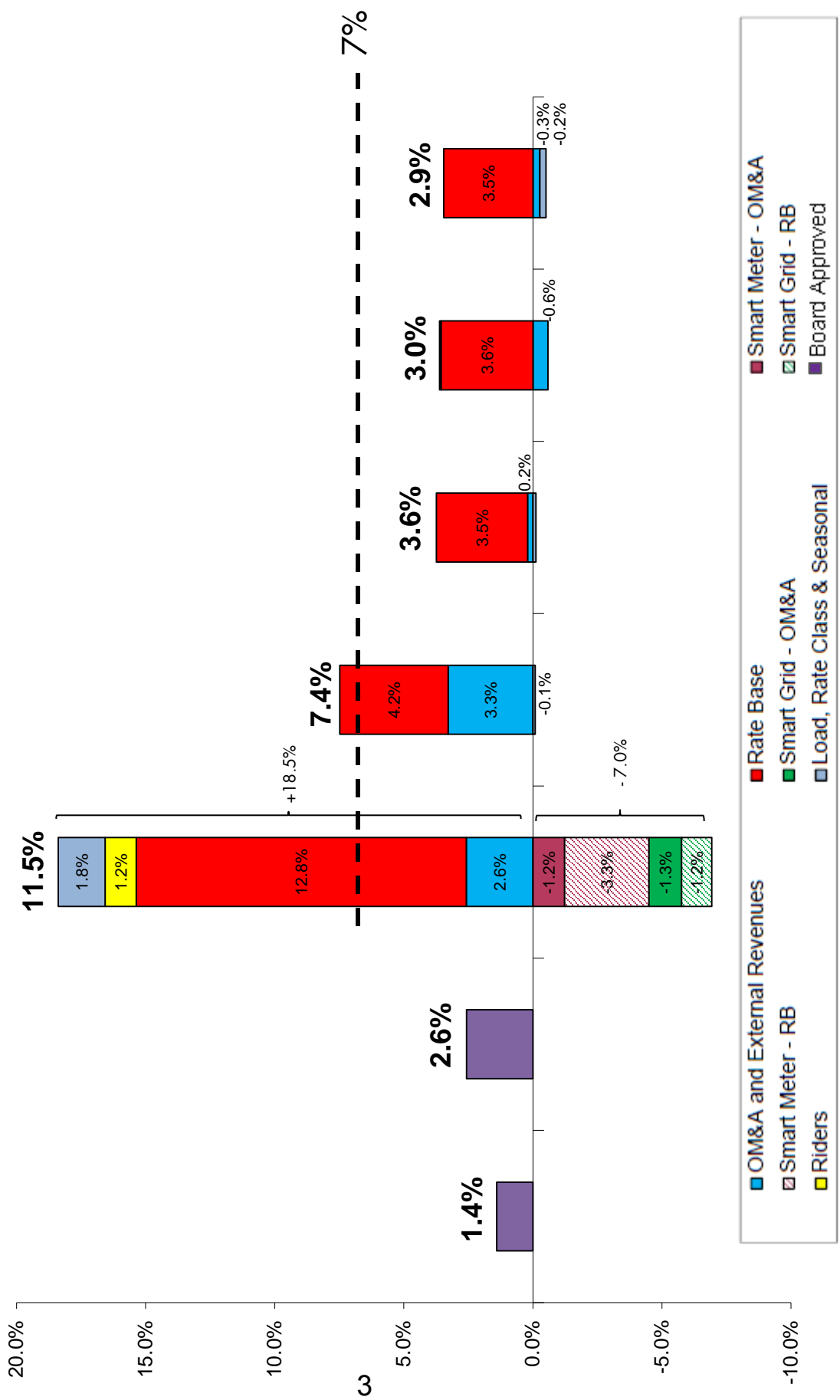
Mike Winters, Sr. VP
Engineering & Construction
Wayne Smith, Sr. VP
Operations

Laura Cooke, VP, Corporate
Relations



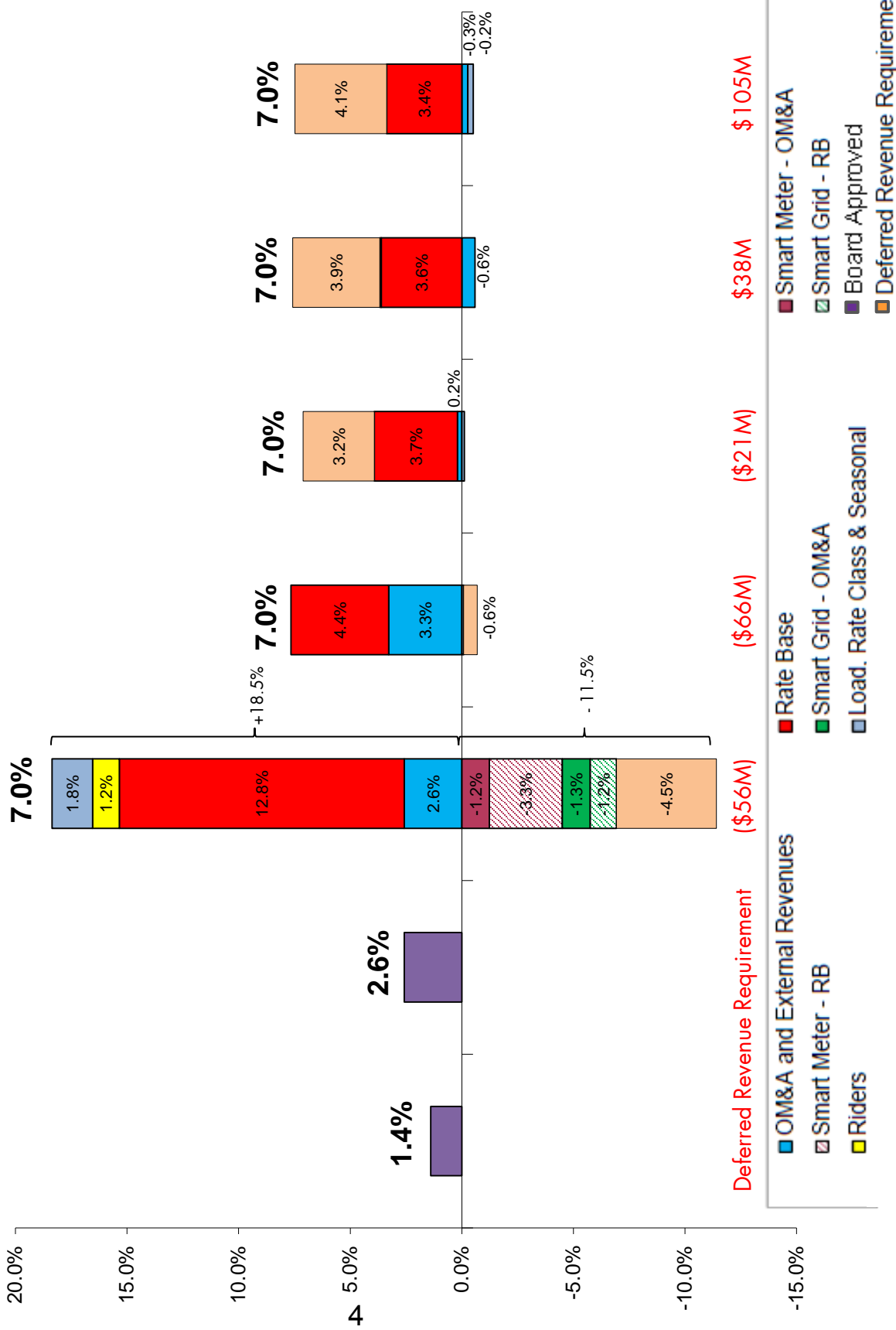
Distribution Rate Increase

2013 2014 2015 2016 2017 2018 2019



Smoothed Dx Rate Increase

2013 2014 2015 2016 2017 2018 2019



REVENUE REQUIREMENT

1.0 SUMMARY OF REVENUE REQUIREMENT

Hydro One Distribution follows standard regulatory practice and has calculated revenue requirement consistent with the principles of the 2006 Electricity Distribution Rate Handbook as follows:

Table 1
Revenue Requirement (\$ Millions)

Components	2011 ¹	2015	2016	2017	2018	2019	Reference
OM&A	525.0	564.3	610.2	614.0	603.9	600.0	Exhibit C1, Tab 2, Schedule 1
Depreciation and Amortization	283.7	355.4	374.9	390.2	402.9	413.6	Exhibit C1, Tab 6, Schedule 1
Income Taxes	34.2	52.5	60.5	63.0	65.4	69.5	Exhibit C1, Tab 7, Schedule 1
Return on Capital	354.0	442.7	477.0	510.8	543.3	576.5	Exhibit B1, Tab 1, Schedule 1
Total Revenue Requirement	1,196.9	1,414.9	1,522.6	1,578.0	1,615.4	1,659.7	Exhibit E2, Tab 1, Schedule 1
Deduct External Revenues and Other	48.1	47.9	48.9	49.9	49.2	49.9	Exhibit E1, Tab 1, Schedule 2
Revenue Requirement less External Revenues	1,148.9	1,367.0	1,473.7	1,528.1	1,566.1	1,609.9	

¹¹ Note 1: This column shows the 2011 revenue requirement approved by the Board in Hydro One
¹² Distribution's 2010 and 2011 rate application in EB-2009-0096.

HYDRO ONE NETWORKS INC.
 DISTRIBUTION
 Calculation of Revenue Requirement
 Year Ending December 31
 (\$ Millions)

Line No.	Particulars	2015 (a)	2016 (b)	2017 (c)	2018 (d)	2019 (e)
	Cost of Service					
1	Operating, maintenance & administrative	\$ 564.3	\$ 610.2	\$ 614.0	\$ 603.9	\$ 600.0
2	Depreciation & amortization	355.4	374.9	390.2	402.9	413.6
3	Income taxes	52.5	60.5	63.0	65.4	69.5
4	Cost of service excluding return (Note 1)	<u>\$ 972.2</u>	<u>\$ 1045.6</u>	<u>\$ 1067.2</u>	<u>\$ 1072.1</u>	<u>\$ 1083.2</u>
5	Return on capital	442.7	477.0	510.8	543.3	576.5
6	Total revenue requirement	<u>\$ 1414.9</u>	<u>\$ 1522.6</u>	<u>\$ 1578.0</u>	<u>\$ 1615.4</u>	<u>\$ 1659.7</u>

Note 1: Per Exhibit C2-1-1

HYDRO ONE NETWORKS INC.
 DISTRIBUTION
 Revenue Deficiency/(Sufficiency)
 Year Ending December 31, 2015 to 2019
 (\$ Millions)

Line No.	Particulars	2015	2016	2017	2018	2019
1	Utility Rate Base	6,553.3	6,864.4	7,191.4	7,541.3	7,869.6
2	Deemed Equity Portion of Rate Base	2,621.3	2,745.8	2,876.6	3,016.5	3,147.9
3	Allowed / Target Return	9.71%	9.96%	10.16%	10.21%	10.21%
4	Allowed / Target Return on Equity	254.5	273.5	292.3	308.0	321.4
5	Revenue at Current Rates	1,198.2	1,205.0	1,215.5	1,219.3	1,221.9
6	Total Costs and Expenditures	1,107.9	1,188.6	1,222.7	1,242.0	1,268.8
7	Utility Net Income before taxes	90.3	16.4	(7.2)	(22.7)	(46.9)
8	Tax adjustments to accounting income	(103.3)	(100.0)	(111.7)	(121.0)	(122.8)
9	Taxable Income	(13.0)	(83.6)	(119.0)	(143.7)	(169.7)
10	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%
11	Income Tax on Taxable Income	(3.4)	(22.2)	(31.5)	(38.1)	(45.0)
12	Income Tax Credits	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)
13	Utility Net Income	95.2	40.1	25.8	16.9	(0.4)
14	Revenue Deficiency/(Sufficiency)	159.3	233.4	266.5	291.1	321.8
15	Gross Revenue Deficiency/(Sufficiency)	216.7	317.5	362.5	396.1	437.8

Assumptions:
 No filing from 2015-19
 Revenue at 2014 rates is with updated load forecast

School Energy Coalition (SEC) INTERROGATORY #61

Issue 7.4 Is moving revenue-to-cost ratios for all rate classes to within 98% to 102% over the 2015-2019 period appropriate?

