

Responses to School Energy Coalition Interrogatories

1-SEC-1

[Ex.1] Please explain how this Custom IR application differs from a five-year cost of service application.

Response:

- 1 Please see Horizon Utilities' response to 1-CCC-3 and BOMA 7 c).

1-SEC-2

[Ex.1] Please detail the Applicant's regular annual budgeting process.

Response:

1 Horizon Utilities prepares its budget in the context of achieving its corporate objectives as
2 presented in Exhibit 1, Tab 2, Schedule 6. The budget is based on three key areas of focus to
3 support the corporate objectives as follows: (i) harnessing productivity in order to deliver more
4 for the same or less; (ii) enhancing the customer experience by delivering improvements to
5 services in a cost effective manner and (iii) focusing on the renewal of the distribution system in
6 order to maintain reasonable service levels and manage load growth.

7 The budgeting process is initiated with the preparation of departmental Business Plans by the
8 Business Units. The Business Plans identify departmental objectives and future initiatives
9 which are set with regard to Horizon Utilities' strategic business objectives. The business plans
10 include justification for: capital expenditures; operating costs; and additional headcount. The
11 Business Plans provide the Executive Management Team with a preliminary view of the
12 financial projections. The Business Plans form the basis of the detailed budgets and the five-
13 year Financial Plan which is ultimately submitted to Horizon Utilities' Board of Directors for
14 approval.

15 Business unit managers are responsible for their five-year operating and capital budgets and
16 headcount planning, based on historical experience as well as future requirements due to
17 ongoing core activities and new business initiatives. The budget for the first year is prepared
18 using a zero-based, activity-based approach, to ensure that there is full justification for each line
19 item. Subsequent years are budgeted with reference to the first year budget, with assumed
20 annual inflation rates (as specified in Exhibit 4, Tab 1, Schedule 1) and include any planned new
21 initiatives and productivity gains. Any requirements for additional headcount positions are
22 justified financially and operationally. These requests must be endorsed by the division
23 executive, then by the SVP & CFO and CEO before being submitted to the Board of Directors.

24 The OM&A expense budgets are based on an in-depth review of operating priorities and are
25 strongly influenced by historical trends from previous years as well as current year forecasts.
26 Significant variances to current year forecast must be documented and justified. The Capital
27 budget is influenced, among other factors, by Horizon Utilities' capacity to finance capital

1 projects. Asset condition assessments are a vital input in determining specific priorities for
2 distribution capital and investments in facilities. Please refer to Horizon Utilities' response to
3 Interrogatory 2-SIA-19 regarding the accuracy and specificity of the capital costs estimates in
4 the five year term.

5 Budget assumptions are provided from the relevant source departments and some of these key
6 budget parameters are explained in Exhibit 1, Tab 2, Schedule 6. The budget implicitly
7 assumes there will be no significant changes to the business environment or regulatory
8 requirements during the five-year period, other than those changes that are explicitly stated as
9 assumptions. The budget is prepared to allow Horizon Utilities to be adequately resourced: to
10 support its capital projects and corporate initiatives; to maintain its infrastructure to an
11 acceptable level of reliability; to deliver on its commitment to employee and public safety, and to
12 deliver customer satisfaction in a cost effective manner by deploying productivity strategies.

13 Once draft detailed budgets are complete, they are reviewed by senior management for
14 completeness, consistency and reasonableness. The budgets are aggregated and summarized
15 in the Five-Year Financial Plan. The SVP & CFO reviews the budget, recommends changes as
16 necessary to support corporate objectives and financial concerns, and ultimately presents the
17 budget to the CEO for approval. The SVP & CFO and CEO present the budget to the Audit and
18 Risk Management Committee and Horizon Utilities' Board of Directors in its November meeting.
19 Any subsequent changes to the budget are processed and incorporated into the final Financial
20 Plan, which is formally approved by the Board of Directors in December.

1-SEC-3

[Ex.1] Please detail the Applicant's budgeting process for the purpose of this 2015-2019 Custom IR application.

Response:

1 As stated in Horizon Utilities' response to Interrogatory 1-SEC-2, Horizon Utilities' regular
2 annual budgeting process includes the preparation of a five-year budget. Accordingly, the
3 process for preparing the budget for the 2014 Bridge Year and five-year 2015-2019 rate plan
4 period was generally consistent with Horizon Utilities' regular annual budget process.

5 For the purposes of the 2015 to 2019 Custom IR Application, Horizon Utilities extended the
6 budgeting term from five years to six years (so as to cover a six-year period from 2014 to 2019)
7 and based distribution revenue on a revenue requirement for each year from 2015 to 2019
8 rather than using IRM adjustments to determine revenue in those years. Certain adjustments
9 were made to the legal entity budget to conform to regulatory accounting and reporting
10 requirements. These adjustments included:

- 11 • Removal of expenditures for which Horizon Utilities is not seeking recovery through
12 distribution rates, such as Conservation and Demand Management activities contracted
13 with the Ontario Power Authority;
- 14 • Removal of other non-regulated revenue, operating and capital expenditures; and
- 15 • Reclassification of certain items to conform with regulatory accounting requirements
16 under the Board's Accounting Procedures Handbook, where such requirements differ
17 from those under IFRS.

18 Consideration was also given to the provision of additional data needed to meet rate application
19 filing requirements, such as OM&A presented based on the Ontario Energy Board's Uniform
20 System of Accounts and employee compensation presented in accordance with Appendix 2-K
21 requirements.

22 Additionally Horizon Utilities undertook the following measures to ensure a high degree of
23 accuracy in its budget for the rate plan term as follows:

- 1 • Prepared a comprehensive Distribution System Plan (“DSP”) over a twenty year
2 planning horizon which identifies planned and necessary investments in the renewal
3 of Horizon Utilities’ distribution system;
- 4 • Performed detailed Asset Condition Assessments (“ACAs”) on distribution assets in
5 the development of the above-mentioned DSP. The ACAs provide essential insights
6 into the state of the distribution system and building assets to support capital
7 expenditures as provided in Appendix B of the DSP filed as Appendix 2-4 in Exhibit
8 2;
- 9 • Engaged KPMG to conduct an independent assurance review on the results of the
10 Kinectrics’ ACA, filed as Appendix C of the DSP filed as Appendix 2-4 in Exhibit 2;
- 11 • Engaged Evans Consulting Services in 2013, a leading building assessment firm, to
12 conduct a Building Condition Assessment (“BCA”) (provided in Appendix K of the
13 DSP filed as Appendix 2-4 in Exhibit 2) of the five main Horizon Utilities buildings and
14 28 substations to support a long-term plan for facilities renewal and maintenance and
15 confirm required investment levels;
- 16 • Engaged Navigant Consulting Inc. to perform an independent review of its Lead/Lag
17 Study in 2013, filed as Appendix 2-3 of Exhibit 2, Tab 4
- 18 • Implemented a centralized Planning and Scheduling process as identified in Exhibit
19 4, Tab 2, Schedule 2, which included the creation of a new Project Controls Office
20 department, to efficiently and effectively deploy labour, vehicles, tools and materials;
21 and reduce variability in Operating and Maintenance expenditures;
- 22 • Prepared a Workforce Labour Strategy and Plan (“WLSP”) filed as Appendix 4-3 of
23 this Exhibit. The WLSP provides reasonable projections of retirements, attrition and
24 hiring requirements for the 2015-2019 rate plan and enables Horizon Utilities to
25 regularly assess the availability of resources and identify strategies to mitigate risk
26 through workforce planning;
- 27 • Engaged Eckler Ltd. to perform actuarial evaluations for post-employment benefits
28 filed as Appendix 4-4.1 of Exhibit 4, Tab 4;

- 1 • Conducted a Transfer Pricing Study for transactions between regulated electricity
2 distribution operations and affiliated, non-regulated businesses filed as Appendix 4-
3 6.1 of Exhibit 4, Tab 4.

1-SEC-4

[Ex.1] Please provide a copy of all materials provided to the Applicant's Board of Directors in approving this application and the underlying budgets.

Response:

- 1 Please see Horizon Utilities' response to Interrogatory 1-CCC-1.

1-SEC-5

[Ex. 1-2-6/p.1] Please revise the analysis provided in lines 1 through 7 of page 26, for 2014-2019.

Response:

- 1 This question has been withdrawn by the School Energy Coalition. Therefore, Horizon Utilities
- 2 has not provided a response.

1-SEC-6

[Ex.1-12-2/p.1] Does the Applicant's proposed 'reopeners' includes a materiality threshold?

Response:

- 1 Please see Horizon Utilities' response to Interrogatory 1-Staff-6.

1-SEC-7

[RRFE Report/p.13] Please provide copies of all benchmarking studies, evaluation, and surveys, undertaken by the Applicant through a third-party or conducted internally, since 2011.

Response:

Horizon Utilities undertakes industry benchmarking internally with the use of OEB and local distribution company ("LDC") data, through MEARIE as a member company, and through third parties. Horizon Utilities' internal benchmarking annually compares itself to the LDC sector on the following financial performance scores and typical customer rates comparisons:

- Controllable costs (or "OM&A", operations, maintenance and administration) or per customer;
- Revenue per customer;
- Return on Equity percentage;
- Residential distribution only rates at 800 (or 1,000) kWh per month;
- Small commercial distribution only rates at 13,000 kWh per month;
- Mid-size commercial distribution only rates at 350 kW per month; and
- Large commercial distribution only rates at 3,500 kW per month.

The financial benchmarking data is sourced from the OEB's Yearbook of Electricity Distributors and the rates data used in the benchmarking are sourced from the OEB rate orders of the individual LDCs, but both exclude Hydro One because of its service territory being largely non-urban in character.

Excerpts of the financial data and the "distribution only" rates data, as printed in Horizon Holdings Inc.'s 2013 Sustainability Based Annual Report, are included as

- 1-SEC-7_Attch 1_Sustainability-basedAnnualReport2010-comparison pages only
- 1-SEC-7_Attch 2_Sustainability-basedAnnualReport2011-comparison pages only
- 1-SEC-7_Attch 3_Sustainability-basedAnnualReport2012-comparison pages only
- 1-SEC-7_Attch 4_Sustainability-basedAnnualReport2013-comparison pages only

Excel versions of the following attachments have been filed:

- 1-SEC-7_Attch 5_OM&A-Revenue-ROE Comparisons 2010-2012 - all LDCs
- 1-SEC-7_Attch 6_OM&A-Revenue-ROE Comparisons 2009-2011 - all LDCs
- 1-SEC-7_Attch 7_OM&A-Revenue-ROE Comparisons 2008-2010 - all LDCs
- 1-SEC-7_Attch 8_Rate Comparisons 2011 - all LDCs
- 1-SEC-7_Attch 9_Rate Comparisons 2012 - all LDCs
- 1-SEC-7_Attch 10_Rate Comparisons 2013 - all LDCs

Horizon Utilities does industry benchmarking analyses internally on specific subjects as required for industry presentations. Presentations since 2011 are included as attachments as follows:

- 1-SEC-7_Attch 11_DOCS-#11256084-v4-OEB_Presentation
- 1-SEC-7_Attch 12_Horizon Benchmarking to Horizon Reg Affairs 2013-03-27
- 1-SEC-7_Attch 13_Horizon Presentation 2013 Ontario Power Summit (Final)
- 1-SEC-7_Attch 14_Presentation to the OEB Working Group on Benchmarking (2013-02-14 version v6)
- 1-SEC-7_Attch 15_Horizon EUCI Presentation 2013-09-20 vFinal

Horizon Utilities does industry benchmarking analyses internally on specific subjects as required for business purposes, including this Application. Horizon Utilities has provided the following excel file:

- 1-SEC-7_Attch 016_LDC Billing and Collecting Comparison on 2012 Financial Statements

Horizon Utilities is a member of MEARIE Group of Companies and annually participates in the MEARIE UPM Survey. This data set differs from the OEB Yearbook of Distributors in that LDCs are not required to participate. In the 2012 and 2013 survey, only 29 and 28 LDCs participated respectively. Copies of the MEARIE Management Report and Statistics and Ratios Report for 2012 (on 2011) and 2013 (for 2012) are included in this interrogatory response electronically.

1 Horizon Utilities does not intend to print paper copies of these surveys which total approximately
2 1400 pages.

3 Horizon Utilities also addresses benchmarking with respect to capital and OM&A expenditure
4 planning in its responses to Interrogatory 1-Staff-14 and reliability benchmarking in Interrogatory
5 SIA-13.

6 Horizon Utilities does commission compensation benchmarking from third-parties. This
7 benchmarking is addressed in Horizon Utilities' response to Interrogatories 1-Staff-26 f) and 4-
8 SEC-32.

9 Horizon Utilities addresses OM&A and FTE per customer in its evidence at Exhibit 4, Tab 2,
10 Schedule 3, Page 2, Table 4-20.

EB-2014-0002
Horizon Utilities Corporation
Responses to School Energy
Coalition Interrogatories
Delivered: August 1st, 2014
1-SEC-7_Attch 1_Sustainability-basedAnnualReport2010-comparison pages only

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pages only**

2010 Sustainability-Based Annual Report



The Power to Make our Communities Better



2010

Sustainability-Based Annual Report

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Financial Statements (Enclosed)	

Visit www.horizonutilities.com for:

- Horizon Holdings Inc. Sustainability-Based Annual Report
- Horizon Holdings Inc. Global Reporting Initiative™ (GRI) Filing
- Horizon Holdings Inc. Financial Statements
- Ernst & Young 2010 GRI Assurance Statement

Economic Performance

Controllable Costs

In 2005, in the first full year of the amalgamation of Hamilton and St. Catharines utilities, Horizon's costs per customer was \$165 per annum, at a time when the industry average increased to \$228 per annum. In 2009 (the most current available data), Horizon's costs per customer still stood at \$165 per annum, compared to the Ontario LDC industry average of \$257 per annum. Through the economies of scale in amalgamation, and by maintaining costs and organizational efficiencies, Horizon has kept its operating costs close to 2005 levels – among the lowest in the sector.

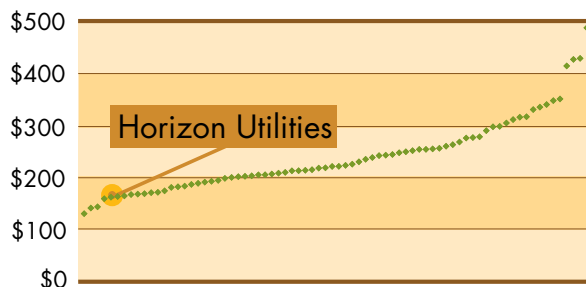
Horizon's Customer Connections department was one of the few meter service providers in Canada to receive registration to the ISO 9001:2008 Standard. The department is also accredited to Measurement Canada's S-A-01 Standard and certified under the Independent Electricity System Operator (IESO) as a Meter Service Provider.



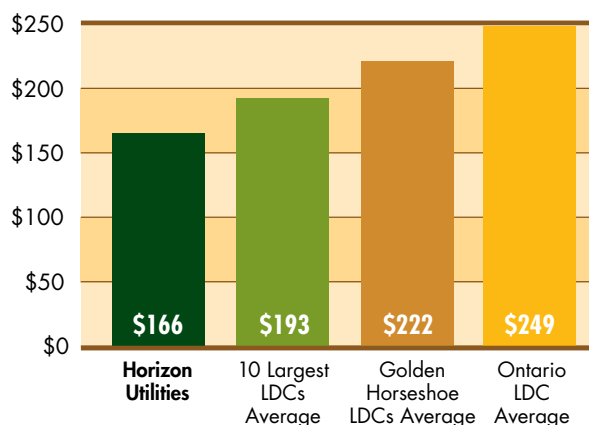
2007-2009 Controllable Costs

Three-Year Comparison between
Horizon Utilities and all LDCs

2007-2009 OM&A*/Customer Average



2007-2009 OM&A*/Customer Average



Source: Ontario Energy Board (OEB) Yearbook of Electricity Distributors 2007, 2008 and 2009 (2010 not yet published). NB: Data for Horizon Utilities, rather than Horizon Holdings, is used here because only LDCs are in the OEB Yearbook. Averages are simple averages. Data excludes Hydro One Networks because of the character of its service territory compared to other distributors. Golden Horseshoe LDCs are 27 utilities around Lake Ontario from Durham to Niagara and north from the lake to Newmarket and Waterloo.

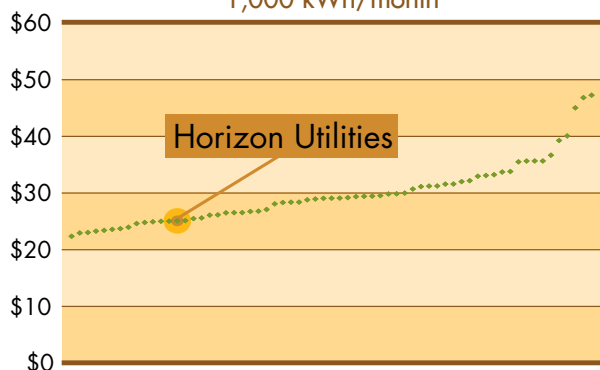
*OM&A means operations, maintenance and administration.

In 2010 we made our largest capital investment to renew our infrastructure – primarily poles and wires.

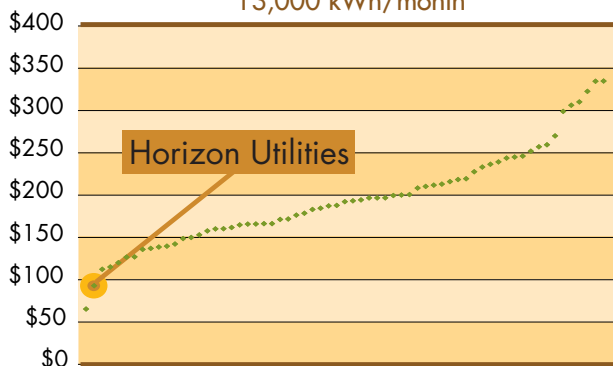


2010 Low and Balanced Customer Rates

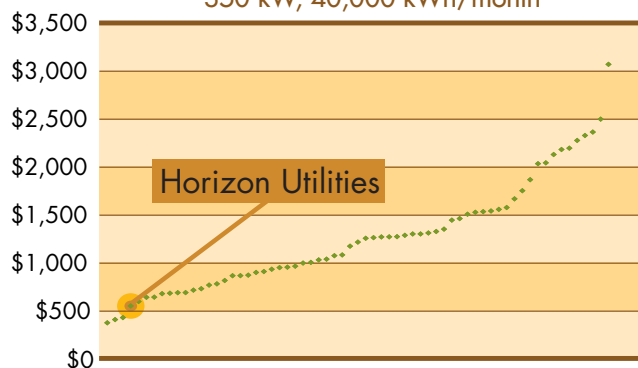
Residential Customers
1,000 kWh/month



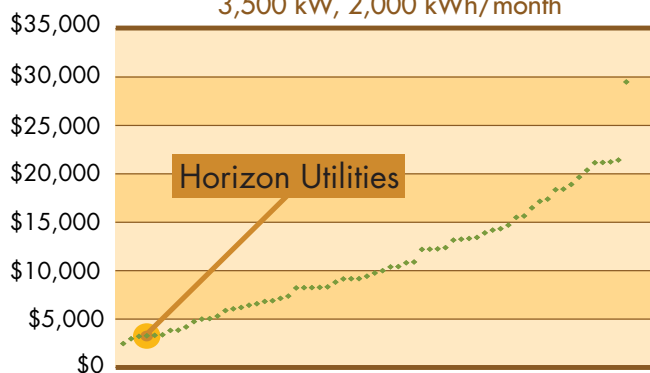
Small Business
13,000 kWh/month



Light Manufacturing
350 kW, 40,000 kWh/month



Manufacturing
3,500 kW, 2,000 kWh/month



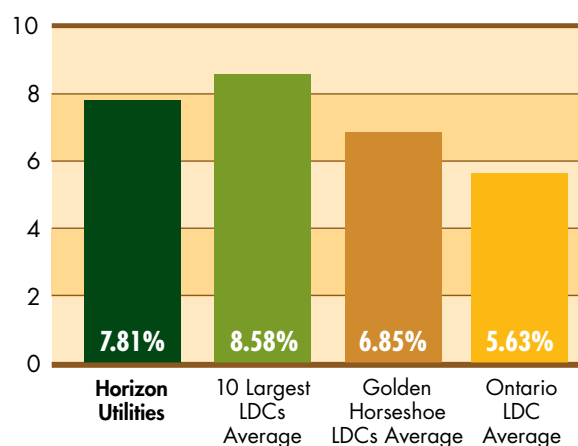
Horizon Utilities rates compared to all other local distribution companies (LDCs) in the province of Ontario (except Hydro One Networks). These four graphs represent typical customers – one residential and three commercial – of varying size and the rates displayed here are the OEB's approved distribution rates, including rate riders, for all Ontario distributors in 2010.



2010 Direct Economic Value* Generated by Horizon Holdings

Operating Expenditures	\$46,576,000
Capital Expenditures	\$39,193,000
Dividends to Shareholders	\$8,113,000
Payments in Lieu of Taxes (PILs)	\$5,745,000
Energy Incentives and Rebates (OPA funded)	\$1,028,104
Charitable Contributions (Employees and Corporate)	\$57,528
Economic Benefit	\$100,712,632

2007-2009 Return on Equity Three-Year Comparison between Horizon Utilities and all LDCs



2009 Comparative Direct Economic Value** Generated by Distribution Utilities Only*

	Horizon Utilities (Not Holdings)	Horizon Utilities /Customer	Ten Largest LDCs Average	Ten Largest LDCs Avg. /Customer	All 78 LDCs Average	All 78 LDCs Avg. /Customer
Revenues	\$88,769,697	\$378	\$123,578,444	\$539	\$23,613,105	\$505
Operating Expenditures	\$38,778,645	\$165	\$47,532,895	\$207	\$10,011,645	\$214
Capital Expenditures	\$44,674,968	\$190	\$60,004,994	\$261	\$11,054,189	\$237
Payments in Lieu (PILs)	\$5,502,940	\$23	\$7,518,527	\$33	\$1,505,592	\$32

*NB: See full GRI filing for additional details. Data for Operating Expenditures and PILs differ in this table from the financial statement because \$305,000 of the PILs shown is for capital taxes that are included as Operating Expenditures in the financial statements.

**Source: Ontario Energy Board (OEB). LDC – An LDC is a Local Distribution Company. LDCs are compared here because only their data is published by the OEB. 2009 data is used because 2010 is not yet published. Averages are simple averages. Hydro One Networks are excluded because its service territory differs so greatly from other LDCs. Charity contributions are not included because they are not published by the OEB.

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pages only**



2011 Sustainability in Action

Sustainability-Based Annual Report

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Visit horizonutilities.com to view:

Horizon Holdings Inc. Sustainability-Based Annual Report

Horizon Holdings Inc. Global Reporting Initiative™ (GRI) Filing

Horizon Holdings Inc. Financial Statements

Ernst & Young 2011 GRI Assurance Statement

Economic Performance

Contributing to the Sustainability of Our Communities

Horizon Holdings Inc.'s principal affiliate, Horizon Utilities Corporation, continues to be a leader among Ontario electricity distribution utilities in terms of economic performance, customer service, reliability, reasonable rates, and supporting conservation and demand management. All of this contributes to a healthy and sustainable economic climate in the communities we serve.

Horizon Energy Solutions Inc. (HESI) continues to grow in the emerging renewable energy sector and conservation and demand management business. It is building a track record and reputation as a leader, delivering reliable excellence in customer service. HESI has a clear stake in the future. Our services are all about sustainability.

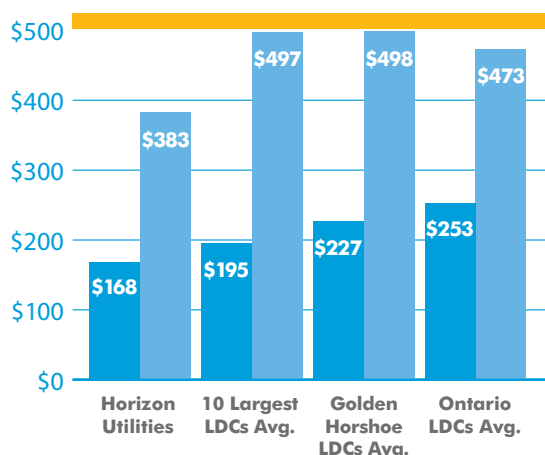
We power our communities with the best possible recipe for economic sustainability.

Reasonably low operating costs contribute to our financial performance, and in turn, we deliver economic value to our customers, employees and shareholders. By seeking to be as efficient as possible in our operations, we are able to deliver reasonable rates to our customers while earning a fair return for our shareholders. The end result is sound employment for staff and the enhanced economic health of our communities. For us, this is putting sustainability into action.

Horizon Holdings' net income was \$17.8 million compared to \$12.7 million in 2010 resulting in a 40 per cent increase. The increase in net income was largely

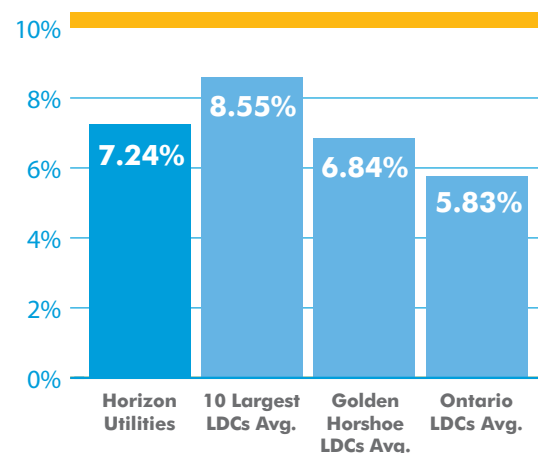
HORIZON UTILITIES AND ALL LDCs AVERAGES OF 2008-2010

CONTROLLABLE COSTS AND REVENUE PER CUSTOMER COMPARISON



■ Operations, Maintenance & Administration/Customer
■ Distribution Revenue/Customer

RETURN ON EQUITY COMPARISON



"Horizon Holdings Inc. delivered strong financial results in 2011. We continued with important investments in the communities we serve in support of sustainable and reliable electricity distribution service delivery. The well-being and sustainability of our communities are paramount to us. We are committed to balancing costs in support of service delivery with reasonable customer rates, because we know this contributes directly to the sustainability of our communities through the cost of living and the cost of doing business."

John G. Basilio
Senior Vice President and CFO
Horizon Holdings Inc.

attributable to non-recurring events such as recoveries of past regulated costs and the disposition of the HESI water heater business. Additionally, Horizon Utilities rates increased to address requirements to renew its aging electricity distribution infrastructure and wage and price inflation. The credit rating of Horizon Holdings was confirmed by Standard & Poor's at "A stable".

Low Costs and Revenue with High Shareholder Return — Horizon Utilities

Horizon Performs Well

Horizon Utilities significantly outperformed the utility industry in Ontario in many important economic measures. Horizon Utilities proves that you can benefit customers and shareholders simultaneously.

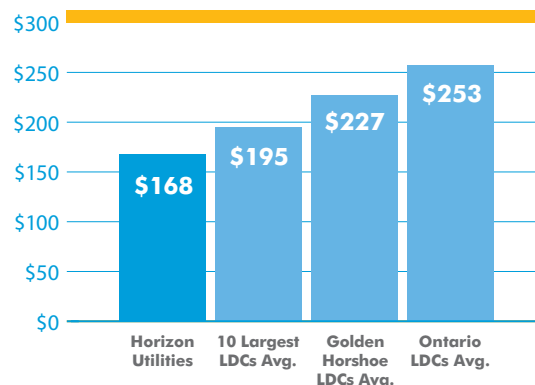
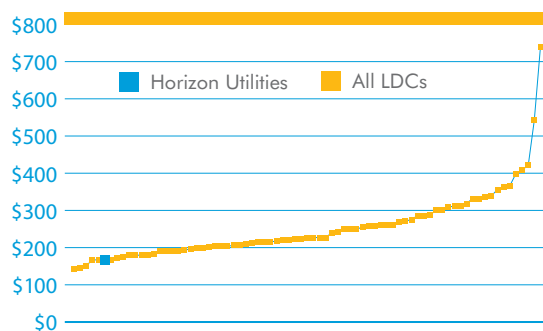
We have among the lowest controllable costs and revenue requirement per customer across the sector. Moreover, we do so while also earning a strong net income per customer and realizing one of the highest average returns on equity in the sector.

This demonstration of our sustainability in action is illustrated in the table on page 25, showing both controllable costs and revenue per customer. The data is based on the Ontario Energy Board's (OEB) Yearbook of Distributors—examined across an average of three years to ensure exceptions to performance (good or bad) are out.

Comparisons

Horizon's average controllable cost (operations, maintenance and administration expenses) of \$168 per customer per year across 2008 to 2010 (see graph below) is one of the lowest in Ontario, and fully 34 per cent less than the Ontario average of \$253. It is also better than the \$195 per customer for the 10 largest utilities, which have an average size of 226,000 customers. In addition, it compares favourably to the \$227 per customer of the 26 distributors in the Golden Horseshoe, which have an average size of 83,000 customers. The average size of all 78 distributors is 46,500 customers and median size is 15,000 customers.

CONTROLLABLE COSTS PER CUSTOMER COMPARISON HORIZON UTILITIES AND ALL LDCs AVERAGES 2008-2010



Source Data pp. 25-26: Ontario Energy Board (OEB) Yearbook of Electricity Distributors 2008, 2009 and 2010 (2011 not yet published). NB: Data for Horizon Utilities, rather than Horizon Holdings, is used here because only LDCs are in the OEB Yearbook. Averages are simple averages. Data excludes Hydro One Networks because of the character of its service territory compared to other distributors. OM&A means operations, maintenance and administration.

This superior cost control has an important benefit for our customers when it comes to our need for revenue from customers. Horizon operates with an average of \$383 of revenue per customer, a key comparative indicator of rates charged by each utility. When viewed against the same three comparators groups, Horizon is actually 23 per cent lower than the revenue per customer average of \$497 for the 10 largest utilities and the \$498 of the Golden Horseshoe average, and 19 per cent below the \$473 of revenue per customer in the Ontario average.

Our shareholder return for 2011 was respectable against the three comparator groups over the 2008-2010 period (the 2011 OEB Yearbook will appear in the third quarter of 2012). Horizon's three-year return on equity average of 7.24 per cent compares favourably with the industry average of 5.83 per cent and the Golden Horseshoe average of 6.84 per cent, although below the 8.55 per cent of the 10 largest LDCs (see graph page 25).

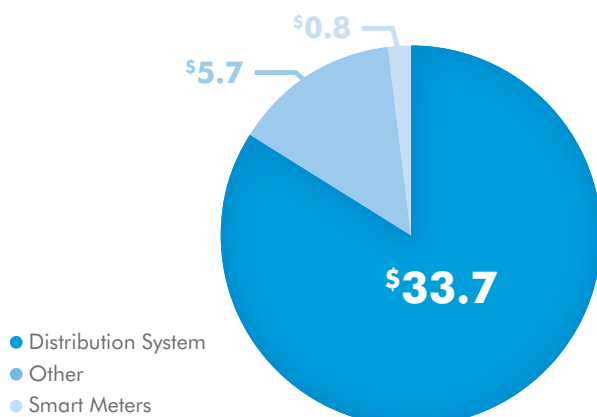
Our financial performance management systems, coupled with our economies of scale, provide us with the necessary tools to achieve fair and competitive shareholder return on equity for Horizon. We do so while charging less than most other LDCs and maintaining investment levels that ensure a safe, reliable electrical system.

Successful Cost of Service Regulatory Application — Horizon Utilities

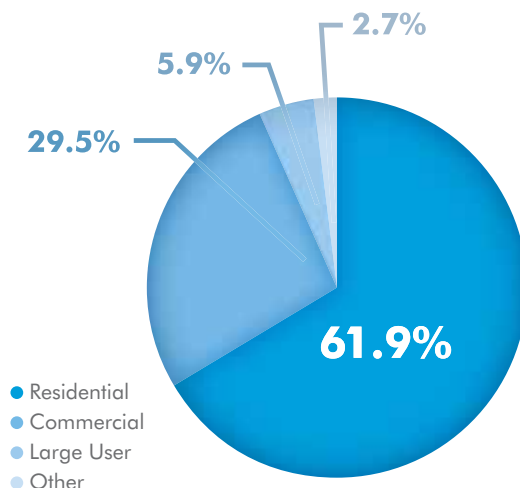
The setting of rates in the energy sector provides stakeholders with an opportunity to influence the direction of local distribution companies.

Horizon's costs, revenue and profits are regulated by the OEB. This quasi-judicial provincial government agency regulates and licenses the entire electricity industry in Ontario, including approving specific customer class rates and rates of return for all distributors. In 2011, Horizon was one of the first LDCs to complete its second cost of service application under the OEB's third-generation Incentive Rate Making (IRM) process.

2011 Capital Expenditures
HORIZON HOLDINGS (in millions)



2011 Electricity Revenue
FOR HORIZON HOLDINGS



"We consider Horizon Utilities a vital partner in the delivery of our five-year strategic plan and our annual work plans. Its contributions to our Business Attraction and Expansion initiatives, the Golden Horseshoe Strategic Energy Alliance, and increasing the sustainability of local industry through its low rates are major factors in Hamilton's economic resurgence."

*Neil Everson, Director
Economic Development
City of Hamilton*

This rate application and approval process is an extremely rigorous and resource consuming exercise for electricity distributors such as Horizon. We provided close to 2,000 pages of written evidence and underwent 32 hours of oral examination before a panel of OEB commissioners. In this process, we responded, orally and in writing, to in-depth review and cross-examination by the OEB's staff and various customer stakeholder representatives.

Stakeholders are a key part of this process. Our 2011 cost of service application was scrutinized by the Association of Major Power Consumers in Ontario, Consumers Council of Canada, Energy Probe, School Energy Coalition and the Vulnerable Energy Consumers Coalition. In response to the whole process, we adjusted aspects of our financial plans and rate application.

At the end of this lengthy process, we were able to continue to maintain reasonable rates for our customers while receiving sufficient revenues to provide for the maintenance and renewal of our infrastructure and investments in skilled labour and customer-focused technology.

Horizon an early IFRS adopter

The Horizon family of companies has successfully transitioned to new International Financial Reporting Standards (IFRS) in 2011—a full year before the changes become mandatory for rate regulated entities in Ontario.

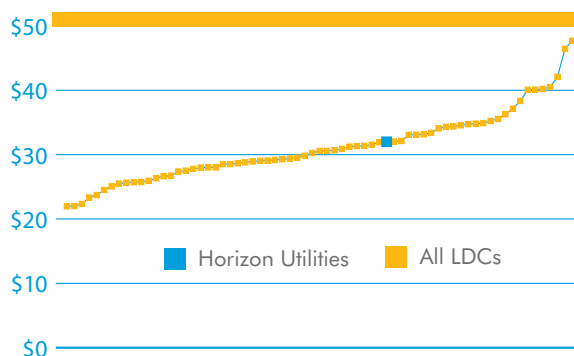
The Canadian Accounting Standards Board (AcSB) directed publicly accountable companies, such as Horizon, to adopt IFRS in place of Canadian Generally Accepted Accounting Principles (GAAP), for interim and annual financial reporting. The first-time adoption of IFRS initially had a mandatory implementation date of January 1, 2011.

The AcSB, however, revised the requirement in 2010 to provide for an optional one-year deferral of the implementation date to January 1, 2012. Horizon implemented IFRS effective January 1, 2012, and is providing comparative financial statements under IFRS for 2011.

2011 LOW AND BALANCED CUSTOMER RATES

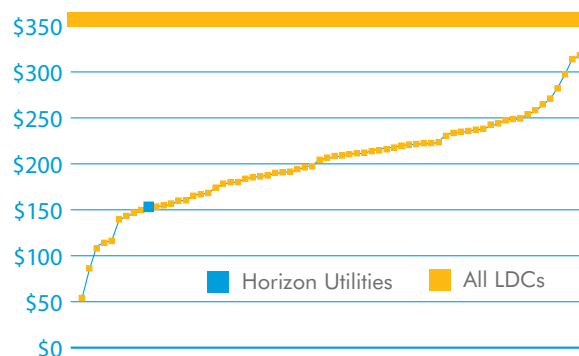
Residential Customers

1,000 kWh/MONTH



Small Business

13,000 kWh/MONTH



NB: These four graphs represent typical customers — one residential and three commercial — of varying size and the rates displayed here are the OEB's approved distribution only rates for all Ontario distributors in 2011.

With all this behind us, we continue to evaluate the impacts of IFRS requirements on all of our business activities.

Low and Balanced Customer Rates — Horizon Utilities

Horizon is proud to be a sector leader on customer rates. When setting out to establish rates for our customers, we strive both to maintain low rates and to ensure that our rates among different classes of customers reflect the specific costs for serving each class of customers. (See graphs on pages 28 and 29).

While Ontarians may know that electricity rates are set by the Ontario Energy Board, most would be surprised to learn that rates vary widely from one local distribution company to another.

For a typical residential customer using 1,000 kilowatt-hours of consumption per month, the distribution charge varies widely by utility. In 2011, most were in the \$25-\$35 range, with a few exceptions. Horizon is near the middle of the pack at \$31. The relatively wide range is due both to cost management and, within the constraints of rate regulation, some flexibility in the manner in which distributors allocate their costs to different rate classes.

On the latter point, the phenomenon is seen more clearly for the case of a typical small commercial customer, such as a large corner store consuming 13,000 kilowatt-hours per month. The majority of utilities across Ontario charged between \$150 and \$250 for distribution in 2011. At Horizon, the customer paid \$152, among the lowest in Ontario.

For a light manufacturing-sized commercial customer, such as a warehouse, small manufacturer or even a municipal arena, where a typical customer might use 350 kilowatts of demand, the majority of local distribution companies charge between \$1,000 and \$1,700 (with some outliers at both ends). At Horizon, the same customer paid closer to the lower end at \$1,013.

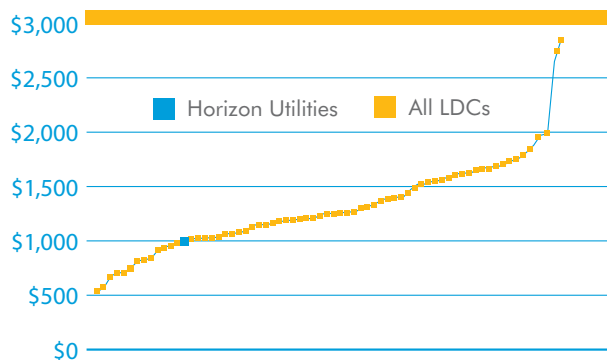
Similarly, a typical large commercial customer, such as an industrial user requiring 3,500 kilowatts of capacity, would see rates varying from \$5,000 to \$15,000 per month for the distribution charge, but just \$7,467 for Horizon customers.

“Horizon Utilities has been an integral partner in St. Catharines’ economic development initiatives, integrated business retention and investment attraction support. As the cost of energy continues to be a major factor in business location decisions, it is essential to have a strong relationship with the innovative Horizon team. Any inquiry we have is always dealt with in a timely and professional manner.”

*David Oakes, Director
Economic Development &
Tourism Services, City of
St. Catharines*

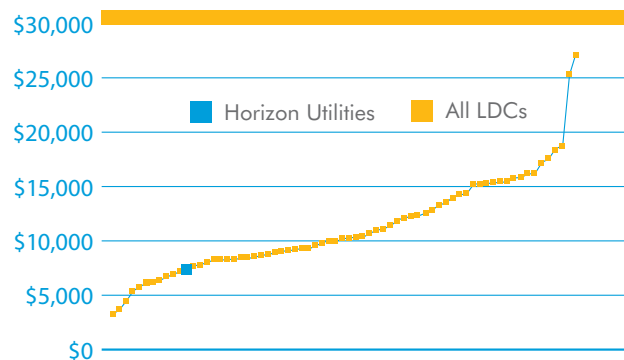
Light Manufacturing

350 kW



Manufacturing

3,500 kW



2011 Direct Economic Value GENERATED BY HORIZON HOLDINGS

Operating Expenditures	\$48,213,000
Capital Expenditures	\$40,184,000
Dividends to Shareholders	\$7,625,000
Payments in Lieu of Taxes (PILs)	\$6,956,000
Energy Incentives and Rebates (OPA funded)	\$4,338,000
Charitable Contributions (Employees and Corporate)	\$214,000
Economic Benefit	\$107,530,000

Source: Horizon Holdings' Global Reporting Initiative™ 2011 Filing. NB: The dividend payments shown here differs from that in the Board Chair and CEO Message on page 4. The figure of \$7.6 million represents the actual dividend payments distributed on an accounting basis in 2011 and \$10.7 million reflects the dividend payments distributed based on financial performance for 2011, part of which was paid in 2012.

The figure of \$214,000 for Charitable Contributions represents the total combined employee and corporate contributions. They consist of \$123,000 for LEAP, \$70,000 corporate and Employee Charity Fund, and an additional \$21,000 corporate.

Cost management practices explain only part of the differences in rates. As regulation evolves in this area to address the relation of the rates for customer classes to costs for serving the classes, the upper range of commercial rates could be expected to decrease for LDCs. Residential customers of LDCs who had their rates kept low through higher commercial rates could be expected to pay more in many utilities.

Horizon Utilities delivers strong direct economic value to our communities

In order to measure our general financial impact on our communities, Horizon uses the key Global Reporting Initiative™ (GRI) metric of "direct economic value". This GRI metric calculates the value generated and distributed by Horizon, including: revenues, operating costs, employee compensation, donations, other community investments, retained earnings and payments to capital providers and government. In 2011, Horizon generated a combined \$107.5 million to the economies of Hamilton and St. Catharines, and the province generally.

Horizon performs very well in Ontario's utility sector in terms of comparative direct economic value. Horizon effectively manages the business, and operates with lower costs and revenues on a per customer basis when compared to the average of the province's 78 LDCs, including its 10 largest.

Horizon spent \$48.2 million on operations, maintenance and administration, largely made up of wages and maintenance projects. These funds flowed straight back into our communities. We also invested another \$40.2 million in new capital projects, of which \$8.2 million was used to procure materials and services in our region.

The conservation and demand management incentives we paid to our customers totalled more than \$4.3 million in 2011. As a tax-paying corporation, we made \$6.9 million in payments in lieu of taxes (PILs) in 2011.

We contributed a combined \$123,000 to the community United Way agencies in St. Catharines and Hamilton to support the OPA's Low-income Energy Assistance Program. In addition, the Horizon Employees' Charity Fund and the corporation contributed \$91,000 to local charities in Hamilton and St. Catharines.

Our economic performance is determined by how well we manage our regulated operations for Horizon Utilities and our ability to compete in unregulated business opportunities through HESI. While Horizon Utilities presently contributes substantially, all of the profits and cash flows of Horizon Holdings, our efforts in 2011 have set the stage for growing the contribution of Horizon Energy Solutions in the coming years.

2010 Comparative Direct Economic Value

	Horizon Utilities (Not Holdings)	Horizon Utilities /Customer	Ten Largest LDCs	Ten Largest LDCs Avg./Customer	All 78 LDCs Average	All 78 LDCs Avg./Customer
Revenues	\$89,674,713	\$382	\$130,819,485	\$564	\$25,148,407	\$540
Operating Expenditures	\$38,742,399	\$165	\$51,155,501	\$221	\$10,572,934	\$227
Capital Expenditures	\$38,802,211	\$165	\$82,212,340	\$354	\$14,451,867	\$310
Payments in Lieu (PILs)	\$5,717,506	\$24	\$6,540,979	\$28	\$1,293,156	\$28

NB: Data generated by Distribution Utilities only. See full GRI filing for additional details. Source: Ontario Energy Board (OEB). LDC — An LDC is a local distribution company. LDCs are compared here because only their data is published by the OEB. 2010 data is used because 2011 is not yet published. Averages are simple averages. Hydro One Networks is excluded because its service territory differs so greatly from other LDCs. Charity contributions are not included because they are not published by the OEB.



Hamilton



CITY OF
ST. CATHARINES



Hamilton Utilities Corporation®
The Business of Public Service®



100%

78.9%

21.1%

100%



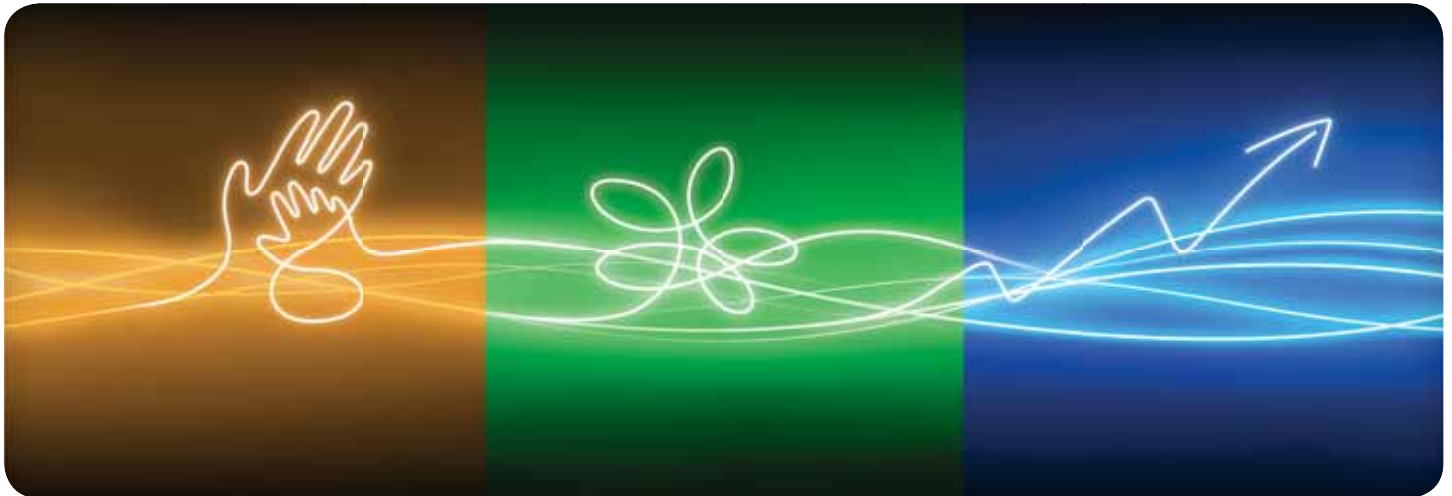
Hamilton Community Energy®
A Hamilton Utilities Company

St. Catharines
Hydro Generation Inc.

horizon®
HOLDINGS *Looking beyond...*

horizon®
UTILITIES *Looking beyond...*

horizon®
ENERGY SOLUTIONS
Looking beyond...



Street Address:
55 John Street North,
Hamilton, ON L8R 3M8

Mailing Address:
PO Box 2249 STN LCD 1
Hamilton, ON L8N 3E4

Telephone:
1-866-458-1236
905-522-9200
Fax: 905-522-6228

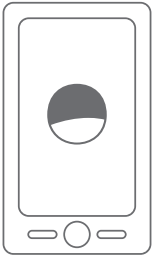
Email:
info@horizonutilities.com
sustainability@horizonutilities.com

Websites:
horizonutilities.com
horizonenergysolutionsinc.com
horizonholdings.ca

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HOLDINGS *Looking beyond...*

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We do good
things so our
communities
can do better

HORIZON HOLDINGS INC. | 2012 SUSTAINABILITY-BASED ANNUAL REPORT

horizon[®]
HOLDINGS *Looking beyond...*

In this report, discover where we have been and where we are going

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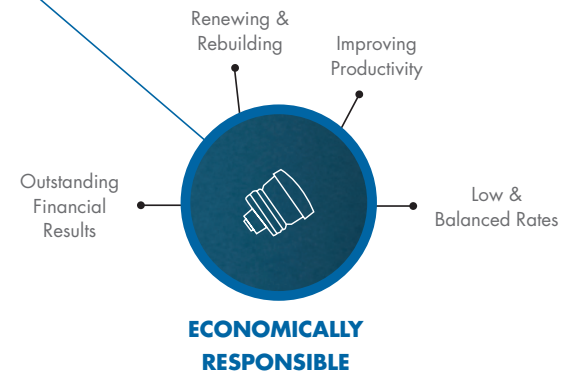
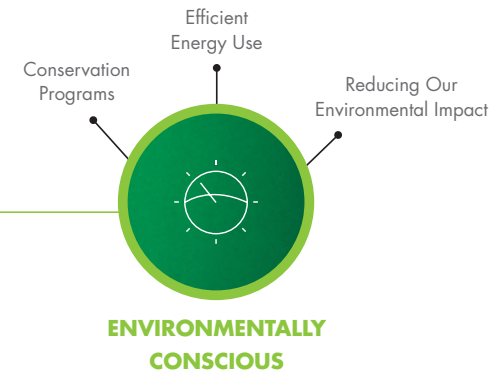
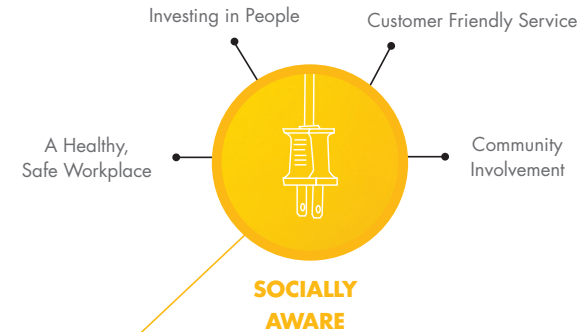
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Economically Responsible

Horizon Holdings' family of companies is demonstrating its commitment to the health of the local economies of St. Catharines and Hamilton in many ways. We take our economic responsibility to our communities and ratepayers seriously, through consistently strong profitability, among the lowest residential and commercial electricity rates, substantial infrastructure investments, and excellent customer service.

In everything we do, we are striving to do better financially in ways that foster sustainable development and economic growth.

The financial results for 2012 for Horizon Holdings Inc. are outstanding. They are attributable, in part, to the success of productivity initiatives in our operations. Our "A/Stable" credit rating was confirmed again by Standard & Poor's, a testament to the financial strength of the company.

The resulting dividends that we pay to our shareholders directly impact the bottom line of our communities, easing the tax burden and supporting critical services and programs. Horizon Holdings Inc.'s regulated affiliate, Horizon Utilities Corporation, continued to make investments in processes and technology that enhance the customer experience while improving operational efficiency and productivity.