Interrogatory

Reference: Exhibit G1

Please confirm that the following table correctly calculates the current and proposed distribution charges for a school in the UGd Class with a 100 kW monthly demand, and the dollar and percentage increases being proposed. If not confirmed, please provide corrected calculations. Please confirm that the same school is being asked to pay an additional \$18,744.60 over the five year test period, subject to any adjustments in the Applicant's annual filings.

Sample School Distribution Rate Calculations 2014-2019						
UGd Class	2014	2015	2016	2017	2018	2019
<i>Monthly Fixed Charge</i>	\$28.71	\$85.01	\$92.91	\$100.56	\$106.14	\$111.64
<i>Smoothing Rider</i>		-\$3.25	-\$4.33	-\$1.47	\$2.79	\$7.08
<i>Net Monthly Fixed</i>	\$28.71	\$81.76	\$88.58	\$99.09	\$108.93	\$118.72
<i>Volumetric Rate</i>	\$6.9350	\$7.8590	\$8.6490	\$9.3830	\$10.0450	\$10.7210
<i>Smoothing Rider</i>		-\$0.3004	-\$0.4030	-\$0.1373	\$0.2637	\$0.6802
<i>Net Volumetric Rate</i>	\$6.9350	\$7.5586	\$8.2460	\$9.2457	\$10.3087	\$11.4012
<i>Result at 100 KW</i>	\$693.50	\$755.86	\$824.60	\$924.57	\$1,030.87	\$1,140.12
<i>Total Monthly Bill</i>	\$722.21	\$837.62	\$913.18	\$1,023.66	\$1,139.80	\$1,258.84
<i>Annual Bill</i>	\$8,666.52	\$10,051.44	\$10,958.16	\$12,283.92	\$13,677.60	\$15,106.08
<i>Increase over Prior Year</i>		\$1,384.92	\$906.72	\$1,325.76	\$1,393.68	\$1,428.48
<i>Percentage</i>		15.98%	9.02%	12.10%	11.35%	10.44%
<i>Five Year Increase</i>						\$6,439.56
<i>Percentage</i>						74.30%
<i>Revenue at Current Rates</i>	\$43,332.60					
<i>Proposed Revenue</i>	\$62,077.20					
<i>Increased Charge</i>	\$18,744.60					

1 *Response*

2
3 The proposed distribution volumetric charge in the above table is rounded to three
4 decimals, while Hydro One uses four decimals for all volumetric charges. Since this
5 change results in only a minor impact to the final results, Hydro One has not updated the
6 table.

7
8 The line labeled “Total Monthly Bill” should appropriately be labeled “Total Distribution
9 Charges”. The charges shown are only for base distribution service and exclude costs the
10 sample school would pay for deferral/variance account riders, commodity and other Total
11 Bill components. For a typical UGd class customer, distribution represents about 17% of
12 the total bill, and therefore the 74.30% figure shown in the table corresponds to about a
13 12.6% impact on Total Bill or roughly a 2.5% annual increase over the 5 years.

14
15 It is confirmed that the same school will pay about \$18,744.60 in additional base
16 distribution charges over the five year test period, subject to any adjustments in the
17 Applicant’s annual filings.

School Energy Coalition (SEC) INTERROGATORY #64

Issue 7.4 Is moving revenue-to-cost ratios for all rate classes to within 98% to 102% over the 2015-2019 period appropriate?

Interrogatory

Reference: Exhibit G1

Please confirm that the following table correctly calculates the current and proposed distribution charges for a school in the GSd Class with a 100 kW monthly demand, and the dollar and percentage increases being proposed. If not confirmed, please provide corrected calculations. Please confirm that the same school is being asked to pay an additional \$32,412.72 over the five year test period, subject to any adjustments in the Applicant's annual filings.

Sample School Distribution Rate Calculations 2014-2019						
Gsd Class	2014	2015	2016	2017	2018	2019
Monthly Fixed Charge	\$52.27	\$83.96	\$91.53	\$98.56	\$103.54	\$108.41
Smoothing Rider		-\$3.21	-\$4.26	-\$1.44	\$2.72	\$6.88
Net Monthly Fixed	\$52.27	\$80.75	\$87.27	\$97.12	\$106.26	\$115.29
Volumetric Rate	\$11.4330	\$13.7210	\$15.1460	\$16.4420	\$17.6170	\$18.8110
Smoothing Rider		-\$0.5244	-\$0.7057	-\$0.2405	\$0.4624	\$1.1934
Net Volumetric Rate	\$11.4330	\$13.1966	\$14.4403	\$16.2015	\$18.0794	\$20.0044
Result at 100 KW	\$1,143.30	\$1,319.66	\$1,444.03	\$1,620.15	\$1,807.94	\$2,000.44
Total Monthly Bill	\$1,195.57	\$1,400.41	\$1,531.30	\$1,717.27	\$1,914.20	\$2,115.73
Annual Bill	\$14,346.84	\$16,804.92	\$18,375.60	\$20,607.24	\$22,970.40	\$25,388.76
Increase over Prior Year		\$2,458.08	\$1,570.68	\$2,231.64	\$2,363.16	\$2,418.36
Percentage		17.13%	9.35%	12.14%	11.47%	10.53%
Five Year Increase						\$11,041.92
Percentage						76.96%
Revenue at Current Rates	\$71,734.20					
Proposed Revenue	\$104,146.92					
Increased Charge	\$32,412.72					

1 *Response*

2
3 The proposed distribution volumetric charge in the above table is rounded to three
4 decimals, while Hydro One uses four decimals for all volumetric charges. Since this
5 change results in only a minor impact to the final results, Hydro One has not updated the
6 table.

7
8 The line labeled “Total Monthly Bill” should appropriately be labeled “Total Distribution
9 Charges”. The charges shown are only for base distribution service and exclude costs the
10 sample school would pay for deferral/variance account riders, commodity and other Total
11 Bill components. For a typical GSd class customer, distribution represents about 26% of
12 the total bill, and therefore the 76.96% figure shown in the table corresponds to about a
13 20.0% impact on total bill or roughly a 4.0% annual increase over the 5 years.

14
15 It is confirmed that the same school will pay about \$32,412.72 in additional base
16 distribution charges over the five year test period, subject to any adjustments in the
17 Applicant’s annual filings.

Ontario Energy Board



Report of the Board

Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach

October 18, 2012

1 Introduction

The Ontario Energy Board regulates the rates of the 77 local electricity distributors that operate Ontario's local electricity delivery networks. These networks are essential to the seamless delivery of electricity from generators to end users. The cost of distributing electricity represents approximately 20% to 25% of the total electricity bill. Revenues collected from customers contribute to the ongoing operation and maintenance of the system as well as its expansion and modernization. Ontario's electricity distributors represent significant capital investments, with total assets of approximately \$17 billion, and new investment of \$1.9 billion in 2011. And while all distributors perform a similar service, their investment needs vary over time. Ontario's energy sector is evolving, as are the expectations of customers and the obligations placed on distributors as a result. The Board believes that our approach to regulation needs to evolve along with the sector.

The Board needs to regulate the industry in a way that serves present and future customers, and that better aligns the interests of customers and distributors while continuing to support the achievement of public policy objectives, and that places a greater focus on delivering value for money. A number of factors have prompted the Board's work on a renewed regulatory framework: government policy, aging infrastructure, customer concerns regarding rate increases, the increased maturity of the industry, and a need to harmonize and consolidate Board policies related to planning and rate setting.

The Board's renewed regulatory framework for electricity is designed to support the cost-effective planning and operation of the electricity distribution network – a network that is efficient, reliable, sustainable, and provides value for customers. Through taking a longer term view, the new framework will provide an appropriate alignment between a sustainable, financially viable electricity sector and the expectations of customers for reliable service at a reasonable price. The performance-based approach described in

this Report is an important step in the continued evolution of electricity regulation in Ontario.

In developing the policies set out in this Report, the Board has been informed by, and has benefitted greatly from, extensive consultation and dialogue with stakeholders representing a broad range of interests and perspectives. The materials generated for and through this consultation provide useful background and context for the issues discussed in this Report, as well as a detailed record of stakeholder comments on those issues. Many of these materials are listed in Appendix A, and all are readily available on the Board's website.

The renewed regulatory framework is a comprehensive performance-based approach to regulation that is based on the achievement of outcomes that ensure that Ontario's electricity system provides value for money for customers. The Board believes that emphasizing results rather than activities, will better respond to customer preferences, enhance distributor productivity and promote innovation. The Board has concluded that the following outcomes are appropriate for the distributors:

Customer Focus: services are provided in a manner that responds to identified customer preferences;

Operational Effectiveness: continuous improvement in productivity and cost performance is achieved; and utilities deliver on system reliability and quality objectives;

Public Policy Responsiveness: utilities deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board); and

Financial Performance: financial viability is maintained; and savings from operational effectiveness are sustainable.

Table 1: Rate-Setting Overview - Elements of Three Methods

	4 th Generation IR	Custom IR	Annual IR Index
Setting of Rates			
“Going in” Rates	Determined in single forward test-year cost of service review	Determined in multi-year application review	No cost of service review, existing rates adjusted by the Annual Adjustment Mechanism
Form	Price Cap Index	Custom Index	Price Cap Index
Coverage	Comprehensive (i.e., Capital and OM&A)		
Annual Adjustment Mechanism	Inflation	Composite Index	Composite Index
	Productivity	Peer Group X-factors comprised of: (1) Industry TFP growth potential; and (2) a stretch factor	Distributor-specific rate trend for the plan term to be determined by the Board, informed by: (1) the distributor’s forecasts (revenue and costs, inflation, productivity); (2) the Board’s inflation and productivity analyses; and (3) benchmarking to assess the reasonableness of the distributor’s forecasts
Role of Benchmarking	To assess reasonableness of distributor cost forecasts and to assign stretch factor		n/a
Sharing of Benefits	Productivity factor		
	Stretch factor	Case-by-case	Highest 4 th Generation IR stretch factor
Term	5 years (rebasings plus 4 years).	Minimum term of 5 years.	No fixed term.
Incremental Capital Module	On application	N/A	N/A
Treatment of Unforeseen Events	The Board’s policies in relation to the treatment of unforeseen events, as set out in its July 14, 2008 EB-2007-0673 Report of the Board on 3rd Generation Incentive Regulation for Ontario’s Electricity Distributors , will continue under all three menu options.		
Deferral and Variance	Status quo	Status quo, plus as needed to track capital spending against plan	Disposition limited to Group 1 Separate application for Group 2
Performance Reporting and Monitoring	A regulatory review may be initiated if a distributor’s annual reports show performance outside of the ± 300 basis points earnings dead band or if performance erodes to unacceptable levels.		

assignments on the basis of total cost benchmarking evaluations. As is the case currently, each group will have its own specific stretch factor. The assignments will continue to be revised annually to reflect changes in efficiencies in the sector. The Board will further consider whether the current three stretch factor values of 0.2, 0.4, and 0.6 continue to be appropriate or whether there should be greater differentiation between the three values. The Board will determine the appropriate stretch factor values for the three efficiency groups in conjunction with its determination of the productivity factor for 4th Generation IR.

Incremental Capital Module (ICM)

The ICM is intended to address incremental capital investment needs that may arise during the IR term. Under 4th Generation IR, the Board's policies in respect of ICM in effect under 3rd Generation IR will continue to apply.

In 2011, the Board revised its *Filing Requirements for Electricity Transmission and Distribution Applications* to clarify the ICM specifications on how to calculate the incremental capital amount that may be recoverable when a distributor applies for an ICM. In the Filing Requirements issued in June 2012, the ICM was further revised to remove words such as "unusual" and "unanticipated" as prerequisites to an application for incremental capital, although the requirement that the proposed expenditures be non-discretionary remains.

Custom IR

In the Custom IR method, rates are set based on a five year forecast of a distributor's revenue requirement and sales volumes. This Report provides the general policy direction for this rate-setting method, but the Board expects that the specifics of how the costs approved by the Board will be recovered through rates over the term will be determined in individual rate applications. This rate-setting method is intended to be

customized to fit the specific applicant's circumstances. Consequently, the exact nature of the rate order that will result may vary from distributor to distributor.

The Custom IR method will be most appropriate for distributors with significantly large multi-year or highly variable investment commitments that exceed historical levels. The Board expects that a distributor that applies under this method will file robust evidence of its cost and revenue forecasts over a five year horizon, as well as detailed infrastructure investment plans over that same time frame. In addition, the Board expects a distributor's application under Custom IR to demonstrate its ability to manage within the rates set, given that actual costs and revenues will vary from forecast.