Horizon Energy Solutions Inc. (HESI), our competitive affiliate, successfully energized one megawatt (MW) of commercial rooftop solar photovoltaic generation, while continuing to grow the metering services, conservation and demand management services, and streetlight maintenance businesses profitably.

Overall, we are committed to delivering all of our services in a more reliable, cost effective, and customer friendly way while providing a safe and healthy workplace for our employees.

Lower Operating Expenses and Higher Net Income

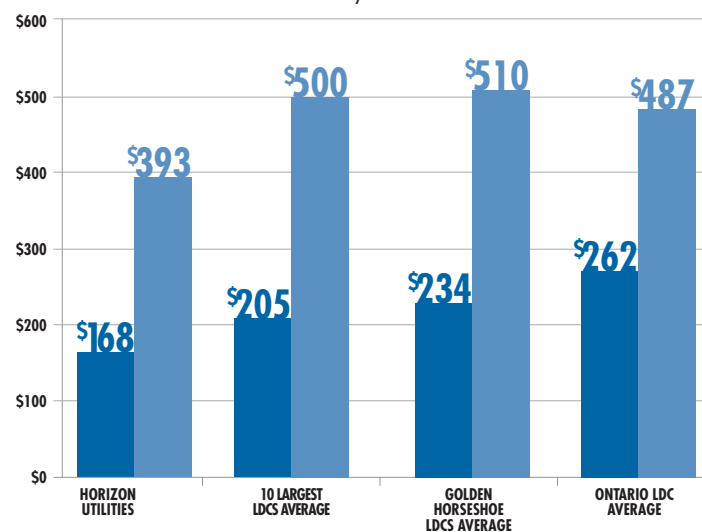
Our disciplined approach to asset management and renewal is beginning to pay off in lower operations and maintenance costs for the regulated distribution system. Operating expenses of \$57.1 million decreased by \$1.2 million or 2.1 per cent. These expenses include salaries and benefits, materials, and other third-party service costs, including operation and maintenance of the distribution system, and general administration costs.

Net income for 2012 increased by \$9.1 million to \$26.2 million, compared to \$17.1 million in the prior year, with total revenue (net of cost of power) having increased by \$10.5 million. This higher revenue is explained by a \$5.5 million increase of net energy sales billed on behalf of electricity transmitters, generators, and regulatory bodies; \$2.4 million higher distribution revenues; and a \$2.6 million increase in other income.

Shareholder Dividends

Horizon Holdings paid \$13.7 million in dividends to its shareholders in respect of 2012, up from \$10.7 million for 2011.

CONTROLLABLE COSTS AND REVENUE/CUSTOMER COMPARISON



The financial results of the Corporation are more fully presented in the accompanying Management's Discussion and Analysis and Consolidated Financial Statements, which are also available on the Horizon Holdings and Horizon Utilities websites.

LDC Sector Comparisons

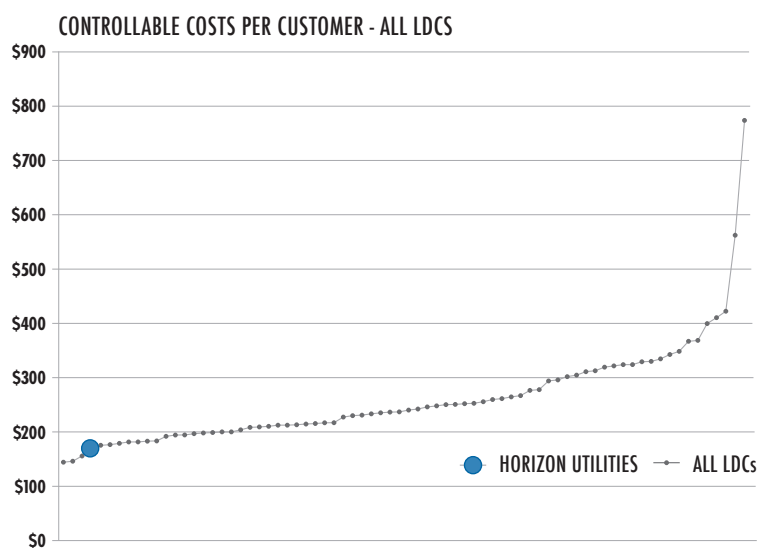
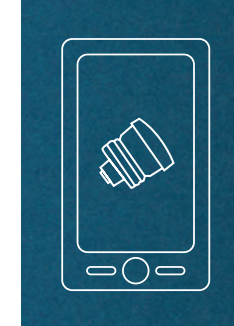
In keeping with our goal to be the best performing energy company in Ontario, we seek to benchmark our controllable cost, revenue need and return on equity performance against our industry peers. The accompanying figures are the most recent three-year average of Ontario Energy Board yearbook data – 2009-2011 – to smooth out one year exceptions. Averages for the sector and the 10 largest LDCs exclude Hydro One due to its rural cost profile.

Horizon Utilities generally operates with much less revenue per customer than other LDCs. We require an average of \$393 of revenue per customer per year, a key comparative indicator of rates. Horizon Utilities is 21 per cent lower than the \$500 of revenue per customer for the 10 largest utilities, 23 per cent below the \$510 for the

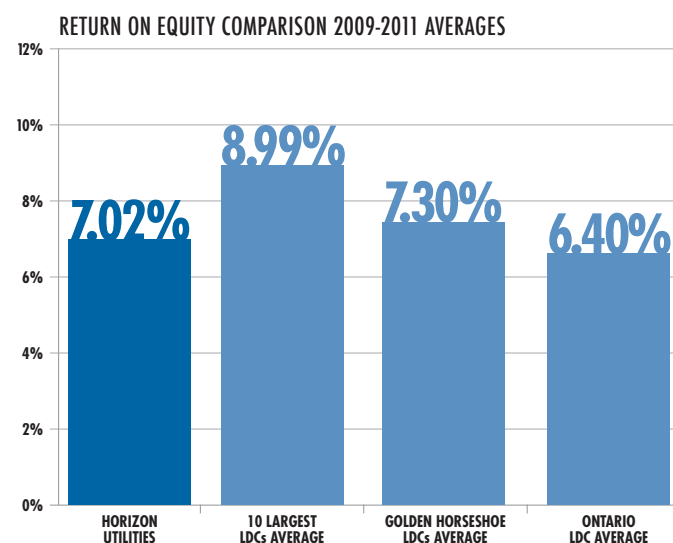
Golden Horseshoe LDCs, and 19 per cent below the Ontario average of \$487.

Horizon Utilities is able to operate with less revenue because its controllable costs (operations, maintenance and administration) of \$168 per customer, on a three-year average, are 36 per cent lower than the Ontario average of \$262, and also lower than the \$205 for the 10 largest utilities and \$234 for the 26 distributors in the Golden Horseshoe. Horizon Utilities had the 4th lowest controllable costs per customer (OM&A) of 78 LDCs in Ontario.

Our average shareholder return on equity (ROE) compares respectably with the three comparator groups as well. Horizon Utilities earned a 7.02 per cent ROE for the 2009-2011 period, compared to the industry average of 6.40 per cent and the 7.30 per cent Golden Horseshoe average, although below the 8.99 per cent ROE of the 10 largest LDCs.

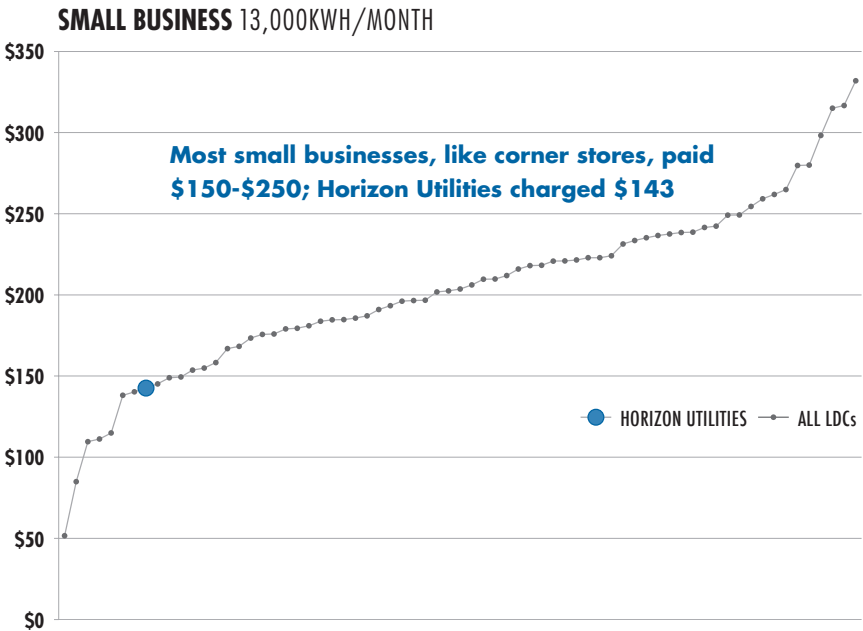
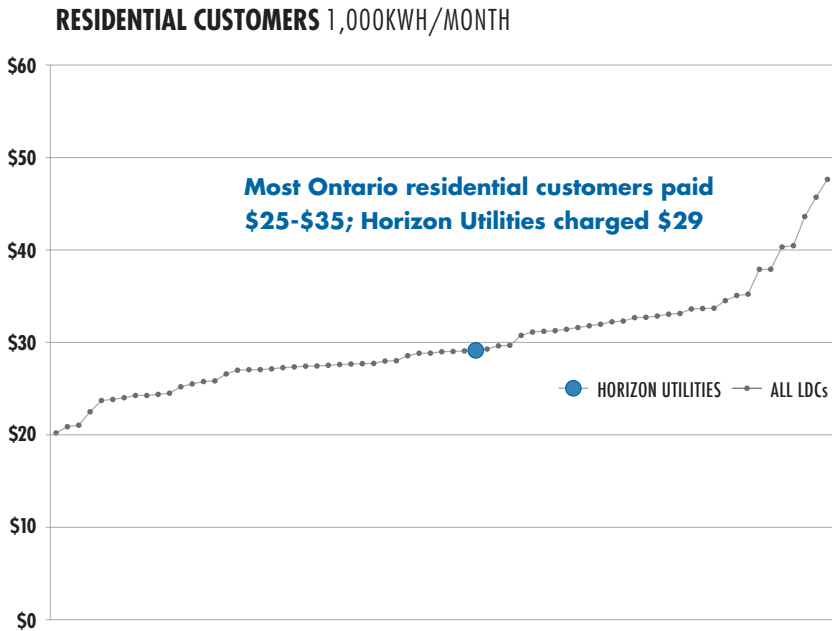


Source: Graphs on pages 26 and 27 are based on OEB 2011 Yearbook of Electricity Distributors data.



LOW AND BALANCED MONTHLY DISTRIBUTION RATES FOR CUSTOMERS — 2012

Horizon Holdings demonstrates our commitment to being economically responsible by keeping rates low and balanced for all of our customer groups. We work diligently to maintain among the lowest distribution rates for all classes of customers, doing our part for the economic sustainability of our communities, businesses and households. See the data in the four accompanying graphs.



These four graphs represent typical customers — one residential and three commercial — of varying size. The rates displayed here are the OEB's approved distribution only rates for all Ontario distributors in 2012. Data excludes Hydro One Networks because of the character of its service territory compared to other LDCs.

DIRECT ECONOMIC VALUE TO COMMUNITIES

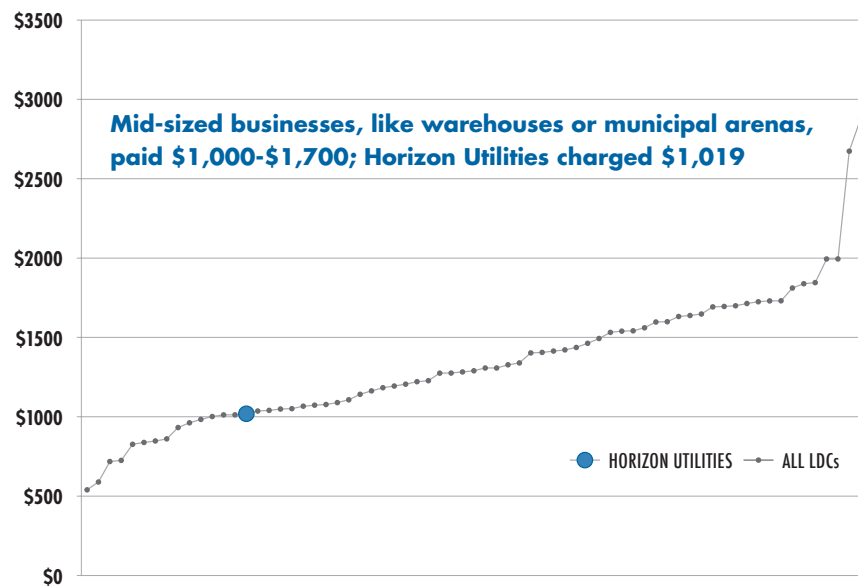
We do not just say we support our communities financially and economically — we measure our general financial impact on our communities. Horizon Holdings uses the key Global Reporting Initiative (GRI) metric of “direct economic value.”

In 2012, Horizon Holdings contributed a combined \$135.3 million to the economy of western Greater Golden Horseshoe and the province generally. This includes \$57.1 million in operating expenses, which are funds that flow back into our communities, \$57.0 million in capital expenditures, of which \$11.4 million was used to procure materials and services in our region, and \$3.1 million in CDM incentives to invest in energy efficiency.

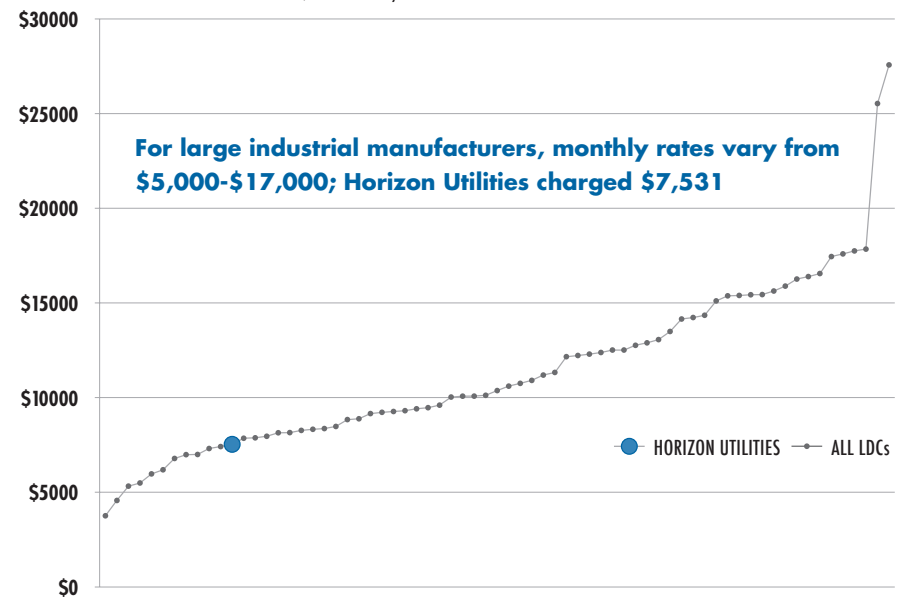
DIRECT ECONOMIC VALUE GENERATED 2012: HORIZON HOLDINGS

Operating Expenditures	\$57,140,000
Capital Expenditures	\$56,975,000
Dividends to Shareholders	\$10,684,000
Payments in Lieu of Taxes (PILs)	\$7,169,000
Energy Incentives and Rebates (OPA funded)	\$3,100,493
Charitable Contributions (Employees and Corporate)	\$257,000
Economic Benefit	\$135,325,493

LIGHT MANUFACTURING 350KWH/MONTH



MANUFACTURING 3,500KWH/MONTH



COMPARATIVE DIRECT ECONOMIC VALUE 2011

	HORIZON UTILITIES (NOT HOLDINGS)	HORIZON UTILITIES /CUSTOMER	TEN LARGEST LDCS AVERAGE	TEN LARGEST AVG./ CUSTOMER	ALL 78 LDCS AVERAGE	ALL 78 LDCS AVG./CUSTOMER
Revenues	\$98,520,033	\$419	\$134,350,079	\$571	\$26,655,024	\$551
Operating Expenditures	\$41,110,249	\$175	\$54,823,872	\$233	\$11,656,120	\$241
Capital Expenditures	\$39,548,836	\$168	\$88,451,584	\$376	\$16,066,152	\$332
Payments in Lieu (PILs)	\$5,924,017	\$25	\$4,258,359	\$18	\$1,782,635	\$37

The direct economic value also includes social responsibility contributions. Combined employee and corporate charitable donations totalled \$257,000 in 2012. Contributions include a \$124,000 provided to the United Way agencies in St. Catharines and Hamilton to support the OEB's Low-income Energy Assistance Program. The Horizon Employees' Charity Fund also contributed an impressive \$69,200 to local charities in Hamilton and St. Catharines.

Notes to Direct Economic Value Generated 2012. Source: Horizon Holdings' Global Reporting Initiative™ 2012 Filing. NB: The dividend payments shown here differs from that in the Board Chair and CEO Message on page 3. The figure of \$10.7 million represents the actual dividend payments distributed on an accounting basis in 2012 and \$13.7 million reflects the dividend payments distributed based on financial performance in respect of 2012, part of which was paid in 2013. The figure of \$257,000 for Charitable Contributions represents the total combined employee and corporate contributions. They consist of \$124,000 for LEAP, \$69,000 corporate and Employee Charity Fund, and an additional \$64,000 corporate.

Notes to Comparative Direct Economic Value 2011. NB: Data generated by Distribution Utilities only. See full GRI filing for additional details. Source: Ontario Energy Board (OEB). LDC — An LDC is a local distribution company. LDCs are compared here because only their data is published by the OEB. 2011 data is used because 2012 is not yet published. Averages are simple averages. Hydro One Networks is excluded because its service territory differs so greatly from other LDCs. Charity contributions are not included because they are not published by the OEB.

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Horizon Utilities Corporation
Responses to School Energy
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Delivered: August 1st, 2014
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SMART GROWTH. SMART GRID. SMART COMMUNITIES.

2013 Sustainability-based Annual Report



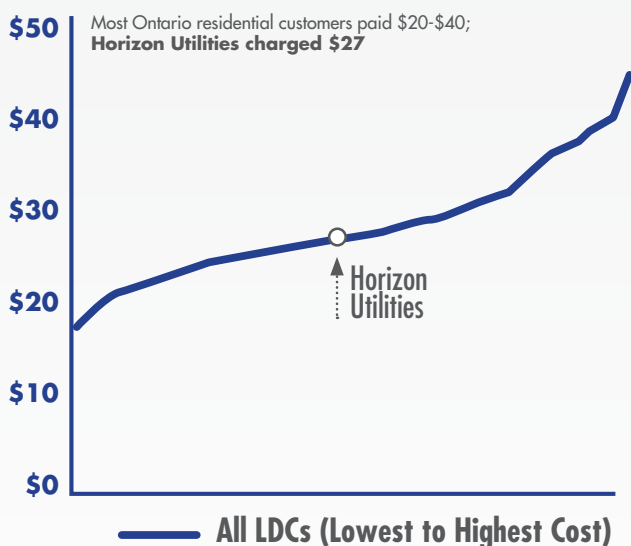


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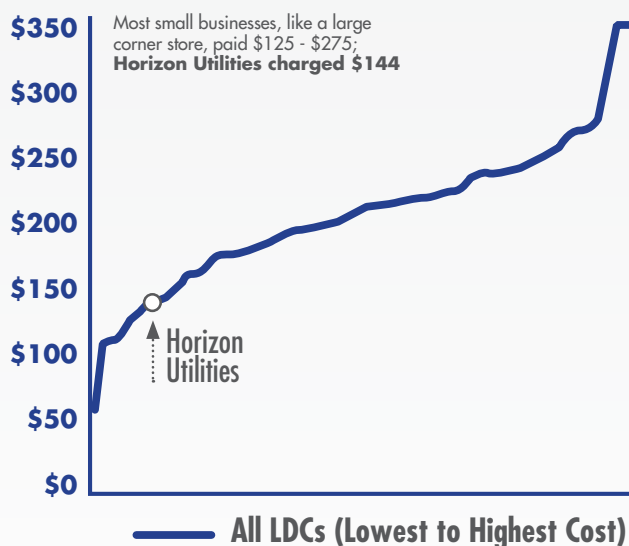
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Low and balanced customer rates

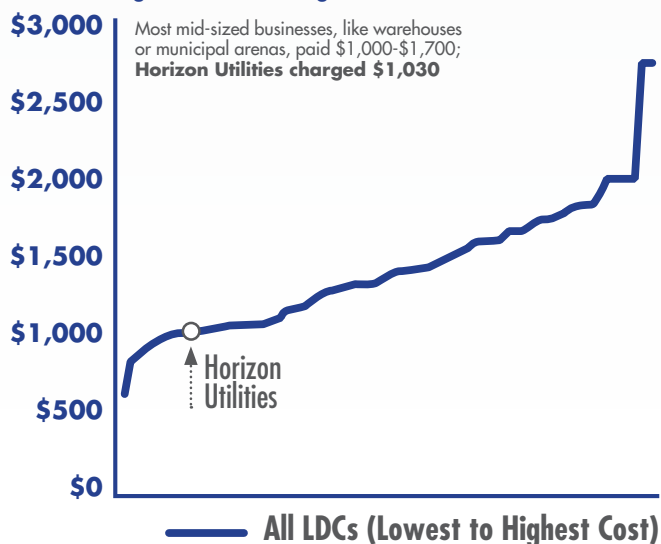
Residential Customers 800kWh/Month



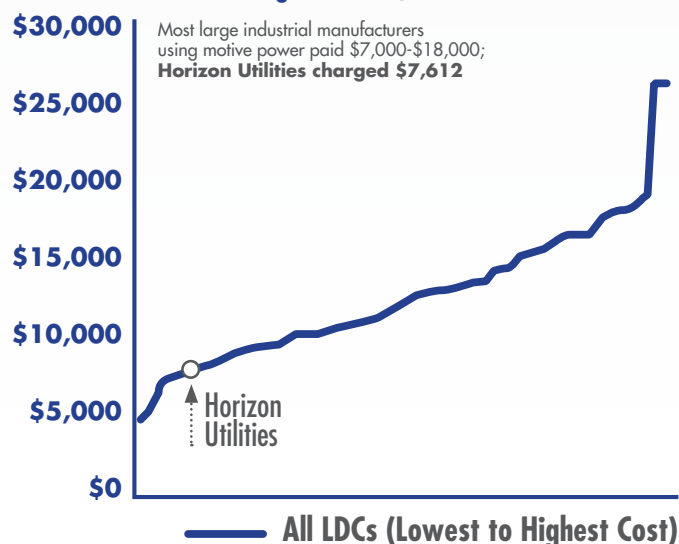
Small Business 13,000 kWh/Month



Light Manufacturing 350kW/Month



Manufacturing 3,500kW/Month



Source: 2013 OEB Tariff of Rates and Charges. NB: These four graphs represent typical customers — one residential and three commercial of varying size. The rates displayed here are the OEB's approved distribution only rates for all Ontario distributors in 2013. Data excludes Hydro One Networks because of the character of its service territory compared to other LDCs.





ECONOMIC SUSTAINABILITY



We know the most important concern of our customers is that the lights are on, consistently and at a reasonable cost. That is the bottom line. For Horizon Utilities, however, the recipe for sustainability is broader – low rates with high service reliability for customers, reasonable dividends for shareholders, and responsible infrastructure renewal for the community.

We are leveraging all we can from our present infrastructure, maintaining and renewing it as needed, and investing in the most effective new technologies to make sure that what we do is consistently more reliable, more responsive, and more cost effective. We are creating opportunities that enable infill development and the more compact urban forms of smart growth municipal planning, which together will create the smart communities of the future.

■ **Through Horizon Utilities and Horizon Energy Solutions**, Horizon Holdings Inc. manages operations that deliver real value to households, businesses, industry and communities. We can offer communities a robust and reliable service because of the economies of scales we have gained through mergers and our business offerings.

While we have used the previous sections telling you about our story on sustainability in social and environmental terms, this one deals with the bottom-line of economic responsibility.

SHAREHOLDER DIVIDENDS

In 2013, Horizon Holdings paid \$13.7 million in dividends to its shareholders, holding companies of the City of Hamilton and City of St. Catharines, up from \$10.7 million in 2012. The full financial results of the Corporation are presented in the accompanying *Management's Discussion and Analysis and Consolidated Financial Statements*, which are posted on the Horizon Holdings Inc. and Horizon Utilities websites.

COST AND REVENUE COMPARISONS

Our goal is to be the best performing energy company in Ontario. We measure our controllable cost and revenue per customer and return on equity performance against our industry peers. The accompanying figures are from the Ontario Energy Board's Yearbook of Electricity Distributors, with an average of the most recent three reported years used to smooth out single year exceptions.

On balance, Horizon Utilities operates with much less revenue per customer than other LDCs. From 2010 to 2012, we required an average of \$422 of revenue per customer per year, a key comparative indicator of rates (Figure 1). By comparison, Horizon Utilities was 19 per cent below the \$521 for the Golden Horseshoe LDCs and 17 per cent below the Ontario average of \$508.

Horizon Utilities was able to operate with less revenue because its controllable costs (operations, maintenance and administration or "OM&A") of \$186 per customer, on a three-year average, were 33 per cent lower than the Ontario

Controllable Costs and Revenue per Customer Comparison

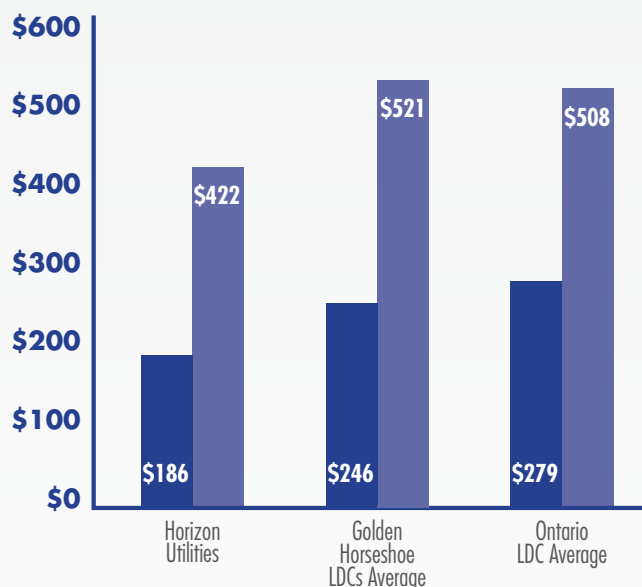


Figure 1

■ Controllable Cost per Customer 2010-2012 Avg.
■ Distribution Revenue per Customer 2010-2012 Avg.

Controllable Costs per Customer

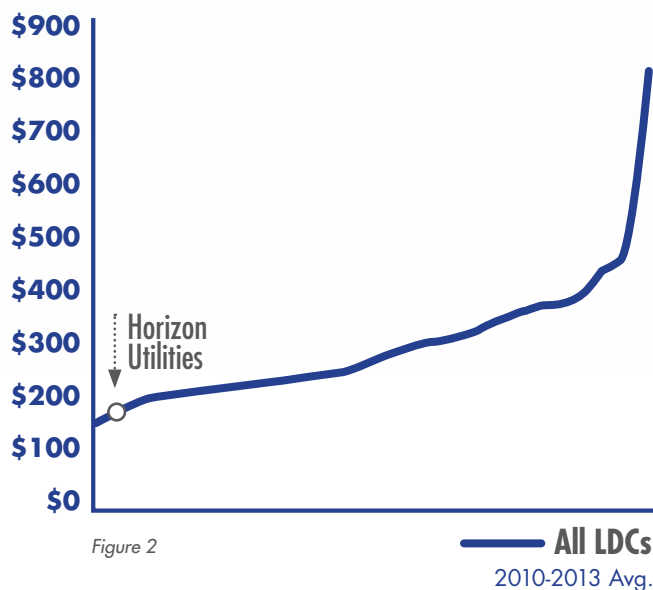


Figure 2

Figures 1-3, Source: Graph data on pages 26 and 27 is based on OEB Yearbook of Electricity Distributors data from 2010-2012 and excludes Hydro One Networks Inc.



average of \$279, and also lower than the \$246 for the 25 distributors in the Golden Horseshoe (Figure 1).

In 2012, Horizon Utilities had the fourth lowest controllable costs per customer (OM&A) of 72 LDCs in Ontario (Figure 2).

RETURN ON EQUITY COMPARISON

Horizon Utilities has a three-year return on equity average of 8.55% over 2010 to 2012 (Figure 3). While the OEB permitted return was 9.85, 9.58 and 9.12 percent respectively across these three years, the average of the 25 utilities in the Golden Horseshoe is 7.75% and the average of all 73 local distribution companies is lower still at 6.18%.

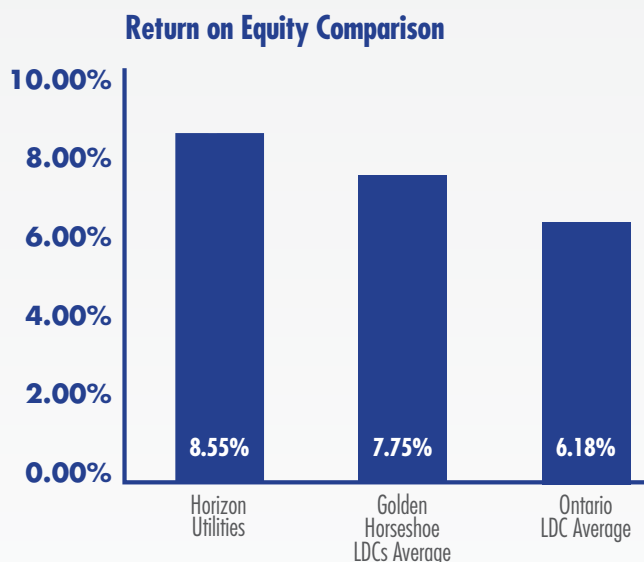


Figure 3

■ Return on Equity 2010-2012 Avg.

CAPITAL EXPENDITURES AND INFRASTRUCTURE RENEWAL

2013 was an important year for the renewal of Horizon Utilities' electricity distribution system and for the planning, building and implementation of its smart grid.

Horizon Utilities has improved the average remaining life of many asset categories and we are continuing to modernize our system as we replace our aging infrastructure. We spent the majority of 2013 conducting a meticulous inventory of all major assets we own, documenting conditions and remaining life spans, and creating a comprehensive plan to serve our communities for the next quarter century and beyond.


Our capital plan calls for approximately \$900 million in investment over the next 20 years. Approximately \$700 million is dedicated to the renewal of the distribution system with the balance related to meeting the growth of our communities. In 2013, we invested \$36.5 million in our distribution system.

The timing for the significant renewal portion of future investment allows us to take advantage of smart grid technologies, which will enhance the delivery of exceptional



service and cost-effective operations for our customers for many decades to come. One of the key projects was the \$5.9 million dollar renewal of our substations, giving us improved reliability and operational abilities. ☀





Aerial view of downtown Hamilton.



Low and balanced customer rates

■ **Horizon is proud to be a sector leader on customer rates.** When setting out to establish rates for our customers, we strive to maintain low rates and to ensure that our rates reflect the specific costs for serving each class of customer. This economic responsibility is a big part of our contribution to the sustainability of our communities, businesses and households.

While Ontarians may know that electricity rates are set by the Ontario Energy Board, most would be surprised to learn that distribution rates vary from one LDC to another.

For a typical residential customer using 800 kilowatt-hours of consumption per month, the distribution charge varies widely by utility. The relatively wide range is due both to cost management and, within the constraints of rate regulation, the manner in which distributors allocate their costs to different rate classes. In 2013, most distribution charges ranged between \$20 to \$40 with a few exceptions. Horizon's distribution charge is \$27.

This is illustrated more clearly for the case of a typical small commercial customer, such as a large corner store consuming 13,000 kilowatt-hours per month. The majority of utilities across Ontario charged between \$125 and \$275 for distribution in 2013. At Horizon, the customer paid \$144, among the lowest rate in Ontario.

For a light manufacturing commercial customer, such as a warehouse, or even a municipal arena, where a typical customer might use 350 kilowatts of demand, the majority of local distribution companies charge between \$1,000 and \$1,700 (with some outliers exceptions on either end). At Horizon, the same customer paid significantly closer to the lower end at \$1,030.

Similarly, a typical heavy industrial manufacturer requiring 3,500 kilowatts of capacity, would see rates varying from \$7,000 to \$18,000 per month for the distribution charge, but just \$7,612 for Horizon customers. ●





Direct economic value to communities

■ **In order to understand the financial impact on communities,** Horizon Holdings measures itself using the key Global Reporting Initiative (GRI) metric of “direct economic value.”

In 2013, Horizon Holdings contributed a combined \$134.0 million to the economy of western Greater Golden Horseshoe and the province generally. This includes \$61.5 million in operating expenses, which in great part flow back into local communities. Of the \$49.3 million in capital expenditures, \$10.5 million was used to procure materials and services in our service areas. In addition, \$2.7 million in CDM incentives was used to invest in energy efficiency.

The direct economic value also includes social responsibility contributions. Combined employee and corporate charitable donations totaled \$0.3 million in 2013. Contributions include \$0.1 million provided to the United Way agencies in St. Catharines and Hamilton to support the OEB’s Low-income Energy Assistance Program (LEAP). Horizon Employees’ Charity Fund contributed \$0.1 million to 61 local charities in Hamilton and St. Catharines. ●

Direct Economic Value Generated 2013: Horizon Holdings Inc. (\$ Millions)

Operating Expenditures	61.5
Capital Expenditures	49.3
Dividends to Shareholders	13.7
Payments in Lieu of Taxes Expense (PILs)	6.6
Energy Incentives and Rebates (Ontario Power Authority funded)	2.7
Charitable Contributions (Employees and Corporate)	0.3
Economic Benefit	134.0

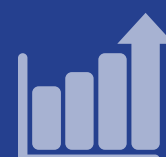
Source: 2013 Horizon Holdings Audited Financial Statements, except for charity and energy incentives, which are sourced internally.

Notes to Direct Economic Value Generated 2013. Source: Horizon Holdings’ Global Reporting Initiative™ 2013 Filing. The figure of \$0.3 million for Charitable Contributions represents the total combined employee and corporate contributions. They consist of \$0.1 million for LEAP, \$0.1 million corporate and Employee Charity Fund, and an additional \$0.1 million corporate.

Comparative Direct Economic Value 2012 (stated in millions of Canadian dollars)

	Horizon Utilities (Not Holdings)	Horizon Utilities/ Customer	72 LDCs Average	72 LDCs Avg./Customer
Revenues	\$110.3	\$465	\$28.5	\$558
Operating Expenditures	\$51.5	\$217	\$13.6	\$266
Capital Expenditures	\$52.9	\$223	\$15.4	\$301
Payments in Lieu (PILs)	\$6.6	\$28	\$0.6	\$12

Notes to Comparative Direct Economic Value 2012. NB: Data generated by Distribution Utilities only. See full GRI filing for additional details. Source: Ontario Energy Board (OEB). LDCs are compared here because only their data is published by the OEB. 2012 data is used because 2013 is not yet published. Averages are simple averages. Hydro One Networks Inc. is excluded because its service territory differs greatly from other LDCs. Charity contributions are not included because they are not published by the OEB.



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Coalition Interrogatories
Delivered: August 1st, 2014
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1-SEC-7_Attch 11_DOCS-#11256084-v4-OEB_Presentation



Presentation by Distribution Regulation Review Task Force to OEB on Renewed Regulatory Framework Review

March, 2012



Overview

- Task Force supports Framework Review as a way to address need for infrastructure investment in a manner that addresses customer expectations and rewards higher performing utilities.
- There are many issues raised in various Board materials; the key now is to prioritize them both by reference to their importance and their sequence.
- It is also important to clarify process for framework review both in terms of timing and participation.

Prioritization by Importance

- DRRTF's agrees with Chair that "one of the major challenges facing the sector today and the most significant driver of costs is the scale of capital spending expected over the next few years."
- The rate treatment of capital investment is the most significant issue facing the sector and should be the first issue addressed in the Framework Review.

Infrastructure Investment: Fundamental Review

- The Framework Review should be driven by the need to fundamentally reconsider the rate treatment of infrastructure investment in light of how different types of investment are treated.
- It will take time to coordinate with the other elements of the framework review and to produce an enduring approach to capital treatment that will be in place until the next framework review.

Capital Treatment During IR

- The concept that there is an “allowed capital envelope” in base rates is inaccurate.
- Capex spending results in incremental depreciation and carrying costs which creates a challenge, over & above other challenges
- All else equal, to hold earnings constant, the rate of capex spending must decline to limit the growth in depreciation and carrying charges
- In the extreme, this would likely (or inevitably) result in deferred project spending, and very large COS requests at rebasing time
- This, in turn, will result in both higher rates, and greater rate volatility for customers at rebasing time
- The mix of capital spending also matters
- All else equal, higher levels of capital investment not associated with higher off-setting incremental revenues create a greater challenge

Different Capital Has Different Rate Impacts

All Utility Capital isn't the same – it's made up of different types:

- **Customer Attachment and System Expansion Capital**
 - Long term; 'revenue producing' in that new load and customers are attached - may lead to scale economies over time
 - Low (or lower) depreciation rates ; sometimes partially funded through capital contributions
 - Short term deficiencies and longer term sufficiency
- **System Integrity, Reinforcement and Enhancement Capital**
 - Long term; needed to meet load growth, customer service levels and safety requirements – may have some revenue producing elements
 - Low depreciation rates ; sometimes partially funded through capital contributions
- **Infrastructure Renewal Capital**
 - Long term; replaces existing infrastructure that is fully depreciated
 - NO new load or customers – non-revenue producing
 - Not funded through capital contributions
- **General Plant – Shorter term capital**
 - E.g., vehicles, IT; high depreciation rates in the range of 6% to 20% annually
 - Not revenue producing and not funded through capital contributions
 - High depreciation rates so some, most, or even all of depreciation and return not in rates within the IRM-PCI period
- **Mandated Investment – May fall into categories described above**
 - Distributed Generation Connection Costs
 - Compliance with Regulations and Government Initiatives – e.g. Smart Meters/Smart Grid, Customer service rules

Rate Impacts of Different Capital Types

Long Term Capital Type	Funding Mechanisms	Effect on Revenue Requirement	Effect on Rates
Customer Attachment and System Expansion	Distribution Rates Additional Billing Units Capital Contributions	++	+/-
System Enhancement Capital	Distribution Rates Additional Billing Units	+++	++
Infrastructure Renewal Capital	Distribution Rates	+++	+++++

Capital Treatment During IR

Capital Constraint Challenges

- Most utilities are experiencing an increased (and perhaps lumpy) need for capital to fulfill obligations related to safety and reliability
- In addition, many utilities have increasing replacement obligations as ageing assets reach their end of life
- These requirements are driving both a need for higher capital, and changing the mix of capital toward non-revenue generating capital
- Further, the input prices underpinning capital projects (labour & materials) may be growing faster than the rate of macroeconomic inflation (GDPIPI)
- Other challenges include:
 - Containing O&M and Capital costs within the bounds of macroeconomic inflation
 - Achieving productivity equal to the X-Factor or greater
 - Volumetric profile

Interim Solution

- In addition to fundamental review, there is a need for an interim solution.
- Current framework addresses infrastructure investment through Cost of Service rebasing and Incremental Capital Module (“ICM”) between rebasings.
- ICM approved in 2008 and has evolved over time through case by case approach. Case by case approach has permitted experimentation.
- This experimentation has provided experience for the Board and participants to draw upon. It is now helpful to learn from that experience and provide a consistent and predictable approach to ICM on an interim basis, pending the framework review.

ICM Criteria

ICM Criteria	OEB Decision/Report
“Materiality, Need and Prudence”	Report of the Board on 3rd Generation Incentive Regulation for Ontario’s Electricity Distributors, July 14, 2008, s. 2.5; see also, Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario’s Electricity Distributors, September 17, 2008, Appendix B.
“Materiality, Need and Prudence”, plus “extraordinary and unanticipated”	Hydro One Networks Inc. Decision, May 13, 2009 (EB-2008)-0187).
Materiality, Need and Prudence”, plus “extraordinary”	Oshawa PUC Decision, June 10, 2009 (EB-2008-0205).
“Applicants must demonstrate that the amounts exceed the Board’s materiality threshold and clearly have a significant influence on the operation of the distributor, must be clearly non-discretionary and the amounts must be outside the base upon which rates were derived. In addition, the decision to incur the amounts must represent the most cost-effective option for ratepayers.”	Guelph Hydro Electric System Inc., Decision, May 13, 2009 (EB-2008-0205 (corrected)) June 10, 2009; and Oakville Hydro Electricity Distribution Inc., Decision (EB-2010-0104), June 10, 2009.
“Discrete, Material and non-discretionary” and, apparently, facility specific. ^[1]	Toronto Hydro-Electric System Limited (EB-2011-0144), Decision, January 5, 2012

^[1] The decision referred to the fact that municipal transformer stations have been funded through ICM and suggested that an IRM application that requested funding for similar facilities would be “directly analogous to projects that the Board has previously approved under ICM for other distributors.” (at p. 22).

Clarity on ICM

- There is a need to bring clarity to this issue. A number of processes available to provide clarity.
- Simplest could be test case in an LDC's 2012 ICM filing (like PILs proceeding (EB-2008-0381)).

Prioritization and Sequencing

- The other framework components that can be addressed on a prioritized basis are:
 - Total bill mitigation;
 - performance measures; and
 - regional planning.

Bill Mitigation

- Part of bill mitigation is the treatment of capital (avoiding step change increases upon rebasing).
- Important point is to maintain clarity and proper governance so that OEB maintains its focus on distribution issues, and not seek to regulate impact on total bill, which is beyond distributors' and the OEB's control (in the absence of legislative change).

Performance Measures

- An outcomes' based approach to regulation requires focus on how performance is effectively measured and evaluated.
- The Board current performance measures are flawed and incapable of meeting these new requirements.
- Major flaws are peer grouping methods and current productivity measures.
- Replacing measures will require considerable time and access to information, thus requiring an early start.

Regional Planning

- If regional planning is confined to cost responsibility issues under TSC, then it can be addressed with a straight forward code amendment, without the need for a full review of regulatory framework.

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1-SEC-7_Attch 12_Horizon Benchmarking to Horizon Reg Affairs 2013-03-27

**1-SEC-7_Attch 12_Horizon Benchmarking to Horizon Reg Affairs
2013-03-27**

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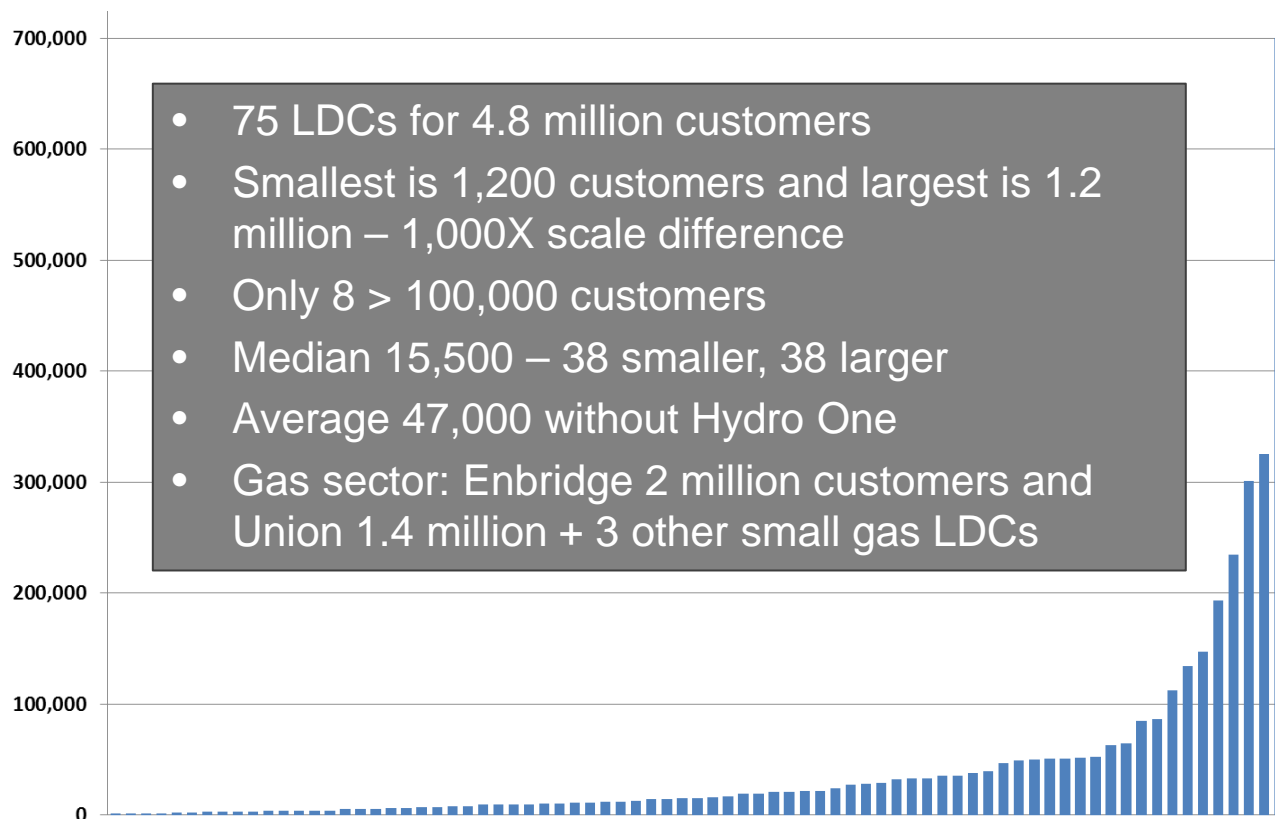
1-SEC-7_Attch 12_Horizon Benchmarking to Horizon Reg Affairs 2013-03-27

Benchmarking Issues for Ontario LDCs

Based on Coalition for Effective Incentive Rate Making
OEB Submission 2008

March 27, 2013

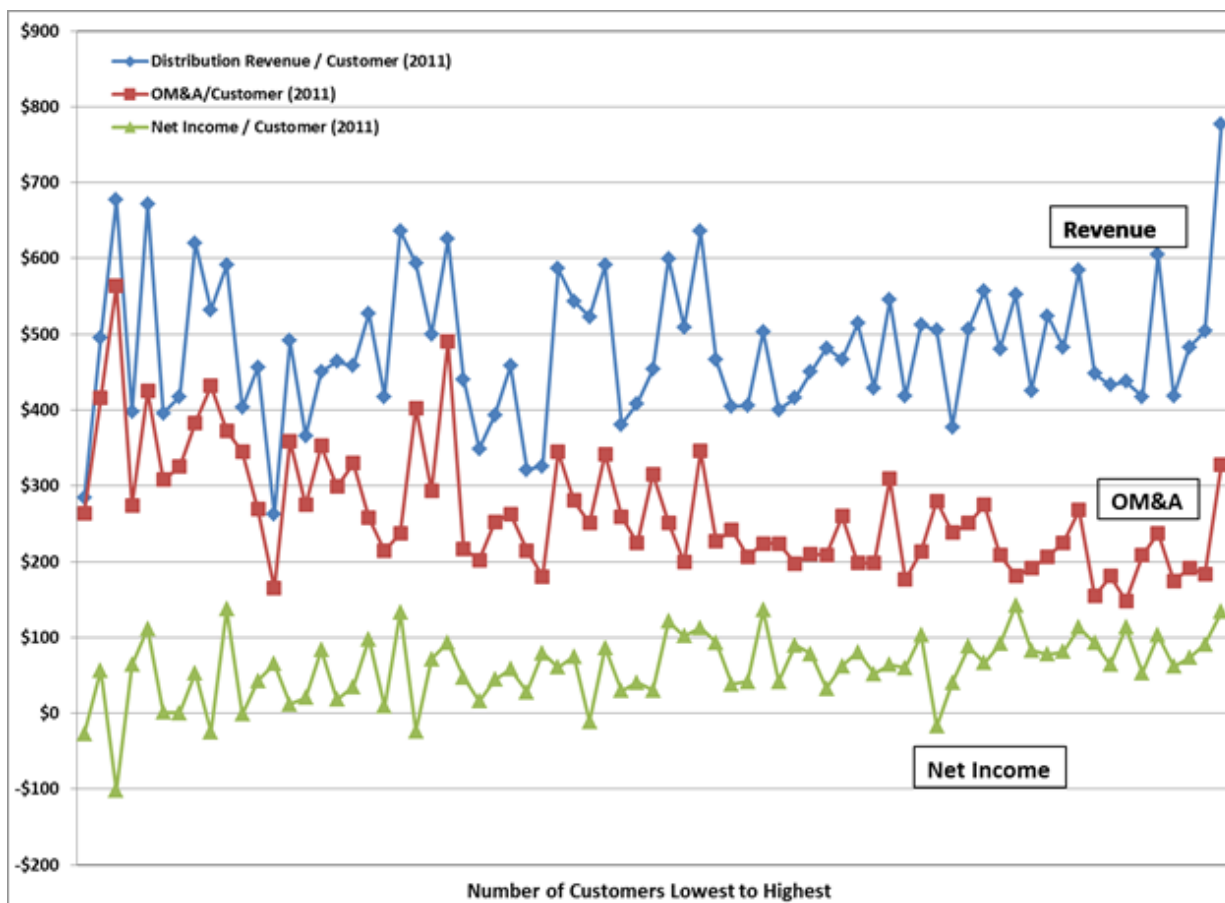
LDC customer scale – a challenge for benchmarking



- LDC numbers, scale differences and fragmentation are unique
- Contribute to many benchmarking challenges

NB: Graph does not include Hydro One Networks. Source: 2011 OEB yearbook

LDC revenue / OM&A / net income per customer



- On balance, larger LDCs operate with generally less revenue on a per customer basis, lower costs, and higher profitability

Source: 2011 OEB Yearbook. Graph lines are linear trend lines.