The Board has determined that a minimum term of five years is appropriate. As is the case for 4th Generation IR, this term will better align rate-setting and distributor planning, strengthen efficiency incentives, and support innovation. It will help to manage the pace of rate increases for customers through adjustments calculated to smooth the impact of forecasted expenditures.

The adjudication of an application under the Custom IR method will require the expenditure of significant resources by both the Board and the applicant. The Board therefore expects that a distributor that applies under this method will be committed to that method for the duration of the approved term and will not seek early termination. As noted above, however, a regulatory review may be initiated if the distributor performs outside of the ± 300 basis points earnings dead band or if its performance erodes to unacceptable levels.

Annual Adjustment Mechanism

The allowed rate of change in the rate over the term will be determined by the Board on a case-by-case basis informed by empirical evidence including:

- the distributor's forecasts (revenues and costs, including inflation and productivity);

- the Board's inflation and productivity analyses; and
- benchmarking to assess the reasonableness of distributor forecasts.

Expected inflation and productivity gains will be built into the rate adjustment over the term.

Capital Spending

There will not be an ICM in the Custom IR method. Under this method, distributors will be expected to operate under their Board-determined multi-year rates.

Under Custom IR, planned capital spending is expected to be an important element of the rates distributors will be seeking, and hence will be subjected to thorough reviews by parties to the proceeding. Once rates have been approved, the Board will monitor capital spending against the approved plan by requiring distributors to report annually on actual amounts spent. If actual spending is significantly different from the level reflected in a distributor's plan, the Board will investigate the matter and could, if necessary, terminate the distributor's rate-setting method. A distributor on the Custom IR method will have its rate base adjusted prospectively to reflect actual spend at the end of the term, when it commences a new rate-setting cycle. This is consistent with the Board's existing policies in relation to incremental capital under 3rd Generation IR.

Annual IR Index

The Annual IR Index will be appropriate for distributors with primarily sustainment investment needs. The Annual IR Index is intended to provide a rate-setting approach that is simpler and more streamlined than the other two. Among other things, there is no forecast cost of service review under this method. Rates are adjusted by a simple price cap index formula. Initial rates are set by applying this adjustment to existing rates. The annual rate adjustments are designed to reflect "steady-state mode" operations – that is, rate adjustments will be comparatively minor.

3.1.3 Tools and methods to support proposed investments

The Board's filing requirements identify minimum requirements with respect to the quantitative data and qualitative information that is to be provided by distributors as part of their filings. The onus, however, remains on a distributor to provide the data, information and analyses necessary to justify the forecasted costs that are the basis for the distributor's proposed rates. Filings must enable the Board to assess whether and how a distributor has sought to control costs in relation to its proposed investments through the appropriate optimization, prioritization and pacing of investment expenditures.

There is a need, therefore, to consider whether specific qualitative and quantitative analyses should be required to assist the Board in its review and consideration of distributor investment plans. Whether and how experts might be used to assist in the assessment of distributor investment plans and planning processes was also noted for consideration.

Stakeholder Views

Some stakeholders endorsed the involvement of independent third party experts in the assessment of distributor planning processes and filings. It was noted that this is currently a practice in the United Kingdom, and that some Ontario distributors already routinely use third party experts for plan evaluation purposes.

Stakeholder proposals for tools and methods to support and justify distributor investments included specific quantitative analyses and verifiable or authoritative qualitative information. A variety of data and quantitative analyses were suggested.

Stakeholder views varied on bill impact estimations and associated tools. Some stakeholders were supportive of a requirement that distributors consider forecasts of the 'total bill' when developing their spending plans, identifying this as essential to the

spacing and prioritization of investment in a manner that controls year-over-year rate increases and to reducing the need for mitigation at the time of Board approval. Others noted that some costs on the total bill are outside of a distributor's control, and that increases in these costs should not result in automatic offsetting adjustments to distribution investment spending.

The Board's Conclusions

As indicated in the Introduction to this Report, the Board's first two statutory objectives are key considerations for the policies described in this Chapter. Pacing and prioritization of capital investments to promote predictability in rates and affordability for customers must be a primary goal in a distributor's capital plan. The Board recognizes that factors beyond a distributor's control may add complexity and uncertainty to any effort to estimate bill impacts on customers. However, a distributor must exercise control over the pace of its own capital spending, as this factor can be an important element in the total cost of electricity to customers. To aid distributors in this essential task, standardized methods and tools should be developed for use by distributors in the preparation of their plans. In addition, the Board sees merit in receiving the evidence of third party experts as part of a distributor's application, or retaining its own third party experts, in relation to the review and assessment of distributor asset management and network investment plans (along with other evidence filed by the distributor).

The Board will further engage stakeholders on the identification and development of qualitative and quantitative approaches and tools to be used by distributors to support their investment proposals, including methodologies to assist in prioritizing and pacing proposed investments in consideration of the total bill impact on customers. The output of any methodology will need to be transparent, robust and reproducible, and include forecast information from independent and authoritative sources where these are publicly available.

1 **School Energy Coalition (SEC) INTERROGATORY #10**

2
3 **Issue 2.6 Are Hydro One's forecasts (revenue, costs, inflation and productivity)**
4 **reasonable? Should Hydro One be expected to provide benchmarking**
5 **evidence as an indicator of reasonableness?**

6
7 **Interrogatory**

8
9 **Reference:**

10
11 For each of the following, please explain how the Applicant has evaluated the
12 reasonableness of its forecasted:

- 13 (a) Revenue
14 (b) Costs
15 (c) Inflation
16 (d) Productivity

17
18 **Response**

- 19
20 (a) Hydro One's responses to Exhibit I, Tab 2.6, Schedule 10 CCC 15 and to Exhibit I,
21 Tab 6.6, Schedule 6 VECC 78 show that Hydro One has demonstrated the
22 reasonableness of its load forecast, which directly determines its revenue forecast;
23
24 (b) Hydro One's responses to Staff IR 33 part (a) and (d) in Exhibit I, Tab 2.6, Schedule
25 1 Staff 33 has demonstrated the reasonableness of its costs forecast;
26
27 (c) Hydro One's responses to Staff IR 35 in Exhibit I, Tab 2.6, Schedule 1 Staff 35 has
28 demonstrated the reasonableness of its inflation forecast; and
29
30 (d) Hydro One's responses to Staff IR 33 part (b) in Exhibit I, Tab 2.6, Schedule 1 Staff
31 33 has demonstrated the reasonableness of its productivity forecast.

Ontario Energy Board (Board Staff) INTERROGATORY #33

Issue 2.6 Are Hydro One's forecasts (revenue, costs, inflation and productivity) reasonable? Should Hydro One be expected to provide benchmarking evidence as an indicator of reasonableness?

Interrogatory

**Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A (Empirical Evidence)**

Preamble:

On pages 19 and 20 of the RRFE Report, the Board states that the allowed rate of change in the rate over the term will be determined by the Board informed by empirical evidence including: the distributor's forecasts; the Board's inflation and productivity analyses; and benchmarking to assess the reasonableness of the distributor forecasts.

- a) Please describe all external benchmarking (i.e. comparisons to utilities outside the Hydro One group) and internal benchmarking (i.e., regression analysis on Hydro One's historical performance and spending) that Hydro One undertook to estimate its costs for activities proposed in the application.
- b) Please describe all external benchmarking (i.e. comparisons to utilities outside the Hydro One group) and internal benchmarking (e.g., regression analysis on Hydro One's historical performance and spending) that Hydro One undertook to estimate the productivity gains it will achieve during the rate term.
- c) Please explain the basis for any company selected as a comparator.
- d) Absent this benchmarking evidence to support Hydro One's forecasts, on what can the Board rely to determine whether Hydro One's forecasts are reasonable?

Response

- a) Benchmarking reviews used to estimate costs for the proposed activities include:
 - the updated 2013 Compensation Cost Benchmarking Study (Attachment 1 to Exhibit C1, Tab 3, Schedule 2), which covers total compensation costs for 2013 in the amount of approximately \$1,067 million, including \$778 million in wages and incentives (Attachment 2, Exhibit C1, Tab 3, Schedule 2), \$160 million in pension

- 1 costs (Exhibit C1, Tab 3, Schedule 3), and \$129 million in OPEBs (Hydro One's
2 response to Exhibit I, Tab 4.3, Schedule 1 Staff 73(g));
- 3 • a 2011 independent study which reviewed, among other things, the efficiency of
4 the "Operations and Carrier Management" services arrangement between Hydro
5 One Telecom and Hydro One Networks (Exhibit C1, Tab 2, Schedule 10 pp.16-17
6 and Hydro One's response to Exhibit I, Tab 4.2, Schedule 1 Staff 34); and
7 • the vegetation management "best practices" benchmarking report, which was filed
8 in Hydro One's last cost-of-service application (Exhibit A, Tab 15, Schedule 2 of
9 EB-2009-0096) and provided again in Hydro One's response to Exhibit I, Tab
10 4.2, Schedule 1 Staff 34.
- 11
- 12 b) No external or internal benchmarking studies have been undertaken to estimate the
13 productivity gains that will be achieved during the rate term. However, Exhibit A,
14 Tab 19, Schedule 1 includes information on Hydro One's cost efficiencies and
15 productivity initiatives, along with programs being developed and implemented.
- 16
- 17 c) In the benchmarking work referred to in answer a) above, peer groups were selected
18 based on the criteria described below.
- 19
- 20 • In the updated 2013 Compensation Cost Benchmarking Study, the selection
21 criteria are described in pp.6-7 of Attachment 1 to Exhibit C1, Tab 3, Schedule 7.
22 • In the 2011 study (referred to in Exhibit C1, Tab 2, Schedule 10 pp.16-17),
23 comparator companies were selected from Hydro One's utility peer group if they
24 had similar geographic considerations and similar business telecom and power
25 system telecom components. For more information, see Hydro One's response to
26 Exhibit I, Tab 2.6, Schedule 1 Staff 34.
- 27
- 28 d) In addition to the above-identified benchmarking reports, the Board can rely on:
- 29
- 30 • expenditure estimates that have been extrapolated from Hydro One's historical
31 spending and adjusted to reflect changes in work programs and forecasted
32 productivity savings;
- 33 • Hydro One's procurement policy for the purchase of external goods or services
34 which prescribes procurement through competitive RFP processes;
- 35 • the benchmarking review of outsourcer fees (Exhibit C1, Tab 2, Schedule 7, pp.3-
36 4), comprising approximately 30% of Common Corporate Costs (Exhibit C1-5-1,
37 Attachment 1, p.3), which review concluded that the fees were within benchmark
38 price as described in Exhibit C1, Tab 2, Schedule 7;
- 39 • Hydro One's historical return on equity detailed in its response to Exhibit I, Tab
40 6.3, Schedule 6 VECC 76, which rebuts any assertion of over-forecasting; and

- 1 • Hydro One's rigorous investment planning, which has been bolstered by far more
2 sophisticated, comprehensive asset data and analytical tools than Hydro One had
3 before, all of which are referred to in Exhibit A, Tab 17.

MEMORANDUM OF AGREEMENT

BETWEEN

**Her Majesty the Queen
in Right of the province of Ontario
as Represented by the Minister of Energy**

AND

Hydro One Inc. ("HOI")

A. Purpose:

This document sets out the agreement between Hydro One Inc. ("HOI"), a corporation incorporated under the *Business Corporations Act* (Ontario) (the "OBCA") and subject to/governed by the *Electricity Act, 1998* (the "EA") and its sole shareholder, Her Majesty the Queen in Right of the Province of Ontario as represented by the Minister of Energy (the "Shareholder") on mandate, governance, responsibilities, performance expectations and executive compensation.

This Memorandum of Agreement is intended to promote a positive and co-operative working relationship between HOI and the Shareholder.

B. Mandate:

1. HOI's core mandate is the safe, reliable and cost-effective transmission and distribution of electricity to Ontario electricity users.
2. HOI will operate as a commercial enterprise with an independent Board of Directors that will, at all times, exercise its fiduciary responsibility and a duty of care to act in the best interests of HOI.

C. Governance:

The governance relationship between HOI and the Shareholder shall be founded on the following principles:

1. The Board of Directors of HOI is responsible for oversight of the management of the business and affairs of the Corporation, including the appointment of executive officers and management and the formation and operation of key committees essential to its governance structure.
2. HOI will maintain a high level of accountability and transparency as follows:
 - (i) As an OBCA company, HOI is subject to all of the governance requirements associated with the OBCA, and as a reporting issuer of debt securities is subject to the governance requirements under the *Securities Act (Ontario)* and any other applicable securities regulatory requirements.
 - (ii) HOI is also subject to the *Freedom of Information and Protection of Privacy Act (Ontario)*, the *Public Sector Salary Disclosure Act (Ontario)* and the *Auditor General Act (Ontario)*.
 - (iii) As a transmitter and distributor of electricity, and as a generator for the purposes of distributing electricity to remote areas through its wholly-owned subsidiary Hydro One Remote Communities Inc., HOI is licensed by and subject to the jurisdiction of the Ontario Energy Board (the OEB) pursuant to the *Ontario Energy Board Act, 1998*, including all of the OEB's orders, codes and other regulatory requirements as are applicable.

3. The Shareholder may at times direct HOI to undertake special initiatives. Such directives will be communicated as written declarations by way of an Unanimous Shareholder Agreement or Declaration in accordance with Section 108 of the OBCA. Hydro One will disclose this direction as required under securities legislation.

D. Responsibilities – Operational:

1. HOI will operate its transmission and distribution assets as efficiently and cost-effectively as possible, within the legislative and regulatory framework of the Province of Ontario. The company will operate these assets in a manner that appropriately mitigates the Shareholder's financial and operational risk.
2. HOI will continue to operate in full compliance within the legislative and regulatory framework and using best practices with respect to employee and public safety.
3. HOI will prioritize investments in transmission and distribution capacity to support projects necessary to maintain ongoing grid security and reliability.
4. HOI will operate in Ontario in accordance with the highest corporate standards, including but not limited to the areas of corporate governance, social responsibility, environmental stewardship and corporate citizenship.

E. Responsibilities – Financial:

1. HOI will annually prepare a three to five year investment plan for new projects. Once approved by HOI's Board of Directors, the plan will be submitted to the Minister of Energy and the Minister of Finance for concurrence.
2. As an OBCA corporation and reporting issuer with a commercial mandate, HOI will operate on a financially sustainable basis and maintain or increase the value of its assets for its Shareholder.
3. HOI will obtain the approval of the Minister of Energy and Minister of Finance, in advance, with respect to:
 - (i) any proposal to issue or transfer shares in the Corporation or any of its subsidiaries;
 - (ii) any proposed acquisition or divestment of assets, other major transaction, proposal or action by the Corporation or any of its subsidiaries, where such acquisition or divestment, major transaction, proposal or action would potentially have a material impact on:
 - the cash flow to the Ontario Electricity Financial Corporation
 - the financial Interests of the Province; or
 - the payments in lieu of taxes by the Corporation and its subsidiaries under the EA.

F. Responsibilities – Communications & Reporting:

1. The HOI Board of Directors and the Minister of Energy will meet, as needed, to enhance mutual understanding of interrelated strategic matters.
2. HOI's Chair, President and Chief Executive Officer and the Minister of Energy will meet on a regular basis.
3. HOI's Chair, President and Chief Executive Officer and the Minister of Finance will meet at the Minister's request.
4. HOI's senior management and senior officials of the Ministry of Energy and the Ministry of Finance will meet and communicate on a regular and as needed basis to discuss ongoing issues and clarify expectations or to identify and address emergent issues, including but not limited to issues that may have a material impact on the financial performance of HOI or the Shareholder. Such communication and reporting from HOI should be on an immediate or, at minimum, an expedited basis where an urgent material human safety or system reliability matter arises.

5. HOI will provide the Minister of Energy and senior officials of the Ministries of Energy and Finance its multi-year and annual business planning information, and advise on developments and issues that may materially impact the business and financial performance of HOI, and/or the financial performance and interest of the Shareholder, on a timely basis.
6. HOI will provide the Minister of Energy and senior officials of the Ministries of Energy and Finance quarterly and monthly financial reports and briefings on operational and financial performance against plan.
7. In all other respects, HOI will communicate with government ministries and agencies in a manner typical for an Ontario corporation of its size and scope.

G. Performance Expectations:

1. HOI will seek continuous improvement in the operational performance of its transmission and distribution assets and internal operations.
2. HOI will annually establish three to five year performance targets for operating and financial results as well as major project execution. Key measures are to be agreed upon with the Minister of Energy and the Minister of Finance. HOI will benchmark its performance on these measures against the performance of other utilities, including international utilities where information is available. On these measures, Hydro One will target performance to be in the top quartile of private and publicly-owned utilities in North America.
3. Once approved by HOI's Board of Directors, HOI's annual performance targets will be submitted to the Minister of Energy and the Minister of Finance for concurrence.
4. HOI will provide annual reports on its performance compared to targets to senior officials of the Ministry of Energy and Ministry of Finance.

H. Executive Compensation:

1. HOI will have regard to the recommendations of the Agency Review Panel regarding Executive and Senior Management Compensation in setting executive compensation policies, procedures and practices, including internal governance practices and procedures.

I. Review of this Agreement:

This agreement will be reviewed and updated as required.

This Memorandum of Agreement shall be effective as of the date hereof:

Dated the 27 day of March, 2008

On behalf of HOI:

On behalf of the Shareholder:

Original Signed by:

Original Signed by:



Rita Burak
Chair,
Hydro One Inc. Board of Directors



Her Majesty the Queen in Right of the Province of
Ontario as represented by the Minister of Energy,
Gerry Phillips

1 **Ontario Energy Board (Board Staff) INTERROGATORY #34**

2
3 **Issue 2.6 Are Hydro One's forecasts (revenue, costs, inflation and productivity)**
4 **reasonable? Should Hydro One be expected to provide benchmarking**
5 **evidence as an indicator of reasonableness?**
6

7 **Interrogatory**

8
9 **Ref: Exhibit A/Tab6/Schedule 1/p. 4 & Technical Conference #2, TR pp. 133-134**

10
11 At Table 1 on this page, Hydro One indicates that it has a five year vision of achieving
12 'top-quartile unit costs against comparable utilities'. In response to an Energy Probe
13 question in the Technical Conference, Hydro One indicated that it had only three
14 comparable utilities: BC Hydro, Manitoba Hydro and New Brunswick Power.
15

- 16 a) What unit cost measures does Hydro One benchmark?
17 b) Please explain the basis for selecting BC Hydro, Manitoba Hydro and New
18 Brunswick Power as comparable utilities.
19 c) Why are there no additional comparable utilities?
20 d) How does Hydro One currently compare to these utilities with respect to company
21 characteristics and the benchmarked unit costs?
22 e) Please file any studies or reports that show Hydro One's performance in
23 comparisons to others.
24

25 **Response**

26
27 a) Hydro One has not yet identified suitable unit cost measures to benchmark. In large
28 part, this is attributable to the poor quality of available data. While benchmarking is
29 the best tool for comparisons and identification of best practices, a number of utilities
30 are no longer participating in studies due to:
31

- 32 • potential misuse or disclosure of confidential data;
33 • unwillingness to invest in long-term benefits; and
34 • uninformed use of comparable results (e.g. only comparing costs, not reliability,
35 customer satisfaction, or safety).
36

37 b) These utilities were identified because they were the few that have made some data
38 available in the past, however, major industry studies, such as the Canadian
39 Electricity Association and consultancy studies, are now being cancelled or curtailed
40 over disclosure concerns.
41

42 c) Please see Hydro One's response to b).

- 1 d) Hydro One has not yet conducted any such analysis. Future performance
2 comparisons will be based on published materials such as the OEB statistical reports.
3
- 4 e) For copies of the requested final reports that have been commissioned by Hydro One,
5 please see:
6
- 7 • Hydro One's response to Exhibit I, Tab 4.2, Schedule 1 Staff 63 for the 2013
8 Inergi fees benchmarking report;
 - 9 • Attachment 1 to Exhibit C1, Tab 3, Schedule 2 for the updated 2013 Mercer
10 compensation benchmarking report;
 - 11 • Attachment 1 to this response for the 2009 vegetation management benchmarking
12 report;
 - 13 • Attachment 1 to this response for the 2011 HOT contract benchmarking report;
14 and
 - 15 • Attachment 1 to Exhibit I, Tab 2.6, Schedule 11 EP 23 (AMENDED).

Empirical Research in Support of Incentive Rate-Setting: 2013 Benchmarking Update

Report to the Ontario Energy Board

July 2014



Pacific Economics Group Research, LLC

The views expressed in this report are those of Pacific Economics Group Research, and do not necessarily represent the views of, and should not be attributed to, the Ontario Energy Board, any individual Board Member, or Ontario Energy Board staff.

Table 4

Summary of Stretch Factor Assignments

	2010-2012		2011-2013		Change in Stretch Factor
	Benchmarking Performance	Stretch Factor	Benchmarking Performance	Stretch Factor	
Algoma Power Inc.	65.5%	0.60	68.5%	0.60	NO
Atikokan Hydro Inc.	18.5%	0.45	17.5%	0.45	NO
Bluewater Power Distribution Corporation	1.6%	0.30	4.6%	0.30	NO
Brant County Power Inc.	16.5%	0.45	13.0%	0.45	NO
Brantford Power Inc.	2.0%	0.30	0.9%	0.30	NO
Burlington Hydro Inc.	-7.9%	0.30	-8.0%	0.30	NO
Cambridge And North Dumfries Hydro Inc.	-7.0%	0.30	-3.7%	0.30	NO
Canadian Niagara Power Inc.	14.0%	0.45	13.2%	0.45	NO
Centre Wellington Hydro Ltd.	-4.4%	0.30	-1.5%	0.30	NO
Chapleau Public Utilities Corporation	18.8%	0.45	19.8%	0.45	NO
Collus Power Corporation	-6.3%	0.30	-7.7%	0.30	NO
Cooperative Hydro Embrun Inc.	-20.9%	0.15	-21.2%	0.15	NO
E.L.K. Energy Inc.	-26.6%	0.00	-28.3%	0.00	NO
Enersource Hydro Mississauga Inc.	-11.7%	0.15	-12.3%	0.15	NO
Entegrus Powerlines	-12.5%	0.15	-12.3%	0.15	NO
Enwin Utilities Ltd.	19.5%	0.45	16.9%	0.45	NO
Erie Thames Powerlines Corporation	11.1%	0.45	8.7%	0.30	YES
Espanola Regional Hydro Distribution Corporation	-20.0%	0.15	-18.9%	0.15	NO
Essex Powerlines Corporation	-15.5%	0.15	-15.7%	0.15	NO
Festival Hydro Inc.	19.6%	0.45	19.2%	0.45	NO
Fort Frances Power Corporation	12.3%	0.45	9.6%	0.30	YES
Greater Sudbury Hydro Inc.	9.5%	0.30	11.9%	0.45	YES
Grimsby Power Incorporated	-17.1%	0.15	-15.2%	0.15	NO
Guelph Hydro Electric Systems Inc.	8.3%	0.30	4.2%	0.30	NO
Haldimand County Hydro Inc.	-23.5%	0.15	-22.2%	0.15	NO
Halton Hills Hydro Inc.	-26.5%	0.00	-29.5%	0.00	NO
Hearst Power Distribution Company Limited	-28.3%	0.00	-30.6%	0.00	NO
Horizon Utilities Corporation	-11.2%	0.15	-8.8%	0.30	YES
Hydro 2000 Inc.	-9.3%	0.30	-4.7%	0.30	NO
Hydro Hawkesbury Inc.	-59.0%	0.00	-55.5%	0.00	NO