NB: Graph does not include Hydro One Networks or Algoma Power. Revenue is distribution revenue

OEB incentive benchmarking – how it works for LDCs

Econometric

Peer Group

Stretch Factor

Updated Performance Rankings Based on Econometric Benchmarks (26% allocation for LV charges divided by 2.35)

	Year Benchmark	Actual/Target	Deviation	P-Value	Rank
			Percent (p < 1e-7)		
North Carolina	2009-2007	1.601	-0.339	0.901	1
Charmaine Smith	2009-2007	1.700	-0.339	0.901	2
Northwestern Denmark	2009-2007	1.719	-0.288	0.901	3
Charmaine Smith	2009-2007	1.724	-0.288	0.901	4
U.K. Energy	2009-2007	1.763	-0.207	0.904	5
Germany and Italy	2009-2007	1.781	-0.241	0.904	6
Charmaine Smith	2009-2007	1.787	-0.219	0.913	7
U.S. Energy	2009-2007	1.792	-0.204	0.913	8
Charmaine Smith	2009-2007	1.803	-0.197	0.918	9
U.S. Energy	2009-2007	1.822	-0.186	0.918	10
U.S. Energy	2009-2007	1.830	-0.190	0.918	11
Charmaine Smith	2009-2007	1.832	-0.178	0.922	12
Burns Energy Distribution	2009-2007	1.828	-0.174	0.942	13
Charmaine Smith	2009-2007	1.829	-0.171	0.945	14
Charmaine Smith	2009-2007	1.835	-0.165	0.945	15
Charmaine Smith	2009-2007	1.856	-0.150	0.946	16
Charmaine Smith	2009-2007	1.865	-0.148	0.946	17
Italy 2009	2009-2007	1.876	-0.130	0.939	17
Italy 2009	2009-2007	1.876	-0.130	0.939	18
Western North	2009-2007	1.877	-0.135	0.917	19
Western North	2009-2007	1.888	-0.129	0.917	20
Western North	2009-2007	1.888	-0.116	0.918	21
Western North	2009-2007	1.895	-0.112	0.921	22
Western North	2009-2007	1.895	-0.106	0.927	23
Western North	2009-2007	1.897	-0.106	0.927	24
Western North	2009-2007	1.898	-0.090	0.919	25
Western North	2009-2007	1.904	-0.082	0.919	26
Western North	2009-2007	1.904	-0.082	0.919	27
Western North	2009-2007	1.915	-0.060	0.929	27
Western North	2009-2007	1.915	-0.060	0.929	28
Western North	2009-2007	1.915	-0.062	0.919	29
Western North	2009-2007	1.925	-0.074	0.942	30
Western North	2009-2007	1.928	-0.079	0.942	31
Western North	2009-2007	1.930	-0.079	0.942	32
Western North	2009-2007	1.940	-0.061	0.917	32
Western North	2009-2007	1.940	-0.061	0.917	33
Western North	2009-2007	1.942	-0.058	0.942	34
Western North	2009-2007	1.942	-0.058	0.942	35
Western North	2009-2007	1.942	-0.058	0.942	36
Western North	2009-2007	1.942	-0.058	0.942	37
Western North	2009-2007	1.942	-0.058	0.942	38
Western North	2009-2007	1.942	-0.058	0.942	39
Western North	2009-2007	1.942	-0.058	0.942	40
Western North	2009-2007	1.942	-0.058	0.942	41
Western North	2009-2007	1.942	-0.058	0.942	42
Western North	2009-2007	1.942	-0.058	0.942	43
Western North	2009-2007	1.942	-0.058	0.942	44
Western North	2009-2007	1.942	-0.058	0.942	45
Western North	2009-2007	1.942	-0.058	0.942	46
Western North	2009-2007	1.942	-0.058	0.942	47
Western North	2009-2007	1.942	-0.058	0.942	48
Western North	2009-2007	1.942	-0.058	0.942	49
Western North	2009-2007	1.942	-0.058	0.942	50
Western North	2009-2007	1.942	-0.058	0.942	51
Western North	2009-2007	1.942	-0.058	0.942	52
Western North	2009-2007	1.942	-0.058	0.942	53
Western North	2009-2007	1.942	-0.058	0.942	54
Western North	2009-2007	1.942	-0.058	0.942	55
Western North	2009-2007	1.942	-0.058	0.942	56
Western North	2009-2007	1.942	-0.058	0.942	57
Western North	2009-2007	1.942	-0.058	0.942	58

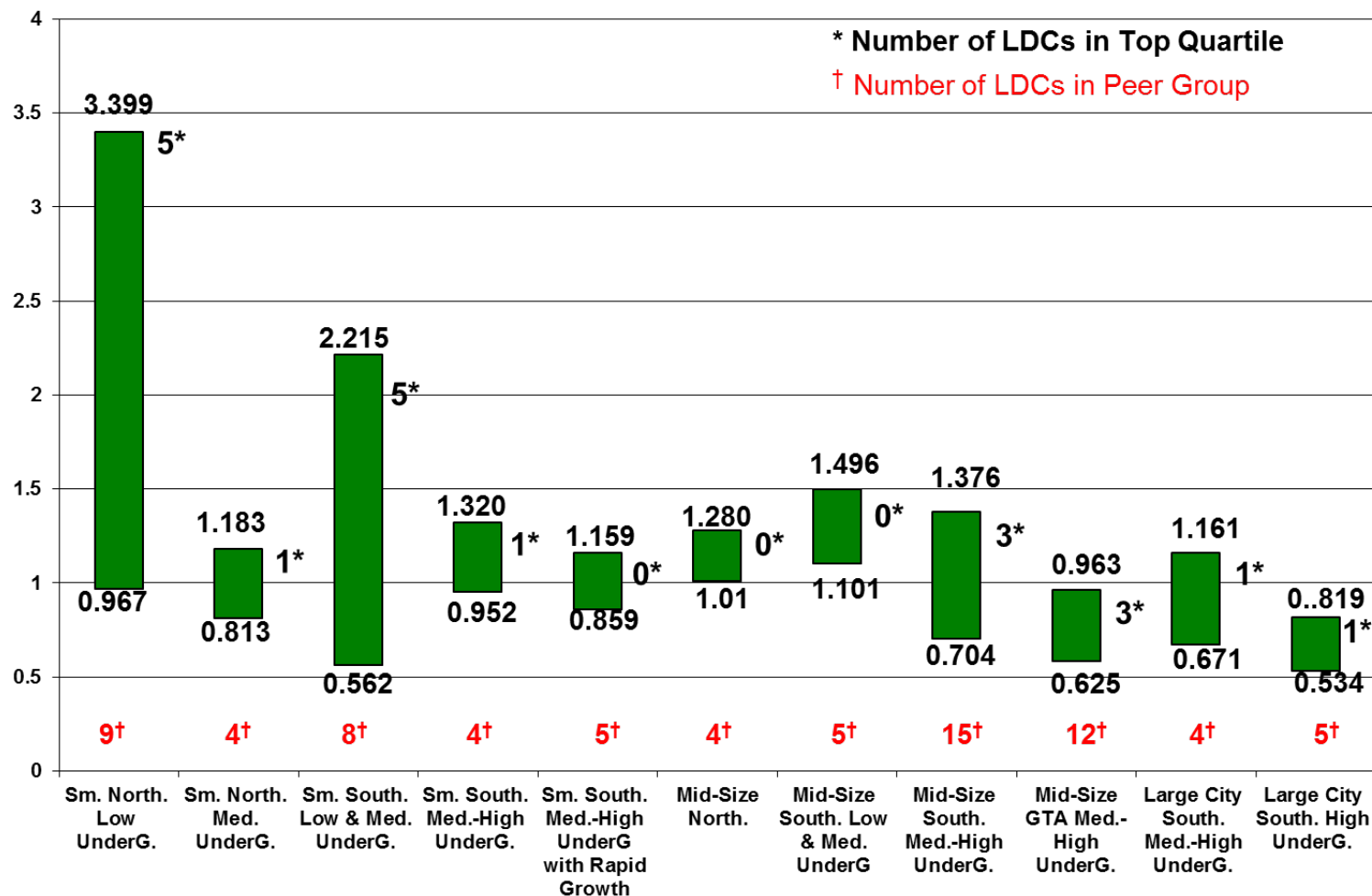
Updated Performance Rankings Based on Unit Cost Indexes (26% allocation for LV charges divided by 2.35)			
	Average / Group Average [A]	Percentage Difference ¹ [B - 1]	Efficiency Ranking ²
Alameda County	0.309	-60.1%	1
Alameda County	0.802	-39.2%	3
Alameda County	0.810	-39.2%	4
Alameda County	0.726	-37.2%	5
Alameda County	0.741	-35.9%	6
Alameda County	0.741	-35.9%	7
Alameda County	0.768	-34.2%	8
Alameda County	0.762	-34.2%	9
Alameda County	0.771	-32.9%	9
Alameda County	0.772	-32.9%	10
Alameda County	0.790	-30.9%	11
Alameda County	0.790	-30.9%	12
Alameda County	0.790	-30.9%	13
Alameda County	0.820	-18.2%	14
Alameda County	0.830	-16.2%	15
Alameda County	0.830	-16.2%	16
Alameda County	0.830	-16.2%	17
Alameda County	0.845	-15.2%	19
Alameda County	0.872	-14.8%	20
Alameda County	0.880	-12.2%	21
Alameda County	0.881	-12.2%	22
Alameda County	0.884	-11.8%	23
Alameda County	0.885	-11.8%	24
Alameda County	0.887	-11.3%	25
Alameda County	0.892	-10.2%	26
Alameda County	0.896	-10.2%	28
Alameda County	0.910	-8.2%	30
Alameda County	0.927	-7.3%	31
Alameda County	0.938	-6.2%	32
Alameda County	0.944	-6.2%	34
Alameda County	0.944	-6.2%	35
Alameda County	0.948	-5.1%	35
Alameda County	0.955	-3.7%	37
Alameda County	0.974	-2.8%	38
Alameda County	0.974	-2.8%	39
Alameda County	0.981	-2.8%	40
Alameda County	0.988	-1.7%	41
Alameda County	0.983	-1.7%	42
Alameda County	0.993	-0.2%	43
Alameda County	0.997	-0.2%	44
Alameda County	1.018	1.4%	45
Alameda County	1.018	1.4%	47
Alameda County	1.024	2.4%	48
Alameda County	1.033	3.4%	49
Alameda County	1.038	3.9%	50
Alameda County	1.049	5.1%	51
Alameda County	1.054	5.6%	52
Alameda County	1.055	5.6%	53
Alameda County	1.066	6.6%	54
Alameda County	1.066	6.6%	55
Alameda County	1.071	7.1%	56
Alameda County	1.077	7.7%	57
Alameda County	1.083	8.3%	58
Alameda County	1.083	8.3%	59
Alameda County	1.090	9.6%	60
Alameda County	1.114	11.1%	61
Alameda County	1.118	11.5%	62
Alameda County	1.131	13.1%	63
Alameda County	1.137	13.7%	64
Alameda County	1.140	14.2%	65
Alameda County	1.147	14.7%	66
Alameda County	1.149	14.9%	68
Alameda County	1.150	15.0%	69
Alameda County	1.160	16.0%	70
Alameda County	1.161	16.1%	71
Alameda County	1.199	19.9%	72
Alameda County	1.200	20.0%	73
Alameda County	1.224	22.4%	74
Alameda County	1.234	23.4%	75
Alameda County	1.237	23.7%	76
Alameda County	1.237	23.7%	77
Alameda County	1.310	31.0%	78
Alameda County	1.420	42.0%	79
Alameda County	1.469	46.9%	80
Alameda County	1.501	50.1%	81
Alameda County	2.016	101.6%	82

[illegible]

- Econometric accounts for advantage of scale, undergrounding, Canadian Shield, etc.
- Unit Cost (peer groups) are based on scale, degree of undergrounding and northern
- LDCs must be superior in both to receive best stretch factor incentive

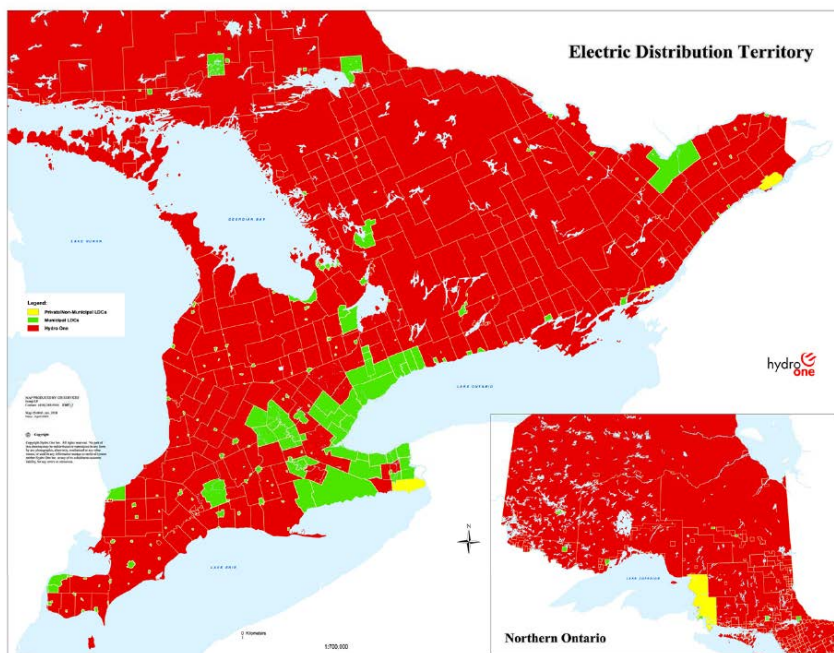
OEB peer group benchmarking – results distribution

Revised from 2008 CEIRM submission based on 2011 LDC sector data



Ontario's LDC fabric and supply configurations

LDC Service Territory



Transmission System



- 75 LDCs and 200 distinct LDC service territories (many non-contiguous mergers)
- Some connected at Tx voltages, with own sub-Tx assets and in some cases Tx stations
- Many connected to (embedded in) a host LDC, where host owns the sub-Tx assets
- Most have permutations of the two configurations
- Approximately 150 of 200 service territories are “embedded”

Connection configuration affects LDC operating cost

- Tx connected LDCs generally have more assets per customer
 - Particularly distribution feeders, stations
 - Result is more O&M and capital work per customer
- Dx connected LDCs generally have fewer assets per customer
 - Feeders and stations, in many cases, belong to the host LDC

Tx Connected LDC



Dx Connected (embedded) LDC



Horizon – mostly Tx connected, some embedded



Elgin TS – Wilson St. at Elgin St.

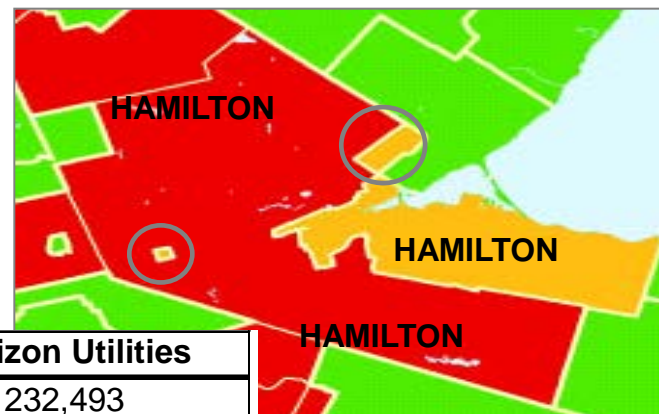


1 large and 1 small LDC – with and without LV charges

Hydro 2000 – Embedded / LV Only



Horizon – Tx and Embedded / LV



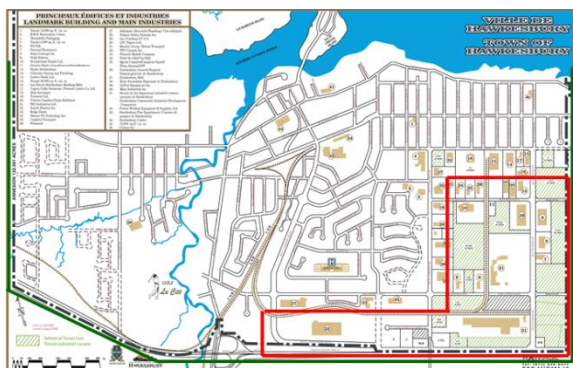
Metric	Hydro 2000	Horizon Utilities
Customers ²	1,159	232,493
Rate Base ¹	\$735,075	\$362,942,366
Net PPE ²	\$375,075	\$301,539,366
Rate Base / Customer	\$634	\$1,561
Net PPE / Customer	\$324	\$1,297
O&M ²	\$15,268	\$12,578,876
Administration ²	\$217,311	\$24,425,794 ²
OM&A ²	\$232,579	\$37,004,670
LV Costs	\$106,241 ¹	\$128,811
OMA + LV	\$338,820	\$37,133,481
OM&A / Customer	\$201	\$159
OM&A + LV / Cust.	\$292	\$160

¹ 2008 EDR Decisions, ² 2007 OEB RRR filings.

NB: Circles represent embedded territories

2 small LDCs – Embedded & Tx connected compared

Embedded / LV – Hawkesbury Hydro

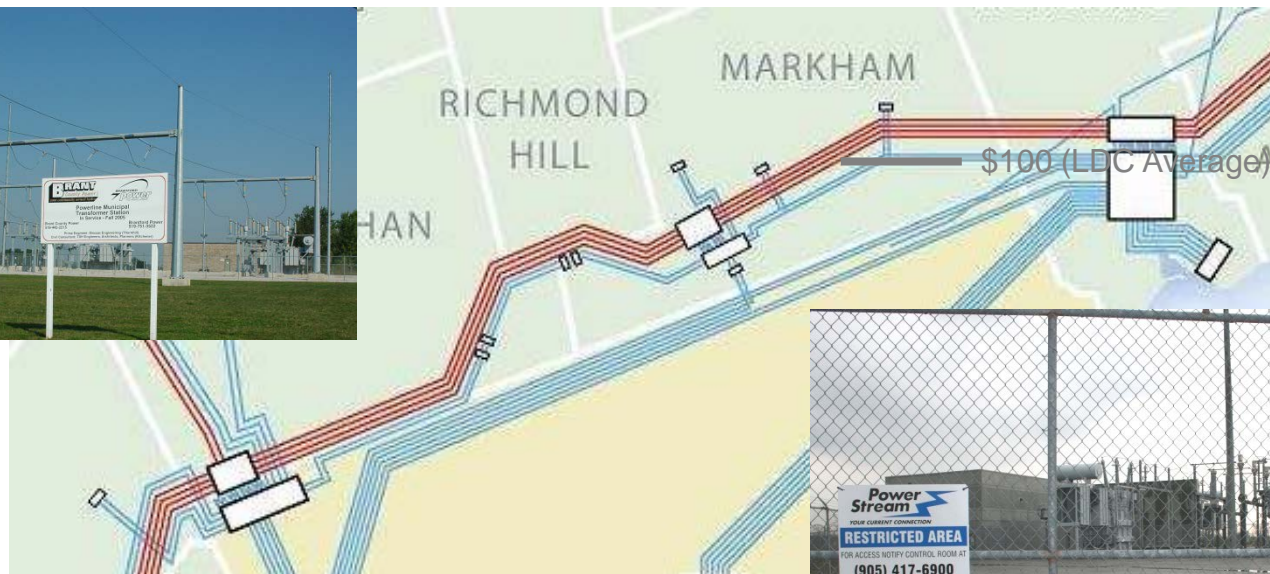


Tx / HV – Tillsonburg Hydro



Metric (2011 Yearbook)	Hydro Hawkesbury	Tilsonburg Hydro
Customers	5,521	6,745
Gross PPE	\$3,764,809	\$15,368,250
Net PPE	\$1,985,359	\$5,982,518
Gross PPE / customer	\$682	\$2,278
Net PPE / customer	\$360	\$887
OM&A / Customer	\$165	\$330
O&M / Customer	\$40	\$141
Admin. / Customer	\$125	\$189
kWh Billed per Customer:		
Residential	10,605	8,408
GS <50 kW	31,178	34,309
GS > 50 kW & LU	880,206	1,213,948

18 LDCs own Tx / HV assets in their LDC*



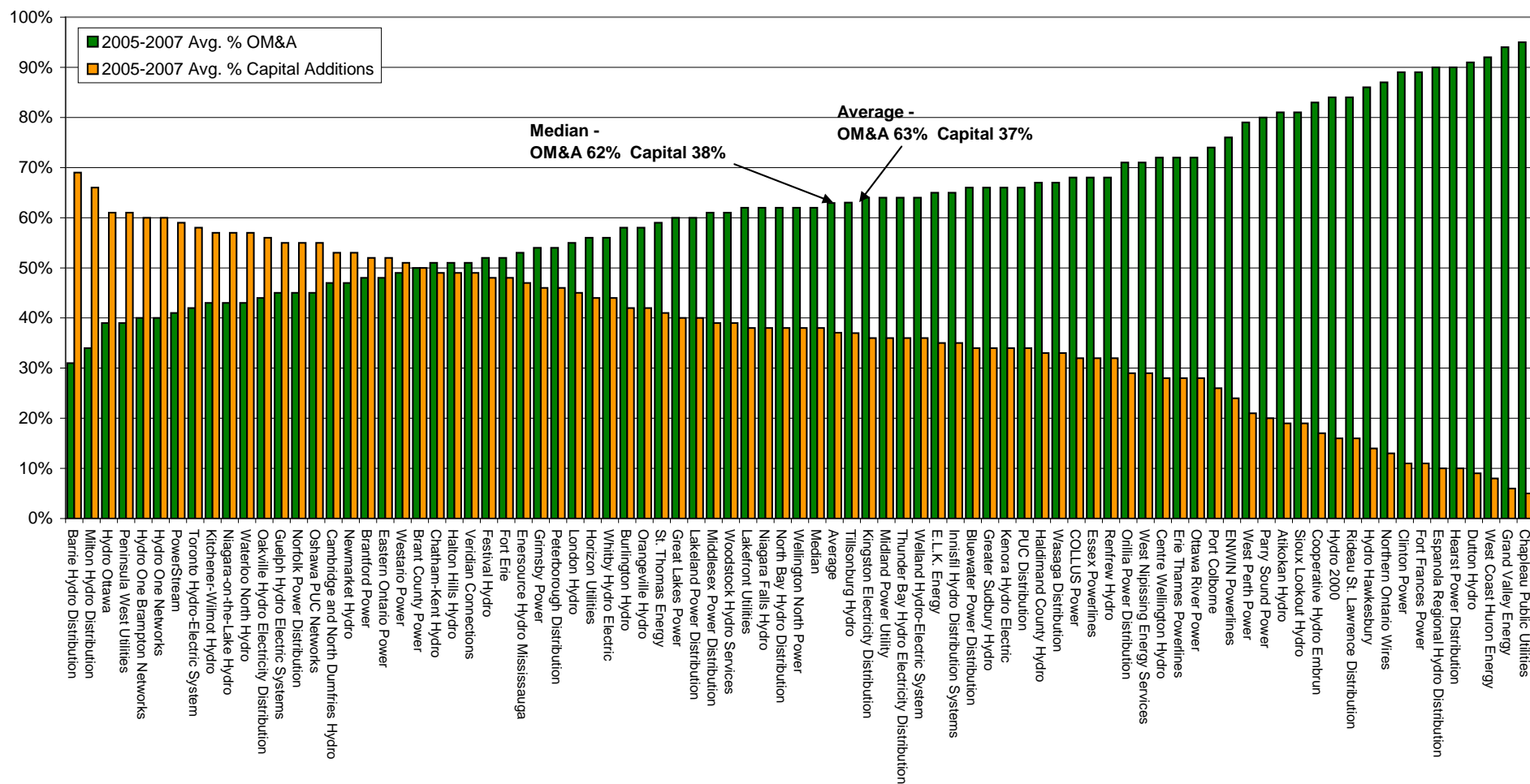
Top 5 LDCs	\$ Assets of HV	HV % in LDC
Kitchener-Wilmot Hydro	\$37,975,643	28%
Niagara-on-the-Lake Hydro	\$5,181,654	27%
Waterloo North Hydro	\$21,208,072	23%
Kenora Hydro	\$1,544,361	20%
PowerStream Inc.	\$88,054,589	19%

* The 18 are: Brant County Power, Brantford Power, Cambridge & North Dumfries Hydro, Enwin, Hydro Hawkesbury, Hydro One Brampton Networks, Hydro One Networks Inc., Hydro Ottawa, Kenora Hydro, Kitchener-Wilmot Hydro, Niagara Falls Hydro, Niagara-on-the-Lake Hydro, Norfolk Power, Northern Ontario Wires, PUC Distribution, PowerStream, Toronto Hydro, Waterloo North Hydro.

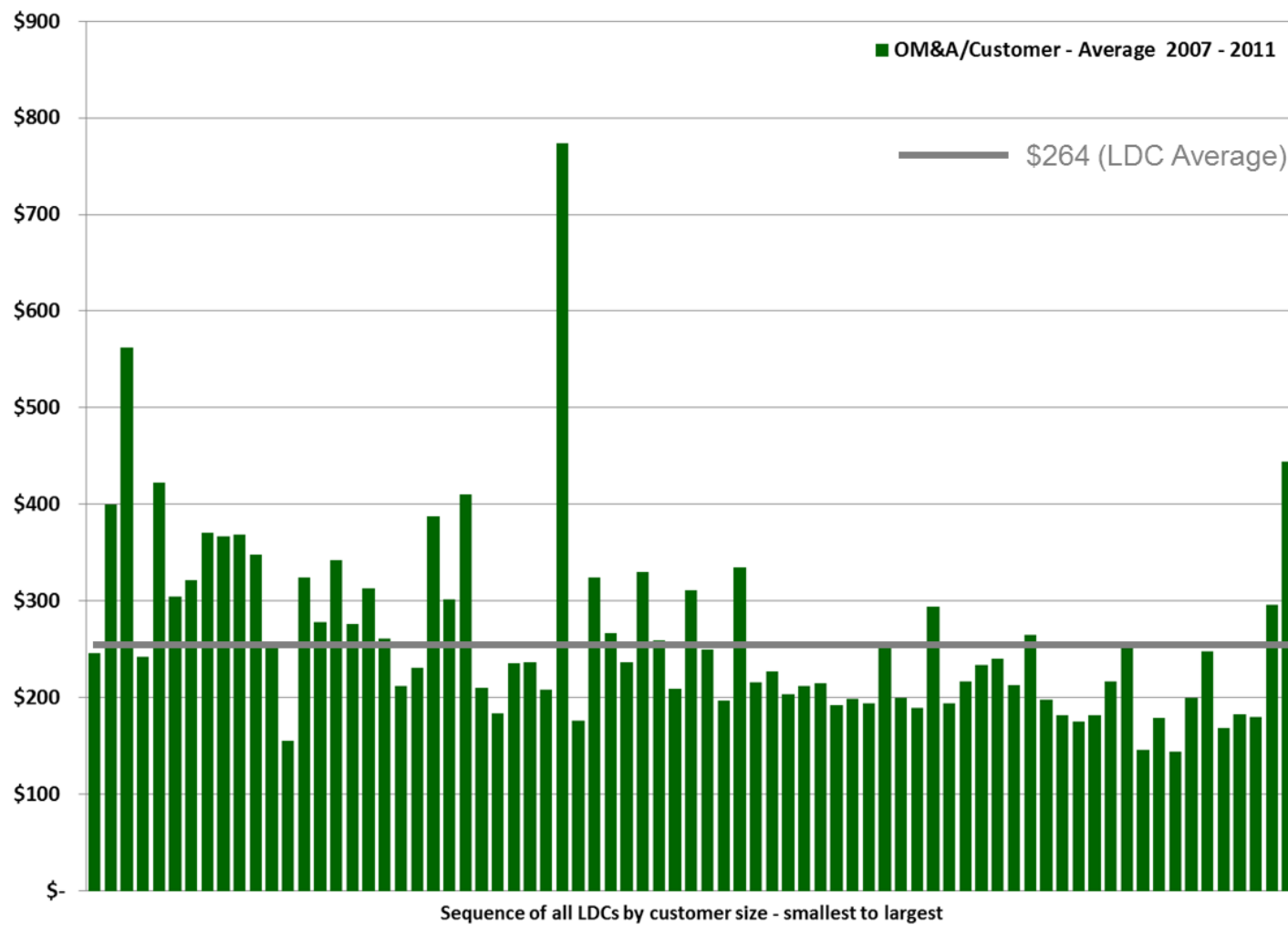
Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Capital in benchmarking – was not in, but will be now

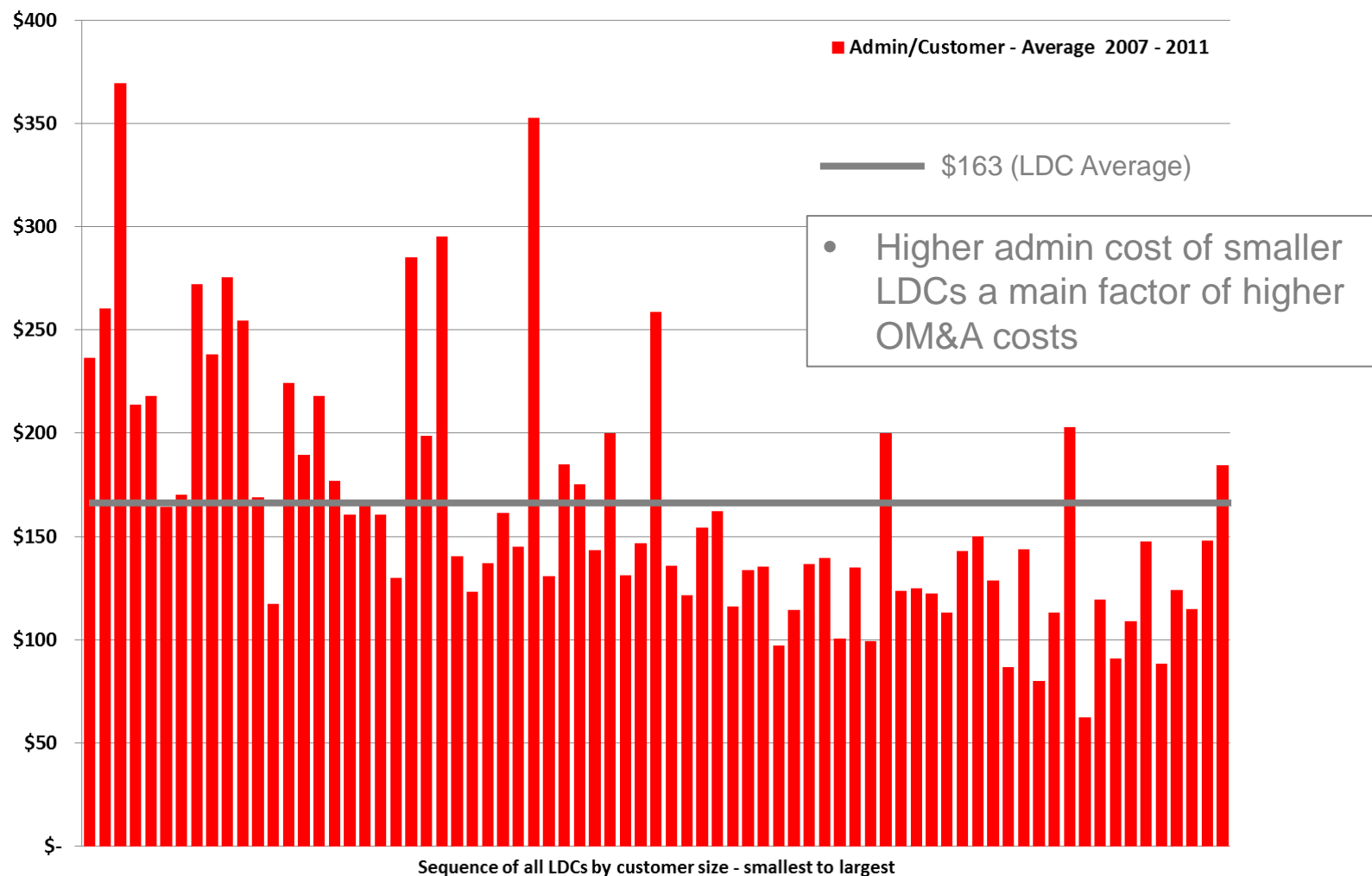
(Figure 3 of CEIRM submission)



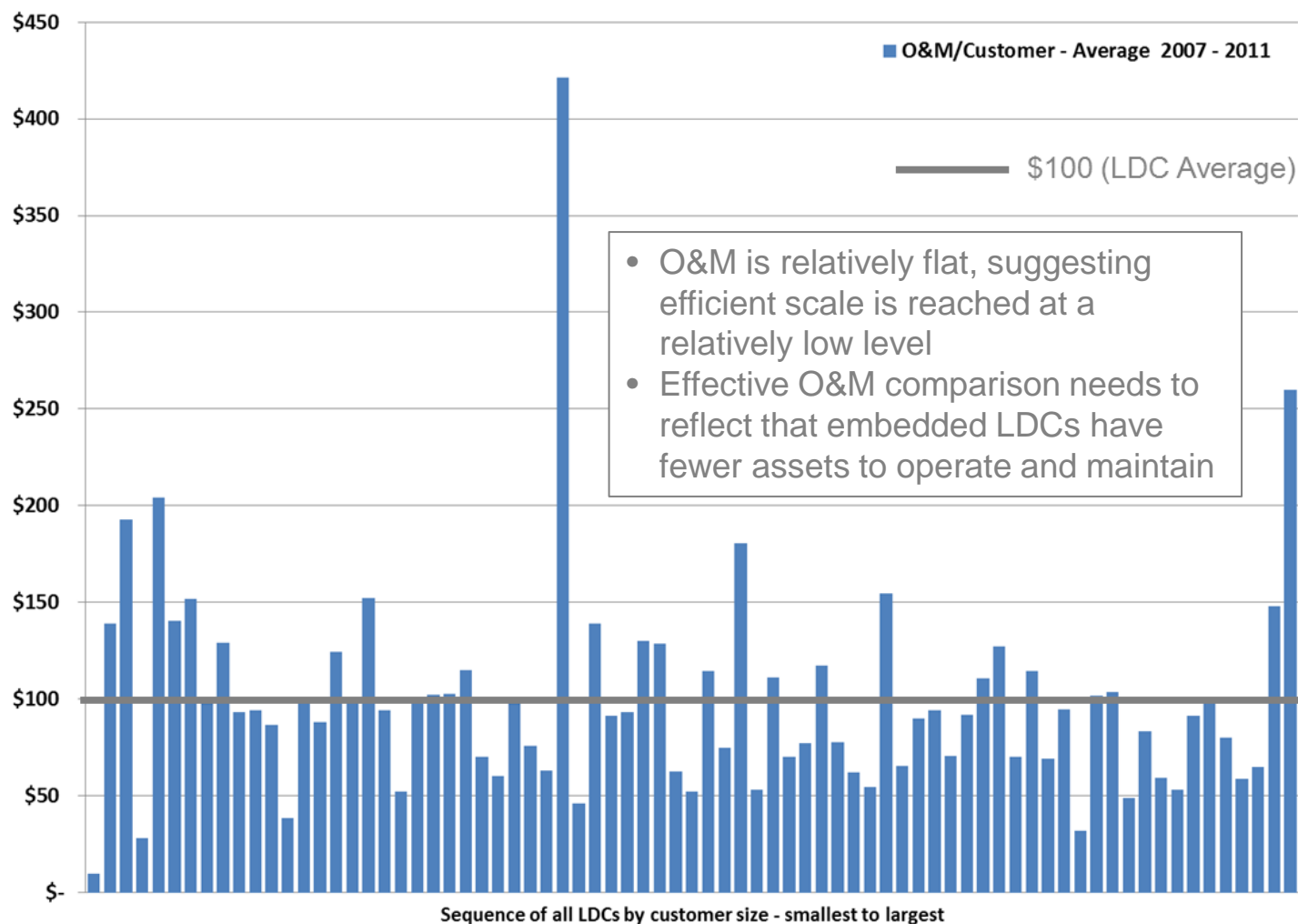
All LDCs – average OM&A 2009-2011



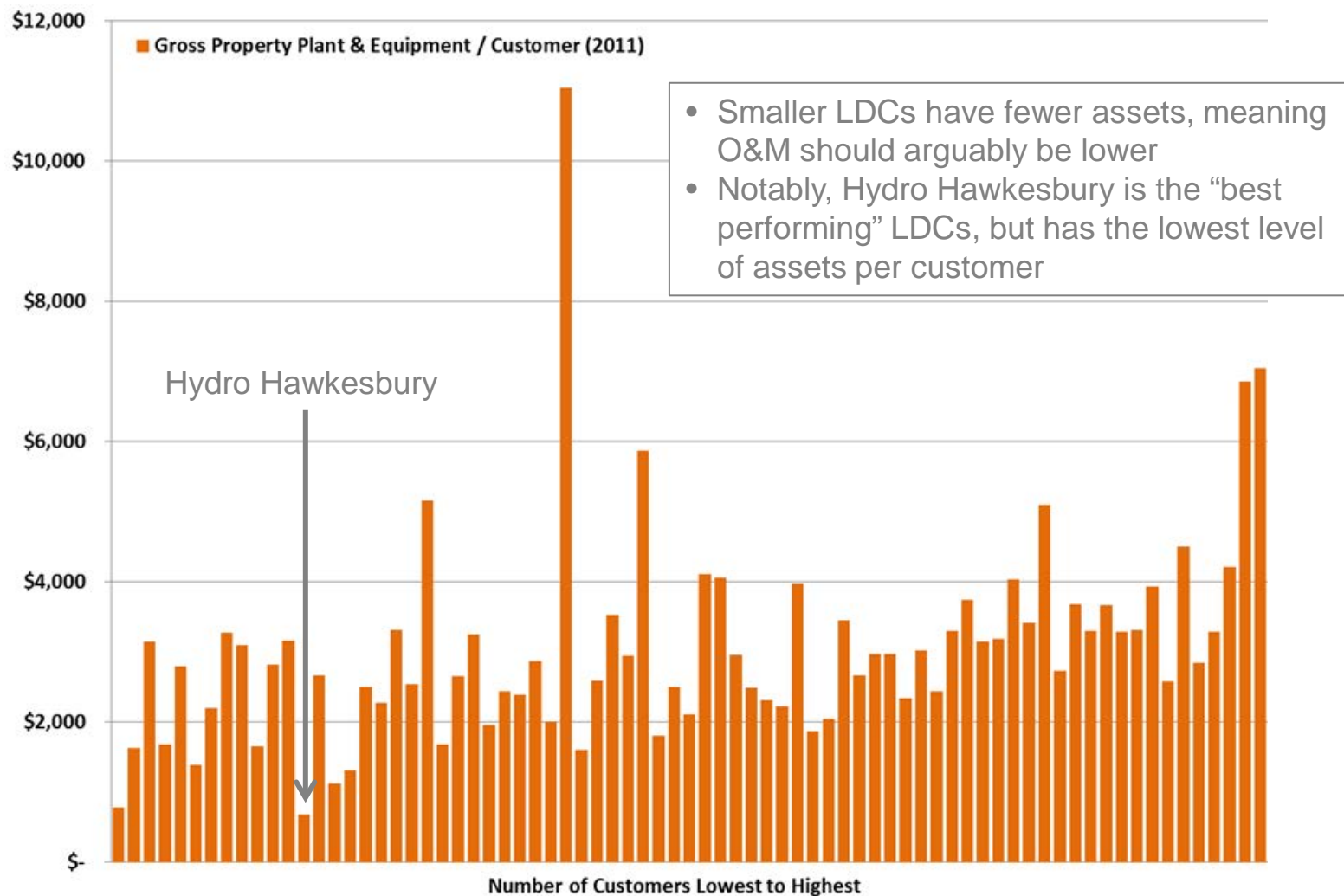
All LDCs – average administration 2009-2011



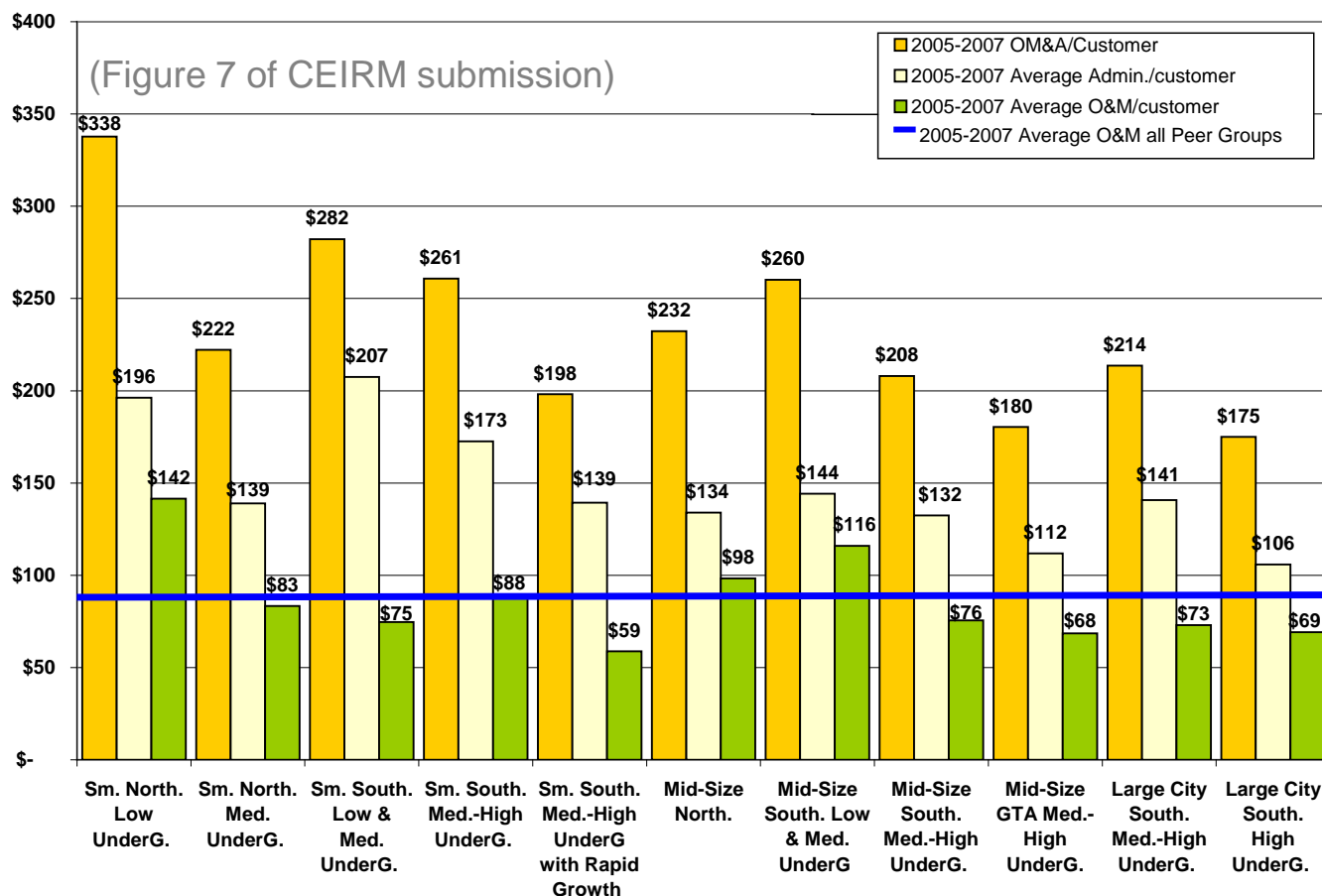
All LDCs – average O&M 2009-2011



All LDCs – Gross Fixed Assets per customer



OEB peer groups and OM&A, O&M and Admin. of LDCs



- Small northern low U/G distorted by Algoma Power – \$268 of OM&A without Algoma
- O&M cost largely flat across the peer groups
- Undergrounding not a distinguishing feature of LDC peer groups

Poor peer group determination weakens results

Unit OM&A Cost Indexes

	2002	2003	2004	2005	2006	2007	Average of Last 3 Available Years ²	Average / Group Average ² [A]	Percentage Differences ² [A - 1]	Implied Cost Surplus (Savings) per year ²
Small Northern Low Undergrounding										
Renfrew Hydro	0.928	0.996	0.921	0.809	0.999	1.094	1 0.967	3 0.584	-41.6%	-\$350,347
Espanola Regional Hydro Distribution	1.410	1.171	1.092	1.155	1.495	1.483	1.076	0.892	-16.8%	-\$156,347
Northern Ontario Wires	1.375	1.223	1.369	1.192	1.270	1.374	1.279	0.772	-22.8%	-\$395,437
Parry Sound Power	1.013	1.200	1.214	1.275	1.333	1.303	1.303	0.787	-21.3%	-\$215,508
Fort Frances Power	1.197	1.213	1.236	1.305	1.346	1.442	1.365	0.824	-17.6%	-\$192,252
Sioux Lookout Hydro	1.086	0.877	1.259	1.359	1.390	1.528	1.426	0.861	-13.9%	-\$149,138
Atikokan Hydro	1.443	2.729	1.758	1.618	1.619	2.022	1.753	1.058	5.8%	\$40,163
Chapleau Public Utilities	1.615	1.668	1.720	1.907	1.833	2.380	2.040	1.231	23.1%	\$128,185
Great Lakes Power	2.983	2.924	3.116	3.308	3.412	3.476	3.399	2.052	105.2%	\$8,371,020
GROUP AVERAGE							2 1.657			
Small Northern Medium Undergrounding										
Hearst Power Distribution	0.630	0.609	0.764	0.745	0.826	0.868	0.813	0.799	-20.1%	-\$127,595
Lakeland Power Distribution	1.076	1.296	0.905	0.909	1.083	0.977	0.990	0.972	-2.8%	-\$58,301
Ottawa River Power	0.940	1.043	1.020	0.989	1.070	1.200	1.087	1.067	6.7%	\$141,026
Kenora Hydro Electric	1.098	1.117	1.155	1.114	1.149	1.284	1.183	1.162	16.2%	\$208,696
GROUP AVERAGE							1.018			
Mid-Size Northern										
North Bay Hydro Distribution	1.126	1.005	0.991	0.878	1.147	1.007	1.010	0.906	-9.4%	-\$487,201
PUC Distribution	0.866	0.937	1.070	1.046	1.028	1.166	1.080	0.969	-3.1%	-\$225,144
Thunder Bay Hydro Electricity Distribution	1.087	1.178	1.130	1.016	1.070	1.179	1.088	0.976	-2.4%	-\$262,212
Greater Sudbury Hydro & West Nipissing	1.034	0.996	1.121	1.003	1.069	1.769	1.280	1.149	14.9%	\$1,743,696
GROUP AVERAGE							1.115			
Large Northern										
Hydro One Networks	n/a	1.015	0.969	1.042	1.252	1.465	1.253	NA	NA	NA
GROUP AVERAGE							1.253			

- Unit Cost Ranking Metric (3) = individual metric (1) / group average (2)
- Renfrew Hydro, GLP (Algoma), Ottawa River Power in wrong groups
- Hydro One has its own group, but GLP (Algoma) does not

Benchmarking “northern” LDCs

Canadian Shield – Parry Sound



Canadian Shield – Renfrew?

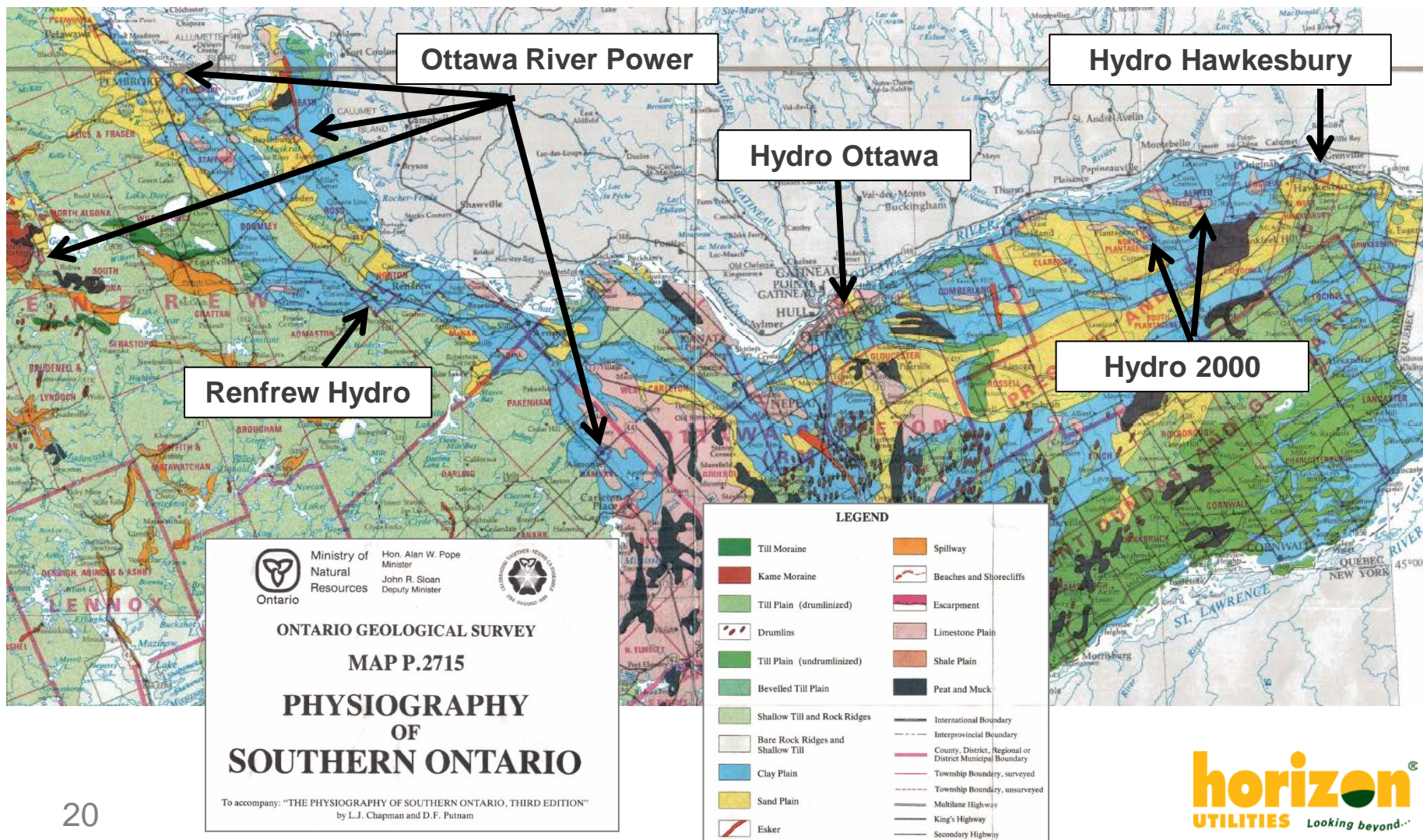


“The Shield is a physiographic region characterized by shallow, rocky soils and numerous lakes. Since the land receives considerable precipitation but is unsuited for agriculture, rural areas of the Shield are typically forested. We expect OM&A expenses to be higher on the Shield.”

Source: PEG Report, March 20, 2008, p. 50.

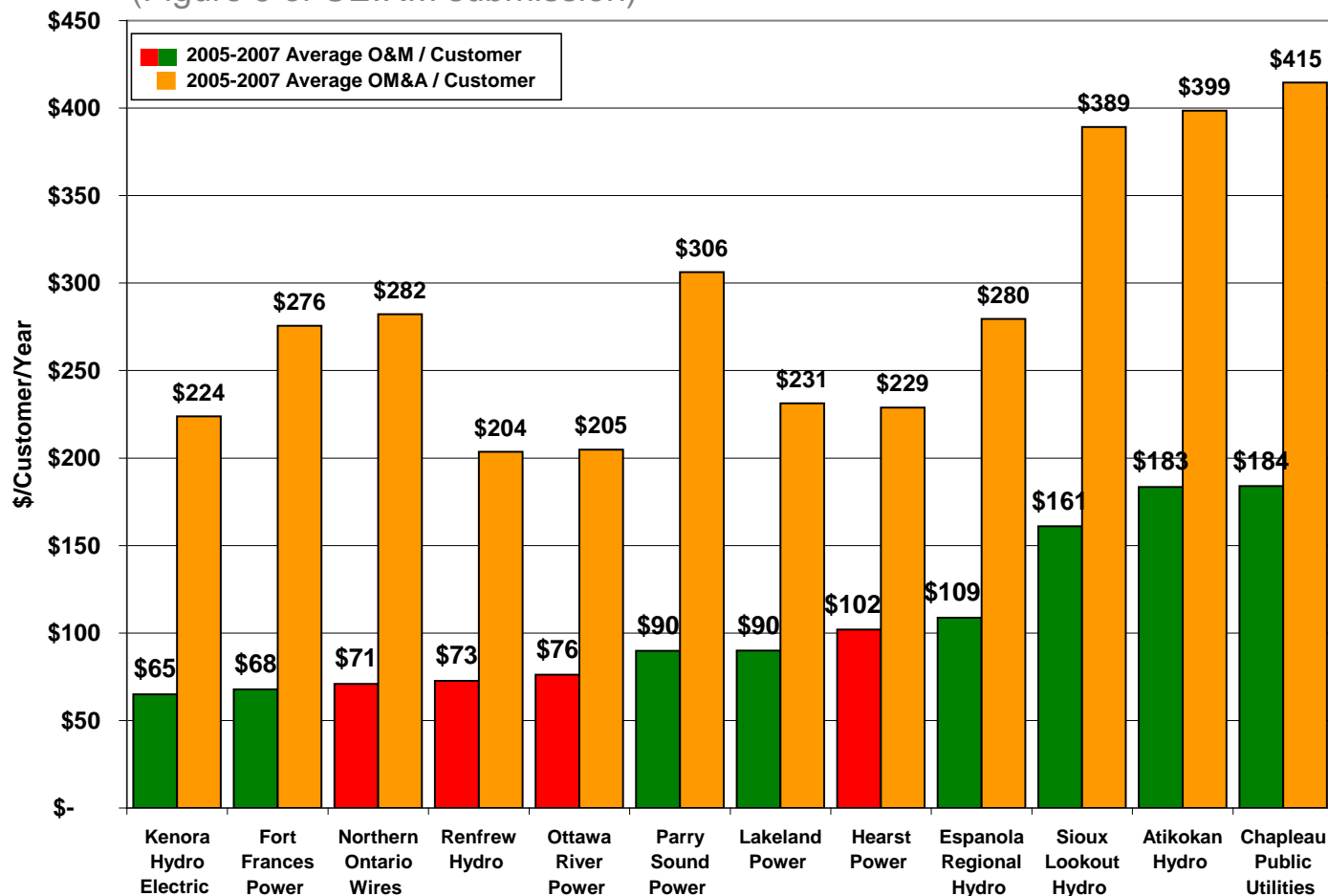
Renfrew Hydro and Ottawa River Power in north?

(Figure 10 of CEIRM submission)



Misapplication of “northern” penalizes northern LDCs

(Figure 9 of CEIRM submission)



- Higher northern costs affect O&M not Administration

PEG's sensitivity test to “northern”

July Results*			December Results**			Change
LDC	Metric	Rank	LDC	Metric	Rank	July/Dec.
Hydro Hawkesbury	0.643	1	Hydro Hawkesbury	0.644	1	0.001
Chatham-Kent Hydro	0.691	2	Chatham-Kent Hydro	0.694	2	0.003
Northern Ontario Wires	0.711	3	Northern Ontario Wires	0.714	3	0.003
Cambridge and N. Dum.	0.715	4	Cambridge and N. Dum.	0.718	4	0.003
E.L.K. Energy	0.729	5	E.L.K. Energy	0.733	5	0.004
Grimsby Power	0.764	6	Renfrew Hydro	0.752	6	-0.055
Oshawa PUC Networks	0.787	7	Grimsby Power	0.769	7	0.005
Lakeland Power	0.789	8	Oshawa PUC Networks	0.781	8	-0.006
Hydro One Brampton	0.793	9	Lakeland Power	0.787	9	-0.002
Kitchener-Wilmot Hydro	0.805	10	Hydro One Brampton	0.792	10	-0.001
Renfrew Hydro	0.807	11	Kitchener-Wilmot Hydro	0.804	11	-0.001
Barrie Hydro	0.814	12	Barrie Hydro	0.810	12	-0.004
Festival Hydro	0.822	13	Festival Hydro	0.827	13	0.005
Welland Hydro	0.834	14	Welland Hydro	0.839	14	0.005
Hydro 2000	0.840	15	Hydro 2000	0.845	15	0.005
Kingston Electricity	0.860	16	Kingston Electricity	0.868	16	0.008
Horizon Utilities	0.864	17	Horizon Utilities	0.872	17	0.008

(Table 8 of
CEIRM
submission)

* PEG “Update” Report, December 3, 2008, Table 3. ** PEG “Update” Report, ibid., Table 11.

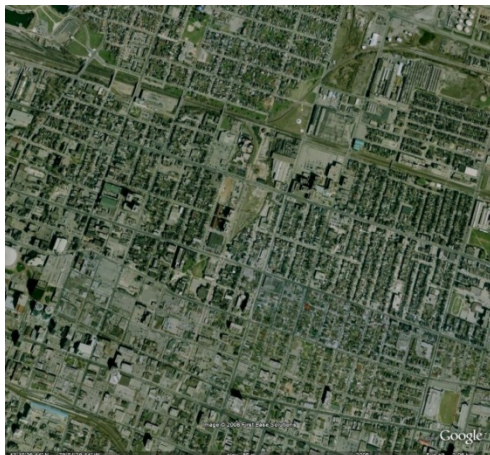
- Renfrew Hydro went up, not down, without “northern” benefit – counter-intuitive
- All other LDCs stayed in same order – PEG sees no issue

Capital & maintenance varies greatly LDC

Capital Intensive – Brampton



Maintenance Intensive – Hamilton



(Figure 2 of CEIRM submission)



- Most LDCs are municipally delimited
- Newer suburban have greenfield growth
- Older urban have maintenance

Too many peer groups – weak distinctions

(Table 2 of CEIRM submission)

Scale	Location	Degree of Undergrounding	LDCs
Small	Northern	Low Undergrounding (0-10%)	9*
Small	Northern	Medium Undergrounding (10-20%)	4*
Small	Southern	Low & Medium Undergrounding (0-20%)	11**
Small	Southern	Medium-High Undergrounding (20-50%)	6***
Small	Southern	Medium-High Ung. with Rapid Growth (20-50%)	5
Mid-size	Southern	Low & Medium Undergrounding (10-20%)	5
Mid-size	Southern	Medium-High Undergrounding (20-50%)	15
Mid-size	GTA [Southern]	Medium-High Undergrounding (20-50%)	12
Mid-size	Northern	N/A	4
Large	Southern	Medium-High Undergrounding (20-50%)	4
Large	Southern	High Undergrounding (>50%)	5
Large	Northern	N/A [Hydro One Networks]	1

* One LDC has been included in small, but should have been in mid-size based on its number of customers

** Three of the LDCs in this group were sold or merged with others in 2007 and 2008, but are still in the 2007 data.

*** Two of these were sold or merged in 2008, but are still in the 2007 data.

NB: Numbers and descriptors based on groupings in December 3, 2008, PEG Report, which is the most recently published data.

Peer grouping “rural” LDCs separately makes sense

(Table 5 of CEIRM submission)

LDC Name	LDC Location	Line Density
Great Lakes Power	North	6.32
Hydro One Networks	North and South	9.76
Haldimand County Hydro	South	12.13
Sioux Lookout Hydro	North	13.05
Peninsula West Utilities	South	13.89
Halton Hills Hydro	South	15.04
Northern Ontario Wires	North	16.52
Eastern Ontario Power	South	18.12
Atikokan Hydro	North	18.60
Innisfil Hydro Distribution Systems	South	22.17
Niagara-on-the-Lake Hydro	South	23.08
Espanola Regional Hydro Distribution	North	24.20

- Low density LDCs should not be included in peer groups with high density – cannot compete and thereby distort data
- Line and area density of rural or low density LDCs make for a better peer group
- Both are reported OEB metrics

Urban & suburban LDCs now mixed in same peer groups

(Table 4 of CEIRM submission)

LDC	Under-grounding	%	O&M / Customer	Line Density Cust./km	Growth / Output Index
ENWIN Powerlines	Med.-High	38.5%	\$51	74.81	1,332
Hydro Ottawa	Med.-High	36.7%	\$61	50.01	2,653
Toronto Hydro	Med.-High	45.5%	\$129	69.24	457
Veridian Connections	Med.-High	31.9%	\$50	52.87	2,837
Enersource Hydro	High	65.5%	\$94	35.47	2,511
Horizon Utilities	High	53.3%	\$54	69.55	1,302
Hydro One Brampton	High	69.8%	\$51	46.64	5,800
London Hydro	High	51.0%	\$82	54.47	2,265
PowerStream	High	69.0%	\$65	38.10	4,617

Source: OEB, RRR, 2005-2007, and, for grouping and growth index, PEG "Update" Report, December 3, 2008, Table 1.

- Undergrounding is not a clear differentiator of performance
- Line density is a stronger basis for establishing peer groups
- Urban and suburban LDCs differ on line density and growth

4 peer groups – Line Density and Canadian Shield

Rural

Suburban

Urban

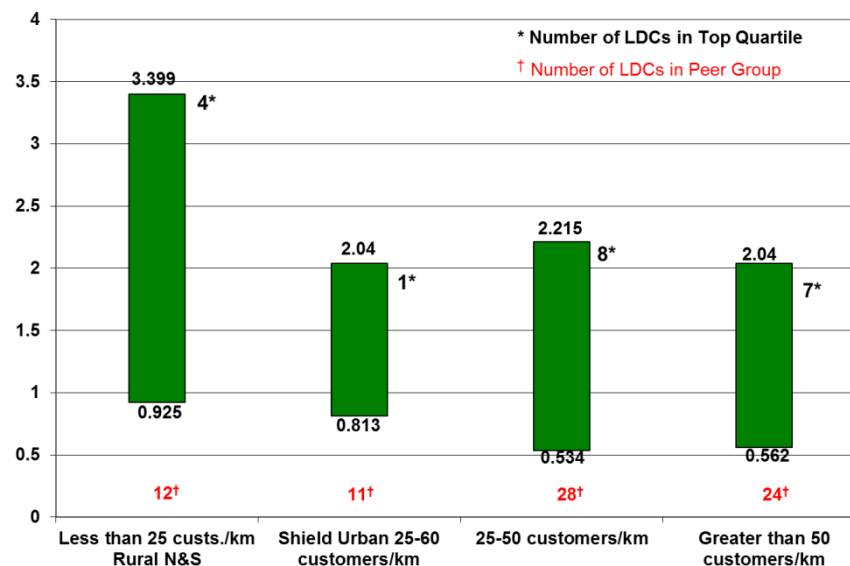
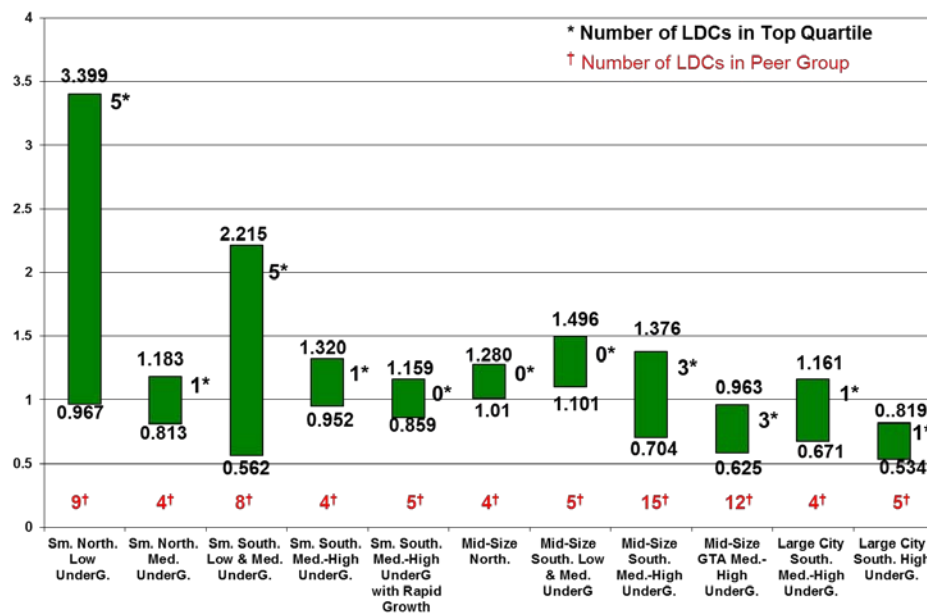
Northern

Less than 25	Cust./km	From 25 to 50	Cust./km	Greater than 50	Cust./km	Shield Urban from 25 to 60	Cust./km
Great Lakes Power	6.32	Milton Hydro Distribution	27.38	Hydro Ottawa	50.01	Lakeland Power Distribution	25.73
Hydro One Networks	9.76	Norfolk Power Distribution	28.46	Veridian Connections	52.87	Parry Sound Power	26.29
Haldimand County Hydro	12.13	Brant County Power	29.18	Oshawa PUC Networks	53.49	North Bay Hydro Distribution	38.88
Sioux Lookout Hydro	13.05	Fort Erie	29.51	Woodstock Hydro Services	53.88	Hearst Power Distribution	40.76
Peninsula West Utilities	13.89	Port Colborne	29.55	London Hydro	54.47	Thunder Bay Hydro Electricity	42.6
Halton Hills Hydro	15.04	Newmarket Hydro	30.17	Hydro 2000	55.19	PUC Distribution	44.84
Northern Ontario Wires	16.52	Waterloo North Hydro	32.56	West Perth Power	56.5	Fort Frances Power	46
Eastern Ontario Power	18.12	Enersource Hydro Mississauga	35.47	Erie Thames Powerlines	56.5	Chapleau Public Utilities	49.56
Atikokan Hydro	18.6	Whitby Hydro Electric	37.49	Midland Power Utility	58.34	Greater Sudbury Hydro	51.82
Innisfil Hydro	22.17	PowerStream	38.1	Essex Powerlines	59.25	Kenora Hydro Electric	57.57
Niagara-on-the-Lake Hydro	23.08	Burlington Hydro	39.91	West Coast Huron Energy	59.28	Ottawa River Power*	70.07
Espanola Regional Hydro	24.2	Chatham-Kent Hydro	40.93	Peterborough Distribution	62.68	Renfrew Hydro*	75.44
		Grimsby Power	41.67	Orangeville Hydro	63.74		
		Orillia Power Distribution	41.88	Middlesex Power Distribution	65.63		
		Niagara Falls Hydro	42.37	St. Thomas Energy	66.33		
		Centre Wellington Hydro	42.73	Rideau St. Lawrence Distribution	67.4		
		Oakville Hydro Electricity	42.87	Toronto Hydro-Electric System	69.24		
		Tillsonburg Hydro	42.95	Horizon Utilities	69.55		
		Cambridge and N. Dumfries Hydro	44.45	Cooperative Hydro Embrun	69.7		
		COLLUS Power	44.49	Festival Hydro	70.3		
		Kitchener-Wilmot Hydro	44.89	Dutton Hydro	71.05		
		Guelph Hydro Electric Systems	46.33	E.L.K. Energy	73.42		
		Hydro One Brampton Networks	46.64	ENWIN Powerlines	74.81		
		Barrie Hydro Distribution	47.43	Grand Valley Energy	75.22		
		Wellington North Power	47.75	Brantford Power	75.73		
		Bluewater Power Distribution	48.13	Kingston Electricity Distribution	76.53		
		Welland Hydro-Electric System	48.83	Clinton Power	78.05		
		Westario Power	48.96	Lakefront Utilities	79.45		
		Wasaga Distribution	49.39	Hydro Hawkesbury	83.51		
		Newbury Power	49.75				

* Source: Line density figures are from 2007 RRR. The calculation is “Total Customers (not including Street & Sentinel Lighting Connections)” divided by “Total KM of Line”. ** NB: Renfrew Hydro and Ottawa River Power were not moved from the “northern” LDCs for the purposes of the peer grouping in the coalition submission only because the peer grouping and “northern” recommendations were treated separately. The “Urban Shield” group would not have LDCs above 60 customer kilometre.

4 peer groups versus 12 – better results distribution

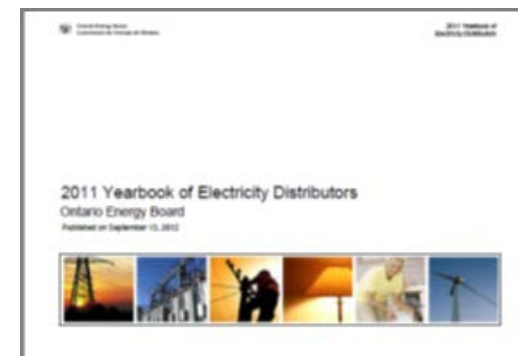
Revised based on 2011 LDC sector



- 12 peer groups is too many and results in too few in some groups
- Distortions in one group affect results for all groups – preponderance of strong performers in smallest LDCs
- 4 groups based on LDC line density and Cdn. Shield presence address same objectives and allow for meaningful size groups

LDC filed data quality and integrity

General Statistics For the year ended December 31, 2011	Hydro Hawkesbury Inc.	Hydro One Brampton Networks Inc.	Hydro One Networks Inc.	Hydro Ottawa Limited	Innisfil Hydro Distribution Systems Limited	Kenora Hydro Electric Corporation Ltd.
Population Served	10,500	523,911	3,029,722	834,406	34,000	12,000
Municipal Population	10,500	523,911	3,029,722	927,118	34,000	16,500
Seasonal Population	0	0	154,799	0	500	0
Residential	4,835	127,956	1,091,935	278,056	13,854	4,757
General Service (<50 kW)	592	8,259	110,421	23,734	904	745
General Service (50-4999 kW)	94	1,635	7,921	3,465	68	70
Large User (>5000 kW)	0	6	0	11	0	0
Sub Transmission	0	0	418	0	0	0
Total Customers	5,521	137,856	1,210,695	305,266	14,826	5,572
Rural Service Area (sq km)	0	0	650,000	650	221	0
Urban Service Area (sq km)	8	269	0	454	71	24
Total Service Area (sq km)	8	269	650,000	1,104	292	24
Overhead km of Line	56	802	109,499	2,916	607	88
Underground km of Line	10	2,094	7,886	2,690	141	10
Total km of Line	66	2,896	117,385	5,606	748	98
Total kWh Delivered (excluding losses)	154,131,709	3,842,969,139	23,561,000,000	7,607,711,356	231,635,167	106,039,212
Total Distribution Losses (kWh)	6,797,658	124,325,586	1,711,000,000	245,447,492	9,624,401	3,513,148
Total kWh Purchased	160,929,367	3,967,294,725	25,272,000,000	7,853,158,848	241,259,568	109,552,360
Winter Peak (kW)	31,966	595,700	3,923,771	1,305,498	49,220	20,492
Summer Peak (kW)	30,227	820,000	3,395,487	1,501,701	48,959	18,511
Average Peak (kW)	26,301	626,200	3,089,825	1,203,408	41,923	17,242
Capital Additions in 2011	\$ 188,179	\$ 38,257,711	\$ 730,752,993	\$ 81,912,537	\$ 3,605,881	\$ 661,401
Full time equivalent number of employees	8	207	3,367	571	32	15



Total Service Area (sq km)	681,511
% Rural	99%
% Urban	1%

- Perform data sensitivity tests to ensure the highest level of data quality
- Rectify general data management issues that come to light in COS hearings
- Make use of IFRS exercise to improve data management and quality
- Devote addition effort and resources to reviewing data filing instructions

Concluding remarks

- Peer group benchmarking undermines robustness of econometric benchmarking
 - Econometric benchmarking covers all the same elements
 - Consultants do not favour peer grouping, but OEB asked for it
 - LDC performance measured on doing well in both, but peer grouping is flawed
- Economic benchmarking should not “level the playing field” for scale
 - Normalizing for scale would make sense if there were a small number of large distributors, such as the ODSP suggestion of 8 to 12
 - Do so for 75 LDCs where largest is 1,000 times larger than smallest only serves to impede Ontario government objective of consolidation
- Peer grouping should be meaningful, if there must be peer groups
 - Line density or line and area density make the most sense – for small or large LDCs, efficiency is always enhanced with higher density
 - Use Canadian Shield or other clear definition to reflect northern challenges
 - Peer group size should be sufficient to ensure a robust data set

Appendix: about the CEIRM submission

- Part of OEB consultation on 3rd Generation Incentive Rate Making
- 22 LDCs representing 51% of then 4.6 million customers
 - 69% of all customers not including Hydro One
 - Led by Horizon Utilities Corporation
- Cross-section of LDC diversity
 - small and large
 - northern and southern
 - urban, suburban and rural
- LDCs that support IRM principles
 - Seeking IRM that works with effectiveness and fairness
 - Forwarding practical and workable recommendations
- 9 recommendations across three issues
 - Level playing field
 - Meaningful peer groups
 - Data quality and assurance

EB-2014-0002
Horizon Utilities Corporation
Responses to School Energy
Coalition Interrogatories
Delivered: August 1st, 2014
1-SEC-7_Attch 13_Horizon Presentation 2013 Ontario Power Summit (Final)

**1-SEC-7_Attch 13_Horizon Presentation 2013 Ontario Power Summit
(Final)**

Buying into an LDC Merger – but who are the Buyers?

Ontario Power Summit 2013

Neil Freeman, Vice President, Business Development

May 29, 2013

Overview

- What did ODSP recommend and where did its recommendations run into problems?
- Where is the value opportunity in LDC consolidations?
- What are the examples of successful consolidations?
- Should consolidation be thought of more broadly than just regional amalgamation?
- What are effective drivers for consolidation and Alternative Service Delivery?

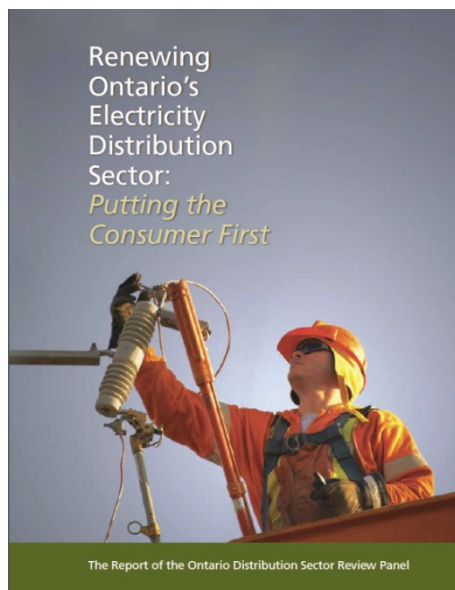
Bottom-line performer and industry leader

- First CEA member designated “Sustainable Electricity Company™” – 2013
- Hamilton-Niagara’s Top Employer – 2012 and 2013
- CEA Sustainability Company of the Year – 2011 and 2012
- ISO 14001 Environmental Management System accreditation – 2011
- ISO 26000 Social Responsibility – first utility in Canada – 2011
- Global Reporting Initiative A+ sustainable development – 2010 & 2011
- Ontario Energy Association Company of the Year – 2009
- OPG-EDA Performance Excellence Award – 2006

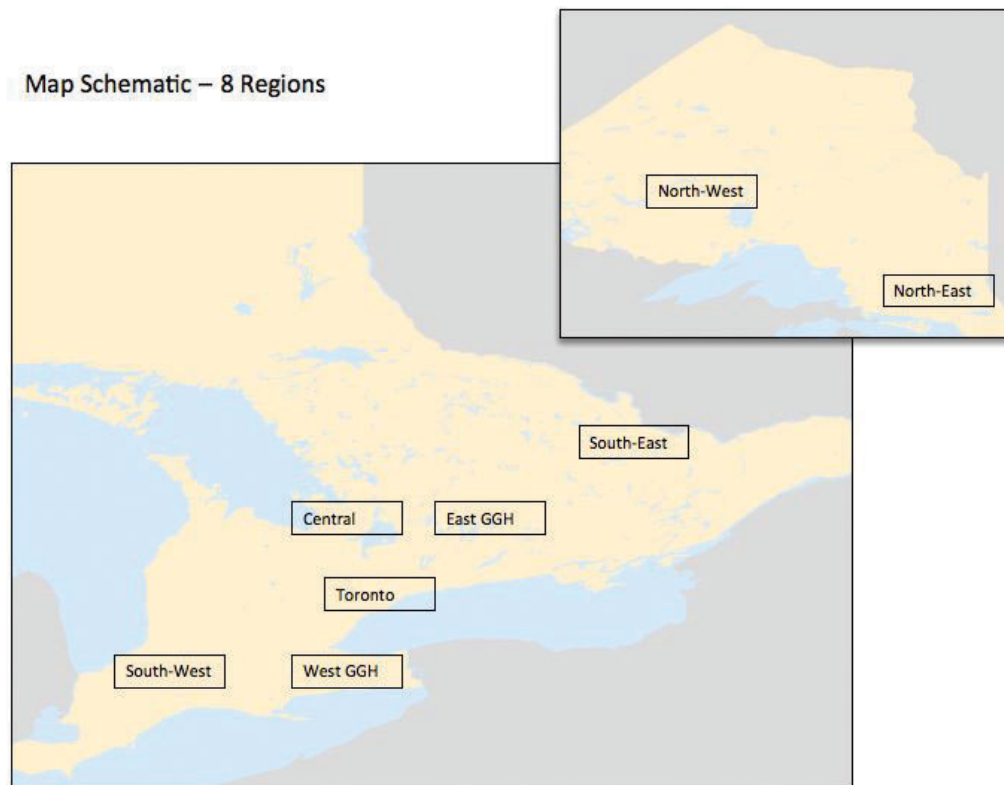


Ontario Distribution Sector Review Panel

- “Ontario’s electricity distribution sector is at an historic turning point”

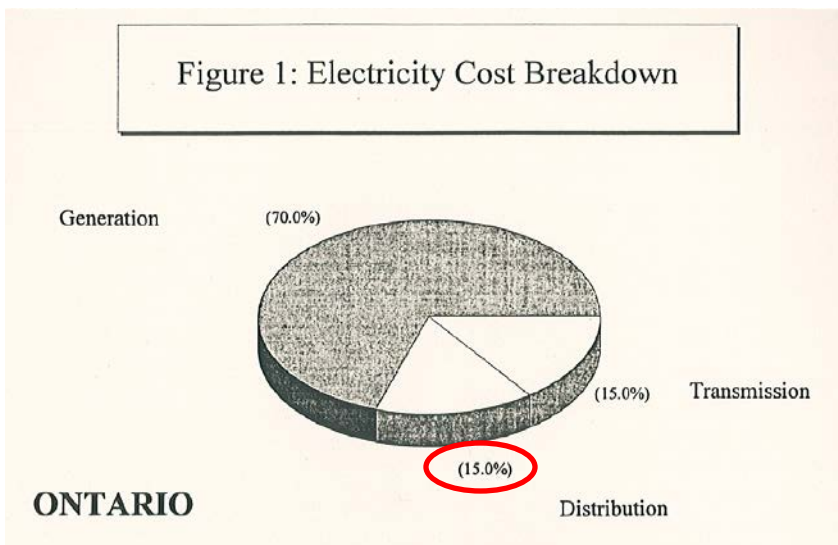


Map Schematic – 8 Regions

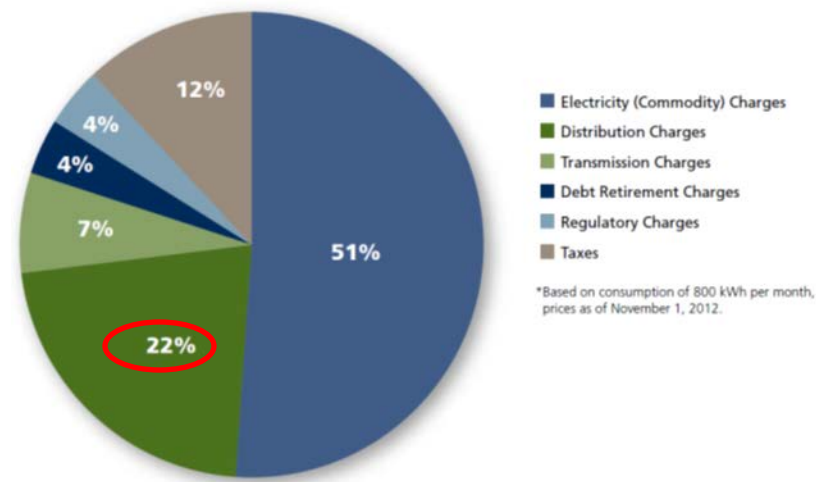


Distribution's share of total Bill 1996 & 2012

- Distribution costs have increased from 15% to 22% of the total bill since deregulation
- Increase is from 15% to 25% when taxes are not included



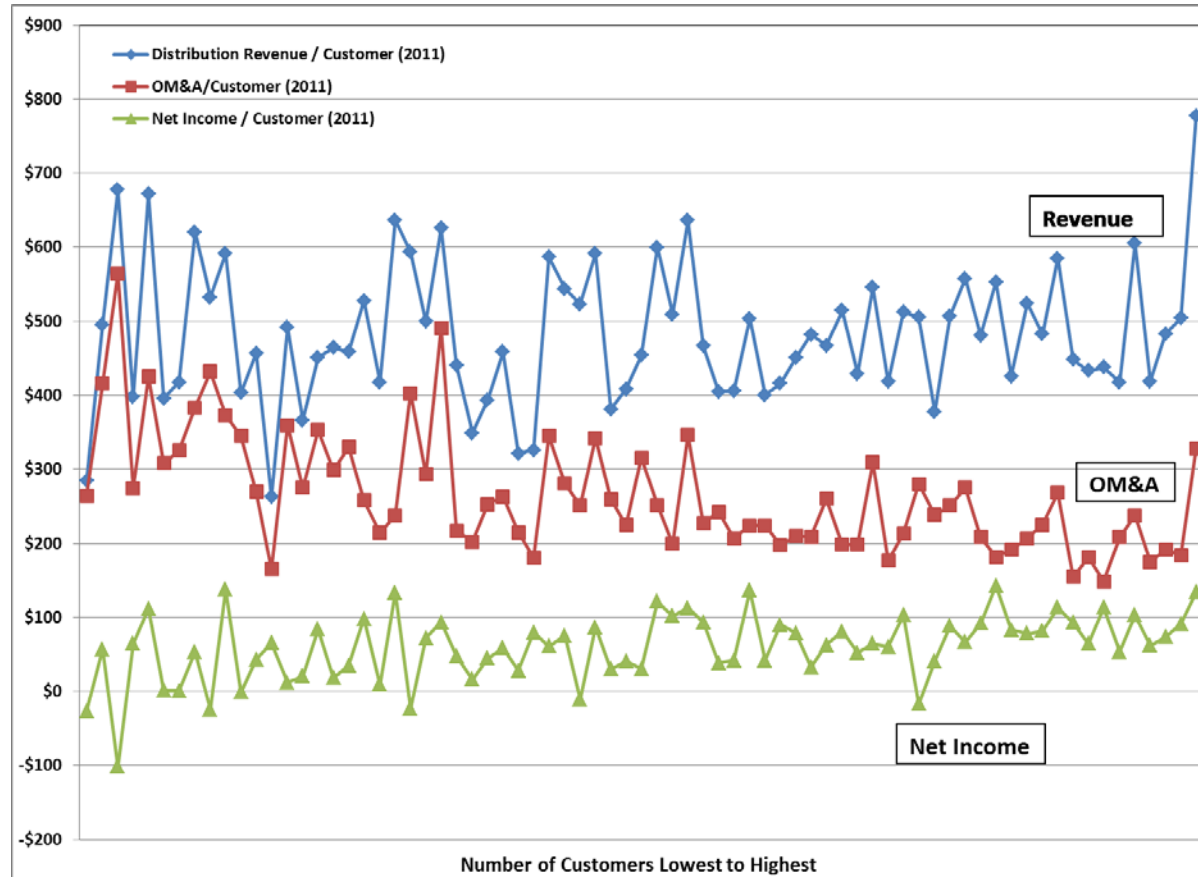
MEA (now EDA) submission to
Macdonald Committee 1996



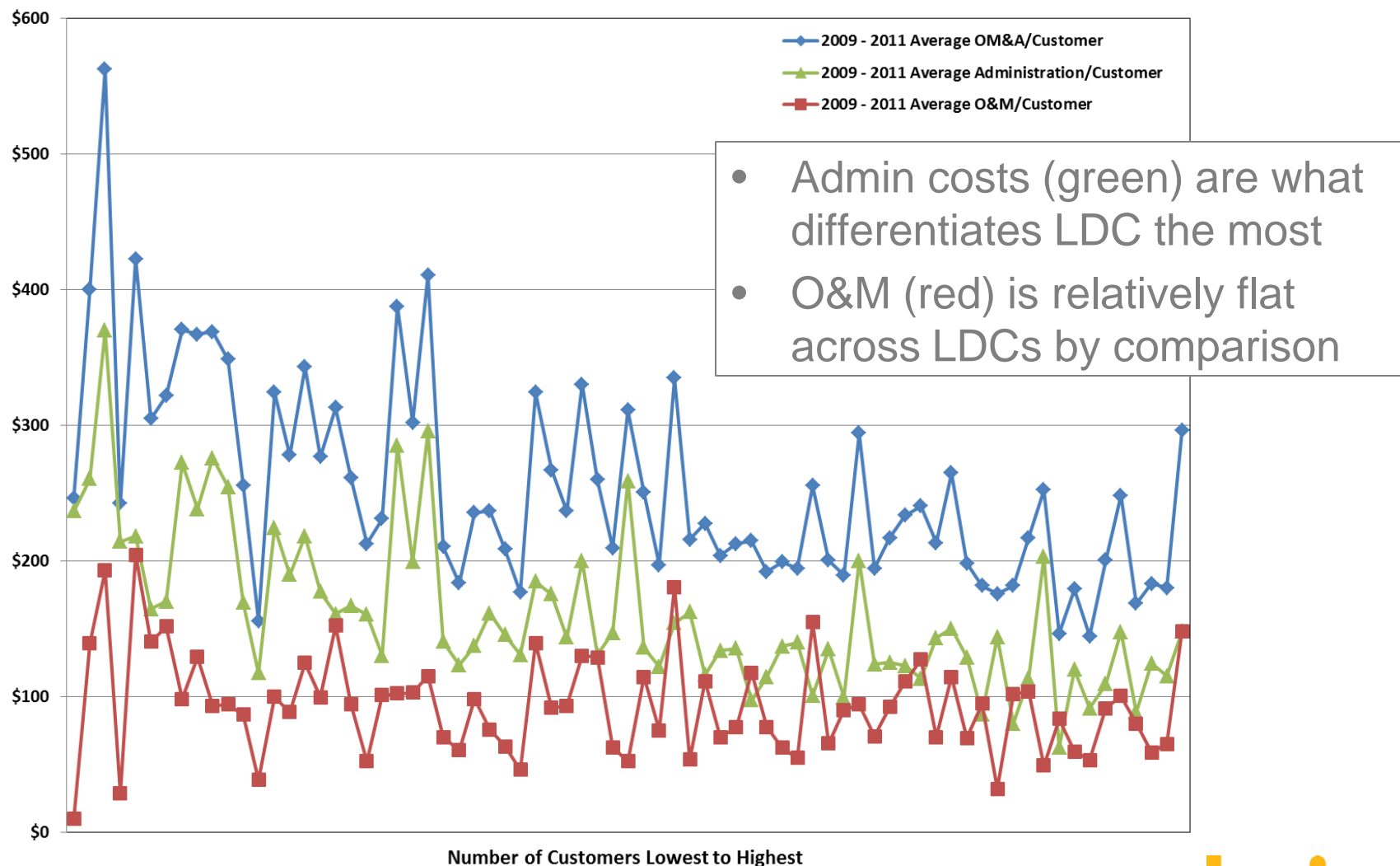
ODSP Report 2012

LDC revenue, OM&A and net income

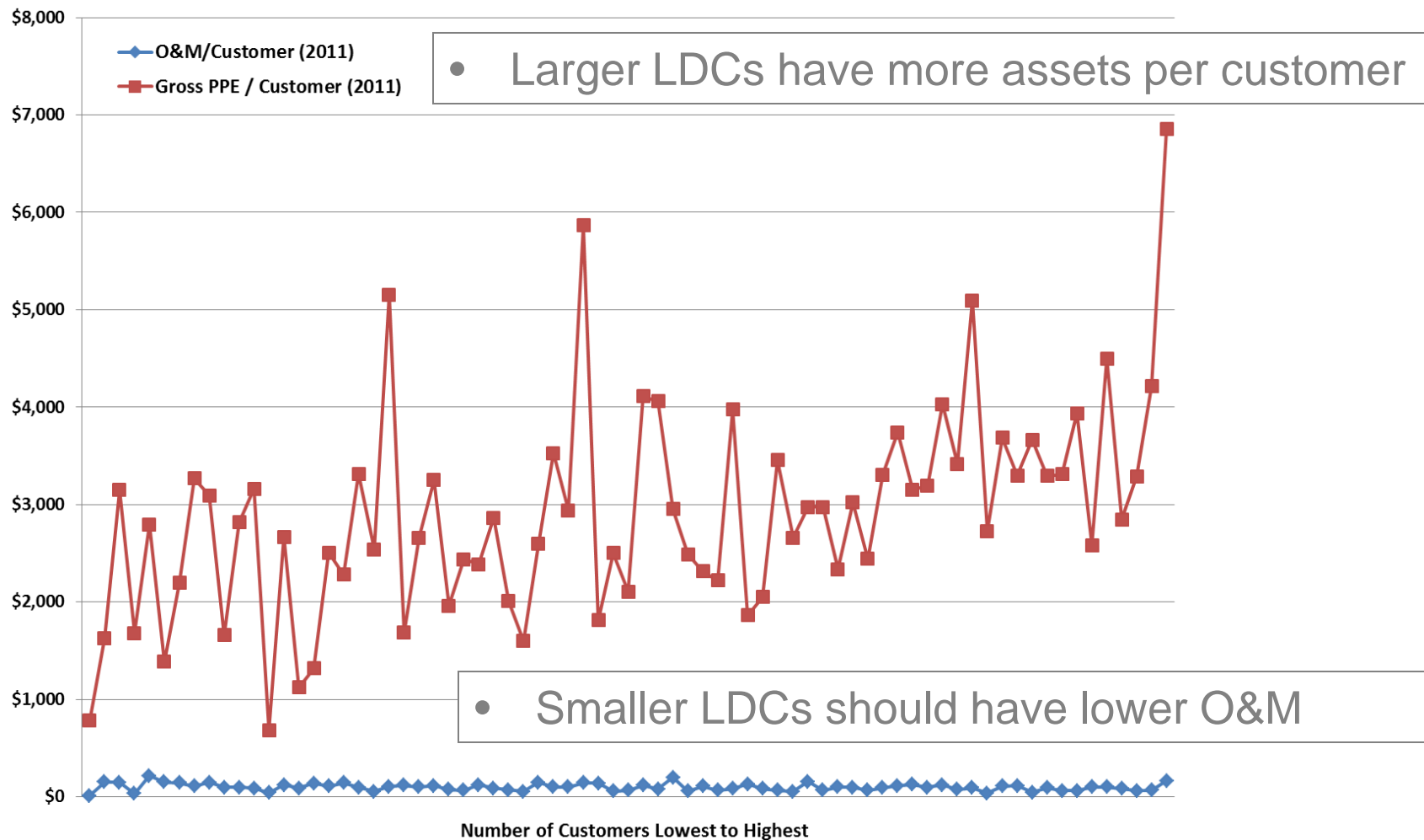
- On balance, larger LDCs are more profitable, operating with much lower costs, and a tighter band of revenue on a per customer basis



Sector OM&A, O&M, Admin. cost breakdown



LDC O&M and Gross Fixed Assets



How LDCs differ fundamentally on O&M costs

- Transmission connected LDCs have more assets per customer
 - Particularly distribution feeders and stations
 - Result is more O&M and capital work per customer
- Distribution connected LDCs have fewer assets per customer
 - Feeders and stations, in many cases, belong to the host LDC

Tx Connected LDC

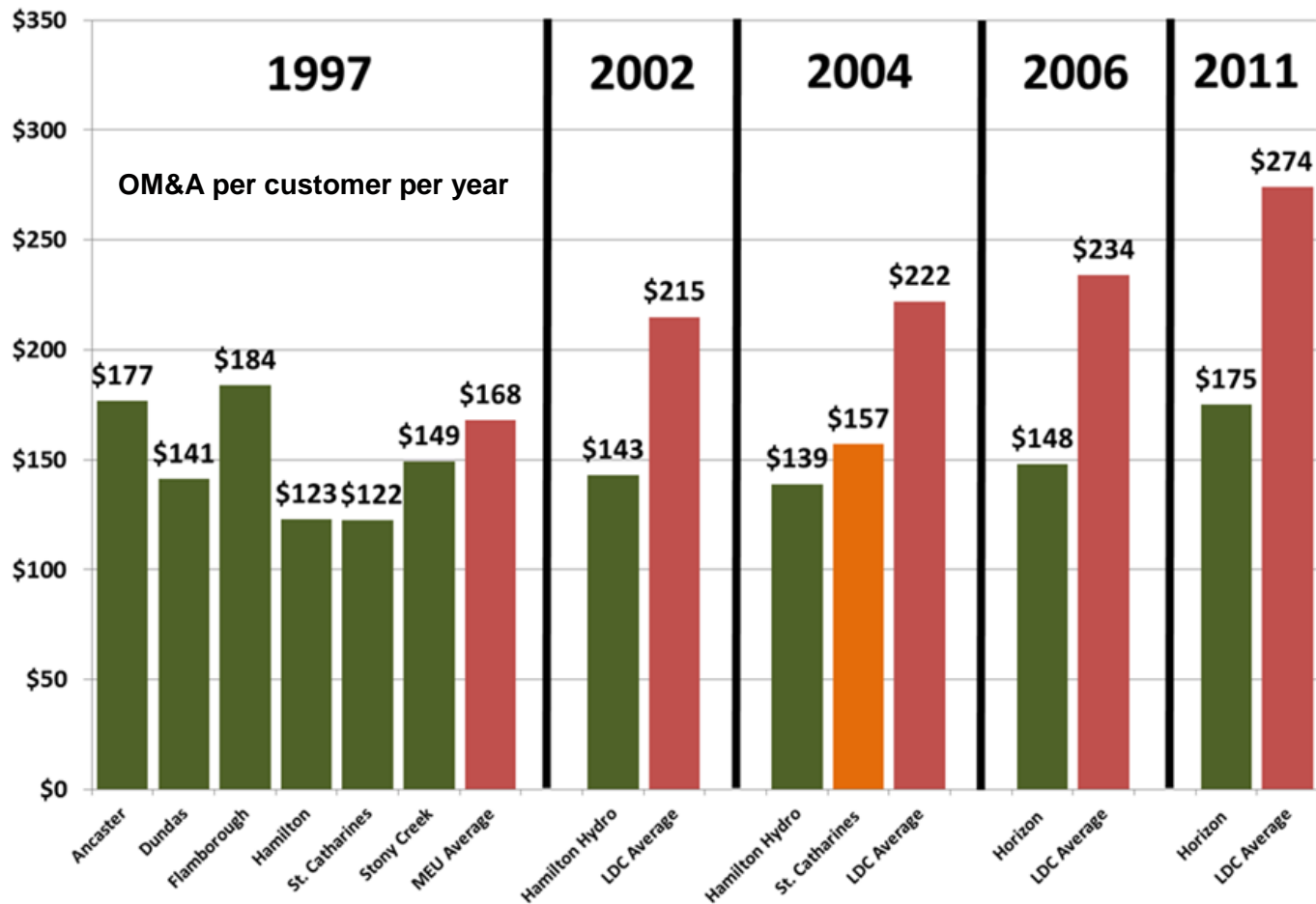


Dx Connected (embedded) LDC



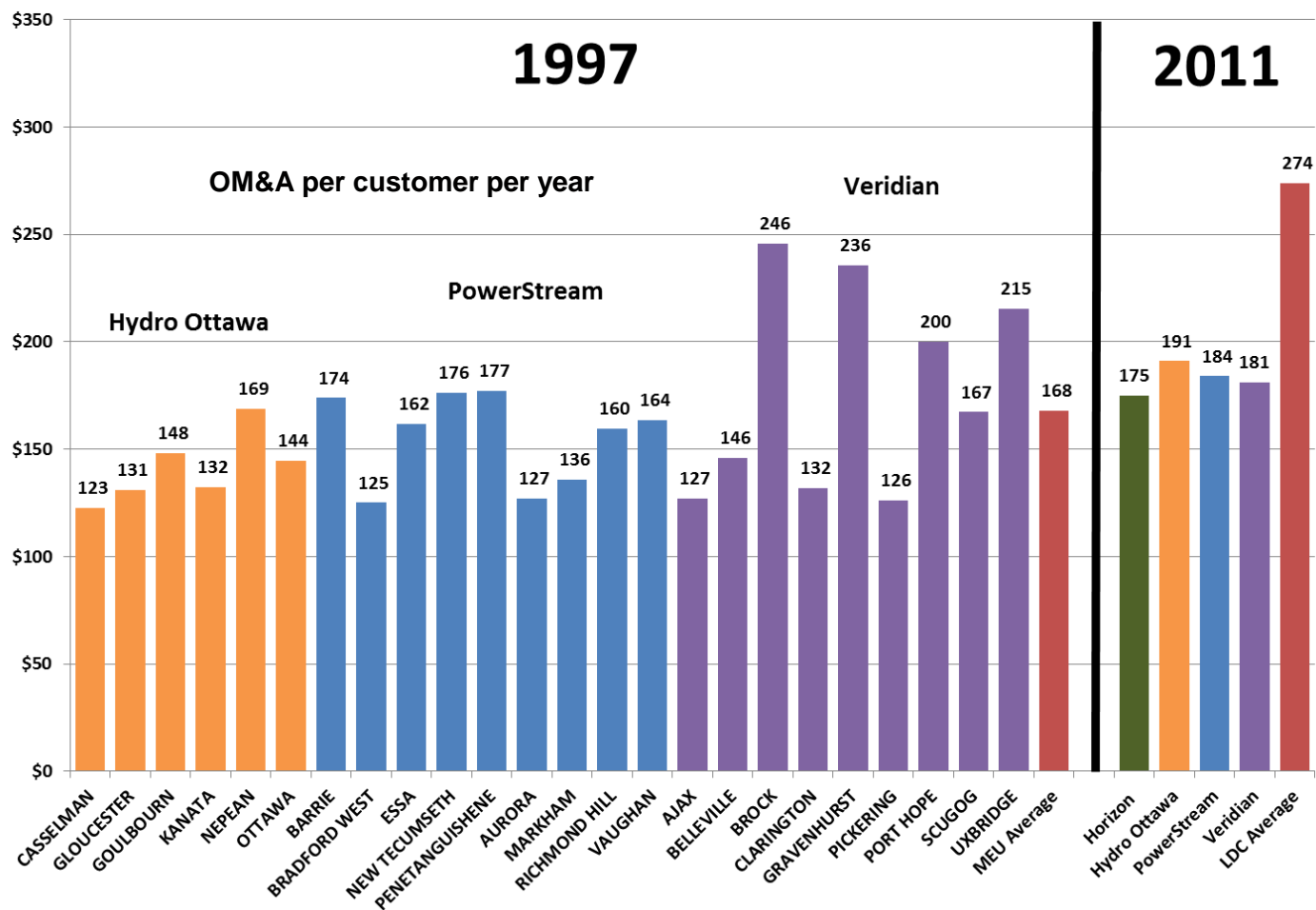
Horizon's mergers and OM&A story

- Horizon's mergers have allowed it to outperform the LDC sector

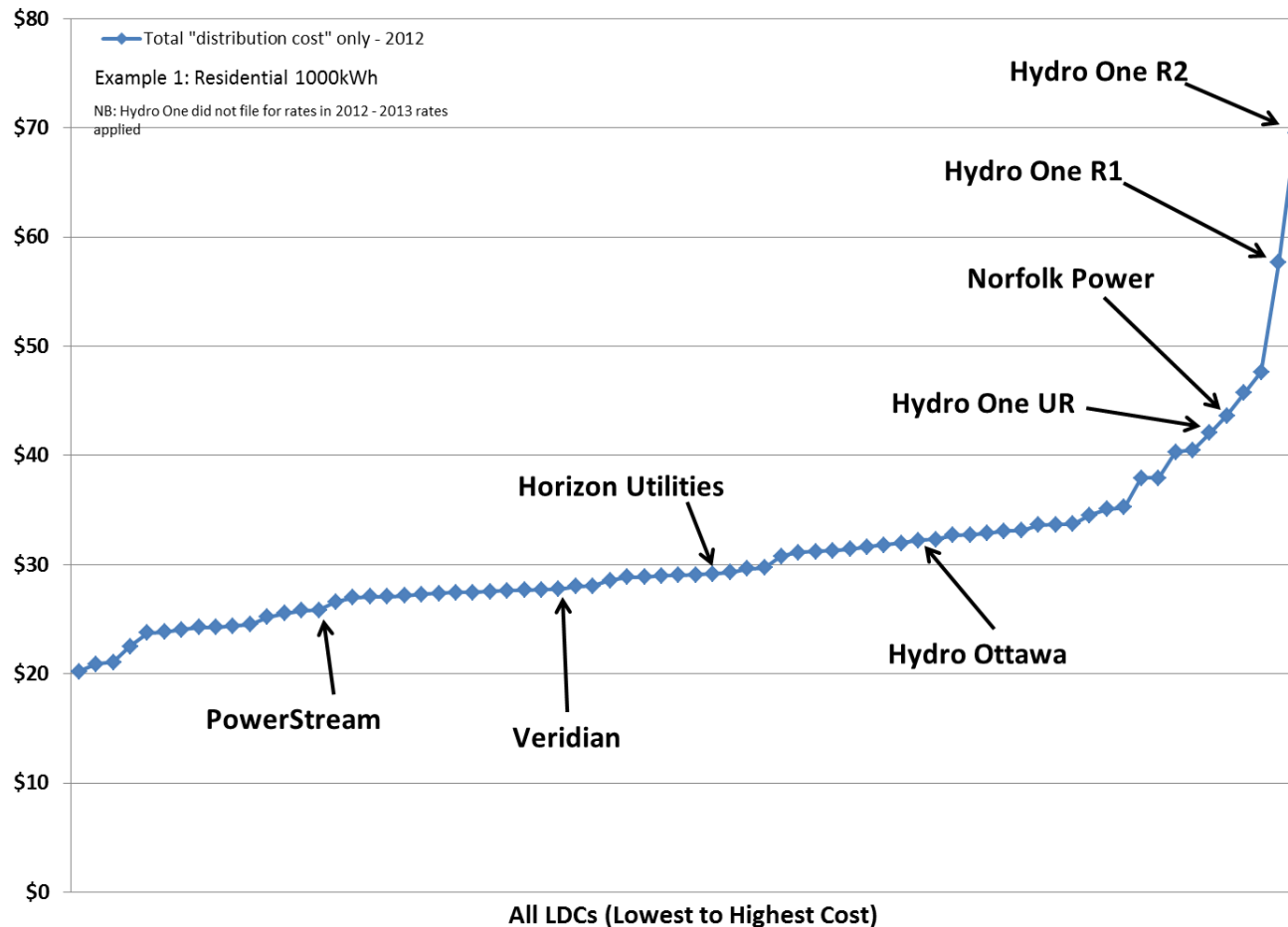


Hydro Ottawa, PowerStream, Veridian mergers and OM&A

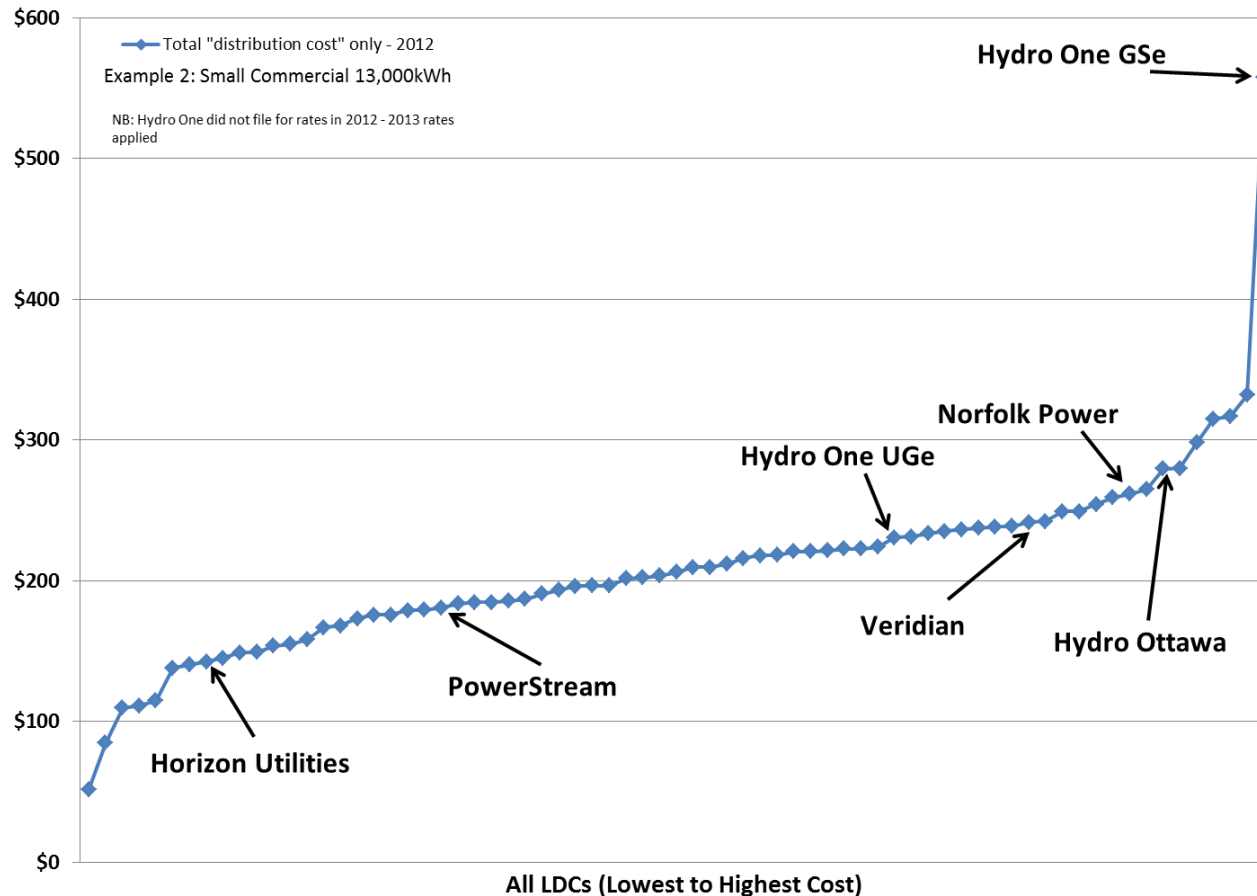
- Other large LDC mergers have also outperformed the sector