Table 4

Summary of Stretch Factor Assignments

	2010-2012		2011-2013		Change in Stretch Factor
	Benchmarking Performance	Stretch Factor	Benchmarking Performance	Stretch Factor	
Hydro One Brampton Networks Inc.	-7.4%	0.30	-7.8%	0.30	NO
Hydro One Networks Inc.	58.2%	0.60	47.8%	0.60	NO
Hydro Ottawa Limited	1.7%	0.30	4.5%	0.30	NO
Innisfil Hydro Distribution Systems Limited	-5.2%	0.30	-3.9%	0.30	NO
Kenora Hydro Electric Corporation Ltd.	-7.1%	0.30	-6.8%	0.30	NO
Kingston Hydro Corporation	1.6%	0.30	2.8%	0.30	NO
Kitchener	-22.2%	0.15	-21.1%	0.15	NO
Lakefront Utilities Inc.	-15.3%	0.15	-12.9%	0.15	NO
Lakeland Power Distribution Ltd.	-10.4%	0.15	-10.1%	0.15	NO
London Hydro Inc.	-12.7%	0.15	-10.8%	0.15	NO
Midland Power Utility Corporation	17.7%	0.45	18.2%	0.45	NO
Milton Hydro Distribution Inc.	-14.9%	0.15	-15.7%	0.15	NO
Newmarket	-18.3%	0.15	-20.1%	0.15	NO
Niagara Peninsula Energy Inc.	6.9%	0.30	5.4%	0.30	NO
Niagara-On-The-Lake Hydro Inc.	5.6%	0.30	2.7%	0.30	NO
Norfolk Power Distribution Inc.	0.5%	0.30	1.5%	0.30	NO
North Bay Hydro Distribution Limited	5.0%	0.30	5.5%	0.30	NO
Northern Ontario Wires Inc.	-33.3%	0.00	-27.6%	0.00	NO
Oakville Hydro Electricity Distribution Inc.	10.2%	0.45	12.0%	0.45	NO
Orangeville Hydro Limited	-0.1%	0.30	0.7%	0.30	NO
Orillia Power Distribution Corporation	-3.1%	0.30	-3.5%	0.30	NO
Oshawa PUC Networks Inc.	-18.1%	0.15	-16.7%	0.15	NO
Ottawa River Power Corporation	-0.1%	0.30	2.3%	0.30	NO
Parry Sound Power Corporation	3.9%	0.30	7.0%	0.30	NO
Peterborough Distribution Incorporated	14.3%	0.45	14.4%	0.45	NO
Powerstream Inc.	-4.2%	0.30	-1.0%	0.30	NO
PUC Distribution Inc.	-0.1%	0.30	10.2%	0.45	YES
Renfrew Hydro Inc.	17.3%	0.45	17.4%	0.45	NO
Rideau St. Lawrence Distribution Inc.	-10.4%	0.15	-9.3%	0.30	YES
Stioux Lookout Hydro Inc.	2.1%	0.30	2.9%	0.30	NO

Table 4

Summary of Stretch Factor Assignments

	2010-2012		2011-2013		Change in Stretch Factor
	Benchmarking Performance	Stretch Factor	Benchmarking Performance	Stretch Factor	
St. Thomas Energy Inc.	-1.4%	0.30	0.6%	0.30	NO
Thunder Bay Hydro Electricity Distribution Inc.	4.9%	0.30	4.4%	0.30	NO
Tillsonburg Hydro Inc.	12.2%	0.45	14.1%	0.45	NO
Toronto Hydro-Electric System Limited	44.8%	0.60	47.0%	0.60	NO
Veridian Connections Inc.	-2.3%	0.30	-2.3%	0.30	NO
Wasaga Distribution Inc.	-43.6%	0.00	-42.1%	0.00	NO
Waterloo North Hydro Inc.	2.5%	0.30	7.0%	0.30	NO
Welland Hydro-Electric System Corp.	-15.4%	0.15	-14.0%	0.15	NO
Wellington North Power Inc.	12.7%	0.45	16.1%	0.45	NO
West Coast Huron Energy Inc.	21.7%	0.45	30.7%	0.60	YES
Westario Power Inc.	-1.5%	0.30	0.2%	0.30	NO
Whitby Hydro Electric Corporation	-3.2%	0.30	-4.1%	0.30	NO
Woodstock Hydro Services Inc.	31.8%	0.60	30.0%	0.60	NO

Ontario Energy Board



EB-2010-0379

Report of the Board

**Rate Setting Parameters and Benchmarking
under the Renewed Regulatory Framework for
Ontario's Electricity Distributors**

Issued on November 21, 2013 and as corrected on December 4, 2013

depending on the performance of the distributor, so as to add an additional incentive for distributors to improve performance year after year. This is addressed in section 4.1.

As detailed in the May 2013 Updated PEG Report, PEG calculated TFP trends using an index-based approach on Ontario data for the period 2002-2011.¹⁵ PEG noted the results of the analysis were being materially impacted by outliers¹⁶, Toronto Hydro and Hydro One, and recommended that the data for the two companies be excluded from the industry calculation. The Board agrees with PEG that an industry productivity measure reflective of 73¹⁷ distributors operating in Ontario should not be materially impacted by only two distributors, and therefore will exclude the two outliers in the industry calculation. Furthermore, the Board is of the view that for as long as they remain outliers, these distributors should be excluded from the Industry TFP data set.

With the exclusion of the outliers, PEG also noted the results of its analyses showed a slowdown in productivity over the time period and expressed uncertainty of whether this trend would persist in the future. PEG and the other experts in this consultation expressed the view that the slow growth in Ontario Industry TFP may be attributable to the 2008-09 recession, a one-time event that is not expected to continue, as well as slow output growth, a factor which is expected to continue with Ontario's continued emphasis on conservation.

In section 4.5 of the Final PEG Report, PEG explained that because TFP growth will be part of the formula used to adjust base rates, only costs recovered through base rates should be included in the estimation of TFP growth. Table 5 in the Final PEG Report summarizes the cost measure used to estimate TFP. In brief, excluded costs include contributions in aid of construction and low voltage charges collected from embedded

¹⁵ PEG has subsequently updated this analysis to include 2012 data, and those results are presented further below.

¹⁶ An outlier is a value that "lies outside" (is much smaller or larger than) most of the other values in a set of data.

¹⁷ Four distributors are excluded from PEG's analysis because their RRR data is not available: Attawapiskat First Nation; Fort Albany First Nation; Kashechewan First Nation; and Hydro One Remote Communities Inc.

1 **Ontario Energy Board (Board Staff) INTERROGATORY #34**

2
3 **Issue 2.6 Are Hydro One's forecasts (revenue, costs, inflation and productivity)**
4 **reasonable? Should Hydro One be expected to provide benchmarking**
5 **evidence as an indicator of reasonableness?**

6
7 **Interrogatory**

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12 report; and
 - 13 • Attachment 1 to this response for the 2011 HOT contract benchmarking report.

1 **Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #42**

2
3 **Issue 2.3 Does the Custom Application adequately incorporate and reflect the**
4 **four outcomes identified in the RRFE Report: customer focus,**
5 **operational effectiveness, public policy responsiveness and financial**
6 **performance?**

7
8 **Interrogatory**

9
10 **Reference: A/T19/S1**

11
12 a) Please show the derivation and of the productivity savings shown in Table 1 for
13 years 2013 through 2019.

14
15

Response

Please see summary sheet provided below.

Initiative Name	LOB	Category	OMA	CAP	Sus	Dev	Oper	Cus	Com	2013		2014		2015		2016		2017		2018		2019		
										Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast			
AIP - Asset Investment Planning	Planning & Operating	Business Transformations	100%	0%	0%				100%	170,496	173,160	177,689	182,246	185,500	188,784	191,654								
Regular Head Count Reduction	Corporate	Centralized Operations	100%	0%	0%				100%	4,853,669	4,853,669	5,095,664	5,197,577	5,301,528	5,407,559	5,515,710								
Admin Spend Controls	Corporate	Miscellaneous Admin	100%	0%	0%				100%	5,119,362	5,230,362	5,341,362	5,452,362	5,563,362	5,674,362	5,785,362								
Initial Training: union pays for basic	Engineering & Construction	Staff Flexibility	100%	0%	63%	35%	2%	0%	0%	150,809	127,410	129,774	133,031	134,905	138,652	140,526								
Outsourcing Drawing backlog	Engineering & Construction	Staff Flexibility	100%	0%	63%	35%	2%	0%	0%	633,011	117,660	117,660	117,660	117,660	117,660	117,660								
Electrical Safety Awareness available online	Health, Safety & Environment	Centralized Operations	100%	0%	0%				100%	66,600	66,600	67,932	69,291	70,676	72,090	73,532								
Spills Management training via E Learning	Health, Safety & Environment	Centralized Operations	100%	0%	0%				100%	39,197	39,197	39,981	40,780	41,596	42,428	43,276								
Workflow of the Future	ISD	Business Transformations	100%	0%	0%				100%	38,428	-	-	1,320,811	1,347,227	1,374,172	1,401,655								
Cell Contracts	ISD	Telephony	100%	0%	0%				100%	730,940	947,960	1,141,120	1,218,384	1,218,384	1,218,384	1,218,384								
Telecom Expense Management (TEM)	ISD	Telephony	100%	0%	0%				100%	265,943	556,144	725,285	888,000	976,800	1,065,600	1,110,000								
Process Improvements & BPC	Shared Services	Business Transformations	100%	0%	0%				100%	213,120	213,120	217,382	221,730	226,165	230,688	235,302								
HR Pay Project	Shared Services	Business Transformations	100%	0%	0%				100%	-	309,283	1,210,231	1,234,436	1,259,125	1,284,307	1,309,993								
Vendor Rebates	Shared Services	Centralized Operations	100%	0%	73%	23%	2%	2%	100%	60,384	88,800	88,800	88,800	88,800	88,800	88,800								
Facilities Energy Efficiency Retrofits	Shared Services	Leveraging Technology	100%	0%	100%				100%	11,321	11,100	11,100	11,100	11,100	11,100	11,100								
Employee Travel Policy	Shared Services	Leveraging Technology	100%	0%	0%				100%	25,237	24,420	-	-	-	-	-								
Project Trailer Purchase	Shared Services	Process Improvement	100%	0%	0%				100%	1,738,260	1,738,260	-	-	71,040	71,040	71,040								
Manage Stations Work for Facilities	Shared Services	Staff Flexibility	100%	0%	0%				100%	445,776	666,000	666,000	666,000	666,000	666,000	666,000								
Fleet Mechanic Reduction	Shared Services	Staff Flexibility	100%	0%	73%	23%	2%	2%	100%	-	973,966	965,499	1,433,654	1,358,413	1,387,167	1,691,823								
Work Program Optimization (TSOGs)	Stations Services	Leveraging Technology	100%	0%	96%	1%	3%	0%	0%	-	-	-	-	-	-	-								
SMNO - Smart Meter Network Operating	Stations Services	Leveraging Technology	100%	0%	96%	0%	4%	0%	0%	113,478	155,400	158,508	161,678	164,912	168,210	171,574								
Maintain Stock of Regularly Used Items	Stations Services	Process Improvement	100%	0%	95%	0%	4%	0%	0%	952,840	177,600	181,152	184,775	188,471	192,240	196,085								
TWHQ - Stations	Stations Services	Staff Flexibility	100%	0%	95%	0%	4%	0%	0%	41,887	39,960	39,960	39,960	39,960	39,960	39,960								
Inhouse Retroques on Light Vehicles	Stations Services	Staff Flexibility	100%	0%	95%	0%	4%	0%	0%	29,917,623	30,579,471	30,762,912	30,950,022	31,140,874	31,335,544	31,534,106								
Cornerstone PH1, 2	Corporate	Business Systems	42%	58%	0%				100%	144,250	144,250	144,250	144,250	144,250	144,250	144,250								
Standards Development for Design	Engineering & Construction	Leveraging Technology	0%	100%	63%	35%	2%	0%	0%	88,949	120,294	120,294	120,294	120,294	120,294	120,294								
Smart MFA spend	Engineering & Construction	Process Improvement	0%	100%	63%	35%	2%	0%	0%	-	-	-	-	-	-	-								
AA	Planning & Operating	Business Transformations	44%	56%	0%				100%	-	2,634,745	3,918,248	4,093,431	4,327,007	4,502,190	4,677,383								
Facilities & Real Estate Outsourcing	Shared Services	Staff Flexibility	100%	0%	0%				100%	-	-	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000								
Ingrit Contract Extension	Shared Services	Back Office	100%	0%	0%				100%	17,958,000	23,287,000	-	-	-	-	-								
Contract Replacement	Shared Services	Back Office	100%	0%	0%				100%	-	-	-	-	-	-	-								
CIS	Customer Service	Business Transformations	100%	0%	0%				100%	-	-	26,718,000	26,718,000	26,718,000	26,718,000	26,718,000								
Advanced Distribution System (ADS) Phase 1	Provincial Lines & Forestry	Business Transformations	100%	0%	0%				100%	-	-	19,785,000	19,785,000	19,785,000	19,785,000	19,785,000								
Usage of feller bunchers	Provincial Lines & Forestry	Business Transformations	100%	0%	0%				100%	-	-	5,615,000	7,099,060	7,224,321	7,355,808	7,490,544								
Field Meter Reads	Provincial Lines & Forestry	Leveraging Technology	100%	0%	100%			100%	0%	3,218,007	3,000,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000								
Forestry ACA incorporated into Lines inspections	Provincial Lines & Forestry	Process Improvement	100%	0%	0%		100%		0%	-	827	1,731,763	1,748,791	1,761,331	1,770,769	1,777,950								
Labour Mix and Misc Productivity Improvements	Provincial Lines & Forestry	Staff Flexibility	100%	0%	100%				100%	892,252	901,175	946,590	946,590	946,590	946,590	946,590								
Reduce Cables Locates	Provincial Lines & Forestry	Staff Flexibility	100%	0%	100%				100%	-	-	-	1,500,000	3,400,000	3,400,000	3,400,000								
Distribution transformer refurbishment	Provincial Lines & Forestry	Staff Flexibility	100%	0%	100%				100%	180,000	1,345,418	1,345,418	3,045,418	3,895,418	4,745,418	5,595,418								
IMDS	Shared Services	Process Improvement	0%	100%	100%				100%	-	300,000	300,000	300,000	300,000	300,000	300,000								
	Stations Services	Leveraging Technology	0%	100%	95%	0%	4%	0%	0%	-	-	2,500,000	3,000,000	3,000,000	3,500,000	3,500,000								
Total			67,964,040	90,694,288	118,433,612	126,505,900	130,342,608	131,341,646	131,507,662															