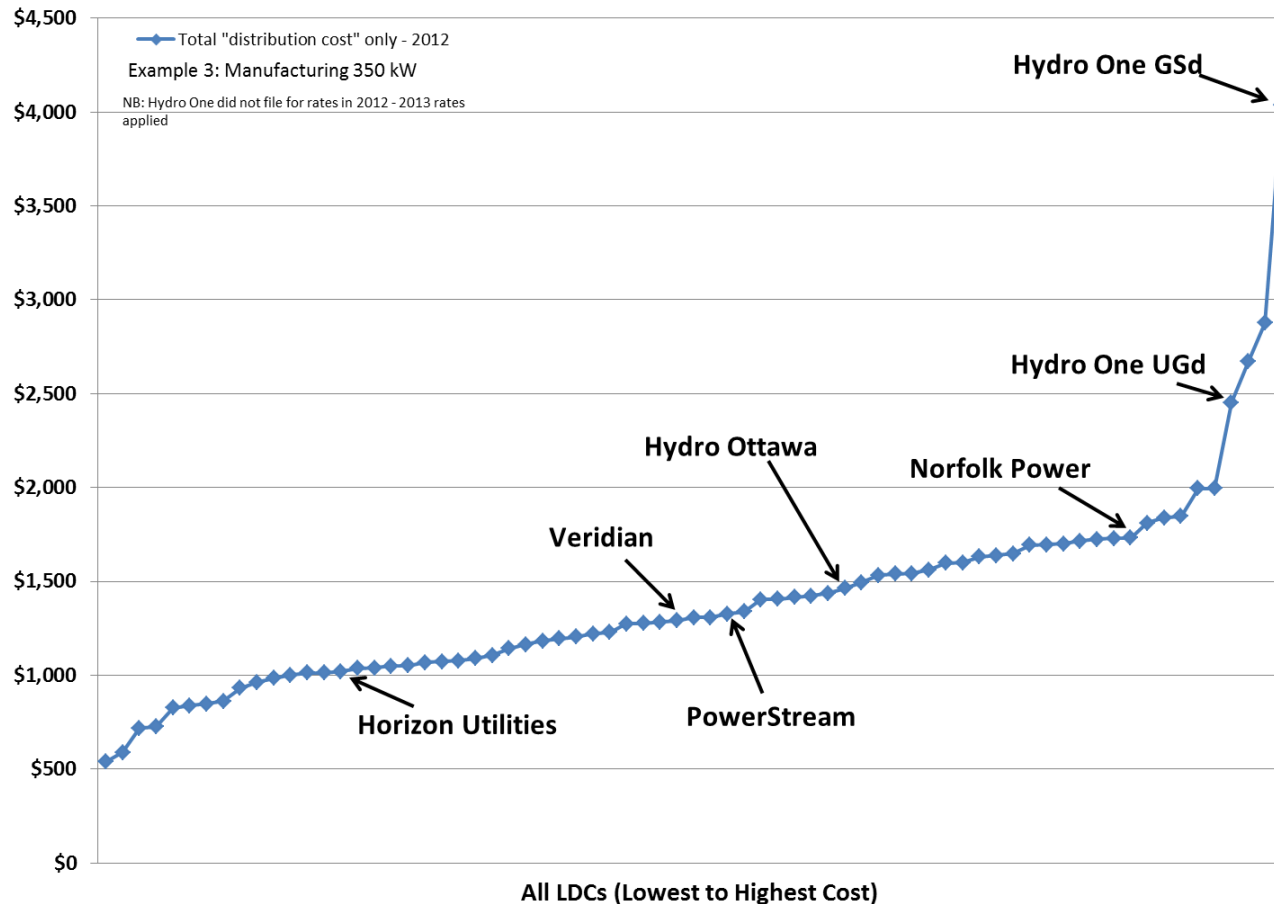
Rate comparison: residential



Rate comparison: small commercial 13,000 kWh

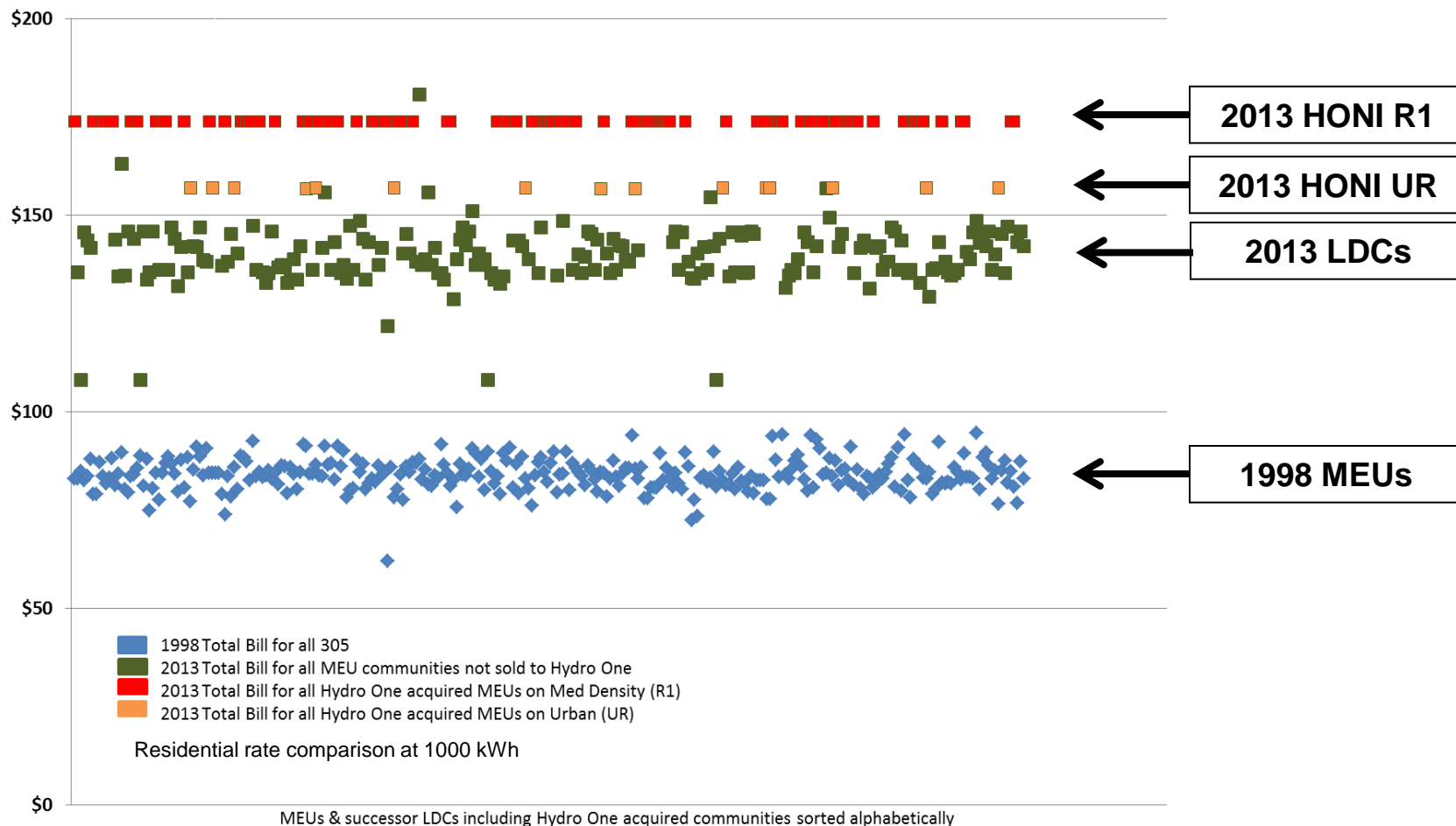


Rate comparison: manufacturing 350 kW

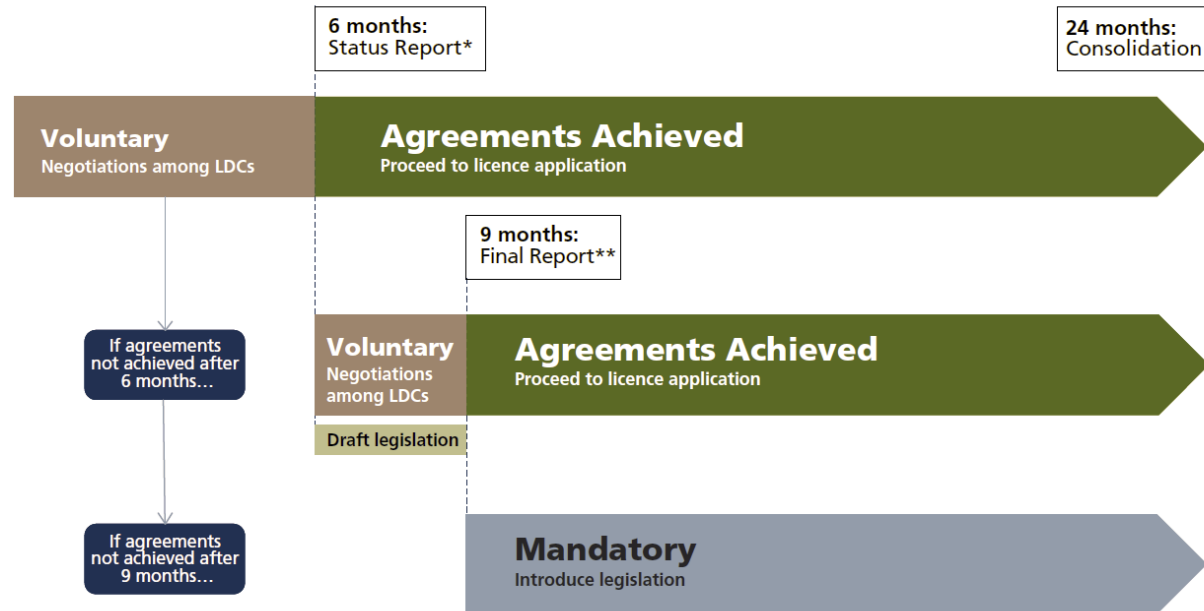


Residential bill 1998 vs. 2013 – all 305 MEUs / LDCs

- LDCs that sold to Hydro One ended up with much higher rates



ODSP – quick timeframe, hint of mandatory



* Should voluntary agreements not be arrived at by the drafting of the Status Report, the government may allow an additional 3 months of negotiations or proceed directly to mandatory consolidation. Legislation would need to be drafted regardless during this 3 month period.

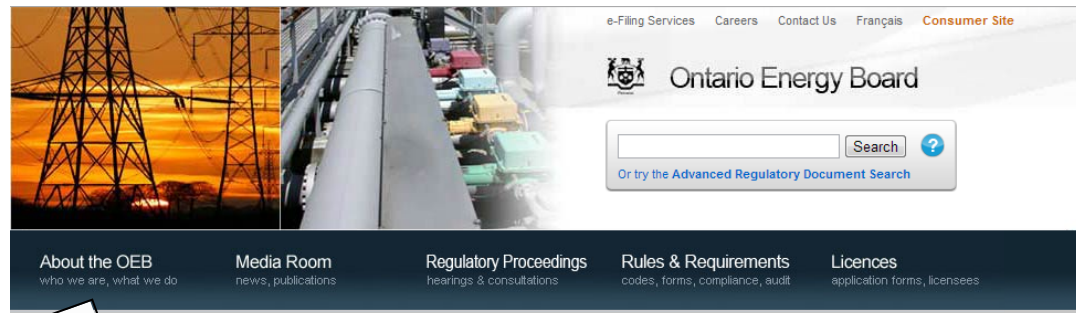
** Should voluntary agreements not be arrived at by the drafting of the Final Report, the government should proceed directly to mandatory consolidation.

- Minister now states there will be no mandatory mergers, but is interested in removing barriers to consolidation

Consolidation as Alternative Service Delivery

- Institutional and cultural barriers to amalgamation are formidable in Ontario
- Government needs a broader view of consolidation
- Objective should be “Alternative Service Delivery” or ASD, not just amalgamation
- While amalgamations are beneficial, “consolidation” should more broadly include:
 - Outsourcing to other LDCs and third-parties
 - LDC Shared Services, Cooperatives, Buying Groups, etc., and
 - Merger and Sale of LDCs
- What is missing are effective drivers for ASD

Is OEB benchmarking the driver?



HOME > Regulatory Proceedings > Policy Initiatives and Consultations > Renewed Regulatory Framework

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Defining and Measuring Performance of Electricity Transmitters and Distributors (EB-2010-0379)

On December 17, 2010, the Ontario Energy Board initiated a consultative process to address how the Board might create conditions which will foster the cost-effective and efficient implementation of Board-approved network investment plans by transmitters and distributors through the establishment of appropriate standards for performance and efficiency, the provision of appropriate incentives, and the review of utility performance.

This initiative is part of a coordinated consultative process to develop a renewed regulatory framework for electricity.

JUMP DOWN:

- [Updates](#)
- [Working Group Materials](#)

Related Information

[A Renewed Regulatory Framework for Electricity](#)

[Distribution Network Investment Planning \(EB-2010-0379\)](#)

[Approaches to Mitigate \(EB-2010-0378\)](#)

[Defining and Measuring Performance of Electricity Transmitters and Distributors \(EB-2010-0379\)](#)

[Developing Guidelines for Implementation of Ontario \(EB-2011-0411\)](#)

[Regional Planning for Infrastructure \(EB-2011-0412\)](#)

[Revenue Decisions \(EB-2012-0413\)](#)

[more...\(+\)](#)

BENCHMARKING THE COSTS OF ONTARIO POWER DISTRIBUTORS



EMPIRICAL RESEARCH IN SUPPORT OF INCENTIVE RATE SETTING IN ONTARIO: REPORT TO THE ONTARIO ENERGY BOARD

May 2011



OEB benchmarking results ranking

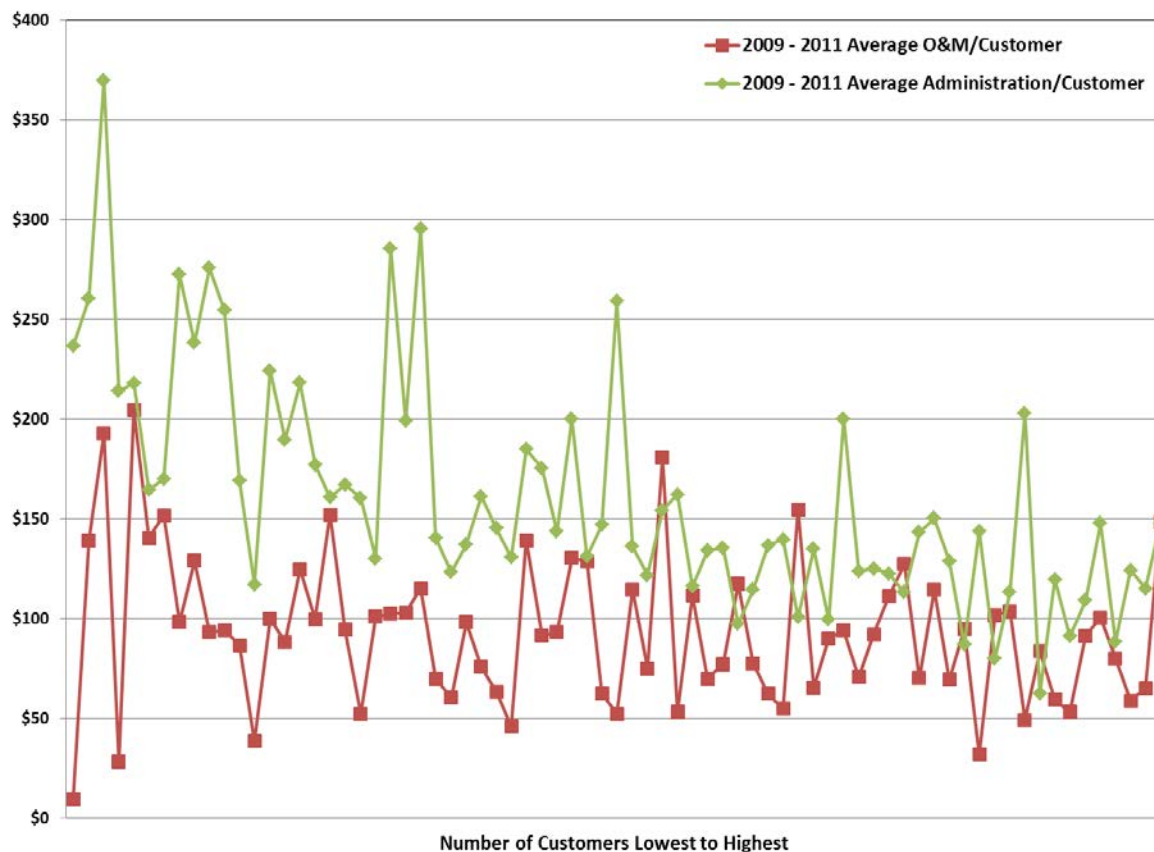
- OEB benchmarking levels the playfield for scale
 - Result is to neutralize any advantage for scale
 - Result is that framework is not a driver for LDC consolidation
- Adjusting for scale should not be a consideration

2013 Efficiency Cohort Grouping Results

Company	Cohort
Entegrus Powerlines Inc. (Chatham-Kent Hydro Inc.)	1
Festival Hydro Inc.	1
Grimsby Power Incorporated	1
Hydro Hawkesbury Inc.	1
Hydro One Brampton Networks Inc.	1
Kitchener-Wilmot Hydro Inc.	1
Entegrus Powerlines Inc. (Middlesex Power Distribution Corporation)	1
North Bay Hydro Distribution Limited	1
Northern Ontario Wires Inc.	1
Renfrew Hydro Inc.	1

Benchmarks for Admin costs – key to ASD

- Total Sector OM&A = \$1.41B; O&M = \$0.69B; Admin = \$0.72B
- Administration costs are just over 50% of sector costs



Stimulate ASD thru Admin cost benchmarks

- Despite Admin functions being largely the same for all LDCs, Administration costs have much wider cost range than O&M
- O&M differences among LDCs will always make benchmarks open to dispute
 - system configuration, geography, climate, density, etc.
- Outsourcing billing and collection services to lower cost providers has been rebuffed in all but some minor cases
- There are no current incentives or stimuli in the LDC sector to spur on consolidation through ASD
- Solution is targeted benchmarking for Admin costs
 - LDCs should be required to meet a benchmark for costs of Admin
- Administration costs are simple to understand, easy to benchmark and a readily available as a stimulus for ASD

Port Dalhousie Hydro



- LDC amalgamations are part of Ontario's electricity history
- Port Dalhousie Hydro merged with St. Catharines Hydro in 1960
- Part of Horizon Utilities since 2005
- LDC amalgamations have been good for customers, shareholders and communities

1-SEC-7_Attch 14_Presentation to the OEB Working Group on Benchmarking (2013-02-14 version v6)

**1-SEC-7_Attch 14_Presentation to the OEB Working Group on
Benchmarking (2013-02-14 version v6)**

1-SEC-7_Attch 14_Presentation to the OEB Working Group on Benchmarking (2013-02-14 version v6)

CEIRM's Benchmarking Submission to 3GIRM Consultation 2008

Presentation to the OEB Working Group
on Benchmarking

January 21, 2013

About the CEIRM submission

- 22 LDCs representing 51% of then 4.6 million customers
 - 69% of all customers not including Hydro One
- Cross-section of LDC diversity
 - small and large
 - northern and southern
 - urban, suburban and rural
- LDCs that support IRM principles
 - Seeking IRM that works with effectiveness and fairness
 - Forwarding practical and workable recommendations
- 9 recommendations across three issues
 - Level playing field
 - Meaningful peer groups
 - Data quality and assurance

3rd GIRM – how it works for LDCs

Updated Performance Rankings Based on Econometric Benchmarks (26% allocation for LV charges divided by 2.35)

Years Benchmarked	Actual/Projected ¹	Deviation Percentage (A-1)	P-Value	Rank ²
Hydro One	0.848	-0.363	0.001	1
Chatham-Kent Hydro	0.780	-0.300	0.001	2
Northern Ontario Wines	0.712	-0.286	0.001	3
Cambridge and North Dumfries Hydro	0.716	-0.286	0.001	4
E. L.K. Energy	0.743	-0.287	0.004	5
Grimsby Power	0.759	-0.341	0.066	6
Chesapeake Bay Electric System	0.781	-0.219	0.013	7
Hydro One Brampton Networks	0.778	-0.288	0.017	8
Chesapeake Bay Electric System	0.803	-0.197	0.024	9
Chesapeake Bay Electric System	0.894	-0.196	0.024	10
Hydro One	0.810	-0.190	0.028	11
Hydro One	0.822	-0.189	0.028	12
Burns Hydro Distribution	0.826	-0.174	0.042	13
Chesapeake Bay Electric System	0.829	-0.171	0.043	14
Chesapeake Bay Electric System	0.865	-0.156	0.064	15
Chesapeake Bay Electric System	0.885	-0.134	0.066	16
Hydro One	0.870	-0.130	0.103	17
Hydro One	0.876	-0.124	0.114	18
Waterloo North Hydro	0.877	-0.123	0.117	19
Niagara-on-the-Lake Hydro	0.880	-0.120	0.123	20
Peninsula West Utilities	0.886	-0.114	0.136	21
Leamington Utilities	0.888	-0.112	0.141	22
Kenora Hydro Electric	0.895	-0.105	0.157	23
Rideau St. Lawrence Distribution	0.907	-0.096	0.167	24
Albion Hydro	0.908	-0.191	0.25	25
North Bay Hydro Distribution	0.914	-0.085	0.268	26
Inland Hydro Distribution Systems	0.915	-0.085	0.269	27
Pelee Hydro Distribution	0.918	-0.082	0.279	28
Huron Hydro	0.919	-0.082	0.279	29
Newmarket & Tay Hydro Electric	0.926	-0.074	0.342	30
Heard Power Distribution	0.929	-0.070	0.359	31
Georgian Hydro	0.949	-0.049	0.371	32
Essex Regional Hydro Distribution	0.950	-0.040	0.366	33
West Perth Power	0.962	-0.038	0.362	34
Chesapeake Bay Electric System	0.962	-0.038	0.364	35
Chesapeake Bay Electric System	0.966	-0.034	0.377	36
Waterloo North Hydro	0.968	-0.030	0.384	37
Waterloo North Hydro	0.970	-0.029	0.391	38
Waterloo North Hydro	0.980	-0.014	0.448	39
Veridian Connections	0.991	0.001	0.496	40
Tillamook Hydro	1.002	0.002	0.491	41
Burlington Hydro	1.006	0.006	0.478	42
Hydro One Networks	1.007	0.007	0.476	43
Brantford Power	1.008	0.008	0.472	44
Haldimand County Hydro	1.010	0.010	0.463	45
Toronto Hydro Electric System	1.015	0.015	0.465	46
Lancaster Hydro	1.026	0.026	0.409	47
Whitby Power	1.027	0.027	0.406	48
Woodstock Hydro Services	1.027	0.027	0.403	49
Milton Hydro Distribution	1.040	0.040	0.361	50
St. Thomas Energy	1.041	0.041	0.364	51
Waterloo Power Distribution	1.048	0.048	0.334	52
Bluelwater Power Distribution	1.049	0.049	0.333	53
Thunder Bay Hydro Electric Distribution	1.050	0.050	0.328	54
Grand Valley Energy	1.051	0.051	0.327	55
Chesapeake Bay Electric System	1.051	0.051	0.326	56
West Perth Power	1.062	0.062	0.292	57
Cooperative Hydro Embury	1.064	0.064	0.295	58
Perry Sound Power	1.065	0.065	0.295	59
Okaville Hydro Electric Distribution	1.077	0.077	0.251	60
Brant County Power	1.078	0.078	0.247	61
St. Thomas Energy	1.080	0.080	0.244	62
COLLUS Power	1.084	0.084	0.232	63
Orillia Power Distribution	1.093	0.093	0.210	64
Dutton Hydro	1.096	0.096	0.201	65
Clinton Power	1.103	0.103	0.186	66
Fort Erie (CNF)	1.107	0.107	0.178	67
PowerStream	1.121	0.121	0.151	68
St. Thomas Energy	1.121	0.121	0.151	69
Greater Sudbury West Nipissing	1.124	0.124	0.145	70
Chesapeake Bay Electric System	1.144	0.144	0.139	71
Chesapeake Bay Electric System	1.144	0.144	0.139	72
Eastern Ontario Power (CNP)	1.158	0.158	0.082	73
Niagara Falls Hydro	1.175	0.175	0.072	74
Ontario Wellington Hydro	1.191	0.191	0.066	75
Midland Power Lines	1.211	0.211	0.041	76
EWNN Powerlines	1.222	0.222	0.029	77
Essex Powerlines	1.237	0.237	0.019	78
Hydro One Electric	1.269	0.269	0.014	79
Chesapeake Bay Electric System	1.310	0.310	0.007	80
West Coast Hydro Energy	1.363	0.363	0.003	81
Erie Thames Powerlines	1.373	0.373	0.002	82
Great Lakes Power	1.412	0.412	0.001	83
Port Colborne (CNP)	1.552	0.552	0.000	84

Updated Performance Rankings Based on Unit Cost Indexes (26% allocation for LV charges divided by 2.35)

Average / Group Average ¹ [A]	Percentage Differences ¹ [A - 1]	Efficiency Ranking ¹
Hydro One	0.299	-80.1%
Chatham-Kent Hydro	0.592	-40.8%
Lakemore Hydro	0.610	-39.0%
Chesapeake Bay Electric System	0.728	-27.2%
Hydro One Brampton Networks	0.741	-25.5%
Barrie Hydro Distribution	0.759	-25.0%
Hydro One	0.760	-24.0%
Hydro One	0.762	-23.8%
Festval Hydro	0.771	-22.5%
Northern Ontario Wines	0.772	-22.8%
Cambridge and North Dumfries Hydro	0.791	-20.5%
Perry Sound Power	0.796	-20.4%
Heard Power Distribution	0.799	-20.1%
E.L.K. Energy	0.804	-19.8%
Fort Frances Power	0.820	-18.0%
Midwest Power Distribution	0.826	-18.4%
Essex Regional Hydro Distribution	0.838	-15.2%
Wallingford North Power	0.846	-15.4%
Kitchener-Windermere Hydro	0.848	-15.2%
Rideau St. Lawrence Distribution	0.851	-14.8%
Grimsby Power	0.872	-12.8%
St. Lawrence Hydro	0.880	-12.0%
Peterborough Distribution	0.891	-10.5%
Drum County Power	0.894	-11.0%
Kingston Electricity Distribution	0.885	-11.4%
Orangeville Hydro	0.897	-10.3%
Norfolk Power Distribution	0.892	-10.8%
Wallingford North Hydro	0.897	-10.3%
North Bay Hydro Distribution	0.906	-9.4%
Peninsula West Utilities	0.910	-9.3%
Mulford Power Utility	0.927	-7.3%
West Perth Power	0.927	-7.3%
Brantford Hydro Distribution Systems	0.930	-7.0%
Niagara-on-the-Lake Hydro	0.934	-6.2%
Veridian Connections	0.944	-5.8%
Chesapeake Bay Electric System	0.949	-5.3%
PUC Distribution	0.969	-3.1%
Waterloo North Hydro	0.971	-2.8%
Waltham Hydro Electric Systems	0.974	-2.5%
Thunder Bay Hydro Electric Distribution	0.974	-2.8%
Toronto Hydro Electric System	0.981	-1.9%
Essex Regional Hydro Distribution	0.983	-1.7%
Woodstock Hydro Services	0.988	-1.2%
Chesapeake Bay Electric System	0.993	-0.7%
Chesapeake Bay Electric System	0.997	-0.3%
Milton Hydro Distribution	1.014	1.4%
COLLUS Power	1.015	1.5%
Tillamook Hydro	1.024	2.4%
Waterloo Power	1.030	3.0%
PowerStream	1.038	3.8%
Albion Hydro	1.049	4.9%
St. Thomas Energy	1.054	5.4%
Burlington Hydro	1.065	6.5%
Okaville Hydro Electric Distribution	1.066	6.6%
Haldimand County Hydro	1.069	6.9%
Ottawa River Power	1.071	7.1%
Niagara-on-the-Lake Hydro	1.077	7.7%
London Hydro	1.083	8.3%
Buvelwater Power Distribution	1.087	8.7%
Brantford Power	1.096	9.6%
Centre Wellington Hydro	1.114	11.4%
Clinton Power	1.115	11.5%
Niagara Falls Hydro	1.121	12.1%
Waterloo Power	1.127	12.7%
Essex Regional Hydro Distribution	1.140	14.0%
Wallingford North Hydro	1.142	14.2%
Korona Hydro Electric	1.147	14.7%
West Coast Hydro Energy	1.149	14.9%
Greater Sudbury Hydro & West Nipissing	1.151	15.1%
Essex Powerlines	1.167	16.7%
Huron Hills Hydro	1.181	18.1%
Cooperative Hydro Embury	1.190	19.0%
Fort Erie	1.206	20.6%
Whitby Hydro Electric	1.221	22.1%
Eastern Ontario Power	1.234	23.4%
Chesapeake Bay Electric System	1.237	23.7%
Dutton Hydro	1.269	26.9%
EWNN Powerlines	1.315	31.5%
Erie Thames Powerlines	1.420	42.0%
Grand Valley Energy	1.459	45.9%
Port Colborne	1.531	53.1%
Great Lakes Power	2.016	101.6%

Stretch Factor Results: 2007 Data Update (26% allocation of LV charges divided by 2.35)

Company	Group	Stretch Factor
Hydro One	1	0.20%
Chatham-Kent Hydro	1	0.20%
Northern Ontario Wines	1	0.20%
Cambridge and North Dumfries Hydro	1	0.20%
E.L.K. Energy	1	0.20%
Hydro One Brampton Networks	1	0.20%
Niagara-on-the-Lake Hydro	1	0.20%
Barrie Hydro Distribution	1	0.20%
Grimsby Power	2	0.40%
Chesapeake Bay Electric System	2	0.40%
Essex Regional Hydro Distribution	2	0.40%
Wallingford North Hydro	2	0.40%
Kingston Electricity Distribution	2	0.40%
Hydro One	2	0.40%
Hydro One	2	0.40%
Waterloo North Hydro	2	0.40%
Niagara-on-the-Lake Hydro	2	0.40%
Peninsula West Utilities	2	0.40%
Lakemore Hydro	2	0.40%
Korona Hydro Electric	2	0.40%
Rideau St. Lawrence Distribution	2	0.40%
Albion Hydro	2	0.40%
North Bay Hydro Distribution	2	0.40%
Inland Hydro Distribution Systems	2	0.40%
Peterborough Distribution	2	0.40%
Huron Hills Hydro	2	0.40%
Newmarket & Tay Hydro Electric	2	0.40%
Heard Power Distribution	2	0.40%
Orangeville Hydro	2	0.40%
Essex Regional Hydro Distribution	2	0.40%
Wallingford North Power	2	0.40%
PUC Distribution	2	0.40%
Chesapeake Bay Electric System	2	0.40%
Midwest Power Distribution	2	0.40%
Newark Power	2	0.40%
Wassaig Distribution	2	0.40%
Veridian Connections	2	0.40%
Tillamook Hydro	2	0.40%
Burlington Hydro	2	0.40%
Hydro One Networks	2	0.40%
Brantford Power	2	0.40%
Haldimand County Hydro	2	0.40%
Toronto Hydro Electric System	2	0.40%
London Hydro	2	0.40%
Waterloo Power	2	0.40%
Woodstock Hydro Services	2	0.40%
Milton Hydro Distribution	2	0.40%
Norfolk Power Distribution	2	0.40%
Bluelwater Power Distribution	2	0.40%
Thunder Bay Hydro Electric Distribution	2	0.40%
Grand Valley Energy	2	0.40%
Ottawa River Power	2	0.40%
West Perth Power	2	0.40%
Cooperative Hydro Embury	2	0.40%
Perry Sound Power	2	0.40%
Okaville Hydro Electric Distribution	2	0.40%
Brant County Power	2	0.40%
St. Thomas Energy	2	0.40%
COLLUS Power	2	0.40%
Orillia Power Distribution	2	0.40%
Dutton Hydro	2	0.40%
Clinton Power	2	0.40%
Fort Erie (CNF)	2	0.40%
PowerStream	2	0.40%
St. Lawrence Hydro	2	0.40%
Greater Sudbury West Nipissing	2	0.40%
Essex Regional Hydro Distribution	2	0.40%
Chesapeake Bay Electric System	2	0.40%
Fort Frances Power	2	0.40%
Centre Wellington Hydro	2	0.40%
Midland Power Utility	2	0.40%
Eastern Ontario Power (CNP)	3	0.60%
Niagara Falls Hydro	3	0.60%
EWNN Powerlines	3	0.60%
Essex Powerlines	3	0.60%
Whitby Hydro Electric	3	0.60%
Chesapeake Bay Electric System	3	0.60%
West Coast Hydro Energy	3	0.60%
Erie Thames Powerlines	3	0.60%
Grand Valley Energy	3	0.60%
Port Colborne (CNP)	3	0.60%

Source: PEG, "Sensitivity Analysis on Efficiency Ranking and Cohorts for the 2009 Rate Year: Update", Dec. 3, 2008.

Recommendations: Level Playing Field

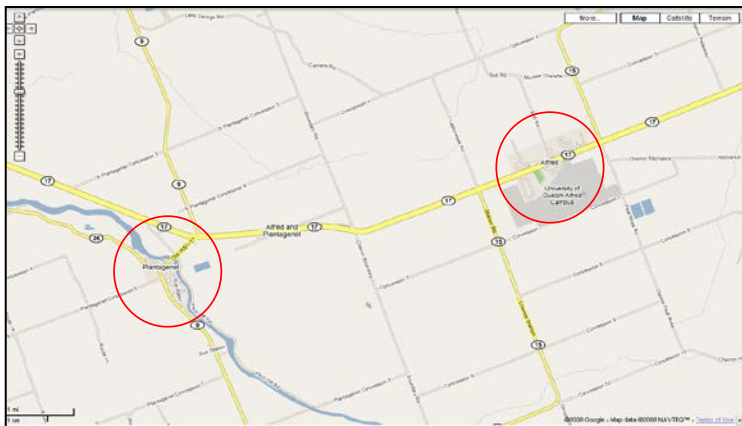
1. Treatment of LV costs
2. Exclusion of LDC HV costs
3. Recognition of Capital in benchmarking

Connection configurations

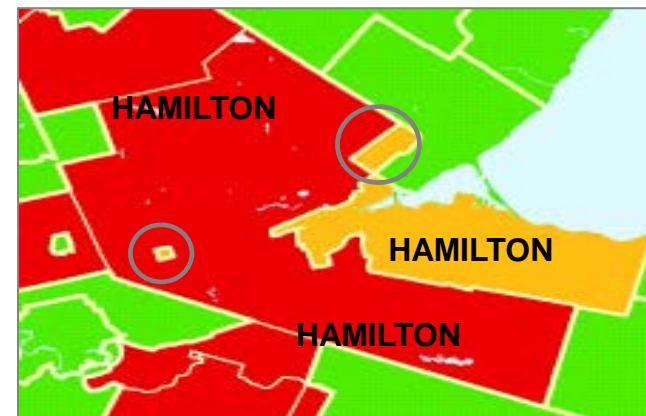
- Connected exclusively at transmission voltages and thereby own sub-transmission assets
- Connected at transmission voltages that also own transmission assets in the LDC
- Exclusively embedded in a host distributor, where the host distributor owns the sub-transmission or low voltage (LV) assets
- Partly embedded in a host distributor
- Permutations of the above, such as embedded distributors that not only have transmission connections, but also own transmission stations

70 of 83 LDCs pay LV to a “host” LDC

Hydro 2000



Horizon Utilities



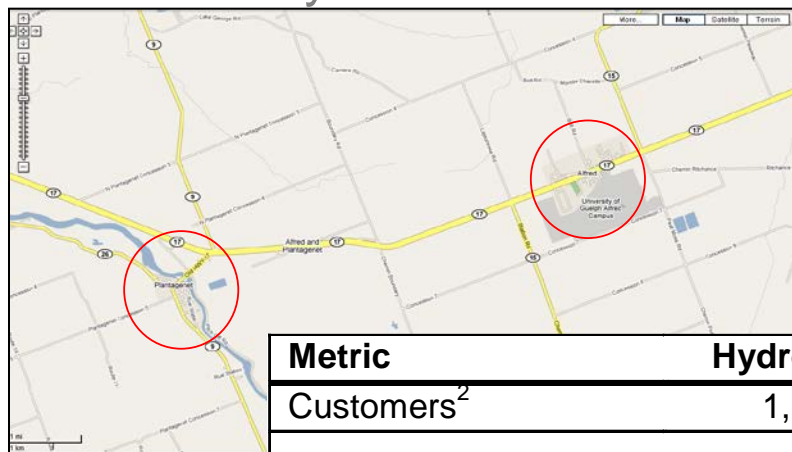
NB: Circles represent “embedded” territories

Updated Performance Rankings Based on Econometric Benchmarks

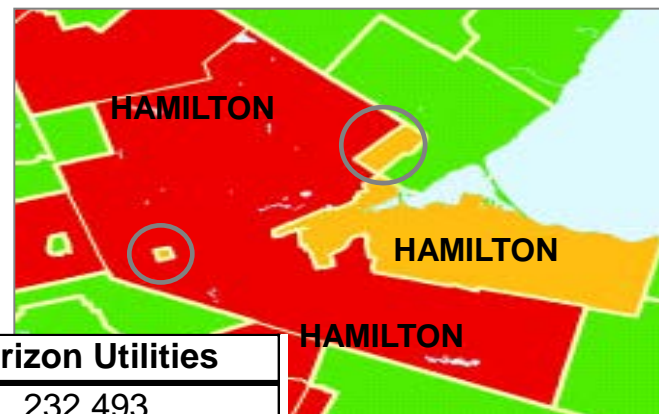
	Years Benchmarked	Actual/Predicted ¹	Deviation Percentage [A-1] ¹	P-Value	Cost surplus (savings) in \$ ¹	Rank ¹
Hydro Hawkesbury	2005-2007	0.643	-0.357	0.000	-418,444	1
Chatham-Kent Hydro	2005-2007	0.691	-0.309	0.001	-2,313,018	2
Northern Ontario Wires	2005-2007	0.711	-0.289	0.001	-705,028	3
Cambridge and North Dumfries Hydro	2005-2007	0.715	-0.285	0.002	-3,034,920	4
E.L.K. Energy	2005-2007	0.729	-0.271	0.003	-801,804	5
Grimsby Power	2005-2007	0.764	-0.236	0.006	-478,794	6
Oshawa PUC Networks	2005-2007	0.787	-0.213	0.017	-2,221,026	7
Lakeland Power Distribution	2005-2007	0.789	-0.211	0.018	-669,491	8
Hydro One Brampton Networks	2005-2007	0.793	-0.207	0.020	-4,101,822	9
Kitchener-Wilmot Hydro	2005-2007	0.805	-0.195	0.027	-2,939,410	10
Renfrew Hydro	2005-2007	0.807	-0.193	0.028	-199,649	11
Barrie Hydro Distribution	2005-2007	0.814	-0.186	0.034	-1,850,692	12
Festival Hydro	2005-2007	0.822	-0.178	0.041	-760,153	13
Welland Hydro-Electric System	2005-2007	0.834	-0.166	0.054	-773,256	14
Hydro 2000	2005-2007	0.840	-0.160	0.060	-45,934	15
Kingston Electricity Distribution	2005-2007	0.860	-0.140	0.090	-811,765	16
Horizon Utilities	2005-2007	0.864	-0.136	0.098	-5,920,789	17
Hydro Ottawa	2005-2007	0.873	-0.127	0.113	-8,195,021	18
Lakefront Utilities	2005-2007	0.874	-0.126	0.115	-261,407	19

LDC benchmarking requires LV for comparison

Hydro 2000



Horizon Utilities



Metric	Hydro 2000	Horizon Utilities
Customers ²	1,159	232,493
Rate Base ¹	\$735,075	\$362,942,366
Net PPE ²	\$375,075	\$301,539,366
Rate Base / Customer	\$634	\$1,561
Net PPE / Customer	\$324	\$1,297
O&M ²	\$15,268	\$12,578,876
Administration ²	\$217,311	\$24,425,794 ²
OM&A ²	\$232,579	\$37,004,670
LV Costs	\$106,241 ¹	\$128,811
OMA + LV	\$338,820	\$37,133,481
OM&A / Customer	\$201	\$159
OM&A + LV / Cust.	\$292	\$160

NB: Circles represent embedded territories

¹ 2008 EDR Decisions, ² 2007 OEB RRR filings.

Hydro 2000 and Horizon both “superior” performers

\$/cust./year LDC	Operation and Maintenance			OM&A		
	2005	2006	2007	2005	2006	2007
Hydro 2000	3	4	13	121	192	201
Horizon	56	53	54	165	148	159
LDC Average	84	92	92	225	247	249

Blue = Hydro 2000’s “under-build” wires

Red = Hydro One’s pole and “primary” wires



Alfred Meter Point

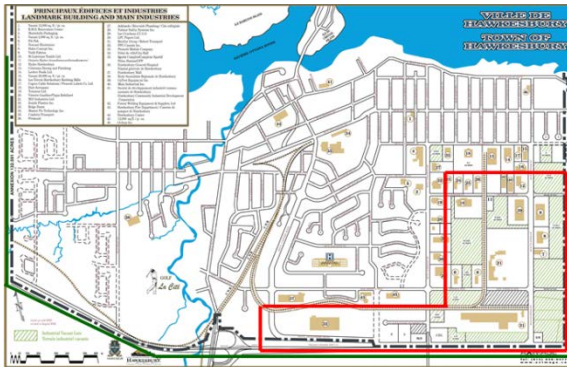


HONI Plantagenet DS



Two small LDCs – LV and HV connected comparison

LV – Hawkesbury Hydro



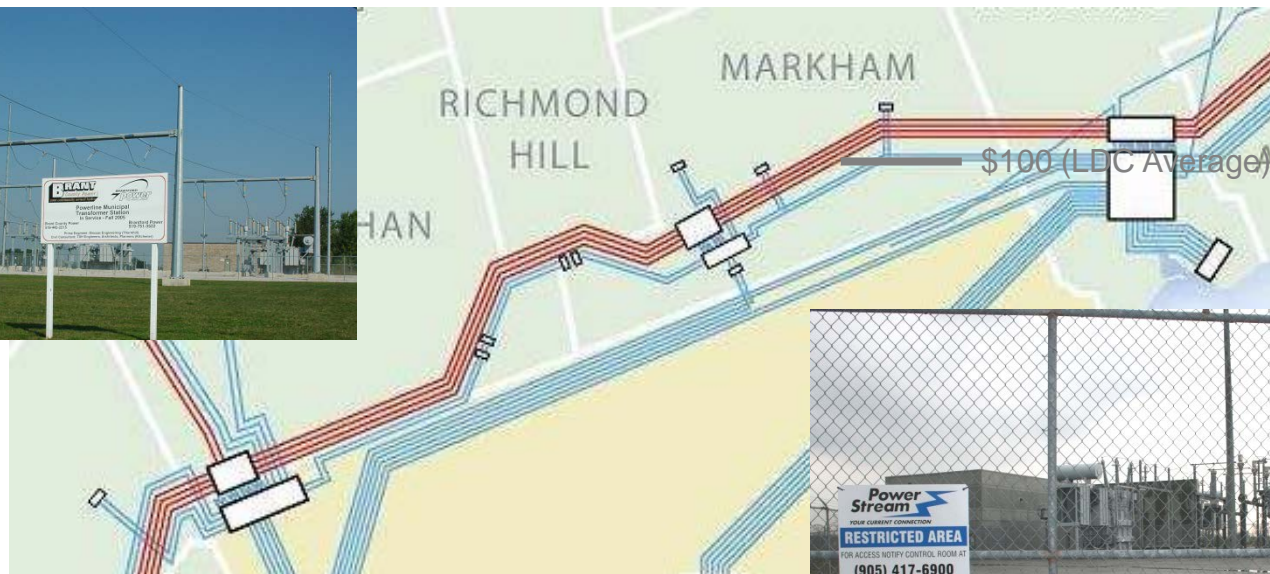
HV – Tillsonburg Hydro



Metric (2007 Yearbook)	Hydro Hawkesbury	Tillsonburg Hydro
Customers	5,428	6,571
Gross PPE	\$3,096,612	\$13,042,205
Net PPE	\$1,921,495	\$5,917,911
Gross PPE / customer	\$570	\$1,985
Net PPE / customer	\$354	\$901
OM&A / customer	\$142	\$247
O&M / Customer	\$42	\$122
Admin. / Customer	\$100	\$125
kWh billed per customer:		
Residential	11,812	8,865
GS < 50 kW	38,912	37,836
GS > 50 kW & LU	1,536,631	1,465,508

Source: 2007 OEB Yearbook

19 of 83 LDC own HV assets in their LDC*



Top 5 LDCs	\$ Assets of HV	HV % in LDC
Kitchener-Wilmot Hydro	\$37,975,643	28%
Niagara-on-the-Lake Hydro	\$5,181,654	27%
Waterloo North Hydro	\$21,208,072	23%
Kenora Hydro	\$1,544,361	20%
PowerStream Inc.	\$88,054,589	19%

* The 18 are: Brant County Power, Brantford Power, Cambridge & North Dumfries Hydro, Enwin, Hydro Hawkesbury, Hydro One Brampton Networks, Hydro One Networks Inc., Hydro Ottawa, Kenora Hydro, Kitchener-Wilmot Hydro, Niagara Falls Hydro, Niagara-on-the-Lake Hydro, Norfolk Power, Northern Ontario Wires, PUC Distribution, PowerStream, Toronto Hydro, Waterloo North Hydro.

Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Options and assumptions in LV determination

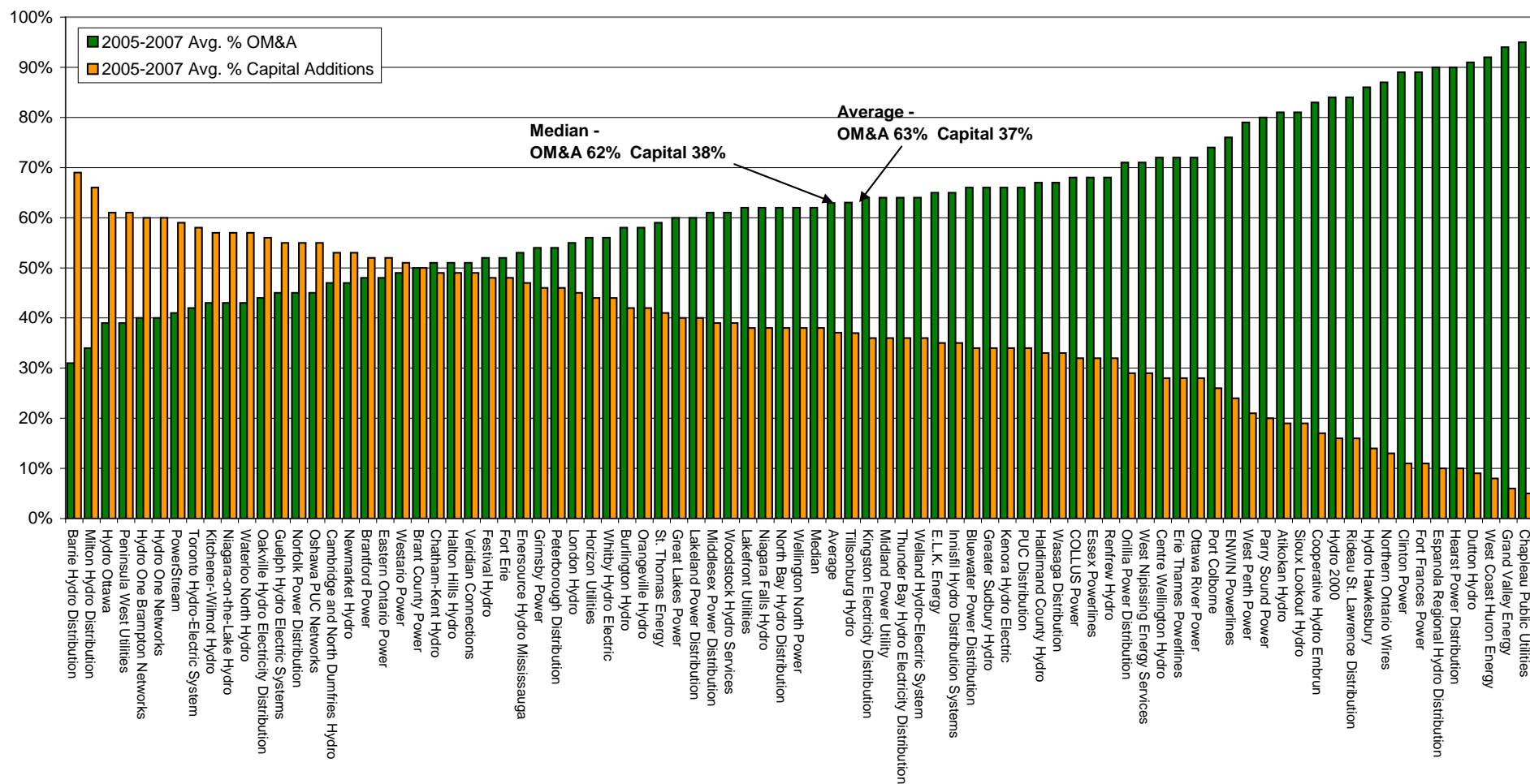
Assumptions:	OM&A	OM&A w/ 1.3 cost allocation	O&M w/ 1.3 cost allocation	O&M w/ 2.35 cost allocation
Proxy LV Payment	\$100,000	\$100,000	\$100,000	\$100,000
Capital (52%)	\$52,000	\$52,000	\$52,000	\$52,000
OM&A portion (48%)	\$48,000	\$48,000	\$48,000	\$48,000
Admin (22%)	\$22,000	\$22,000	\$22,000	\$22,000
O&M portion (26%)	\$26,000	\$26,000	\$26,000	\$26,000
LV adjustment w/ Cost Allocation:				
• OM&A	\$48,000			
• OM&A / 1.3 ¹		\$36,923		
• O&M / 1.3			\$20,000	
• O&M / 2.35 ²				\$11,064

Notes: ¹ 1.3 is the cost allocation for Hydro One's LV class within the ST class. ² 2.3 represents cost allocation for Hydro One's ST class of customers, which includes LV.

(Source: http://www.hydroonenetworks.com/en/regulatory/2008_distribution_rate_application/Dx_Rate_Filing/Exhibit_G1_Cost_Allocation_and_Rate_Design/Tab_7_Schedule_3_Bill_Impacts_Sub-Transmission_Customers.pdf)

Treatment of capital in IRM

(Figure 3 of submission)

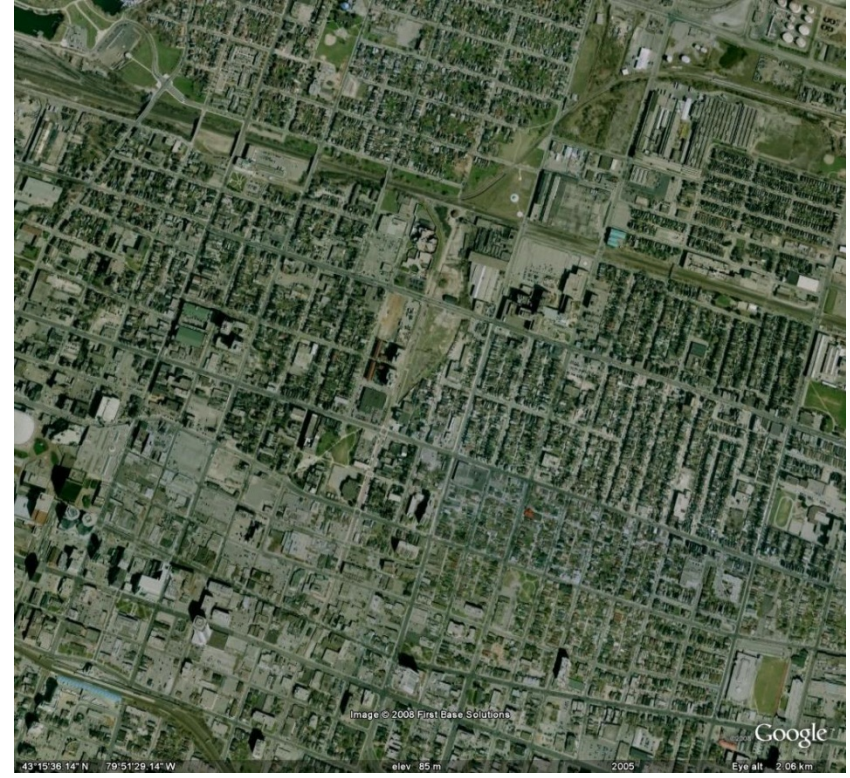


Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

OM&A-based IRM and lifecycle of LDC capital



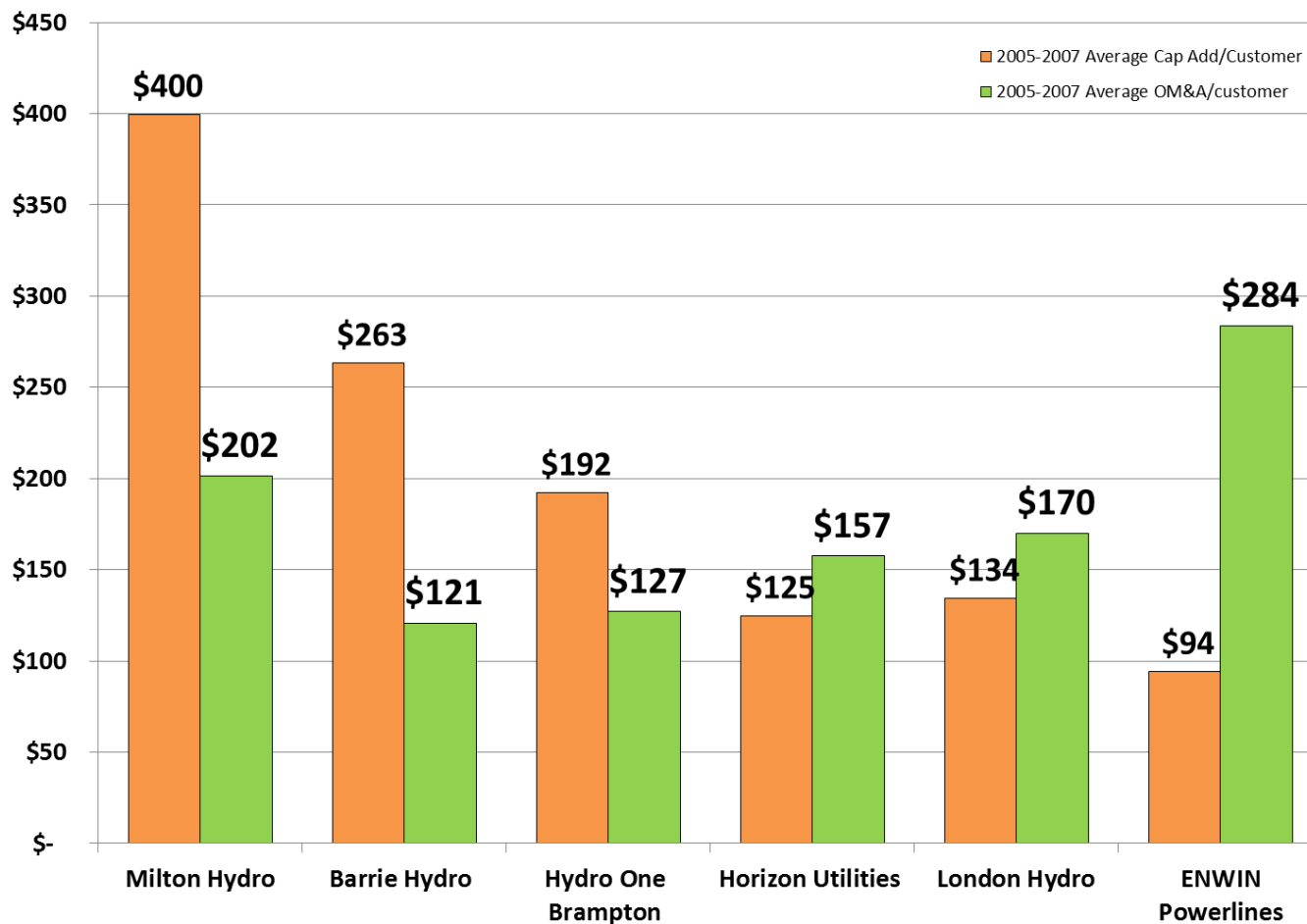
**Emerging Development –
Capital Intensive –
Brampton**



**Mature Development –
Maintenance Intensive -
Hamilton**

Typical new suburban vs. old urban LDCs

(Figure 2 of submission)



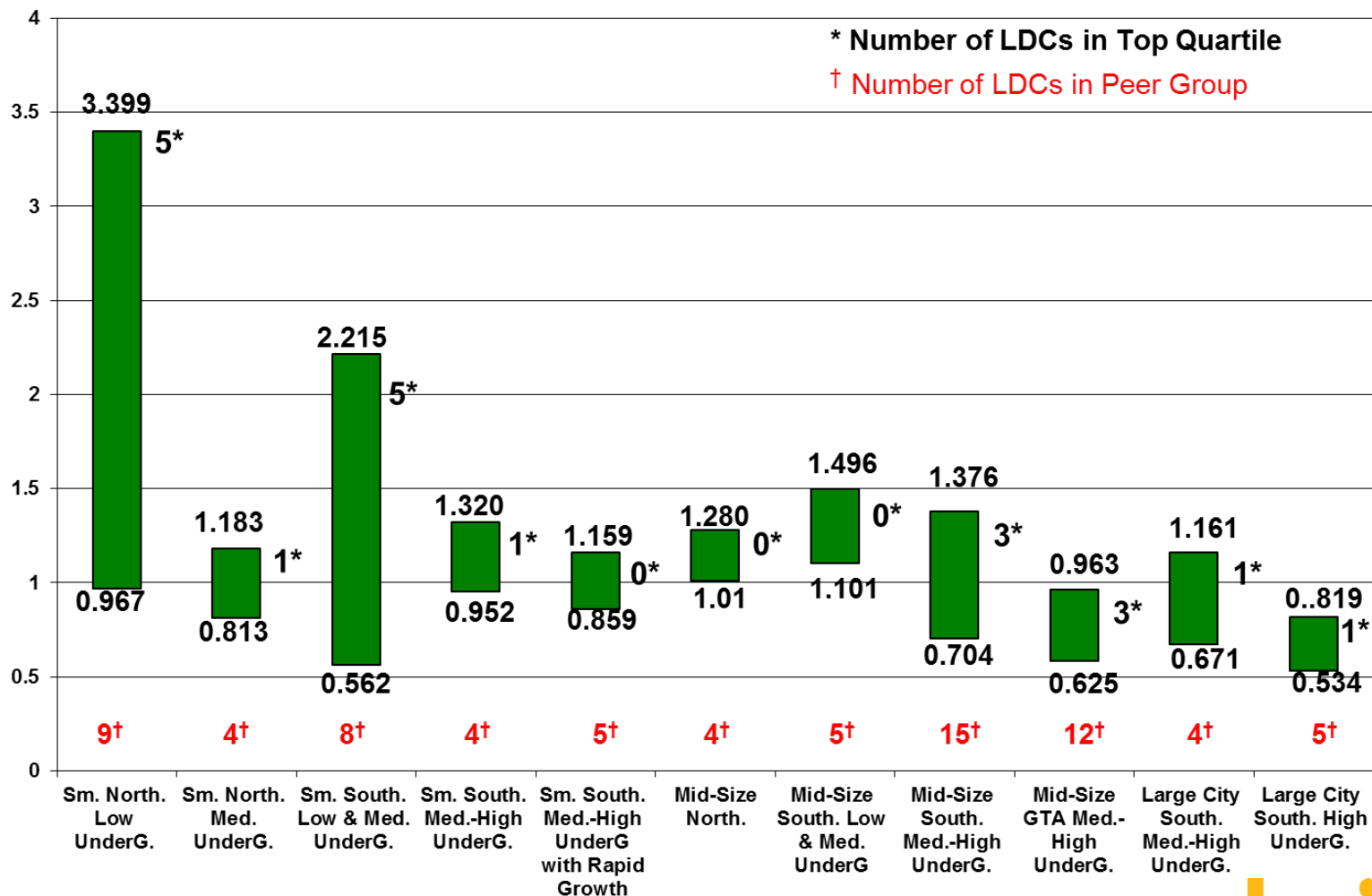
Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Recommendations: Meaningful PEER Groups

4. Abandon scale as a criterion
5. Abandon undergrounding as a criterion
6. Adopt line density and Canadian Shield as new criteria

Current 12 peer groups – scale & undergrounding

Revised based on 2011 LDC sector



LDC Peer groups and peer group criterion

(Table 2 of submission)

Scale	Location	Degree of Undergrounding	LDCs
Small	Northern	Low Undergrounding (0-10%)	9*
Small	Northern	Medium Undergrounding (10-20%)	4*
Small	Southern	Low & Medium Undergrounding (0-20%)	11**
Small	Southern	Medium-High Undergrounding (20-50%)	6***
Small	Southern	Medium-High Ung. with Rapid Growth (20-50%)	5
Mid-size	Southern	Low & Medium Undergrounding (10-20%)	5
Mid-size	Southern	Medium-High Undergrounding (20-50%)	15
Mid-size	GTA [Southern]	Medium-High Undergrounding (20-50%)	12
Mid-size	Northern	N/A	4
Large	Southern	Medium-High Undergrounding (20-50%)	4
Large	Southern	High Undergrounding (>50%)	5
Large	Northern	N/A [Hydro One Networks]	1

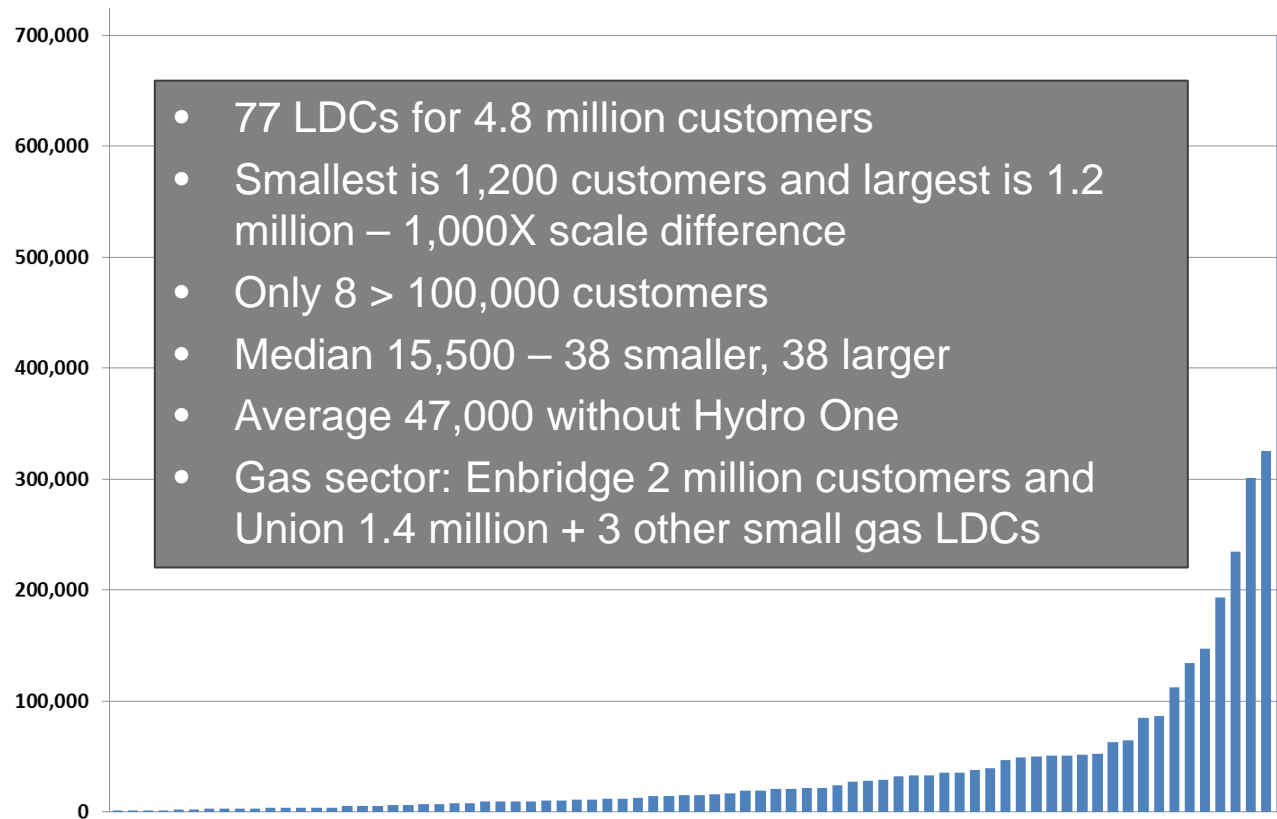
* One LDC has been included in small, but should have been in mid-size based on its number of customers

** Three of the LDCs in this group were sold or merged with others in 2007 and 2008, but are still in the 2007 data.

*** Two of these were sold or merged in 2008, but are still in the 2007 data.

NB: Numbers and descriptors based on groupings in December 3, 2008, PEG Report, which is the most recently published data.

LDC customer scale – Ontario context



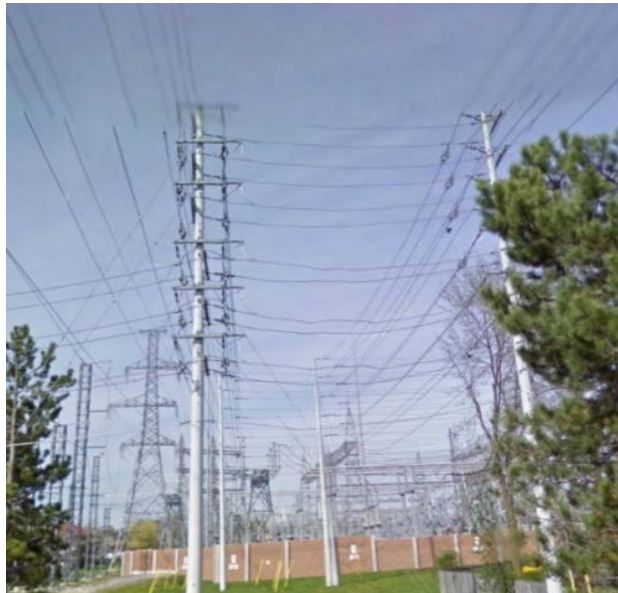
- Ontario's LDC fragmentation is unique in Canada
- Public ownership predated private sector vertical integration – no mechanism in law for consolidation until 1998

NB: Graph does not include Hydro One Networks. Source: 2010 OEB yearbook

Not all LDCs have same O&M cost composition

- Tx connected LDCs generally have more assets per customer
 - Particularly distribution feeders, stations
 - Result is more O&M and capital work per customer
- Dx connected LDCs generally have fewer assets per customer
 - Feeders and stations, in many cases, belong to the host LDC

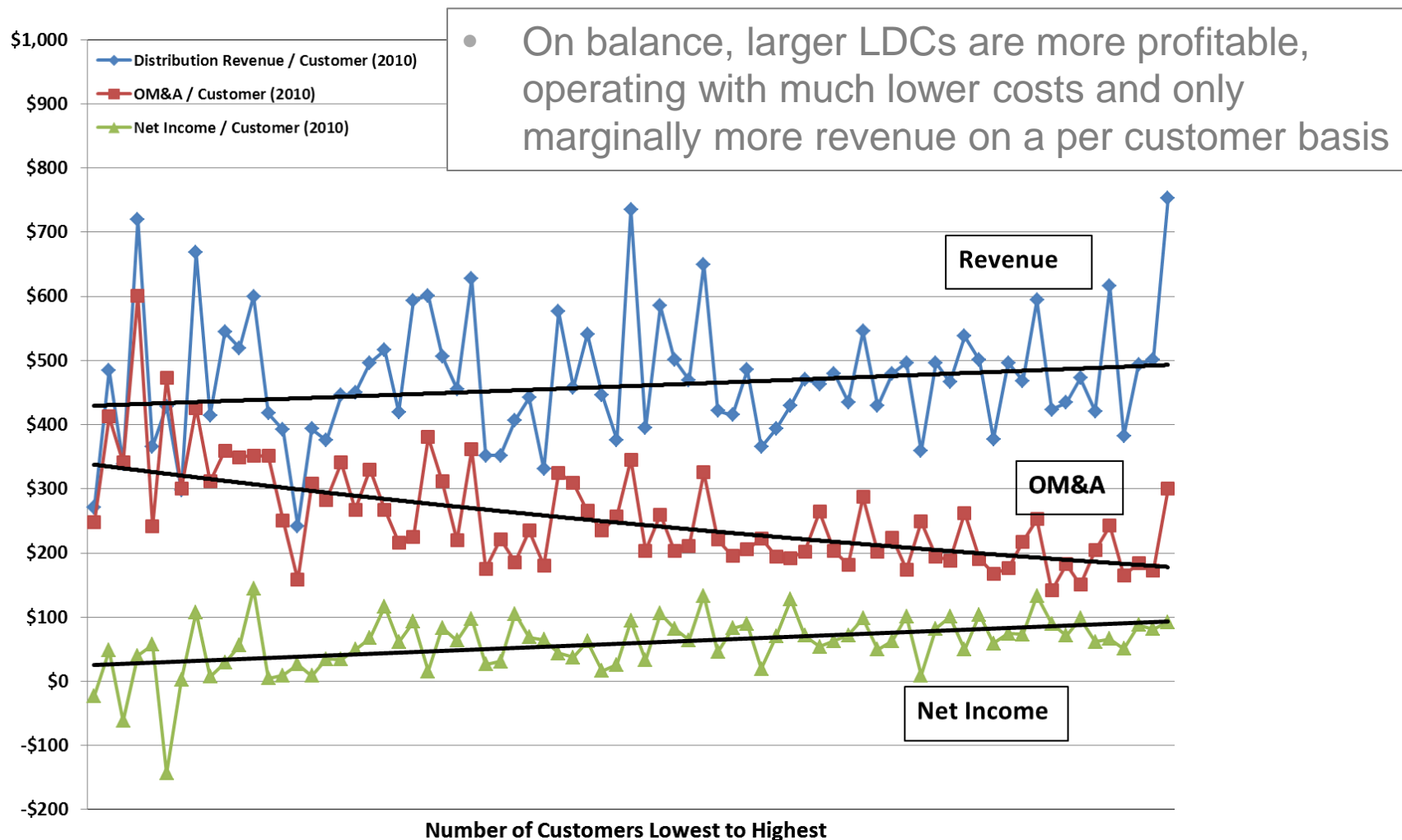
Tx Connected LDC



Dx Connected (embedded) LDC

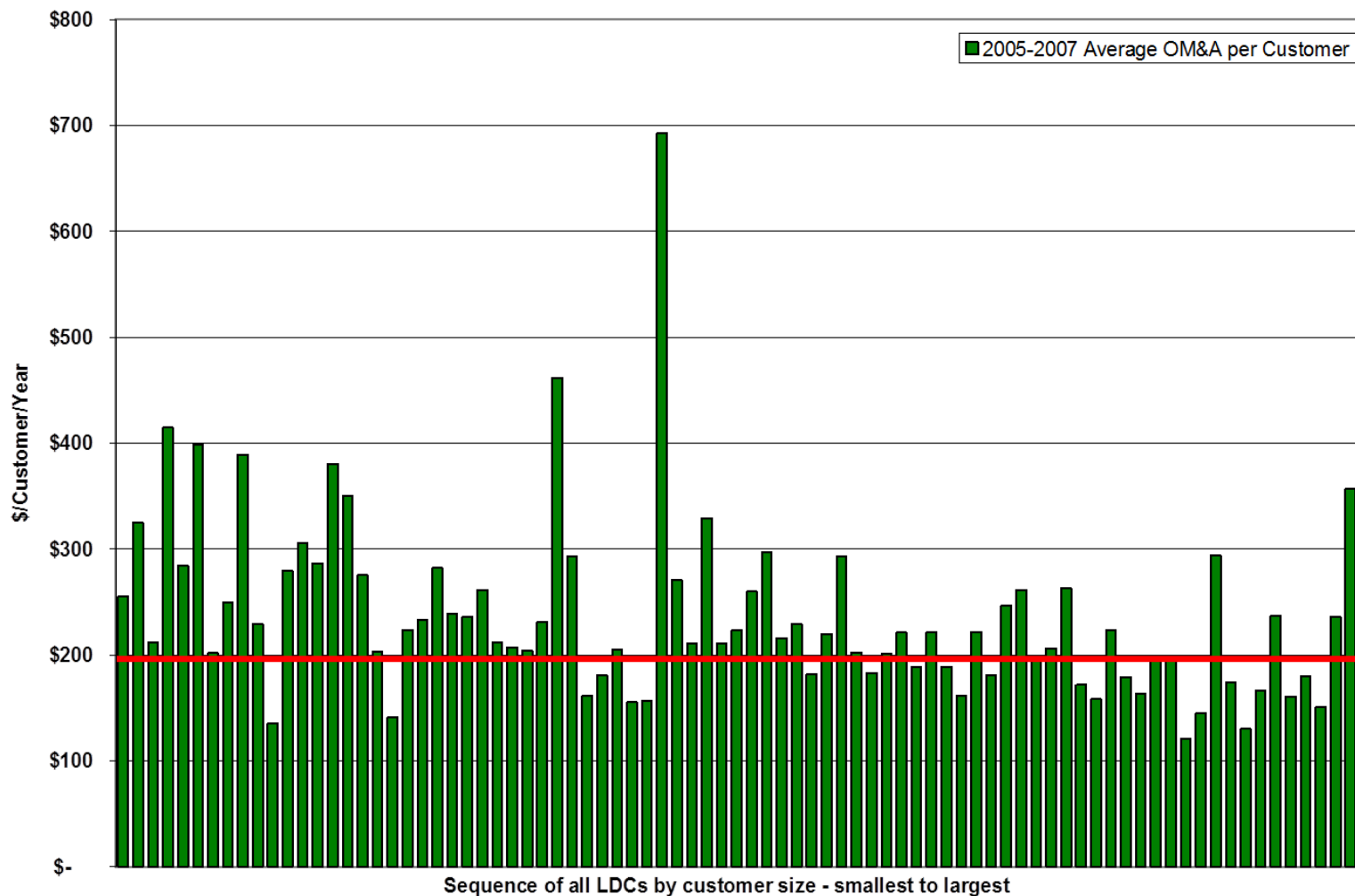


OM&A / distribution revenue / net income per customer

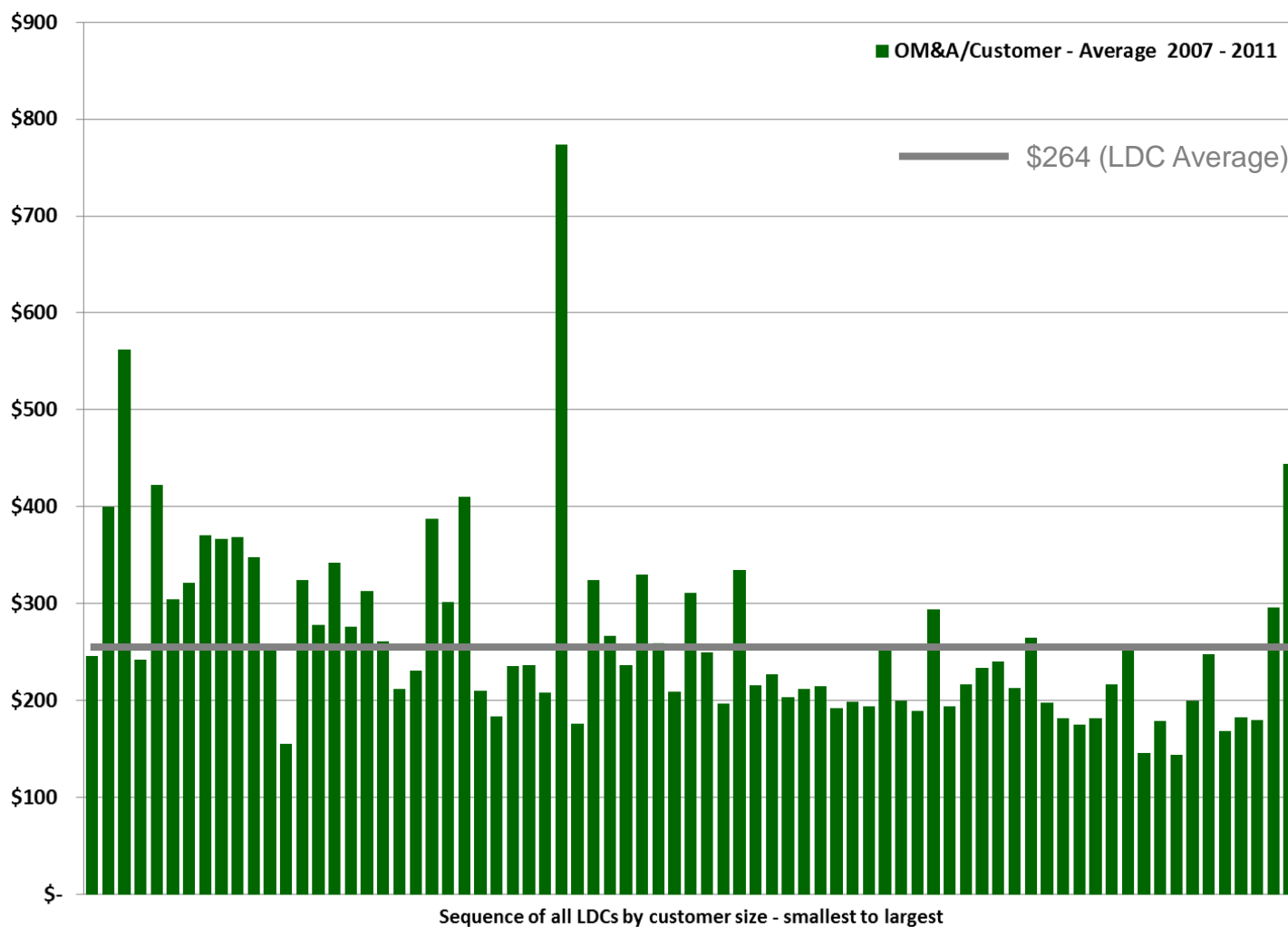


NB: Graph does not include Hydro One Networks or Algoma Power. Source: 2010 OEB Yearbook. Graph lines are linear trend lines.

All LDCs average OM&A 2005-2007

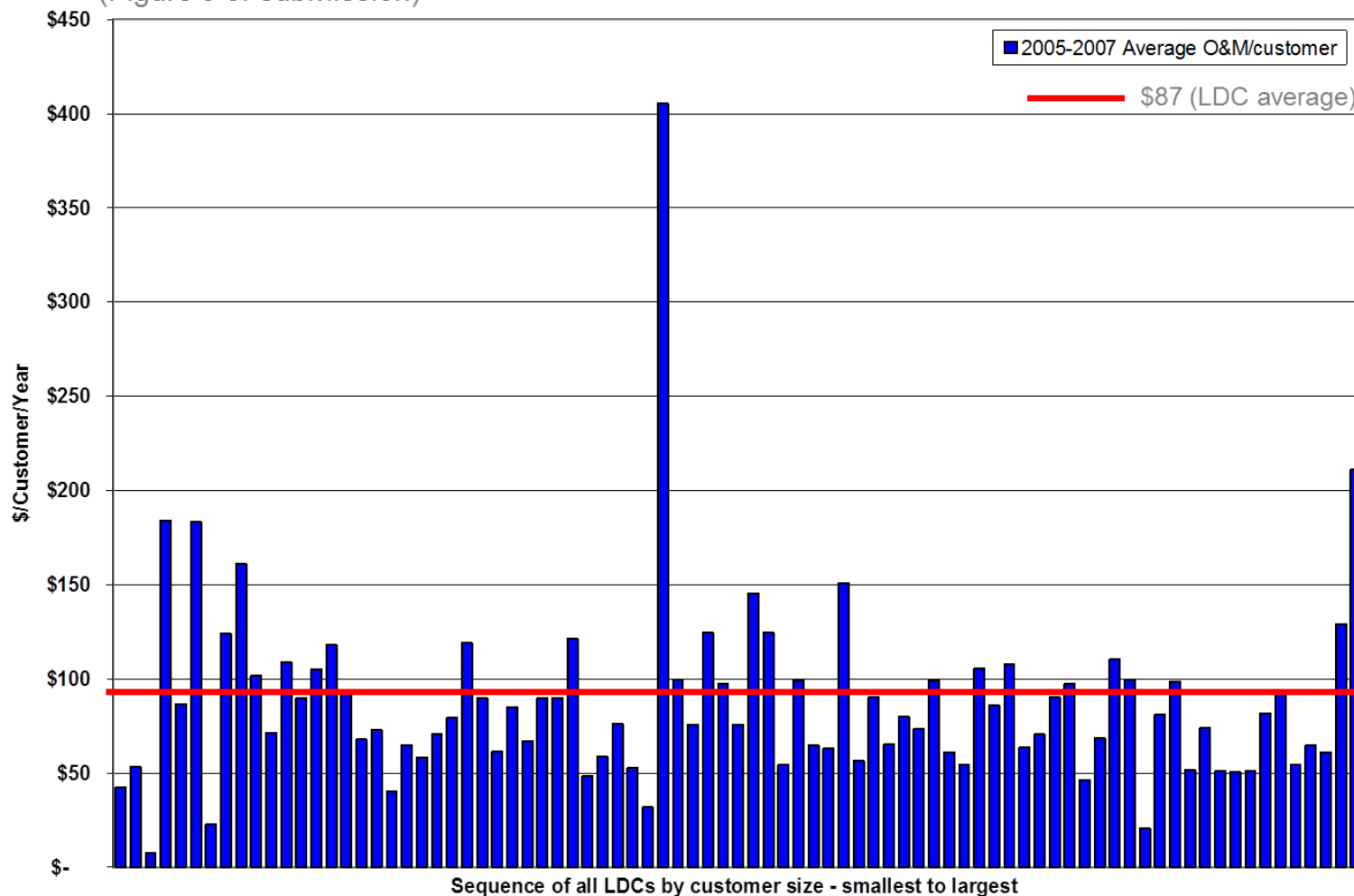


All LDCs average OM&A 2009-2011

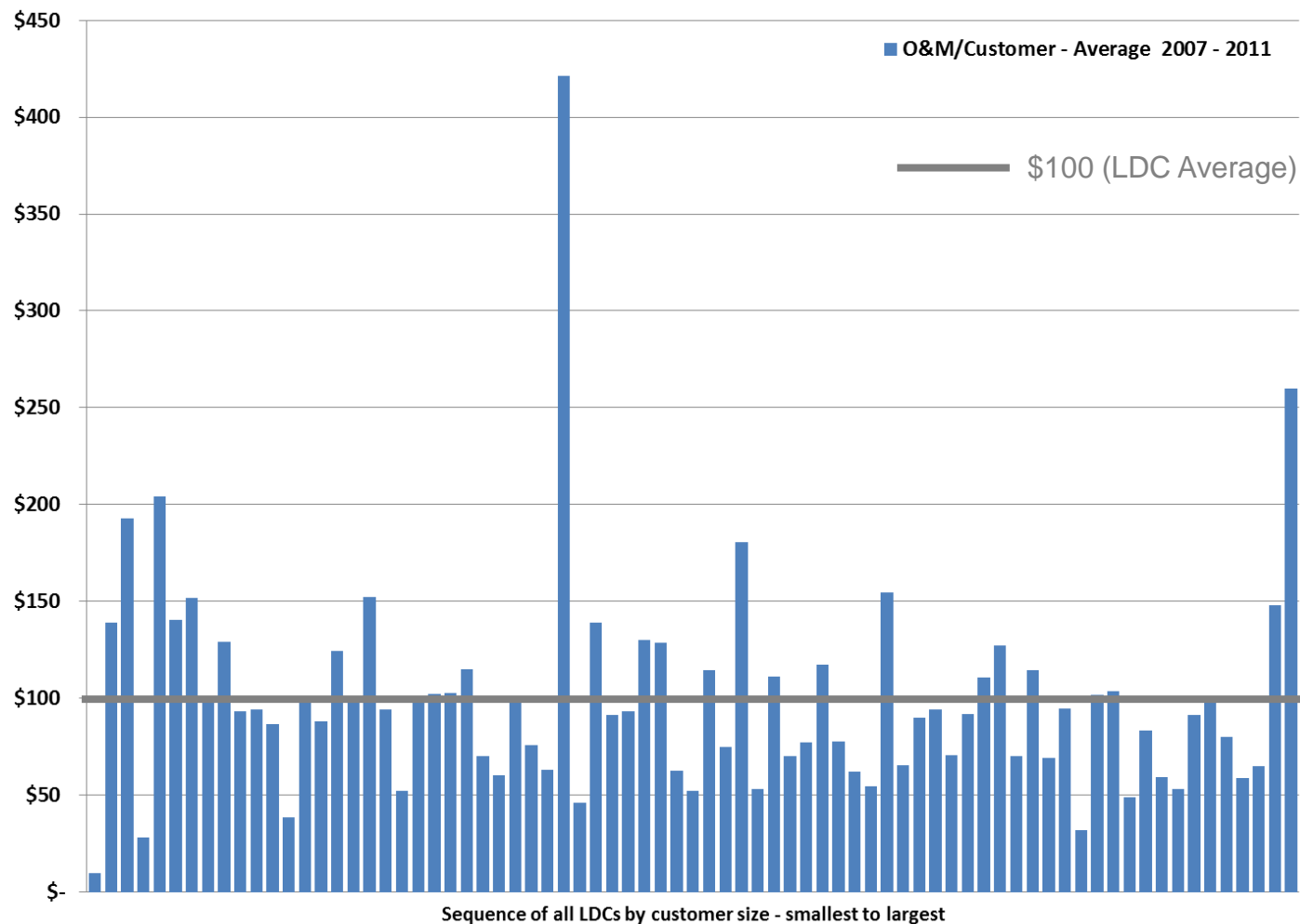


All LDCs average O&M 2005-2007

(Figure 5 of submission)

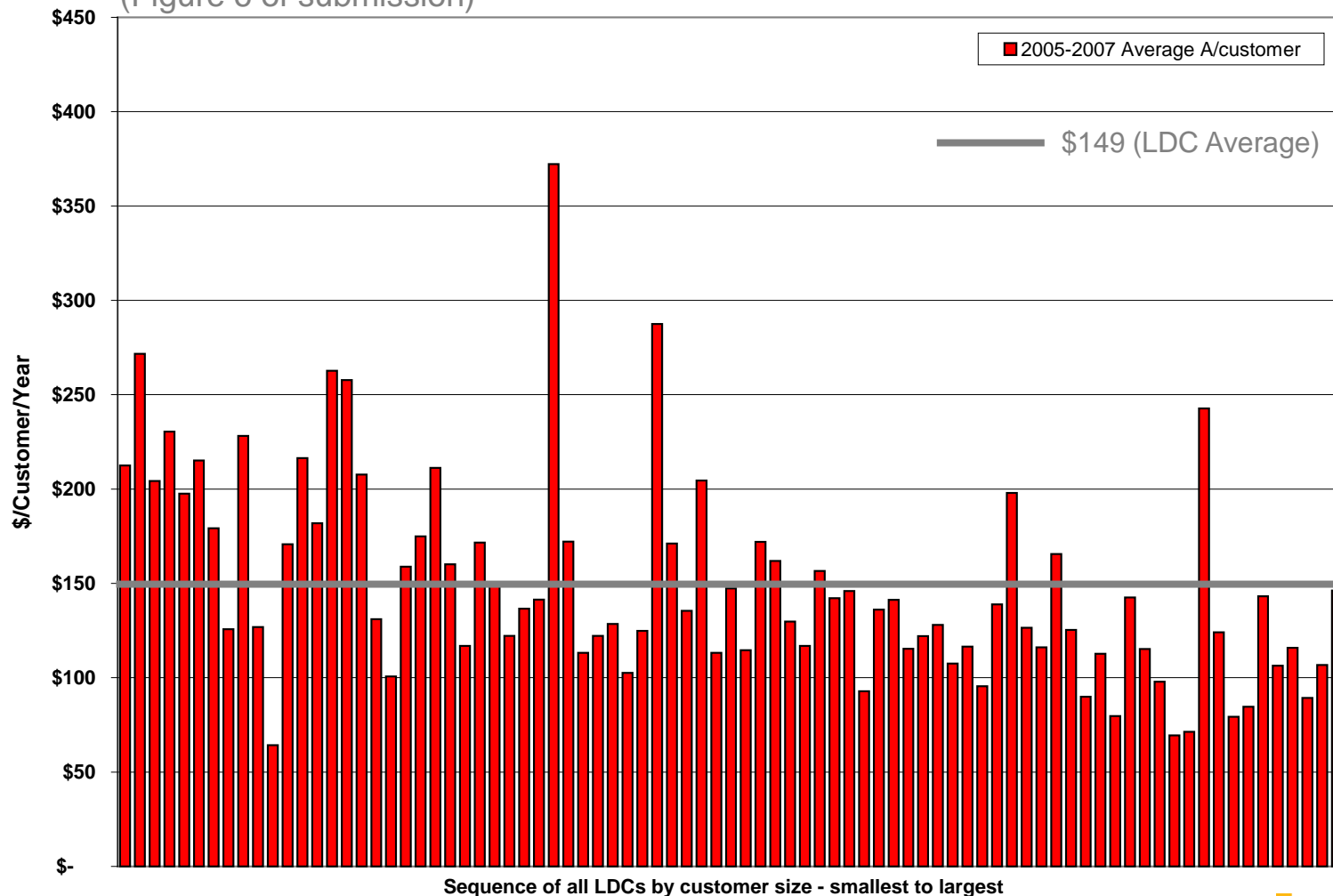


All LDCs average O&M 2009-2011

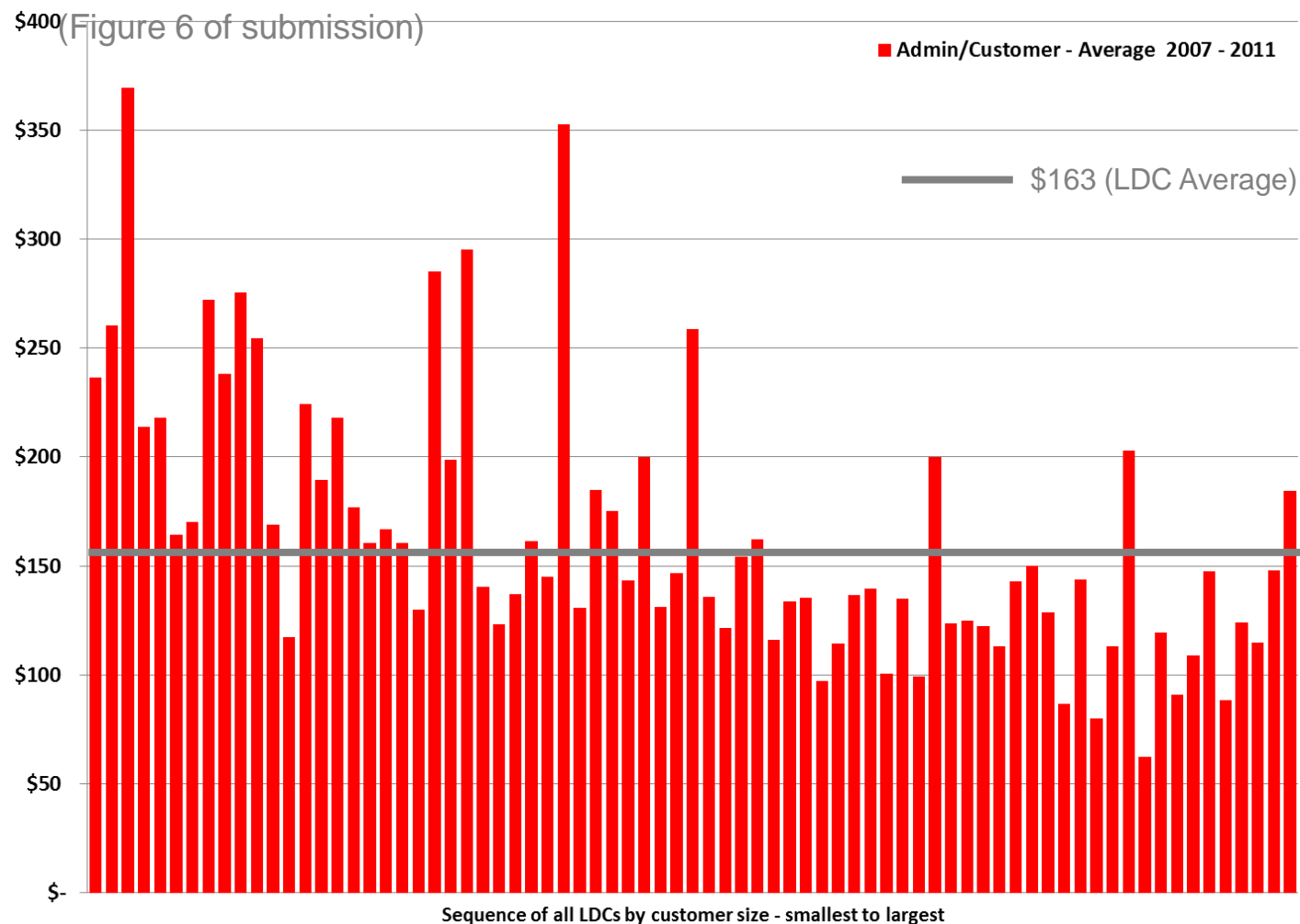


All LDCs average administration 2005-2007

(Figure 6 of submission)