1 **Ontario Energy Board (Board Staff) INTERROGATORY #11**

2
3 **Issue 2.2 Does Hydro One Distribution’s Custom Application promote and**
4 **incent acceptable outcomes for existing and future customers**
5 **(including, for example, cost control, system reliability, service**
6 **quality, bill impacts)?**

7
8 **Interrogatory**

9
10 **Ref: 1. RRFE Report, October 18, 2012**
11 **2. Exhibit A**

12
13 **Preamble:**

14 At page 12 of the RRFE Report, the Board states: “To ensure that the benefits from
15 greater efficiency are appropriately shared throughout the rate-setting term between the
16 distributor/shareholder and the distributor’s customers, the expected benefits will be
17 taken in to account in establishing the rate adjustment mechanisms applicable to each rate
18 method through the X-factor.”

- 19
20 a) In the absence of an X-factor, what process is Hydro One proposing to ensure that
21 benefits are appropriately shared through the rate term between Hydro One and its
22 customers?
23
24 b) How will Hydro One share any additional productivity and/or total cost efficiency
25 gains it achieves over the term of the plan with its customers?
26

27 **Response**

- 28
29 a) Hydro One’s proposal does ensure benefits are appropriately shared throughout the
30 rate term. The forecasted productivity savings embedded in Hydro One’s revenue
31 requirement calculation are described in Exhibit A, Tab 19, Schedule 1. For the
32 ratepayer, the requested rate increase has been lowered by the amount of these
33 productivity savings. Ratepayers’ receipt of the forecasted monetary benefit is
34 guaranteed, regardless of whether it is realized, and it is received throughout the rate
35 term. In contrast, Hydro One’s shareholder bears the downside risk of Hydro One
36 failing to realize these savings because this failure will directly impact its return on
37 equity. Offsetting this shareholder risk is the potential to benefit in the event that
38 additional efficiencies are realized. This should incent Hydro One to realize the
39 forecasted cost savings from efficiencies at a minimum.
40
41 b) Given that its forecasted productivity savings are ambitious, Hydro One does not
42 expect to achieve additional efficiency gains over the 5-year term. Any unexpected,
43 additional gains may be redirected into work programs and projects which benefit the
44 customer.

UNDERTAKING - TCJ1.14

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Undertaking

Reference: Exhibit I, Tab 3.03, Schedule 9 SEC 30

To provide a copy of the balance scorecard for 2013 and 2014.

Response

Please refer to Attachment #1 for the balanced scorecard for 2013 and Attachment #2 for Q1 2014.



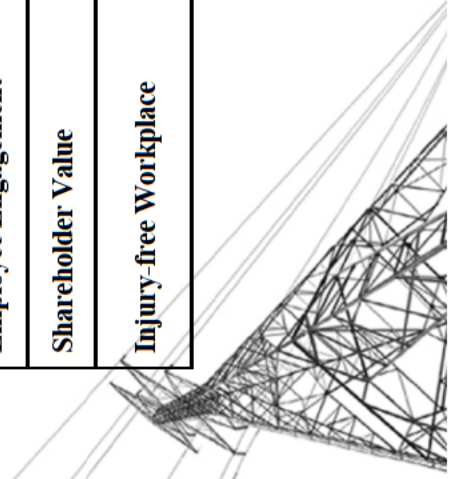
Hydro One Inc. Corporate Scorecard 2013 Results



2013 Scorecard



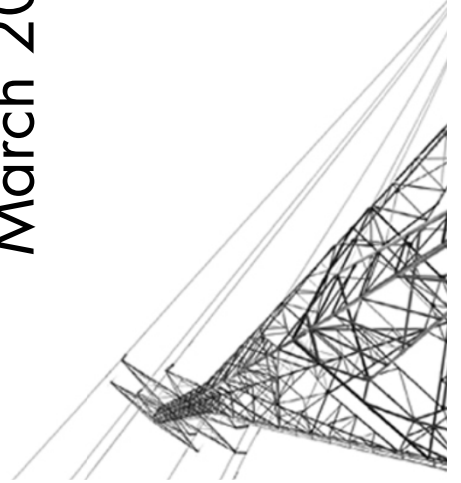
Strategic Objective	Performance Measure	Year-End	
		Actual	Target
Productivity	Transmission Unit Costs (Capital and OM&A per Asset) %	7.8	9.8
	Distribution Unit Costs (Capital and OM&A costs per km of line) \$'000/km	10.6	9.8
Reliability	Tx Duration of Customer Unplanned Interruptions on 115/230kV Network System per delivery point (minutes/delivery point)	12.9 ²	9.0
	Dx Duration of Customer Interruptions (hours per customer)	6.9	6.7
Satisfying Our Customers	Tx Customer Satisfaction (% satisfied)	81	82
	Dx Customer Satisfaction (% satisfied)	87	86
Employee Engagement	Employee Survey (Grand Mean)	3.93	4.06
Shareholder Value	Net Income After Tax (\$M)	803	702
Injury-free Workplace	Medical Attention (# of medical attentions per 200,000 hours worked)	2.5	1.9





Hydro One Inc. Corporate Scorecard with 1st Quarter 2014 Results

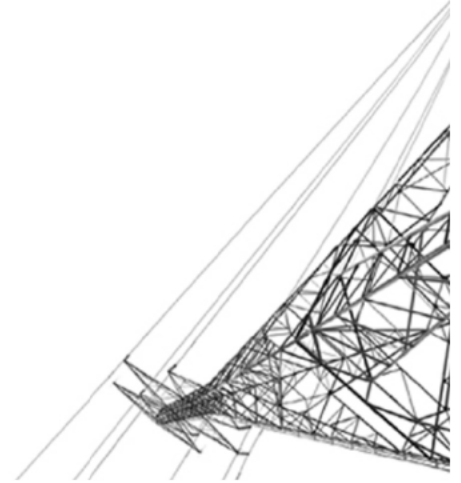
March 2014



March 2014 Scorecard*



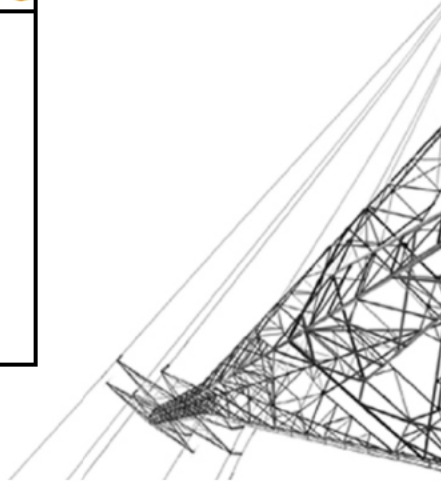
Strategic Objective	Performance Measure	Year-to-Date	Year-End
		Actual	Target
Injury-free Workplace	Recordable Rate (OHSA Recordable) (# of recordable per 200,000 hours worked)	2.0	1.9
	Customer Satisfaction – Transmission (% satisfied)	--	84
Satisfying Our Customers	Customer Satisfaction - Distribution (% satisfied)	91	87
	Connection of New Services - Distribution (% completed in ≤ 5 days)	94	90
	Estimated Bills (% of total bills issued)	4.9	1.8
	No Bill Volume (number of customers) ('000)	47.1	8.0
	% Customers satisfied with escalated complaint resolution	--	N/A



March 2014 Scorecard*



Strategic Objective	Performance Measure	Year-to-Date	Year-End
		Actual	Target
Continuous Improvement & Cost Effectiveness in the Building and Maintaining Reliable Transmission and Distribution Systems	Transmission Unit Costs (OM&A/Gross Fixed Assets) (%)	0.8	2.9
	Distribution Unit Costs (OM&A/Gross Fixed Assets) (%)	1.6	5.7
	Customer Interruption Duration - Transmission (minutes per delivery point)	5.0	8.9
	Customer Interruption Duration - Distribution (hours per customer)	1.1	6.7
	Net Income After Tax (\$M)	240	
Maintaining a Commercial Culture that Increases Shareholder Value	Customer Service Recovery Cost (\$M)	12.9	48.0
	In-Service Capital – Transmission (% of Plan)	97	85
	In-Service Capital – Distribution (% of Plan)	87	87



1 **3.2 Outcome Metrics**

2
3 The proposed areas to be measured are:

- 4 1. Vegetation Management;
- 5 2. Pole Replacement;
- 6 3. PCB Line Equipment;
- 7 4. Substation Refurbishments;
- 8 5. Distribution Line Equipment Refurbishments;
- 9 6. Customer Experience;
- 10 7. Handling of Unplanned Outages; and
- 11 8. Estimated Bills.

12
13 The areas to be measured have, for the most part, been tracked by the Company
14 historically, so data is available against which to measure Hydro One's performance in
15 each area. As will be evident from the following descriptions, the metrics were
16 developed in an attempt to focus on two key issues: (1) was the planned investment
17 made; or (2) were the desired results achieved.

18
19 Each of the proposed metrics against which to evaluate Hydro One's performance
20 compared to the 5-year plan is outlined below. The Company will report actual
21 performance for each of the outcome metrics on an annual basis.

1 **Vegetation Management (Sustaining OM&A)**

2

3 Service interruptions caused by vegetation are an issue faced by most electric distribution
 4 companies. Hydro One is proposing an outcome metric against which its efforts to reduce
 5 the number of vegetation caused outages will be evaluated.

6

7 Vegetation management expenditures related to line clearing are expected to be
 8 approximately \$540 million in the 5-year forecast as compared to \$338 million in the
 9 preceding 5 year period. The ramp-up is required to address tree clearing in order to
 10 allow Hydro One to move to an 8-year vegetation management cycle across the province.

11

12 The number of vegetation related customer outages on Hydro One’s system over the last
 13 five years is set forth in the following table:

14

15

16

17

**Table 1:
 Vegetation Caused Interruptions
 (Excluding Force Majeure Events)**

	Actuals					Targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Interruptions	6,445	6,116	6,113	6,953	5,791	6,300	6,300	6,300	6,200	6,100	6,000

18

19 The proposed metric for assessing Hydro One’s performance with regards to vegetation
 20 management is:

21

- 22 • Reduction in vegetation related customer outages, annual targets for which, are
 23 shown in Table 1.

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As vegetation is managed to achieve an 8-year vegetation management cycle, Hydro One expects that the number of outages caused by contact of trees with the distribution system will decline.

Pole replacement (Sustaining Capital)

Hydro One has approximately 1.6 million distribution poles in its system. Each year approximately 20,000 poles are installed, a figure that includes both new installations and end of life replacements. Poles that fail can cause customer outages. As such, Hydro One is targeting the replacement of poles as a metric against which the Company’s performance can be measured.

At the end of 2011 an asset inventory was completed, and the detailed poles age information largely led to the proposed replacement ramp up. Hydro One is proposing increased funding to address premature decay issues and mitigate the risk of the approaching new wave of poles reaching their expected service life over the period. The plan ramps up replacement quantities each year so that approximately 4,500 additional end-of-life poles will be replaced per year by 2019. Total volumes of accomplishments over the five year plan are expected to be achieved. However, annual variances from the targets may occur due to the complexity of the specific poles to be replaced within a given year.

Hydro One expects to spend approximately \$530 million on pole replacements during the course of the 5 year plan. Approximately \$323 million was spent on pole replacements during the previous 5 year period.

1 The following table provides details regarding the number of poles replaced due to end of
 2 life within the last five years:

3 **Table 2:**
 4 **Pole Replacement**

5

	Actuals					Targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Poles Replaced	7,485	7,518	7,282	7,452	10,720	11,000	11,600	12,200	13,200	14,200	15,200

6
 7 The proposed metric for assessing Hydro One's performance with regards to pole
 8 replacements is:

- 9
- 10 • Poles replaced per year, targets for which are shown in Table 2.

11
 12 Given the current age and condition of the poles, Hydro One expects to replace between
 13 11,000 and 15,000 poles per year during the 5 year plan.

14
 15 **PCB Line Equipment (Sustaining Capital)**

16
 17 **Table 3:**
 18 **PCB Line Equipment**

19
 20 This is a new measure therefore only forecast targets of pole top transformers with PCB
 21 oil to be replaced are shown.

22

Year	2014	2015	2016	2017	2018	2019
Number of pole top Transformers with PCB oil to be replaced	0	400	1,000	2,200	2,200	2,200

23

1 It is possible the number of transformers needing replacement may be less than the
2 projected volume of replacements. In that case, the number of transformers replaced, will
3 be reported.

4
5 The PCB line equipment capital project was selected as an area to be measured via an
6 outcome metric because of the public safety issues pertaining to the equipment. The
7 initiative addresses Federal PCB regulations and ensures Hydro One's communities'
8 environmental concerns are addressed by decreasing the number of pole top transformers
9 containing PCBs.

10
11 The budget for replacing PCB line equipment is approximately \$39 million over the term
12 of the 5 year plan. Approximately \$4 million had been spent replacing PCB pad-mount
13 transformers in the previous 5-year period.

14
15 The proposed metric for assessing Hydro One's performance with regards to PCB
16 equipment replacements is:

- 17
18 • Number of pole top transformers with PCB oil that have been replaced as shown in
19 Table 3.

20
21 **Substation Refurbishments (Sustaining Capital)**

22
23 Hydro One maintains 1,004 distribution and regulating station facilities, with an average
24 expected service life of 50 years. The Company is proposing increased funding in this
25 area to manage system reliability in the face of demographic and load requirement
26 pressures on the system, and to mitigate against a growing wave of stations reaching
27 expected service life simultaneously.

1 Hydro One’s distribution system has experienced a number of substation related outages
 2 over the last five years. The following table summarizes the number of historical
 3 outages:

4
 5
 6
 7

Table 4:
Substation Caused Interruptions
(Excluding Force Majeure Events & Excluding Planned)

	Actuals					Targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Interruptions	153	190	159	144	129	155	155	155	155	155	155

8

9 The Company has identified substation related outages as an area to be addressed in the 5
 10 year plan. The projected level of capital spent on substation refurbishments is expected
 11 to be \$203 million during the 5-year plan period compared to \$46 million in the
 12 preceding 5 year period.

13

14 The proposed metric for assessing Hydro One’s performance with regards to substation
 15 refurbishments is:

16

- 17 • Number of substation interruptions over the five year period, as shown in Table 4.

18

19 Hydro One’s goal is to reduce the number of substation interruptions during the 5 year
 20 plan.

21

22

Distribution Line Equipment Refurbishments (Sustaining Capital)

Hydro One owns over 120,000 circuit km of lines (approximately 3200 feeders). An ongoing assessment of the condition of the lines/feeders is performed by Hydro One. Small and large sustainment projects will be performed over the course of the 5-year plan to improve or sustain the performance of the system. Hydro One anticipates expending approximately \$307 million on line projects during the 5-year plan period compared to \$155 million in the preceding 5 year period.

Hydro One’s distribution system has experienced a number of line equipment related outages over the last five years. The following table summarizes the number of historical outages:

**Table 5:
 Distribution Line Equipment Caused Interruptions
 (Excluding Force Majeure Events)**

Year	Actuals					Targets					
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Interruptions	8210	5,971	7,681	7,316	7,266	7,300	7,300	8,300	7,300	7,300	7,300

The proposed metric for assessing Hydro One’s performance with regards to line projects is:

- Number of distribution line equipment interruptions over the five year period, targets for which are shown in Table 5 .

1 **Customer Experience (OM&A)**
 2

3 Hydro One is fully committed to continuing to improve the customer’s experience. The
 4 Company will become a trusted partner to our customers by improving the quality of
 5 interactions with our customers and by meeting their expectations regarding reliable
 6 power supply. An independent third-party research firm will conduct random bi-annual
 7 residential and small-business impression surveys on behalf of Hydro One. The bi-
 8 annual Residential and Small Business surveys will cover:

- 9
- 10 • Overall impression and overall satisfaction with Hydro One;
 - 11 • Relationship (concerned, fair, flexible);
 - 12 • Customer Service;
 - 13 • Rates;
 - 14 • Billing and payments
 - 15 • Reliability and outage management; and
 - 16 • Communication.
- 17

18 For Residential and Small Business customers, the overall 5-year trend in Satisfaction is
 19 shown in the following table. The Company attributes the 2011 and 2012 results below
 20 80% to the recession followed by a rate increase.

21
 22 **Table 6:**
 23 **Residential and Small Business Overall Satisfaction**

	Actuals					targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
% Satisfied	84	80	77	78	80	80	81	82	83	84	85

1 The expenses related to Customer Experience relate to the set of work activities required
2 to continue to shape the Company's vision for the ideal customer experience, allowing
3 Hydro One to more effectively respond to evolving customer needs and expectations.
4 Hydro One anticipates spending approximately \$21 million on Customer Experience
5 during the 5-year plan period compared to \$6 million during the preceding 5 year period.
6

7 The proposed metric for assessing Hydro One's performance with regards to Customer
8 Experience is:

- 9
- 10 • Overall Customer Satisfaction, targets for which are shown in Table 6.
- 11

12 The main goal is to move Hydro One towards a 85% customer satisfaction target in 5
13 years. Hydro One recognizes that customer satisfaction may also reflect significant
14 changes in economic indicators, the broader electricity industry or impact from new
15 public policy affecting pricing or billing. Customer satisfaction levels during the 5-year
16 plan cycle will be reported annually and evaluated against the target of 85% satisfaction
17 by the end of the 5 year plan period.
18

19 **Handling of Unplanned Outages**

20

21 During the term of the 5 year plan, Hydro One plans to maintain current levels of
22 distribution reliability, while improving customer service and satisfaction.
23

24 It is important to focus on the entire outage experience – from the time the power went
25 out to shortly after the power was restored. Preventing lengthy outages is important to
26 customers but so is Hydro One's response to customers – timely communication to
27 customers and the level of service provided, particularly by representatives at the Call
28 Centre, are crucial for maintaining current outage satisfaction.

1
2 Leveraging technology and proactive notifications and alerts will yield higher levels of
3 satisfaction in this critical customer area. The frequency and severity of storm related
4 outages will continue to be a challenge.

5
6 Smart grid technology will allow for greater visibility in near real time to outages which
7 will allow for more efficient and effective response. More proactive and targeted
8 communications and updates through many communications channels such as mobile,
9 web, text message, auto dialer, email, in home display, etc. will also enhance timely
10 response to the customer. Staying in touch and providing relevant information to
11 customers will help them to know what is happening and how long the restoration efforts
12 are expected to take.

13
14 The following table summarizes Hydro One's handling of unplanned outages, based on
15 satisfaction levels during the last five years:

16
17 **Table 7:**
18 **Customer Satisfaction with Handling of Unplanned Outages**

19

Year	Actuals					Targets					
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
% Satisfied	82	83	81	79	78	80	80	83	83	83	83

20
21 The proposed metric for assessing Hydro One's performance with regards to our handling
22 of unplanned outages is:

- 1 • Percent of customers satisfied with the way Hydro One handled the unplanned
2 outage, as shown in Table 7.

3
4 An independent third-party research firm will conduct random bi-annual residential and
5 small-business impression surveys regarding Hydro One's handling of unplanned
6 outages.

7
8 **Estimated Bills**

9
10 Hydro One understands that targeted customer satisfaction goals are an important
11 outcome metric against which the Company's performance can be measured during the
12 term of the 5 year plan. One area that the Company understands is an issue for our
13 customers "estimated bills". As such, Hydro One proposes an outcome metric that
14 measures the Company's success in reducing the number of estimated bills received by
15 our customers.

16
17 The deployment of the smart meter solution allows for improvement in billing accuracy,
18 specifically reduction in the number of Customer Information System ("CIS") estimated
19 bills being issued to customers. The specific area for future improvement is in the area
20 where meter data is not available driving the need for the billing determinants to be
21 estimated by Hydro One's CIS system. Currently communication technologies have not
22 evolved sufficiently to increase network coverage and reliability for smart meter data
23 transport. Due to the remote locations of some of these meters, it may not be
24 economically feasible to travel to manually process the time of use data. This creates a
25 challenge in achieving the forecast target.

26
27 The following table summarizes the percent of bills that were sent to our customers that
28 were estimated during the last five years:

29

**Table 8 :
 Estimated Bills**

	Actuals					Targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
% of Estimated Bills Issued	N.A	23.9	10.2	8.5	10.8	6.0	5.5	5.0	4.5	4.0	3.5

The majority of billing quality improvements have already been achieved through the implementation of smart metering system and alignment of meter reading and billing frequencies for mass market customers. Specific quantification of annual improvements in billing accuracy are impossible to project with any accuracy due to limited historical experience with the smart meter solution.

The proposed metric for assessing Hydro One’s performance with regards to estimated bills is:

- Percent of estimated bills issued, as shown in Table 8.

Hydro One proposes to reduce the percent of estimated bills during the 5 year plan.

4.0 CONCLUSIONS

Hydro One has proposed a set of reporting metrics based on the general guidance for performance measurement contained in the RRFE, feedback from stakeholders, areas of capital or OM&A growth in the Plan, and measurable metrics tied to those activities. There are eight measures proposed. The Company has considered both activity based measures and outcome based measures, and proposed a true outcome based measure wherever possible. Where not possible, the Company has proposed an activity based

1 measure that closely corresponds with the desired outcome. To manage costs, where
2 possible we are utilizing information already collected by the Company, although it will
3 require compilation and reporting in new ways. At this stage, we have not proposed
4 specific targets for each measure; our initial emphasis is on measurement, reporting, and
5 directional improvements corresponding to the Plan.

6

7 The Company believes these measures are appropriate for outcome based performance
8 monitoring. Just as in Britain with the RIIO program, the RRFE is in its early stages of
9 implementation. Over time, as the Company, stakeholders and the Board gain more
10 experience with outcome measurement, these measures may be refined accordingly.
11 Some may remain for subsequent plans, new metrics may be introduced, and others may
12 be replaced as new data or areas of emphasis evolve. The Company is committed to
13 measurement and reporting that provide the Board, customers and stakeholders with the
14 information required to monitor Hydro One's performance.

1 **Energy Probe Research Foundation (EP) INTERROGATORY #7**

2
3 **Issue 1.4 Is the proposed rate-smoothing mechanism appropriate? Given**
4 **Hydro One's rate smoothing proposal, should the application include**
5 **any other ratepayer protection measures such as an earnings sharing**
6 **mechanism?**

7
8 **Interrogatory**

- 9
10 a) Should there be a penalty or incentive for Hydro One if it fails to meet (exceeds or
11 comes in below) its capital expenditures in its five-year rate term?
12
13 b) If such a penalty or incentive is put in place, would Hydro One consider updating its
14 capital expenditures annually?
15

16 **Response**

- 17
18 a) Hydro One submits that there should be no consequences beyond those imposed
19 internally by Hydro One's management on responsible staff, at management's
20 discretion, given the myriad of possible causes for any variance.
21
22 b) No. Please see Hydro One's response to Exhibit I, Tab 1.3, Schedule 1 Staff 1.