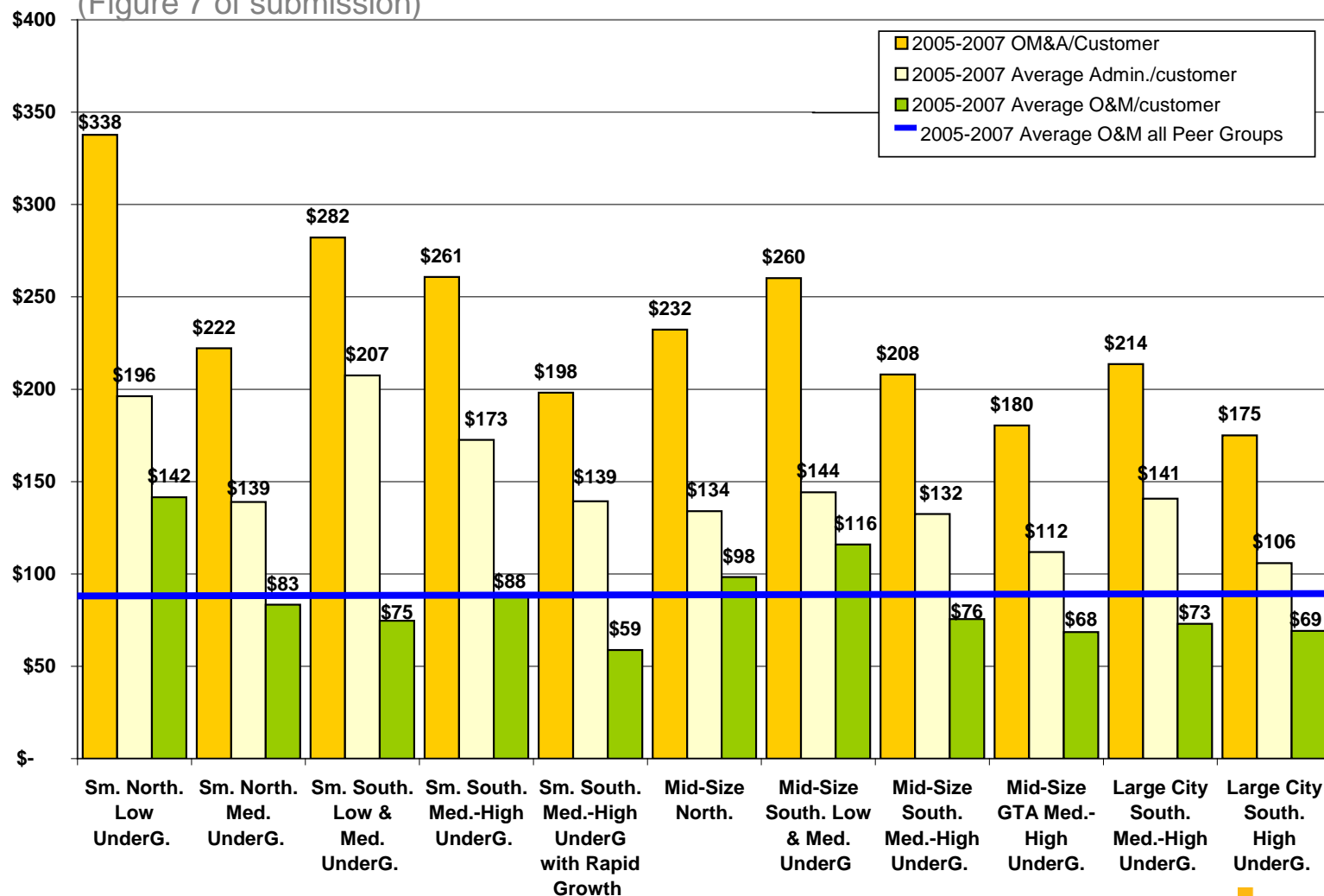


All LDCs average administration 2009-2011



Undergrounding is about O&M not Administration

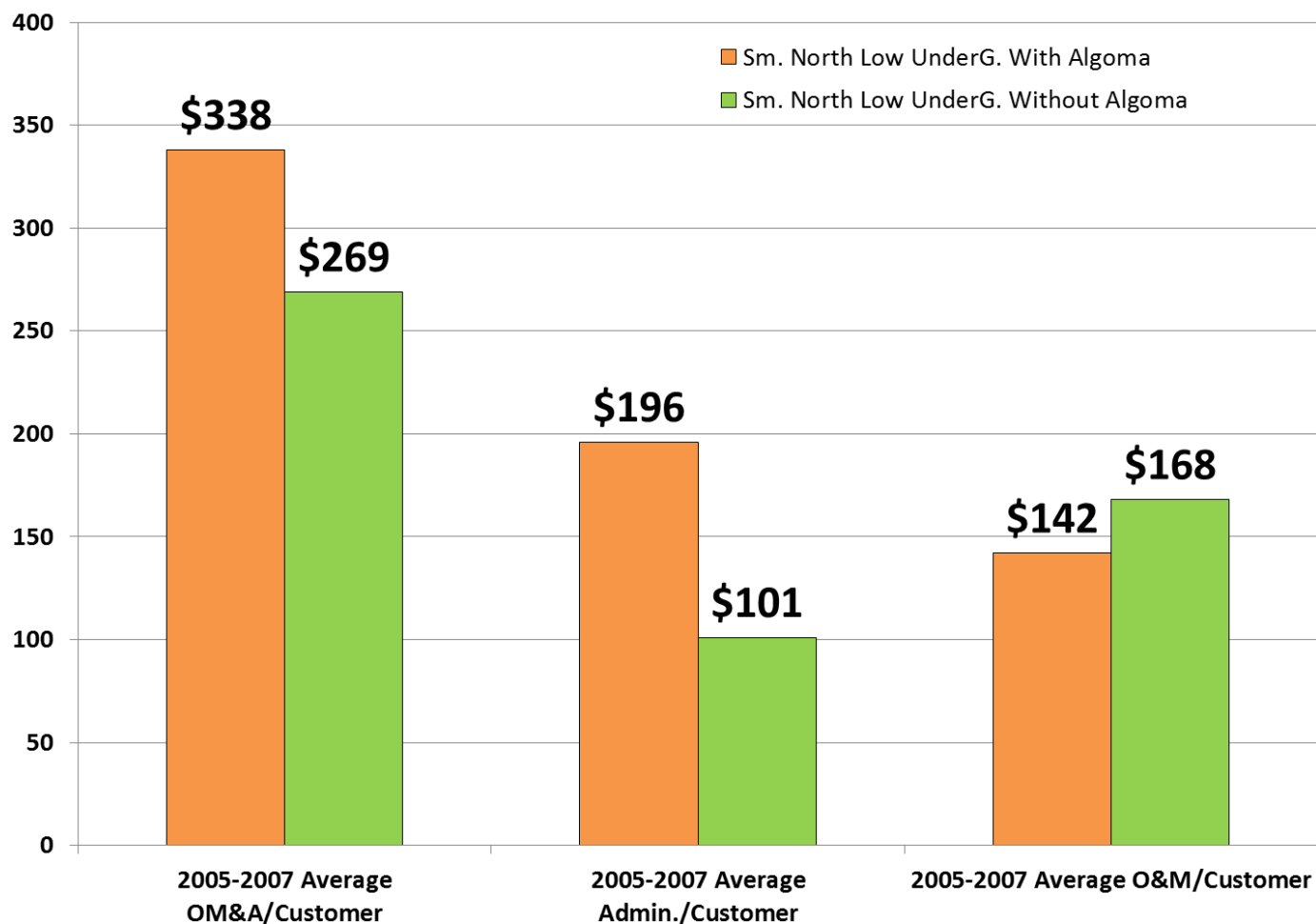
(Figure 7 of submission)



Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Northern Peer Group with/without Algoma Power

(Figure 7 of submission)



Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Peer group “rural” LDCs separately

(Table 5 of submission)

LDC Name	LDC Location	Line Density
Great Lakes Power	North	6.32
Hydro One Networks	North and South	9.76
Haldimand County Hydro	South	12.13
Sioux Lookout Hydro	North	13.05
Peninsula West Utilities	South	13.89
Halton Hills Hydro	South	15.04
Northern Ontario Wires	North	16.52
Eastern Ontario Power	South	18.12
Atikokan Hydro	North	18.60
Innisfil Hydro Distribution Systems	South	22.17
Niagara-on-the-Lake Hydro	South	23.08
Espanola Regional Hydro Distribution	North	24.20

Source: OEB, Reporting and Record-keeping Requirements (RRR), 2007.

Urban & suburban LDCs mixed in same groups

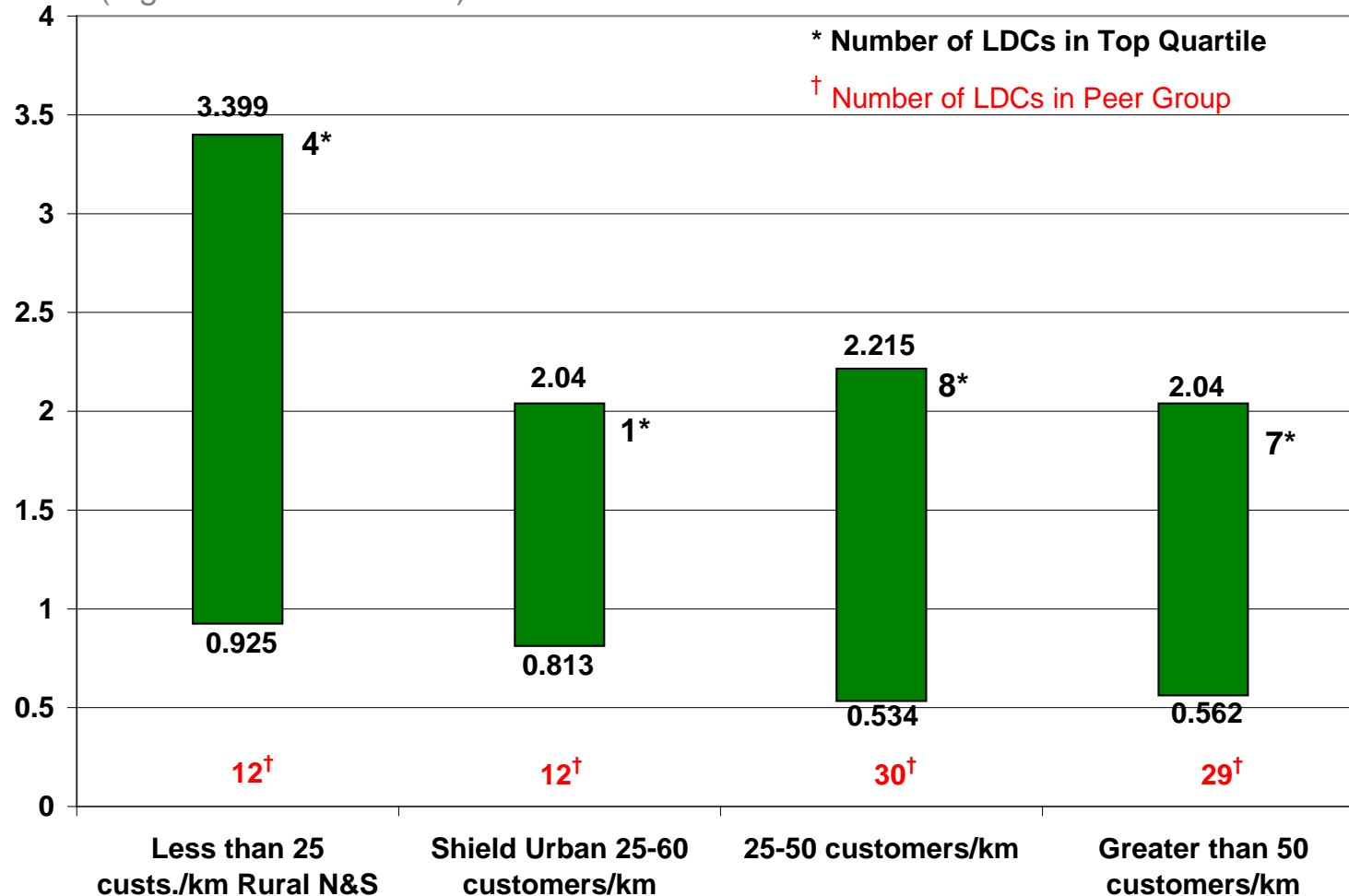
(Table 4 of submission)

LDC	Under-grounding	%	O&M / Customer	Line Density Cust./km	Growth / Output Index
ENWIN Powerlines	Med.-High	38.5%	\$51	74.81	1,332
Hydro Ottawa	Med.-High	36.7%	\$61	50.01	2,653
Toronto Hydro	Med.-High	45.5%	\$129	69.24	457
Veridian Connections	Med.-High	31.9%	\$50	52.87	2,837
Enersource Hydro	High	65.5%	\$94	35.47	2,511
Horizon Utilities	High	53.3%	\$54	69.55	1,302
Hydro One Brampton	High	69.8%	\$51	46.64	5,800
London Hydro	High	51.0%	\$82	54.47	2,265
PowerStream	High	69.0%	\$65	38.10	4,617

Source: OEB, RRR, 2005-2007, and, for grouping and growth index, PEG "Update" Report, December 3, 2008, Table 1.

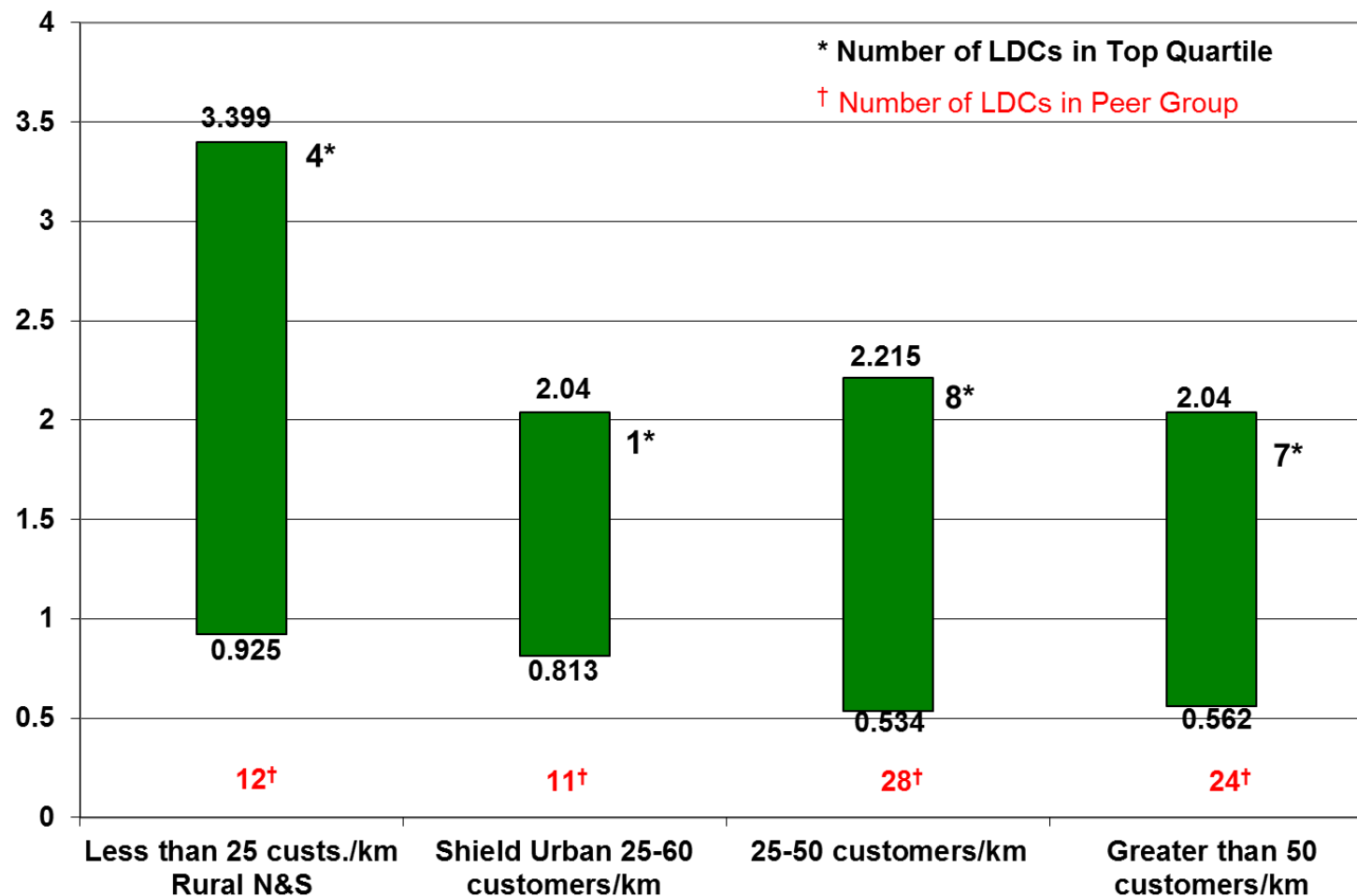
4 peer groups - line density (cust./km) and Shield

(Figure 8 of submission)



4 peer groups - line density (cust./km) and Shield

Revised based on 2011 LDC sector



Peer group results – current vs. line density

(Table 6 of submission)

Line Density Group	# LDCs	Superior Performers	%
Less than 25 Customers per Kilometre	12	3	25%
Shield Urban 25 to 60 Customers per Kilometre	11	1	8%
From 25 to 50 Customers per Kilometre	28	9	30%
Greater than 50 Customers per Kilometre	24	7	24%

(Table 7 of submission)

Scale and Undergrounding Group	# LDCs	Superior Performers	%
Small Northern Low Undergrounding	9	5	55%
Small Northern Medium Undergrounding	4	1	25%
Small Southern Low & Medium Undergrounding	8	5	45%
Small Southern Medium-High Undergrounding	4	1	17%
Small Southern Medium-High Un. with rapid growth	5	0	0%
Mid-Size Northern	4	0	0%
Mid-Size Southern Low & Medium Undergrounding	5	0	0%
Mid-Size Southern Medium-High Undergrounding	15	3	20%
Mid-Size GTA Medium-High Undergrounding	12	3	23%
Large City Southern Medium-High Undergrounding	4	1	25%
Large City Southern High Undergrounding	5	1	20%

Recommendations: Data Quality Issues

7. Treatment of Canadian Shield
8. Wholesale market participants and throughput
9. Correcting identified data problems

IRM criteria for “northern” LDCs



Canadian Shield – Parry Sound



Canadian Shield – Renfrew

“The Shield is a physiographic region characterized by shallow, rocky soils and numerous lakes. Since the land receives considerable precipitation but is unsuited for agriculture, rural areas of the Shield are typically forested. We expect OM&A expenses to be higher on the Shield.” Source: PEG Report, March 20, 2008, p. 50.

Renfrew Hydro – higher “northern” costs?

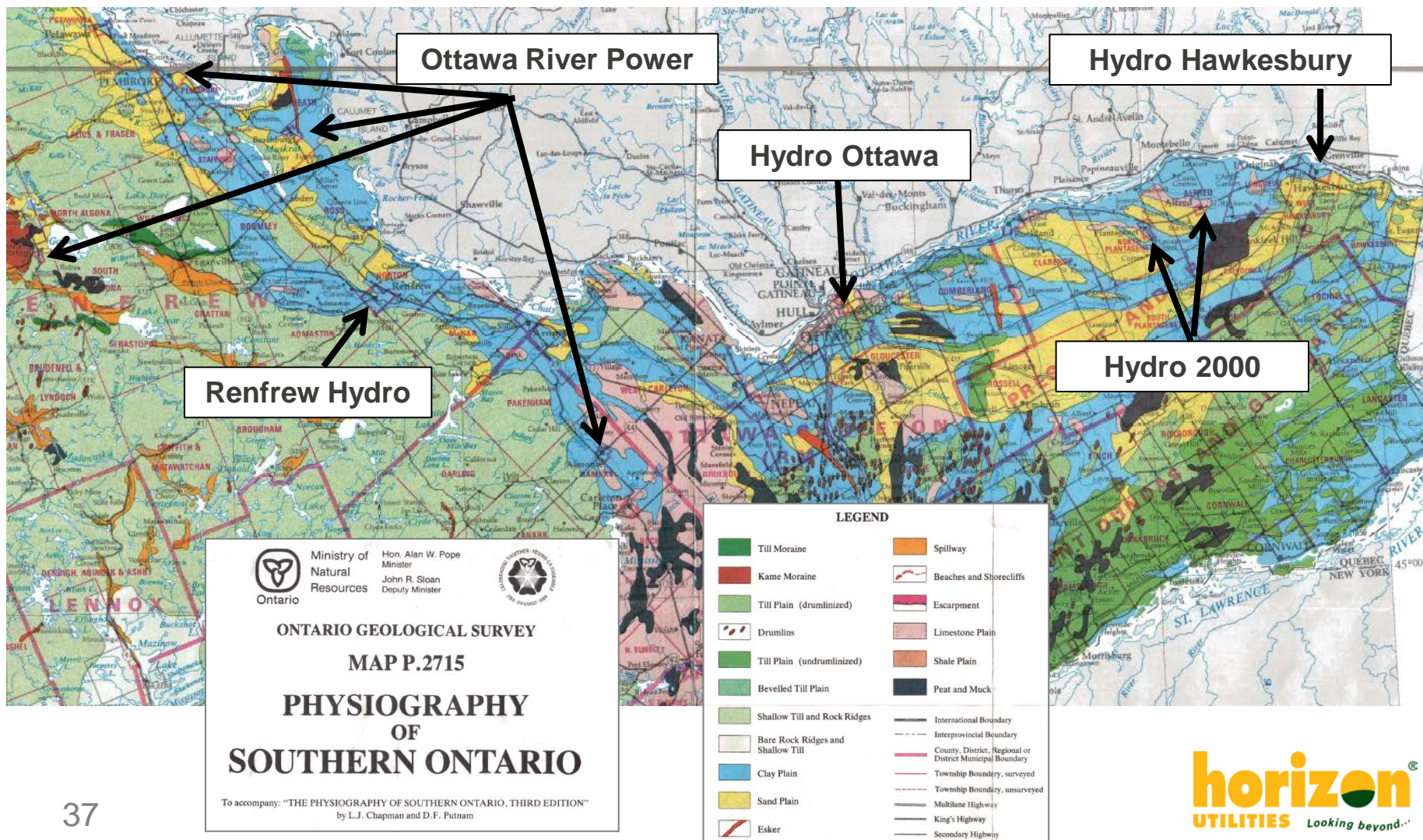


	2005	2006	2007
OM&A/Cust.	173	214	240
O&M/Cust.	55	82	82
Admin./Cust.	118	132	158

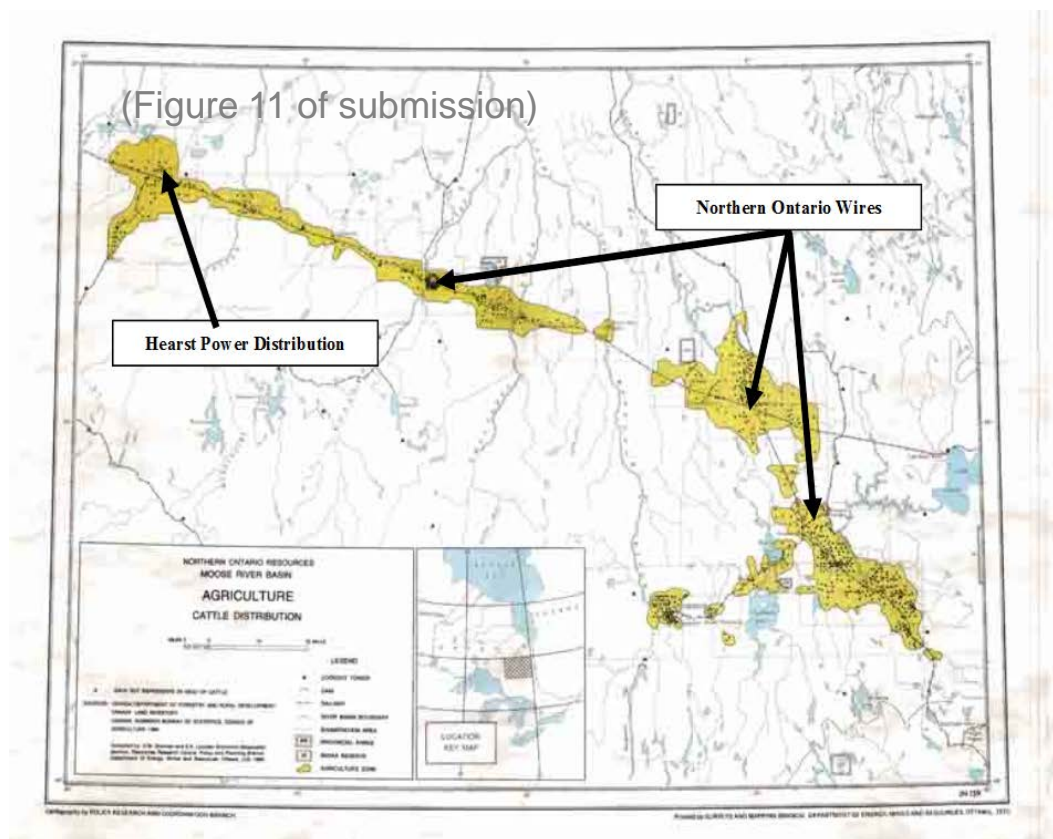


Renfrew Hydro and Ottawa River Power in north?

(Figure 10 of submission)



Northern Ontario Wires and Hearst Power on Shield?



FRONTIERS OF SETTLEMENT IN THE GREAT CLAY BELT, ONTARIO AND QUEBEC¹

GEORGE L. McDERMOTT

State University College of Education, Cortland, New York

THE westward advance of the American frontier had ended by 1900, but the Canadian frontier of agricultural settlement continued to move westward and northward. At the beginning of the second quarter of the twentieth century, only two large areas of potentially arable land in Canada remained open for settlement. These two areas, the Peace River Country of western Alberta and the Great Clay Belt of northeastern Ontario and northwestern Quebec, are enclaves beyond the zone of continuous agricultural settlement. The Great Clay Belt is of special interest to the geographer, for it is shared by two provinces, with differences in cultural environment, religion, and philosophy of colonization that have resulted in strong contrasts in population numbers and distribution, method of settlement, and rate of settlement growth.

Many of the pioneer settlement studies initiated or inspired by Isaiah Bowman were concerned with the economy of the fringe settlements, hence the term "pioneer" was used. The term "frontier" seems more appropriate in this study, for it refers to the area or zone between the settled and unsettled or used and unused land.² It is in this context that the term frontier is used here.

In his preface to *The Pioneer Fringe*, Bowman states that "settlement habitually advances and retreats on the outer fringe of land occupation."³ Since Bowman's writing, Stone has been the only geographer to refer to advancing and retreating frontiers of settlement, which he has shown cartographically for Anglo-America.⁴ This paper is concerned with the simultaneous advance and retreat of the agricultural

frontier in the physically homogeneous Great Clay Belt.

The Great Clay Belt lies almost entirely within two counties: Cochrane, Ontario, and Abitibi, Quebec (Fig. 1). The gray clay, which was laid down in a temporary glacial lake, is estimated to cover sixteen million acres in northern Ontario and thirteen million acres in northern Quebec.⁵ However, only 3 percent of this total is improved farm land. Even within



FIG. 1. Location of the Clay Belt. The Great and Little Clay Belts are the largest clay pockets on the Canadian Shield. Because the frontier of the Little Clay Belt have become stabilized, it is not included in this study.

¹ This study was supported in part by a grant from the Dunforth Foundation. Grateful acknowledgment is given to Professor Kirk H. Stone and Andrew H. Clark of the University of Wisconsin for their suggestions.

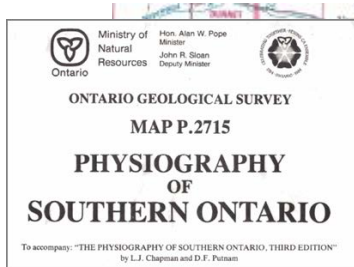
² Kirk H. Stone, "Human Geographic Research in the North American Northern Lands," *Arctic Research*, Special Publication No. 2 of the Arctic Institute of North America, 1950, p. 218.

³ Isaiah Bowman (ed.), *The Pioneer Fringe* (New York: American Geographical Society, 1931), p. v.

⁴ Stone, op. cit., p. 216.

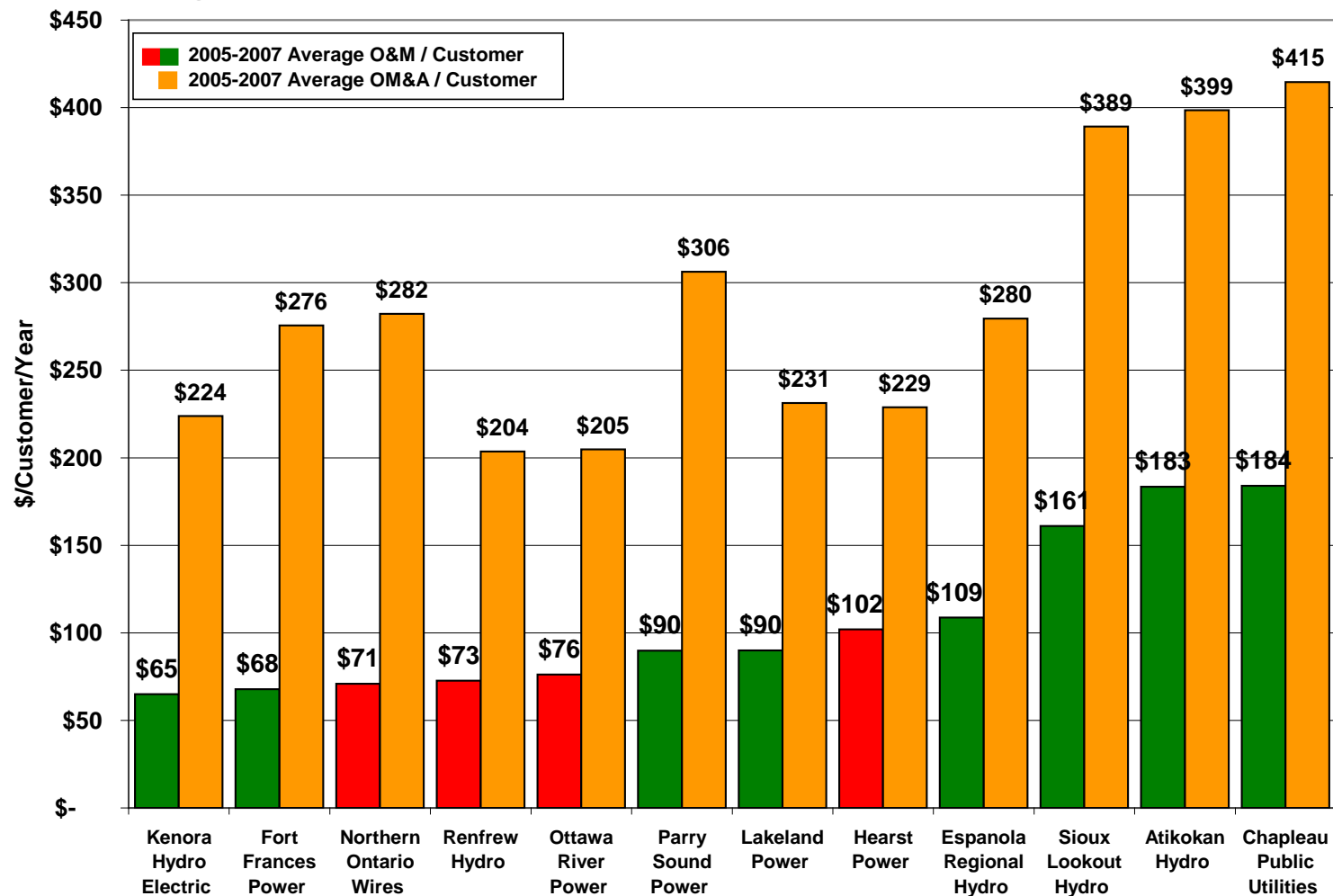
⁵ A. Cosselin and G. P. Boucher, *Settlement Problems in Northwestern Quebec and Northeastern Ontario*, Publication No. 758, Dominion of Canada Department of Agriculture, 1944, p. 8.

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Misapplication of “northern” – O&M and OM&A

(Figure 9 of submission)



Source: OEB, Reporting and Record-keeping Requirements (RRR), 2005-2007.

Neither GLP nor Renfrew Hydro are “small northern”

Table 2

Unit OM&A Cost Indexes

	2002	2003	2004	2005	2006	2007	Average of Last 3 Available Years ²	Average / Group Average ² [A]	Percentage Differences ² [A - 1]	Implied Cost Surplus (Savings) per year ²
Small Northern Low Undergrounding										
Renfrew Hydro	0.928	0.996	0.921	0.809	0.999	1.094	1.067	0.584	-41.6%	-\$350,347
Espanola Regional Hydro Distribution	1.410	1.171	1.092	1.155	1.495	1.483	1.378	0.832	-16.8%	-\$156,347
Northern Ontario Wires	1.375	1.223	1.369	1.192	1.270	1.374	1.279	0.772	-22.8%	-\$395,437
Parry Sound Power	1.013	1.200	1.214	1.275	1.333	1.303	1.303	0.787	-21.3%	-\$215,508
Fort Frances Power	1.197	1.213	1.236	1.305	1.346	1.442	1.365	0.824	-17.6%	-\$192,252
Sioux Lookout Hydro	1.086	0.877	1.259	1.359	1.390	1.528	1.426	0.861	-13.9%	-\$149,138
Atikokan Hydro	1.443	2.729	1.758	1.618	1.619	2.022	1.753	1.058	5.8%	\$40,163
Chapleau Public Utilities	1.615	1.668	1.720	1.907	1.833	2.380	2.040	1.231	23.1%	\$128,185
Great Lakes Power	2.983	2.924	3.116	3.308	3.412	3.476	3.399	2.052	105.2%	\$8,371,020
GROUP AVERAGE							1.657			
Small Northern Medium Undergrounding										
Hearst Power Distribution	0.630	0.609	0.764	0.745	0.826	0.868	0.813	0.799	-20.1%	-\$127,595
Lakeland Power Distribution	1.076	1.296	0.905	0.909	1.083	0.977	0.990	0.972	-2.8%	-\$58,301
Ottawa River Power	0.940	1.043	1.020	0.989	1.070	1.200	1.087	1.067	6.7%	\$141,026
Kenora Hydro Electric	1.098	1.117	1.155	1.114	1.149	1.284	1.183	1.162	16.2%	\$208,696
GROUP AVERAGE							1.018			
Mid-Size Northern										
North Bay Hydro Distribution	1.126	1.005	0.991	0.878	1.147	1.007	1.010	0.906	-9.4%	-\$487,201
PUC Distribution	0.866	0.937	1.070	1.046	1.028	1.166	1.080	0.969	-3.1%	-\$225,144
Thunder Bay Hydro Electricity Distribution	1.087	1.178	1.130	1.016	1.070	1.179	1.088	0.976	-2.4%	-\$262,212
Greater Sudbury Hydro & West Nipissing	1.034	0.996	1.121	1.003	1.069	1.769	1.280	1.149	14.9%	\$1,743,696
GROUP AVERAGE							1.115			

- Renfrew Hydro should be in small southern
- GLP (now Algoma Power) is mid-size northern
- GLP should not be peered with urban LDCs

PEG's sensitivity test to “northern”

- Renfrew Hydro went up, not down, without “northern” benefit – counter-intuitive
- All other LDCs stayed in same order

July Results*			December Results**			Change
LDC	Metric	Rank	LDC	Metric	Rank	July/Dec.
Hydro Hawkesbury	0.643	1	Hydro Hawkesbury	0.644	1	0.001
Chatham-Kent Hydro	0.691	2	Chatham-Kent Hydro	0.694	2	0.003
Northern Ontario Wires	0.711	3	Northern Ontario Wires	0.714	3	0.003
Cambridge and N. Dum.	0.715	4	Cambridge and N. Dum.	0.718	4	0.003
E.L.K. Energy	0.729	5	E.L.K. Energy	0.733	5	0.004
Grimsby Power	0.764	6	Renfrew Hydro	0.752	6	-0.055
Oshawa PUC Networks	0.787	7	Grimsby Power	0.769	7	0.005
Lakeland Power	0.789	8	Oshawa PUC Networks	0.781	8	-0.006
Hydro One Brampton	0.793	9	Lakeland Power	0.787	9	-0.002
Kitchener-Wilmot Hydro	0.805	10	Hydro One Brampton	0.792	10	-0.001
Renfrew Hydro	0.807	11	Kitchener-Wilmot Hydro	0.804	11	-0.001
Barrie Hydro	0.814	12	Barrie Hydro	0.810	12	-0.004
Festival Hydro	0.822	13	Festival Hydro	0.827	13	0.005
Welland Hydro	0.834	14	Welland Hydro	0.839	14	0.005
Hydro 2000	0.840	15	Hydro 2000	0.845	15	0.005
Kingston Electricity	0.860	16	Kingston Electricity	0.868	16	0.008
Horizon Utilities	0.864	17	Horizon Utilities	0.872	17	0.008

(Table 8 of submission)

* PEG “Update” Report, December 3, 2008, Table 3. ** PEG “Update” Report, ibid., Table 11.

Throughput and wholesale market participants

2.1.5 Performance Based Regulation*

Wholesale kWh (kWh) is the total kWh that flows into the system from either the IESO controlled grid (either directly from the High Voltage transmission system or from host distributors) or embedded generators.

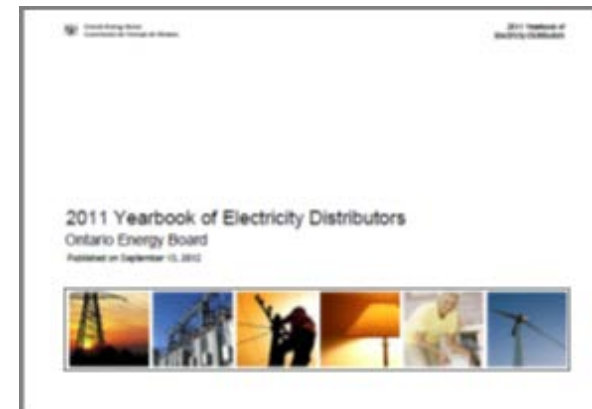
Retail kWh is the total kWh consumed within service territory.

- How to account for “Embedded Wholesale Market Participants (EWMP)”?
 - $\text{Throughput} = \text{Wholesale kWh} - (\text{Retail kWh} + \text{Losses kWh})$
- Sec. 2.1.5 does see IESO subtracts EWMP’s consumption from LDCs
 - IESO indicated 19 LDCs have EWMPs
 - OEB states “approximately 9” LDCs have EWMPs

* Source: OEB, RRR Submission Quick Tips for Distributors and Transmitters”, Dec. 31, 2007. p. 8.

LDC filed data integrity

General Statistics For the year ended December 31, 2011	Hydro Hawkesbury Inc.	Hydro One Brampton Networks Inc.	Hydro One Networks Inc.	Hydro Ottawa Limited	Innisfil Hydro Distribution Systems Limited	Kenora Hydro Electric Corporation Ltd.
Population Served	10,500	523,911	3,029,722	834,406	34,000	12,000
Municipal Population	10,500	523,911	3,029,722	927,118	34,000	16,500
Seasonal Population	0	0	154,799	0	500	0
Residential	4,835	127,956	1,091,935	278,056	13,854	4,757
General Service (<50 kW)	592	8,259	110,421	23,734	904	745
General Service (50-4999 kW)	94	1,635	7,921	3,465	68	70
Large User (>5000 kW)	0	6	0	11	0	0
Sub Transmission	0	0	418	0	0	0
Total Customers	5,521	137,856	1,210,695	305,266	14,826	5,572
Rural Service Area (sq km)	0	0	650,000	650	221	0
Urban Service Area (sq km)	8	269	0	454	71	24
Total Service Area (sq km)	8	269	650,000	1,104	292	24
Overhead km of Line	56	802	109,499	2,916	607	88
Underground km of Line	10	2,094	7,886	2,690	141	10
Total km of Line	66	2,896	117,385	5,606	748	98
Total kWh Delivered (excluding losses)	154,131,709	3,842,969,139	23,561,000,000	7,607,711,356	231,635,167	106,039,212
Total Distribution Losses (kWh)	6,797,658	124,325,586	1,711,000,000	245,447,492	9,624,401	3,513,148
Total kWh Purchased	160,929,367	3,967,294,725	25,272,000,000	7,853,158,848	241,259,568	109,552,360
Winter Peak (kW)	31,966	595,700	3,923,771	1,305,498	49,220	20,492
Summer Peak (kW)	30,227	820,000	3,395,487	1,501,701	46,959	18,511
Average Peak (kW)	26,301	626,200	3,089,825	1,203,408	41,923	17,242
Capital Additions in 2011	\$ 188,179	\$ 38,257,711	\$ 730,752,993	\$ 81,912,537	\$ 3,605,881	\$ 661,401
Full time equivalent number of employees	8	207	3,367	571	32	15



Total Service Area (sq km)	681,511
% Rural	99%
% Urban	1%

Data quality and rigour

- Devote additional effort and resources to reviewing data filing instructions
- Perform data sensitivity tests to ensure the highest level of data quality and rigour
- Rectify general data management issues that come to light in COS hearings
- Make use of IFRS exercise to improve data management and quality

Coalition for Effective IRM submission

- CEIRM's argument:
 - IRM has financial consequences – let's “get it right”
 - Flawed IRM framework will bog down EDR process
 - Misapplication of rewards can affect reliability
 -
- CEIRM's Objective:
 - Improve IRM's effectiveness rather than abandon IRM
 - Board to fix what it can for 2009 and move forward
 - Begin 2010 improvement process right away

Appendix: 4 peer groups – Line Density and Shield

Less than 25	Cust./km	From 25 to 50	Cust./km	Greater than 50	Cust./km	Shield Urban from 25 to 60	Cust./km
Great Lakes Power	6.32	Milton Hydro Distribution	27.38	Hydro Ottawa	50.01	Lakeland Power Distribution	25.73
Hydro One Networks	9.76	Norfolk Power Distribution	28.46	Veridian Connections	52.87	Parry Sound Power	26.29
Haldimand County Hydro	12.13	Brant County Power	29.18	Oshawa PUC Networks	53.49	North Bay Hydro Distribution	38.88
Sioux Lookout Hydro	13.05	Fort Erie	29.51	Woodstock Hydro Services	53.88	Hearst Power Distribution	40.76
Peninsula West Utilities	13.89	Port Colborne	29.55	London Hydro	54.47	Thunder Bay Hydro Electricity	42.6
Halton Hills Hydro	15.04	Newmarket Hydro	30.17	Hydro 2000	55.19	PUC Distribution	44.84
Northern Ontario Wires	16.52	Waterloo North Hydro	32.56	West Perth Power	56.5	Fort Frances Power	46
Eastern Ontario Power	18.12	Enersource Hydro Mississauga	35.47	Erie Thames Powerlines	56.5	Chapleau Public Utilities	49.56
Atikokan Hydro	18.6	Whitby Hydro Electric	37.49	Midland Power Utility	58.34	Greater Sudbury Hydro	51.82
Innisfil Hydro	22.17	PowerStream	38.1	Essex Powerlines	59.25	Kenora Hydro Electric	57.57
Niagara-on-the-Lake Hydro	23.08	Burlington Hydro	39.91	West Coast Huron Energy	59.28	Ottawa River Power*	70.07
Espanola Regional Hydro	24.2	Chatham-Kent Hydro	40.93	Peterborough Distribution	62.68	Renfrew Hydro*	75.44
		Grimsby Power	41.67	Orangeville Hydro	63.74		
		Orillia Power Distribution	41.88	Middlesex Power Distribution	65.63		
		Niagara Falls Hydro	42.37	St. Thomas Energy	66.33		
		Centre Wellington Hydro	42.73	Rideau St. Lawrence Distribution	67.4		
		Oakville Hydro Electricity	42.87	Toronto Hydro-Electric System	69.24		
		Tillsonburg Hydro	42.95	Horizon Utilities	69.55		
		Cambridge and N. Dumfries Hydro	44.45	Cooperative Hydro Embrun	69.7		
		COLLUS Power	44.49	Festival Hydro	70.3		
		Kitchener-Wilmot Hydro	44.89	Dutton Hydro	71.05		
		Guelph Hydro Electric Systems	46.33	E.L.K. Energy	73.42		
		Hydro One Brampton Networks	46.64	ENWIN Powerlines	74.81		
		Barrie Hydro Distribution	47.43	Grand Valley Energy	75.22		
		Wellington North Power	47.75	Brantford Power	75.73		
		Bluewater Power Distribution	48.13	Kingston Electricity Distribution	76.53		
		Welland Hydro-Electric System	48.83	Clinton Power	78.05		
		Westario Power	48.96	Lakefront Utilities	79.45		
		Wasaga Distribution	49.39	Hydro Hawkesbury	83.51		
		Newbury Power	49.75				

* Source: Line density figures are from 2007 RRR. The calculation is “Total Customers (not including Street & Sentinel Lighting Connections)” divided by “Total KM of Line”. ** NB: Renfrew Hydro and Ottawa River Power were not moved from the “northern” LDCs for the purposes of the peer grouping in the coalition submission only because the peer grouping and “northern” recommendations were treated separately. The “Urban Shield” group would not have LDCs above 60 customer kilometre.

Appendix: 22 signatory LDCs to CEIRM

	LDC	Contact	Customers*
1	Brantford Power	George Mychailenko, CEO, Heather Wyatt, Reg. Officer	37,108
2	Enersource Hydro Miss.	Jon Bonadie, Manager, Capital and Rates	183,715
3	ENWIN Powerlines	Andrew Sasso, Director, Regulatory Affairs	84,757
4	Erie Thames Powerlines	Graig Pettit, Manager of Regulatory Affairs	14,181
5	Guelph Hydro	Art Stokman, President	47,720
6	Greater Sudbury Hydro	Stan Pawlowicz, Vice President, Corporate Services	43,167
7	Halton Hills Hydro	Tracy Rehberg-Rawlingson, Regulatory Affairs Officer	20,214
8	Horizon Utilities	Cameron McKenzie, Director, Regulatory Affairs; Neil Freeman, VP, Business Development	232,493
9	Hydro Ottawa	Lynne Anderson, Chief Regulatory Affairs Officer	287,006
10	Innisfil Hydro Dist.	Laurie Ann Cooledge, CFO/Treasurer	14,120
11	Kenora Hydro	Dave Sinclair, President and CEO	5,642
12	London Hydro	Vinay Sharma, Vice President, Customer Services	142,105
13	Norfolk Power Dist.	Alvin Allim, Manager of Finance	18,641
14	North Bay Hydro	Todd Wilcox, President & Chief Operating Officer	23,642
15	Oakville Hydro	Cristina Birceanu, Manager, Regulatory Affairs	59,883
16	Oshawa PUC Networks	Vivian Leppard, Regulatory Analyst	50,980
17	PowerStream	Paula Conboy, Dir., Regulatory & Government Affairs	236,220
18	PUC Distribution	Terry Greco, Treasurer and Vice President, Finance	32,512
19	Thunder Bay Hydro	Robert Mace, President	49,421
20	Tillsonburg Hydro	Steve Lund, General Manager	6,571
21	Toronto Hydro	Colin McLorg, Manager, Regulatory Affairs	679,913
22	Veridian Connections	George Armstrong, Manager of Regulatory Affairs	109,225
	Total		2,379,236

NB: All signatory LDCs have provided email confirmation of their support for the CEIRM submission.