1
2

Table 4

Directives from Proceeding EB-2013-0141 (2014 Distribution Rates)

Item #	Issue	Summary of Directive	Reference Exhibit
(i)	Smart Grid Rate Rider	Hydro One to provide information on its allocation of Smart Grid costs	G1-3-1

OVERVIEW:

Hydro One filed a rate application seeking adjustments to rates and charges in accordance with the 3rd Generation Incentive Rate Mechanism (“IRM3”) for distribution rates effective January 1, 2014. Of the requested approvals, the settlement conference focused solely on Hydro One’s request for the establishment of a Smart Grid rate rider. The parties were able to reach agreement on this issue. The parties agreed that the other requests for rate adjustments to Board approved 2013 distribution rates were matters to be addressed between Hydro One and the Board.

SMART GRID RATE RIDER

Hydro One proposed the establishment of a Smart Grid rate rider to recover the revenue requirement of \$29.3M in 2014 for OM&A and in-service capital costs of Smart Grid.

For the purposes of settlement and without prejudice to matters pertaining to the appropriateness of Hydro One’s Smart Grid expenditures in 2015-2019, the parties agree that the Hydro One’s forecast expenditures of \$15.8M for smart grid OM&A and \$29.0M for smart grid capital in 2014 are reasonable. In addition, the parties agree that the proposal to establish a smart grid rate rider for recovery of \$29.3M of revenue requirement is reasonable. The acceptance of these sums as reasonable is subject to the following conditions:

- (a) Variance Account Protection – Hydro One will continue to track OM&A and capital smart grid expenditures in accounts 1534 and 1535. Hydro One will also continue to track variances in smart grid revenues and expenditures in account 1536. The expenditures recorded in account 1536 for 2014 will not be subject to a prudence review in a subsequent proceeding.
- (b) Cost Allocation – The issue of appropriate cost allocation methodology for smart grid related costs will be raised as an issue in Hydro One’s Application for distribution rates for 2015-2019 unless the Board directs that this issue be considered and determined in another forum or proceeding. Hydro One will raise the issue by filing evidence and rationale for its proposed allocation of smart grid expenditures.
- (c) Presentation and Reporting of Smart Grid Expenditures in the Future – The parties acknowledge that page 48 in the Report of the Board dated October 18, 2012,

entitled “Renewed Regulatory Framework for Electricity Distributors: A Performance Based Approach” indicates that, under the integrated approach to planning, no distinction is to be made for regulatory purposes between “smart grid” investments and more traditional investments undertaken by distributors and transmitters. The parties also acknowledge that Hydro One intends to adhere to this approach in its next custom cost of service application for distribution rates for 2015-2019. In that application, Hydro One will also present evidence that will identify smart grid projects in order to assist the parties and the Board in evaluating the reasonableness of Hydro One’s smart grid program.

In that custom cost of service application for 2015-2019, Hydro One will present its proposal to the Board on how best to report upon the progress and results of its smart grid program as part of the custom cost of service rate application annual reporting.

Evidence: The evidence in relation to this issue includes the following:

A-2-1	Application
A-3-1	Summary of Application
C-1-1	Smart Grid Rate Rider
C-1-1 App. A	Phase 1 Release 2 Business Case Summary
D1-1-1	Rate Rider Calculations
D1-1-1 Att. 1	Calculation of Smart Grid Variable Rate Riders by Rate Class
I-1-1	OEB Interrogatory #1
I-1-2	OEB Interrogatory #2
I-1-3	OEB Interrogatory #3
I-1-4	OEB Interrogatory #4
I-1-5	OEB Interrogatory #5
I-1-6	OEB Interrogatory #6
I-1-7	OEB Interrogatory #7
I-1-8	OEB Interrogatory #8
I-1-9	OEB Interrogatory #9
I-1-10	OEB Interrogatory #10
I-1-11	OEB Interrogatory #11
I-1-12	OEB Interrogatory #12
I-2-1	OSEA Interrogatory #1
I-2-2	OSEA Interrogatory #2
I-2-3	OSEA Interrogatory #3
I-2-4	OSEA Interrogatory #4
I-2-5	OSEA Interrogatory #5
I-2-6	OSEA Interrogatory #6
I-2-7	OSEA Interrogatory #7
I-2-8	OSEA Interrogatory #8
I-2-9	OSEA Interrogatory #9



Ipsos Loyalty



CANADIAN RESIDENTIAL BENCHMARKING STUDY

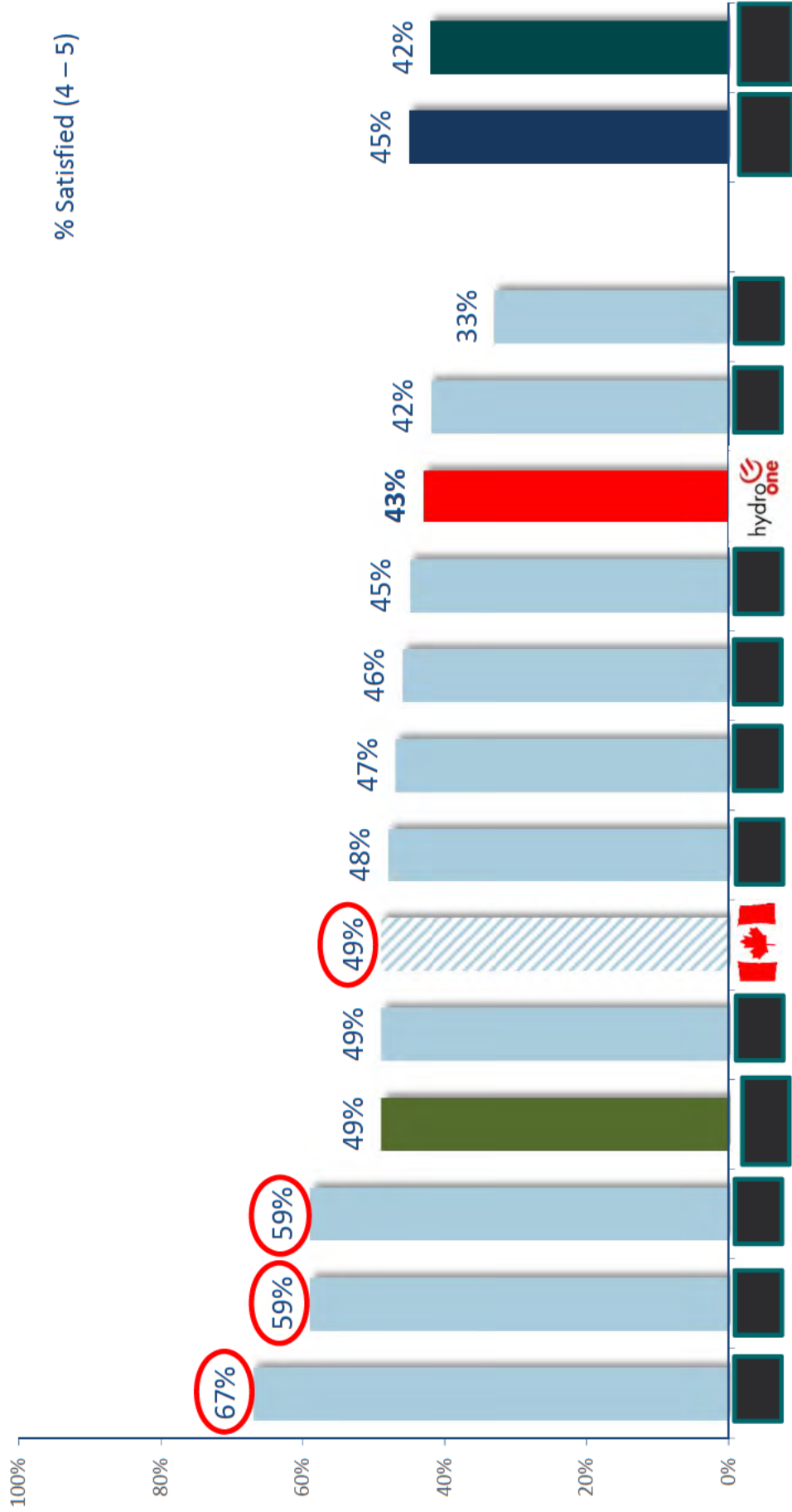
Customer Satisfaction Tracking
July – 2013

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Nobody's Unpredictable

Rates Charged

HON significantly lower than [redacted] the Best Practice province.



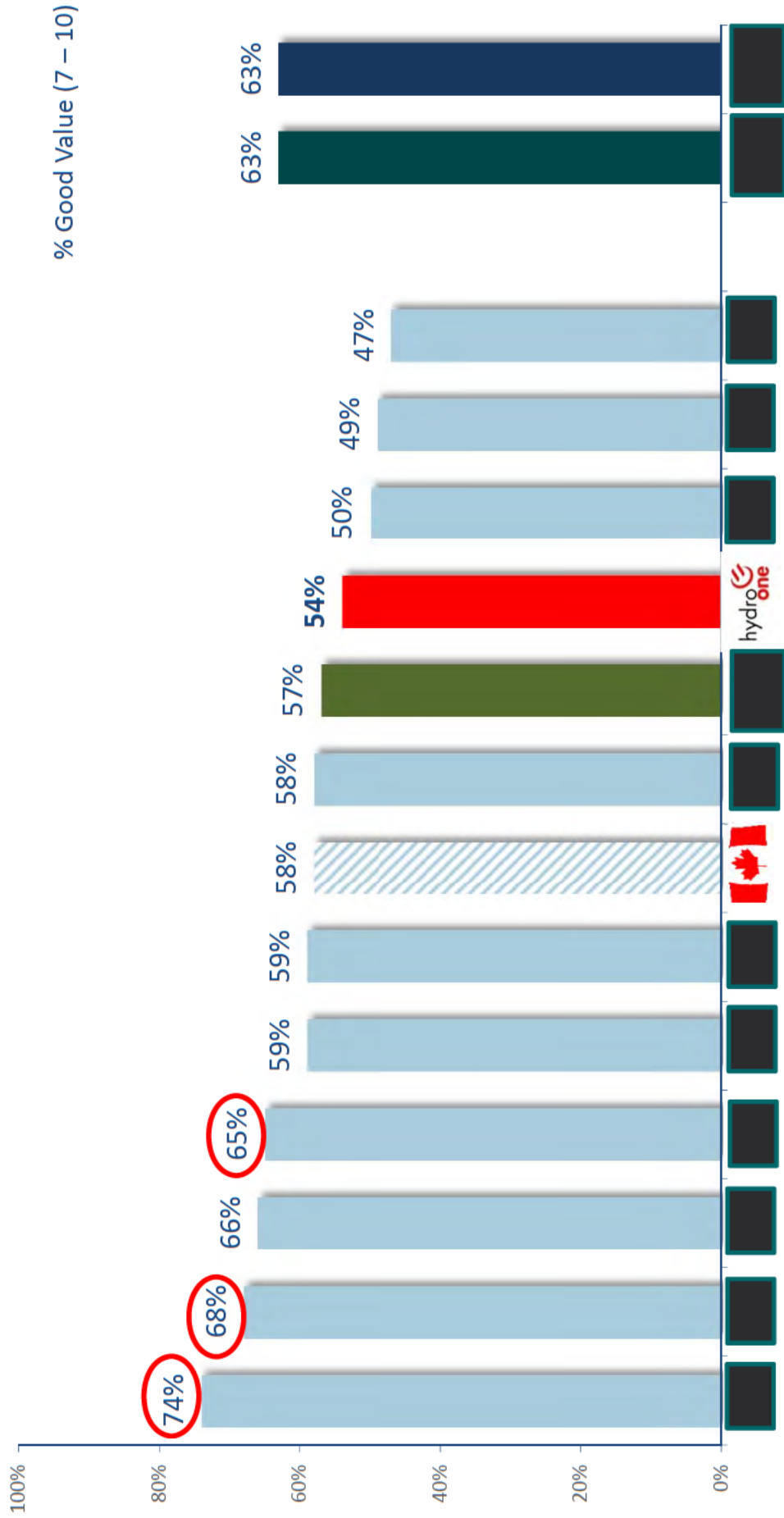
Significantly higher/lower than Hydro One at 95% confidence interval.



Conducted among residential populations under 50,000. Base: All Respondents Q.1g3 How satisfied are you overall with: the rates charged by [UTILITY].

Value For Money

HON significantly lower than [redacted] the Best Practice province.



Conducted among residential populations under 50,000. Base All Respondents. Q1f. Considering the overall quality of the electricity service you get from Hydro One, how would you rate the value for the money provided by [UTILITY]. Please use a scale of 1 to 10, where a "10" means "excellent value" and a "1" means "poor value".

Significantly higher/lower than Hydro One at 95% confidence interval.