* Customer numbers taken from: OEB, 2007 Yearbook of Electricity Distributors.

http://www.oeb.gov.on.ca/OEB/Documents/Documents/2007_electricity_distributors.pdf

1-SEC-7_Attch 15_Horizon EUCI Presentation 2013-09-20 vFinal

Local Distribution Companies – 25% of the Customer Bill

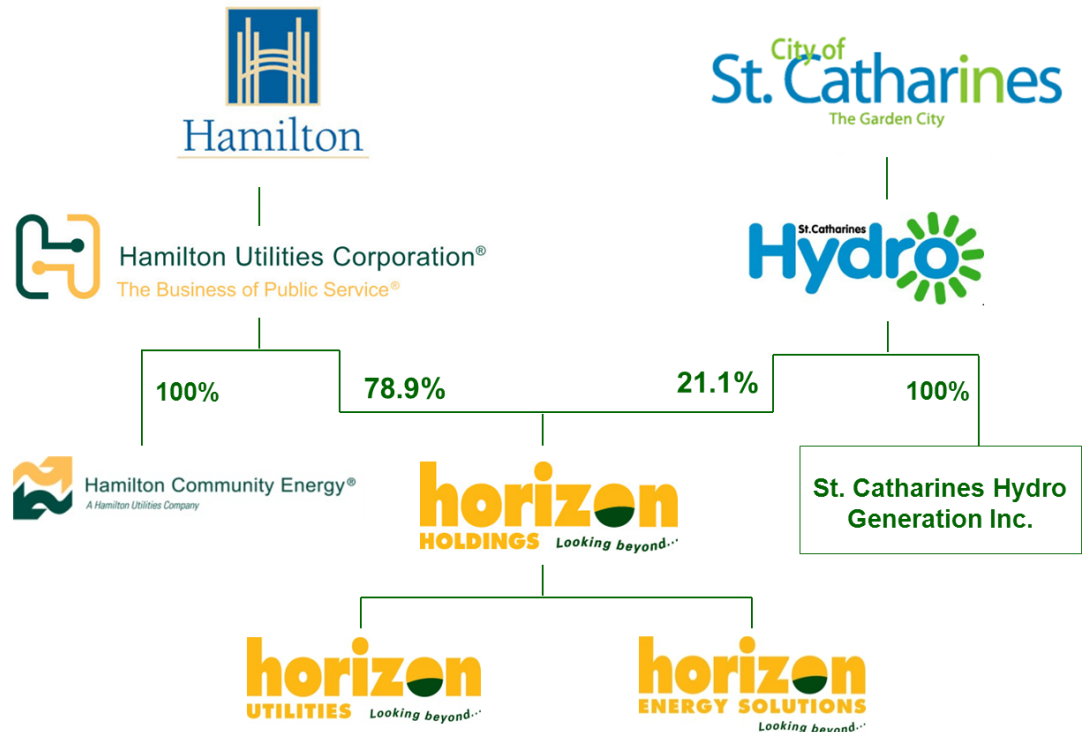
**EUCI's The Future of Electricity Prices in Ontario
and Key Canadian Markets**

Neil Freeman, Vice President, Business Development

September 20, 2013

Horizon Utilities – who we are

- Serving 239,000 customers in Hamilton & St. Catharines
- \$565 million in assets – one of Ontario's largest local utilities
- Municipally-owned 100% and generating full shareholder returns
- Pioneer of province-wide conservation programs
- Industry leader in sustainable development
- High customer satisfaction
- Extensive community involvement

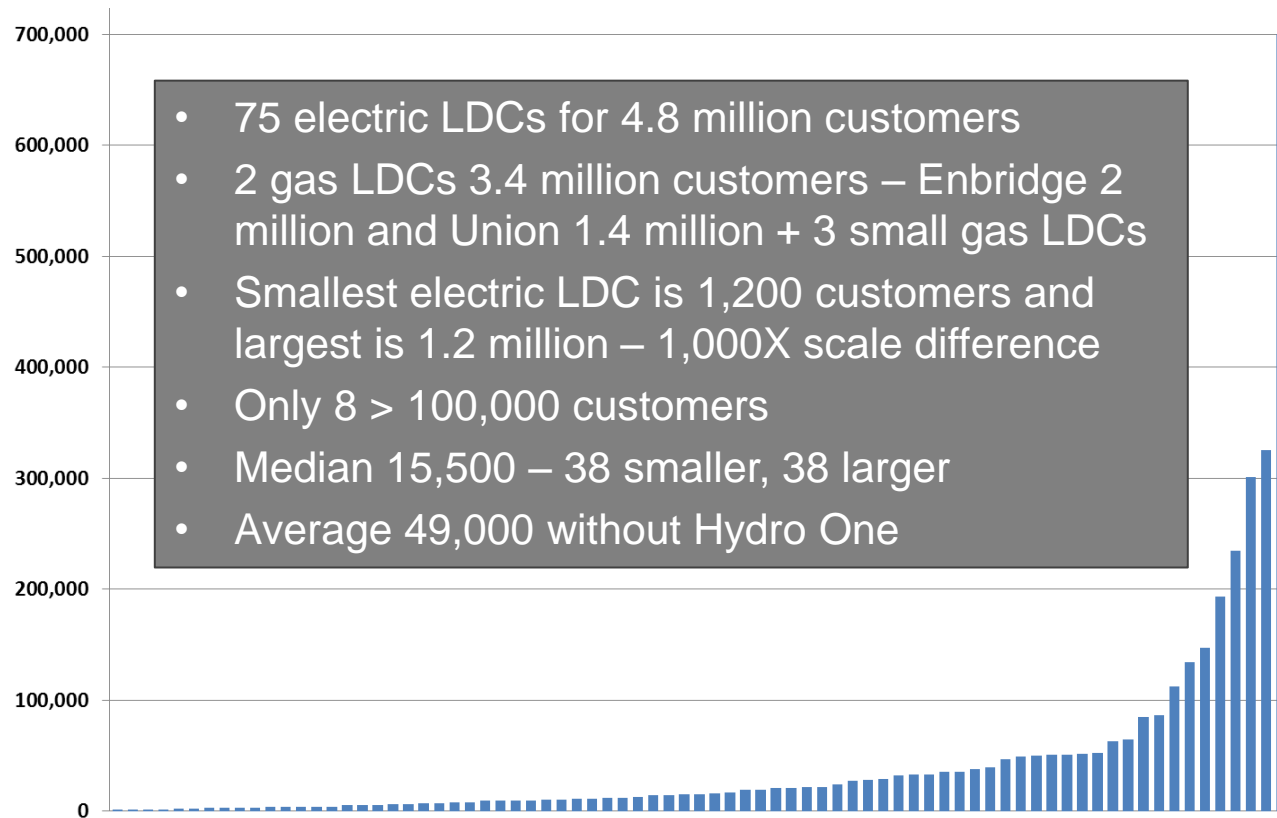


Horizon – bottom-line performer & industry leader

- First CEA member designated Sustainable Electricity Company™ – 2013
- Both EDA Environmental Award & CEA Environmental Award – 2013
- Hamilton-Niagara's Top Employers – 2012 and 2013
- Sustainable Hamilton Award of Merit – 2013
- CEA Sustainability Company of the Year – 2011 and 2012
- ISO 14001 Environmental Management System accreditation – 2011
- ISO 26000 Social Responsibility – first utility in Canada – 2011
- Global Reporting Initiative A+ sustainable development – 2010, 2011, 2012
- Ontario Energy Association Company of the Year – 2009
- OPG-EDA Performance Excellence Award – 2006



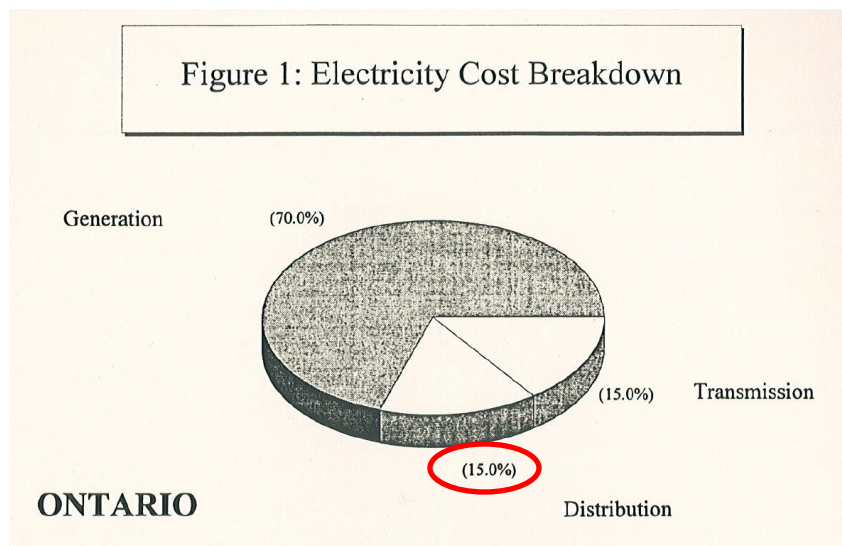
Ontario LDCs – gas and electric compared



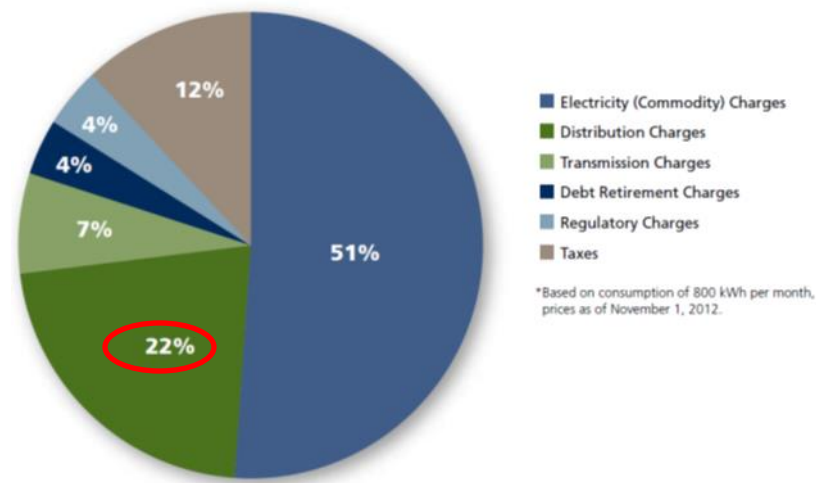
- LDC numbers, scale differences and fragmentation are unique to Ontario
- LDC structure contributes to higher costs for customers

Distribution's "Total Bill" share 1996 & 2012

- Distribution costs have increased from 15% to 22% of the total bill since industry restructuring in the 1990s
- Increase is actually from 15% to 25% when taxes are not included

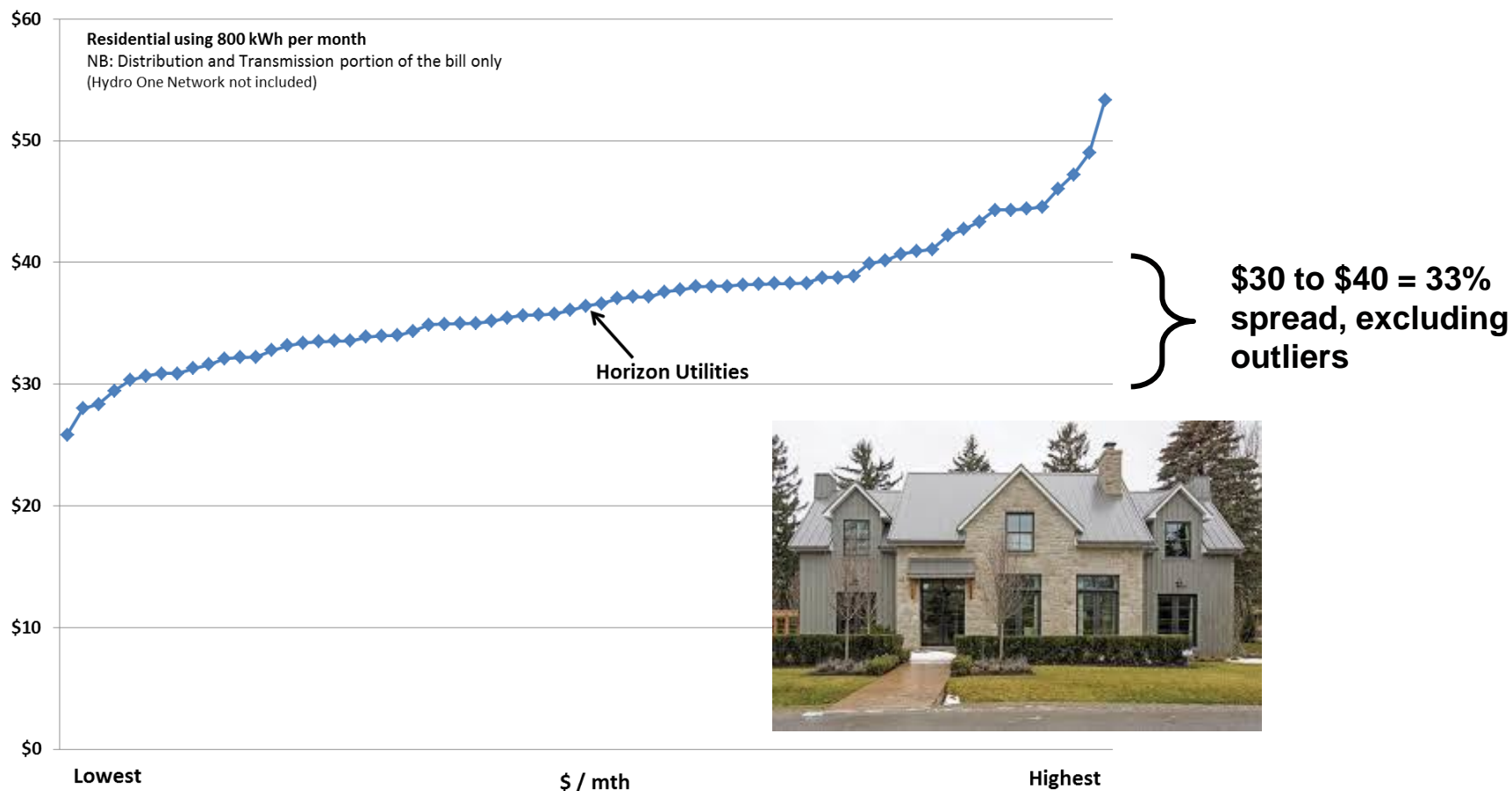


MEA (now EDA) submission to
Macdonald Committee 1996

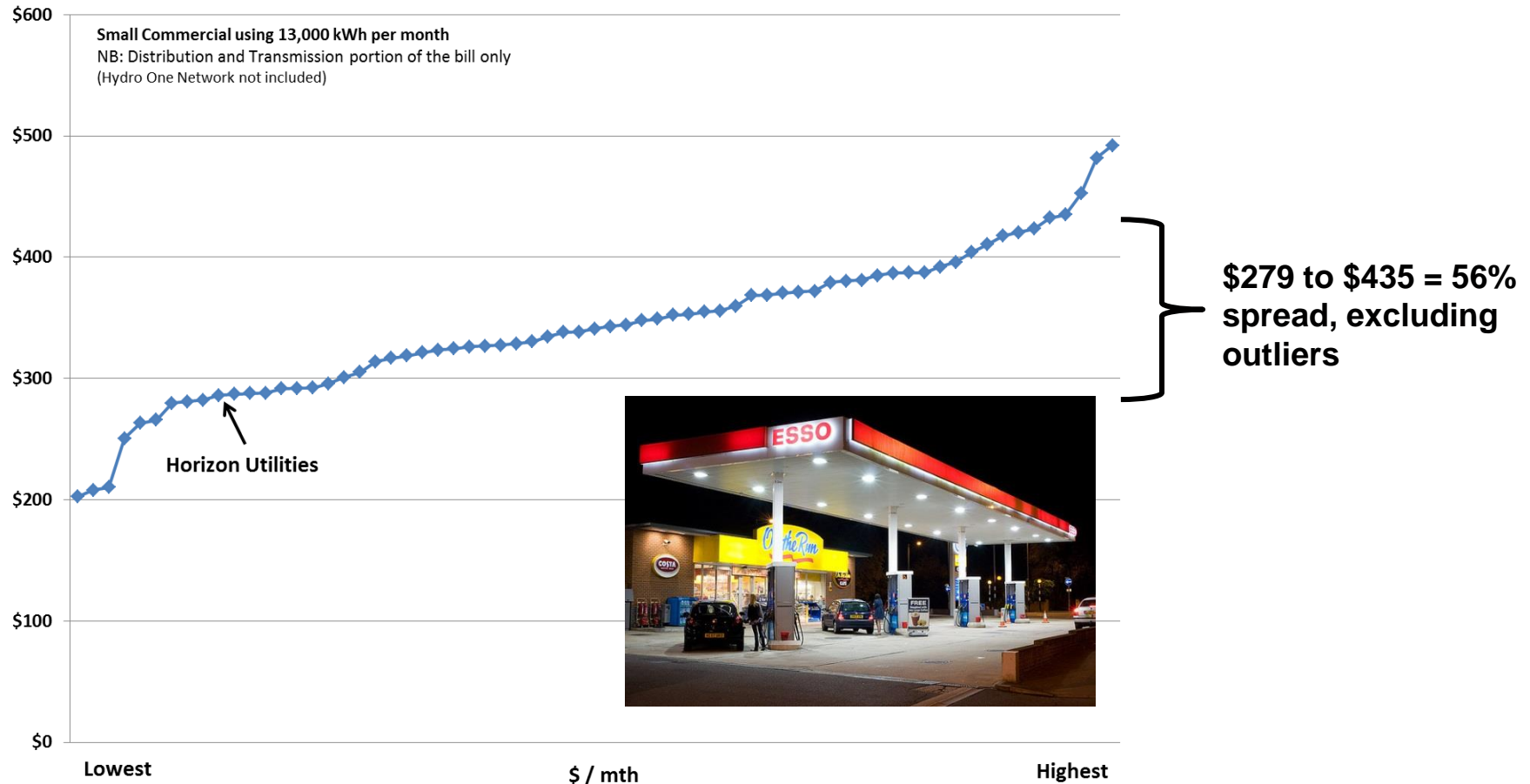


ODSP Report 2012

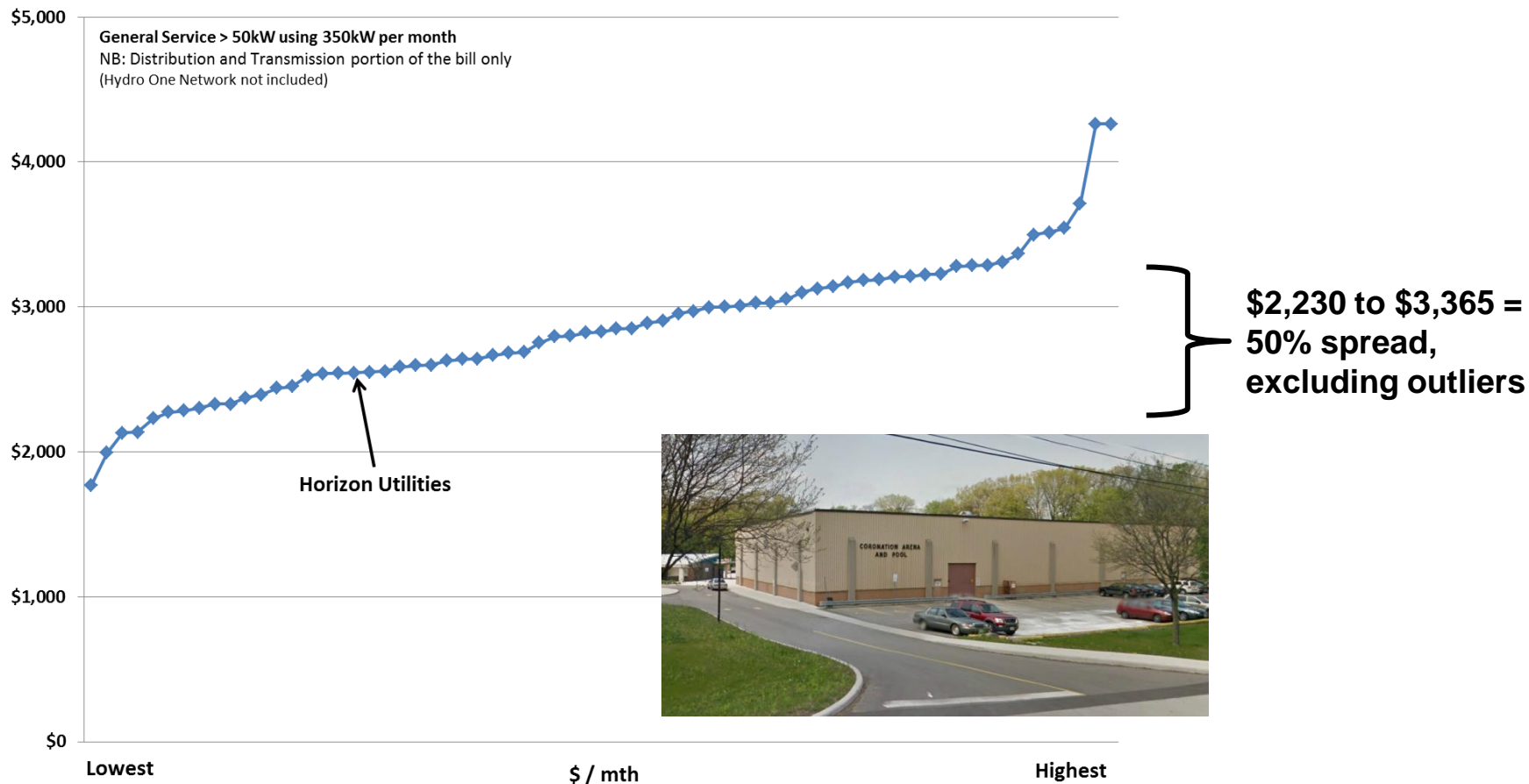
Residential rate comparison – 800 kWh



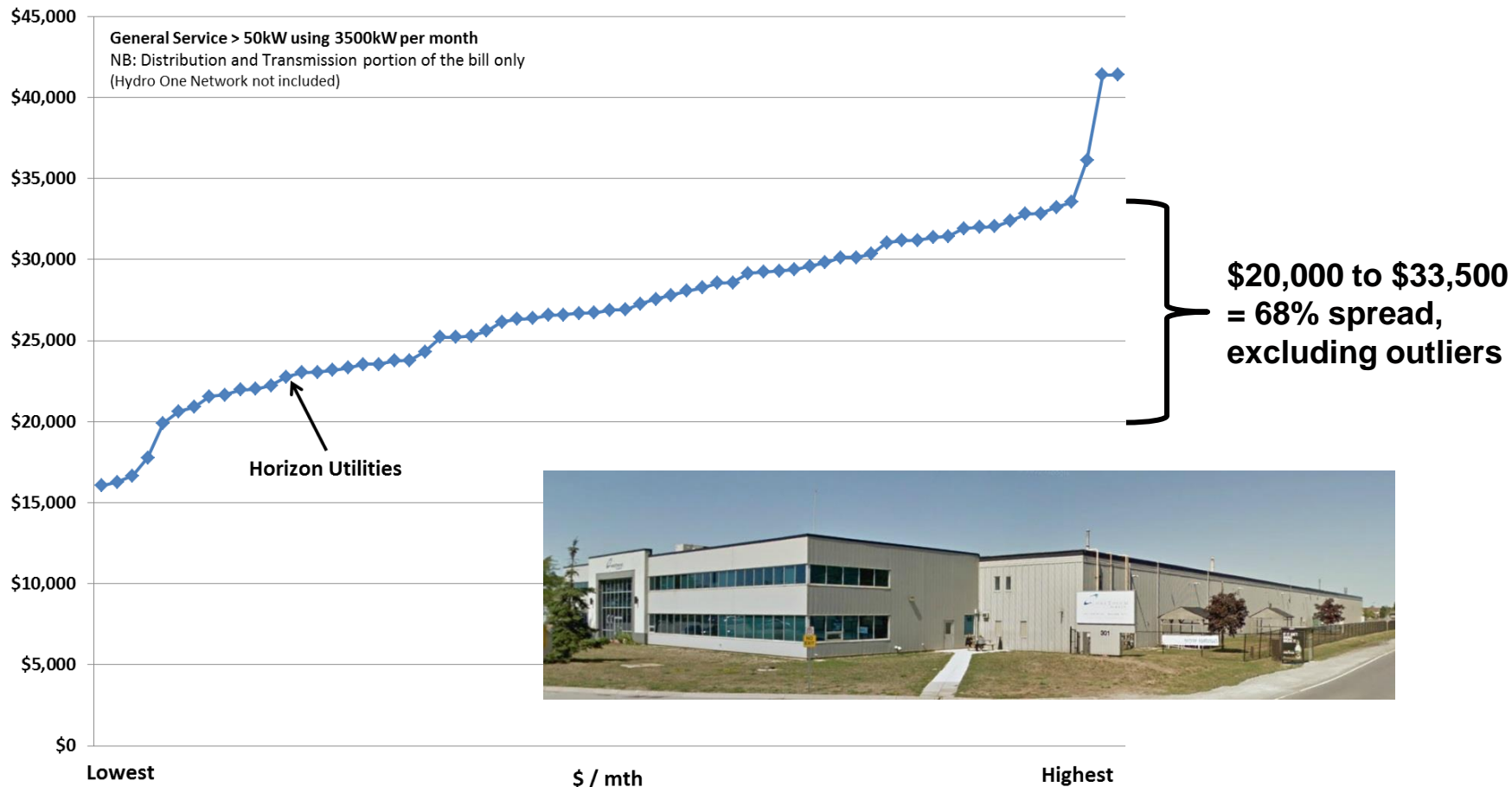
Small commercial rate comparison – 13,000 kWh



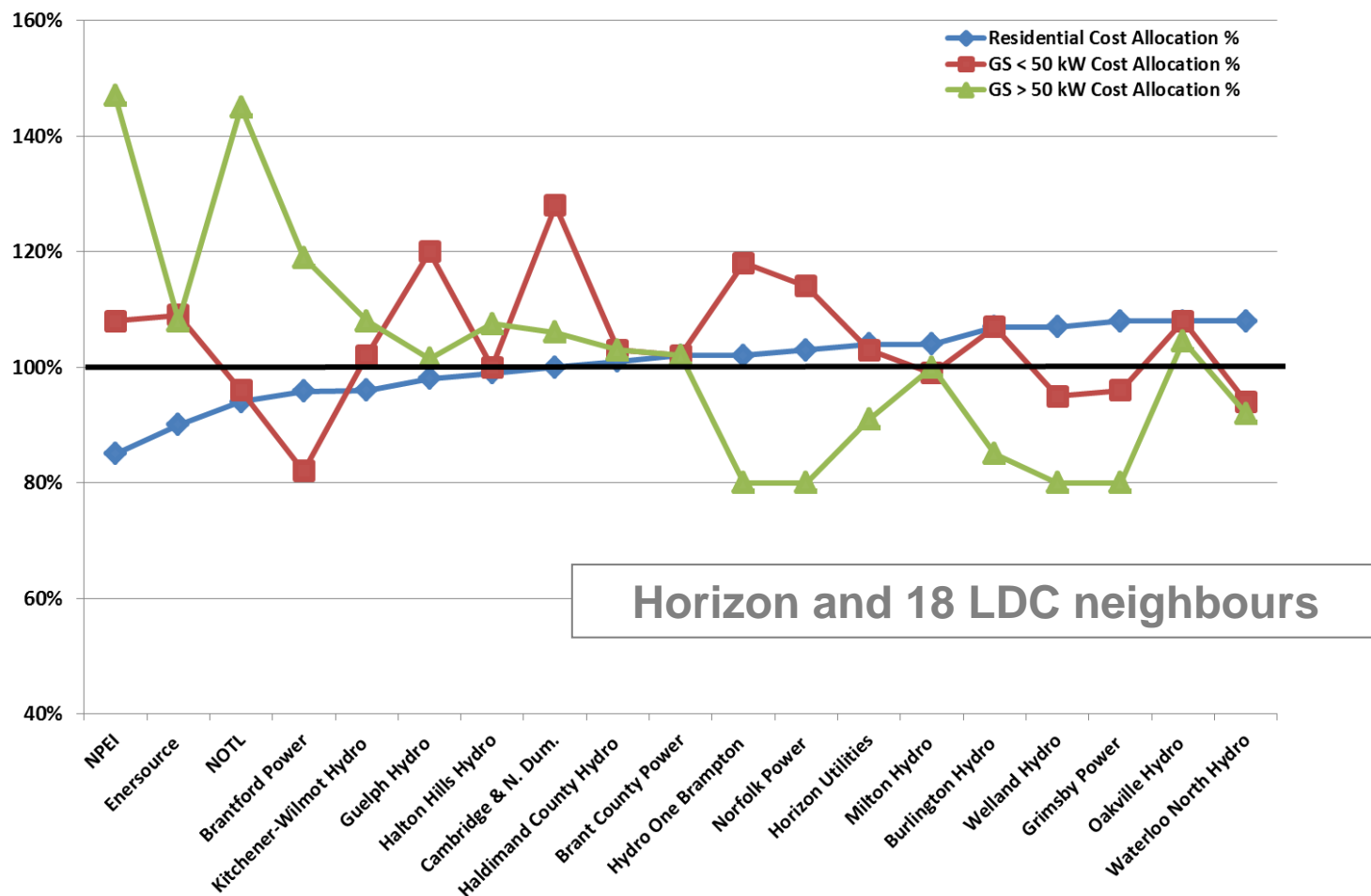
Light industrial rate comparison – 350 kW



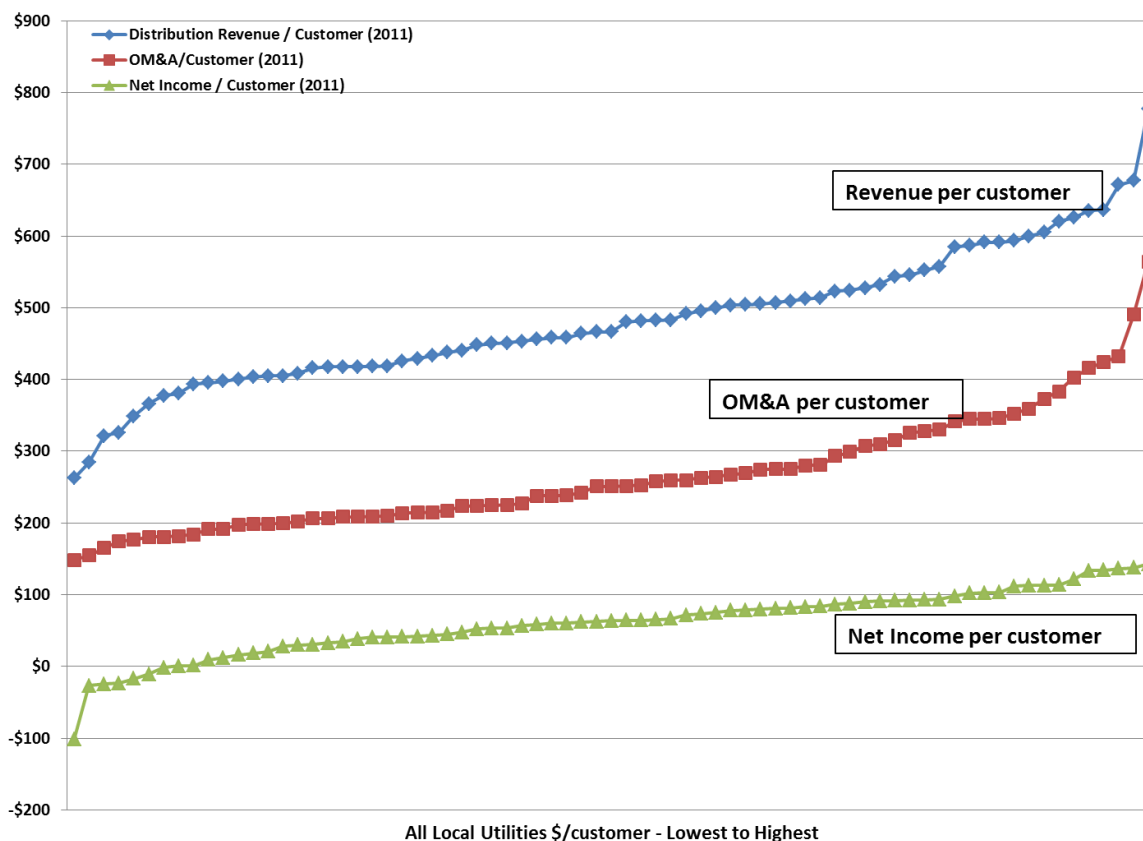
Manufacturing rate comparison – 3,500 kW



Cost allocations across rate classes – 19 LDC



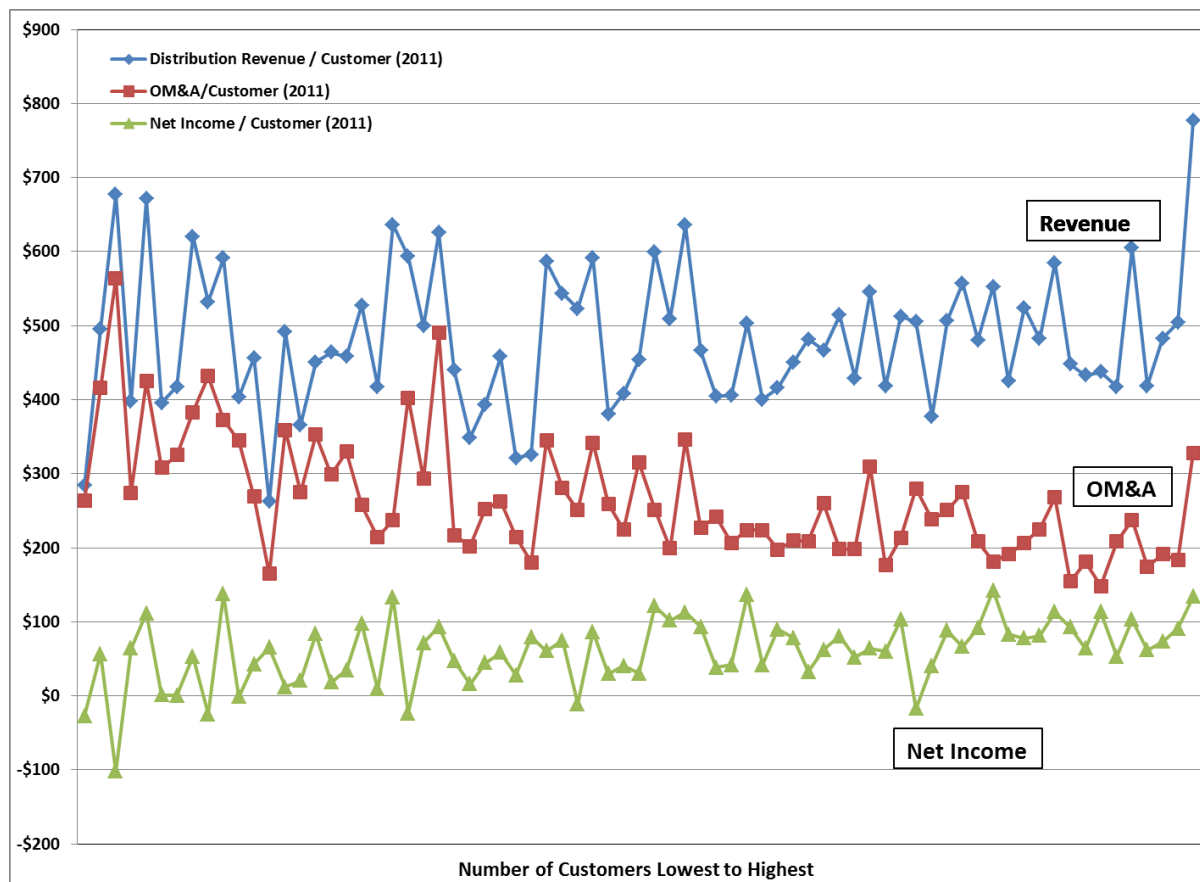
All LDCs – revenue, OM&A and NI per customer



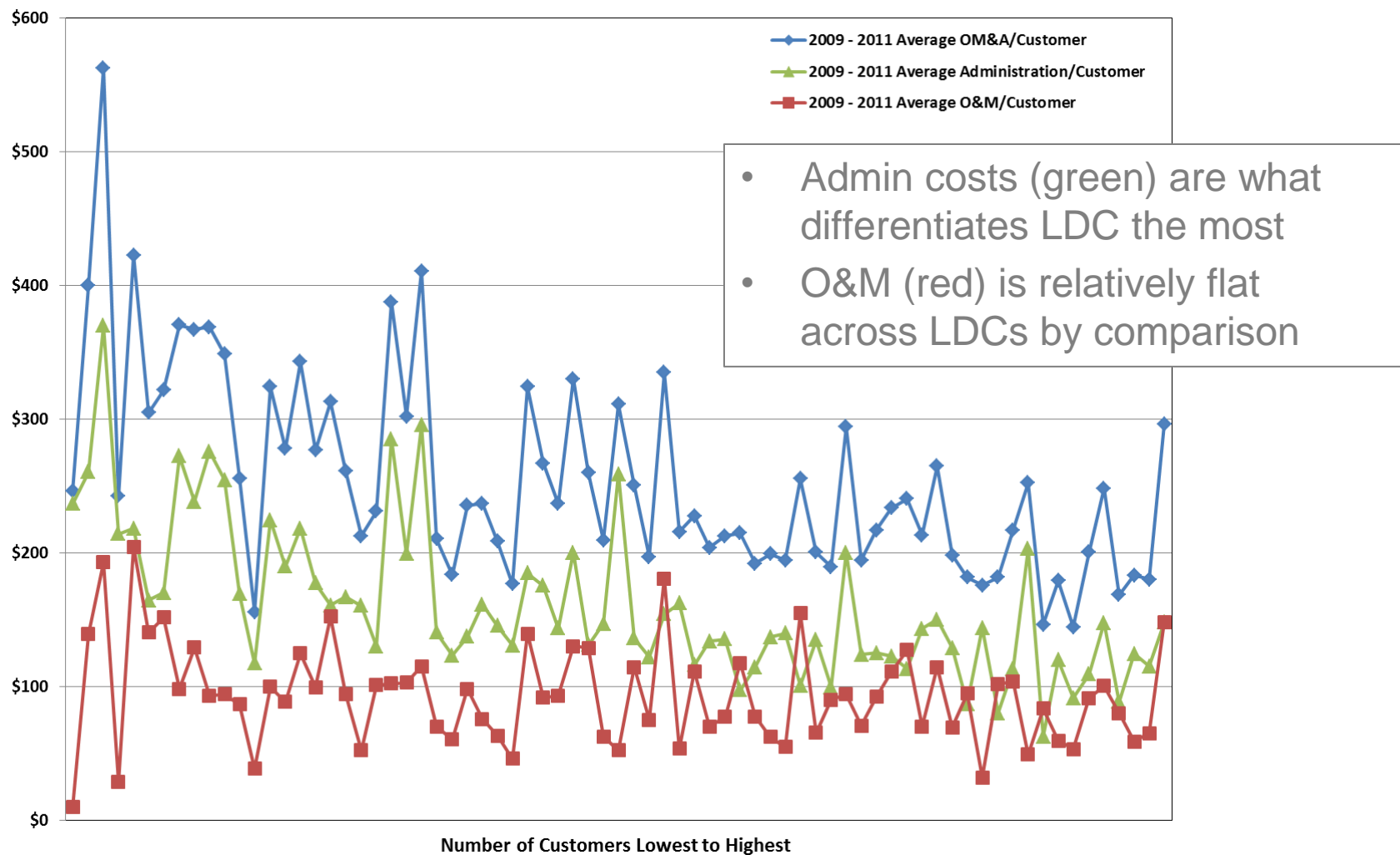
- Wide differences on controllable cost and revenue among LDCs
- Wide differences not translated into higher net income

All LDCs by customer scale – revenue, OM&A and NI

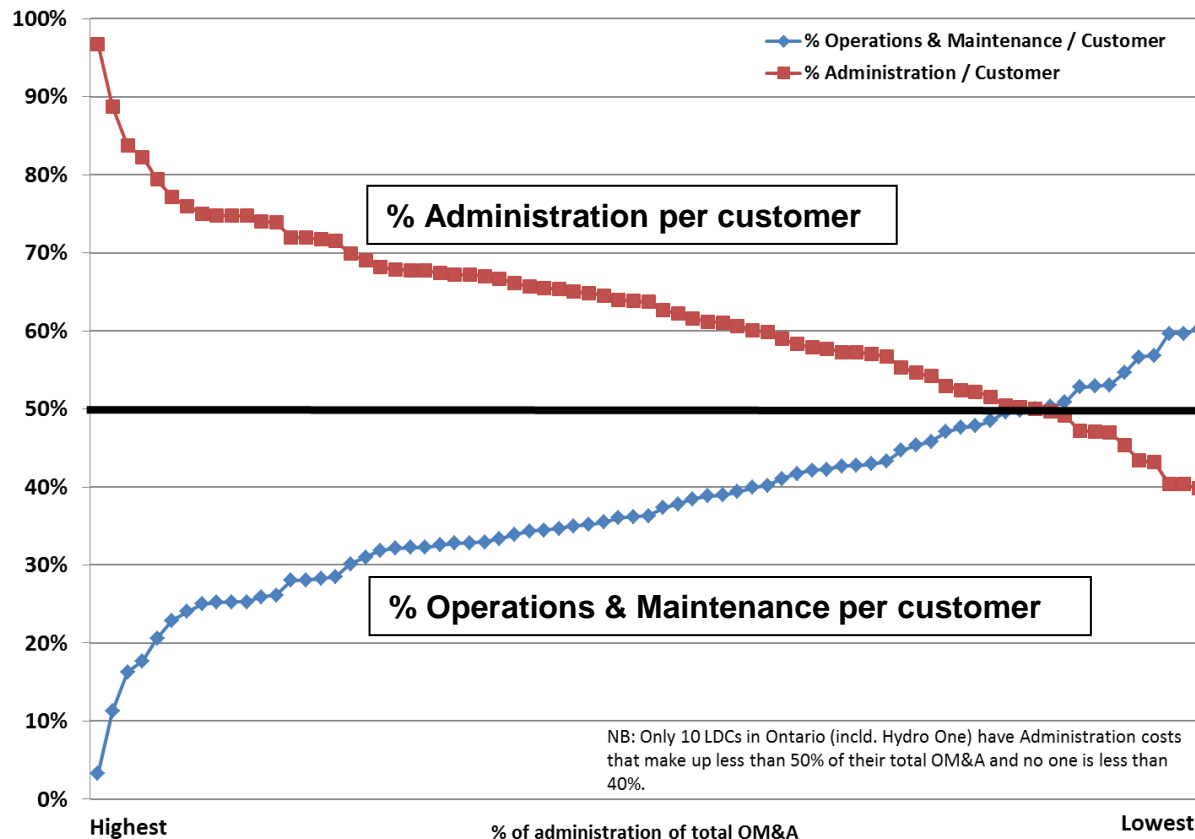
- On balance, larger LDCs are more profitable, operating with much lower costs, and a tighter band of revenue on a per customer basis



Sector OM&A, O&M, Administration cost breakdown

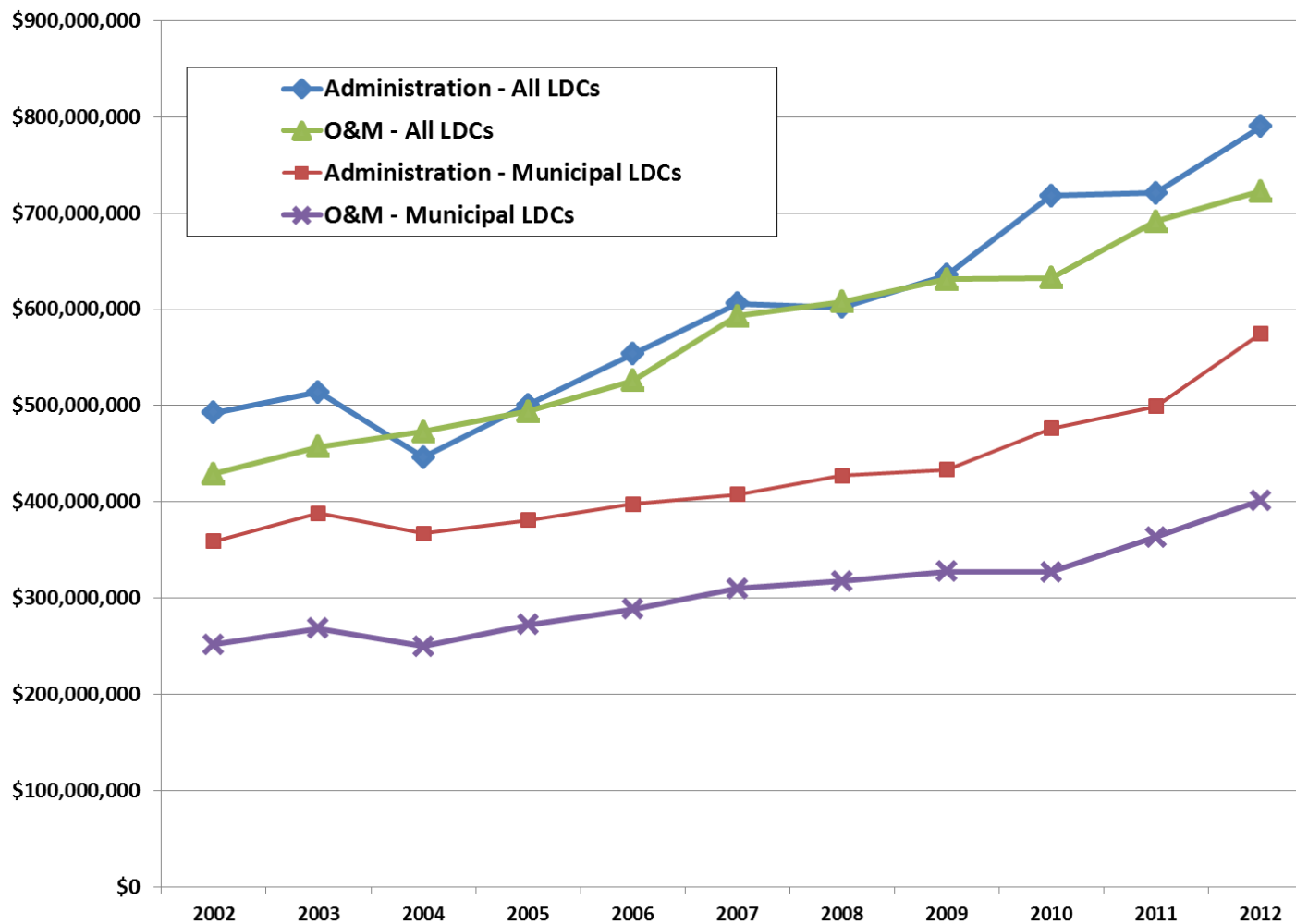


Administration costs are largest part of OM&A



- Admin. is 59% of total municipal LDC OM&A costs – \$575M of \$976M
Administration is 52% of total sector OM&A – \$790M of \$1.51B

Administration growing faster than O&M



O&M cost composition – all LDCs are not the same

- Tx connected LDCs generally have more assets per customer
 - Particularly distribution feeders, stations
 - Result is more O&M and capital work per customer
- Dx connected LDCs generally have fewer assets per customer
 - Feeders and stations, in many cases, belong to the host LDC

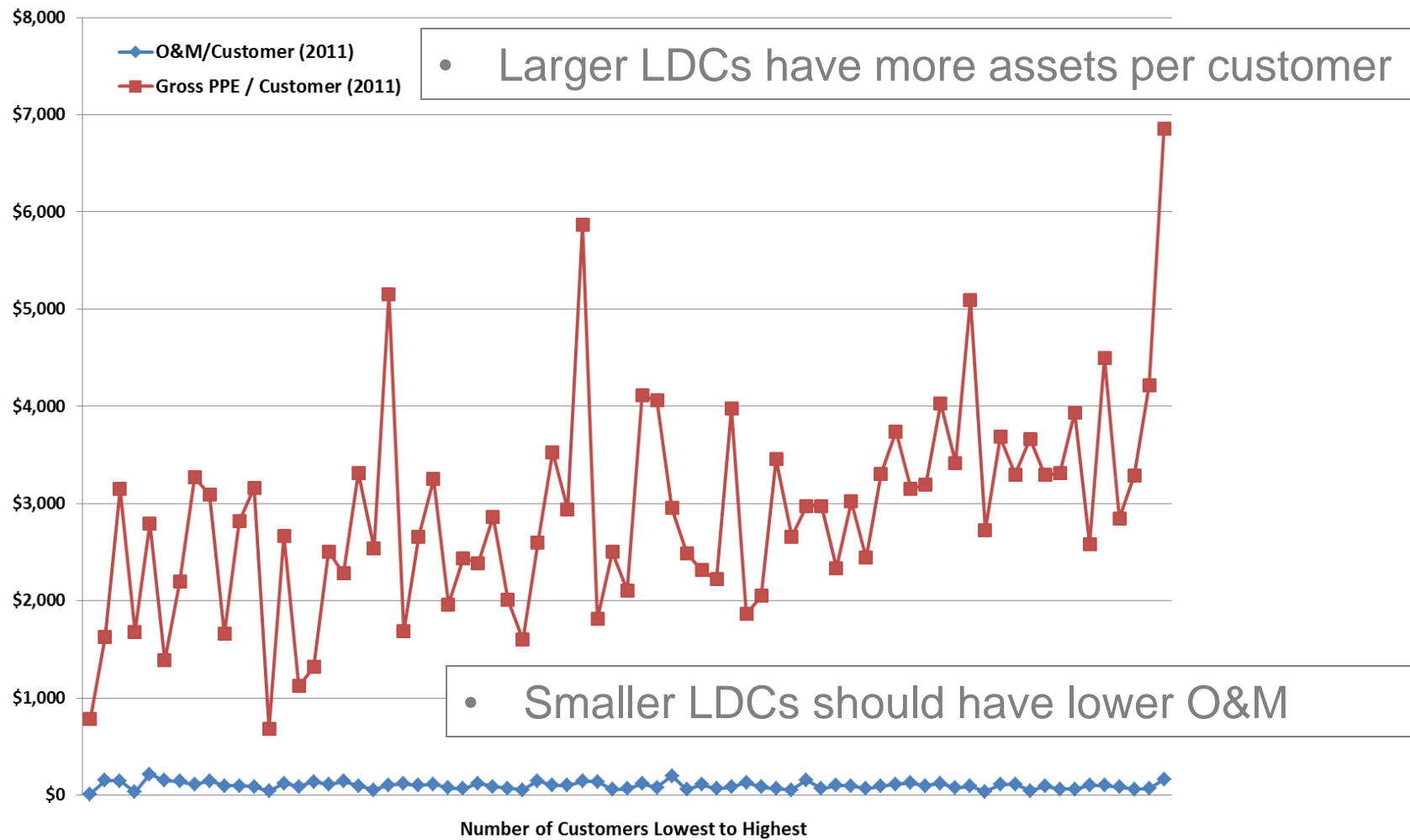
Tx Connected LDC



Dx Connected (embedded) LDC

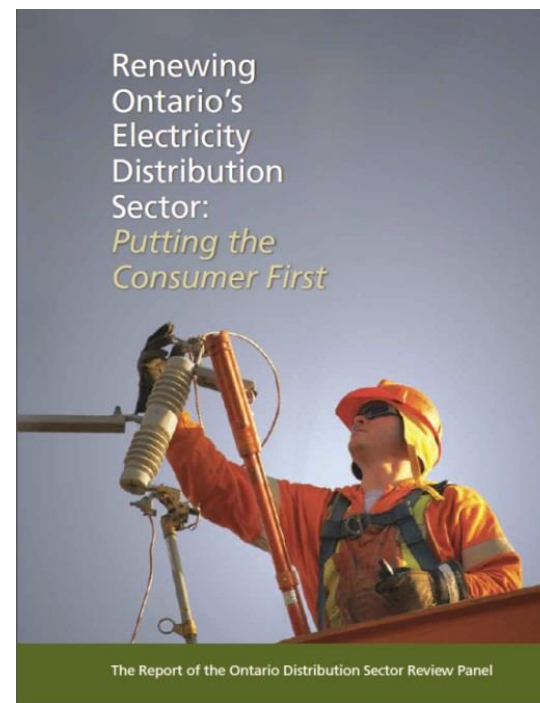


LDC O&M and Gross Fixed Assets

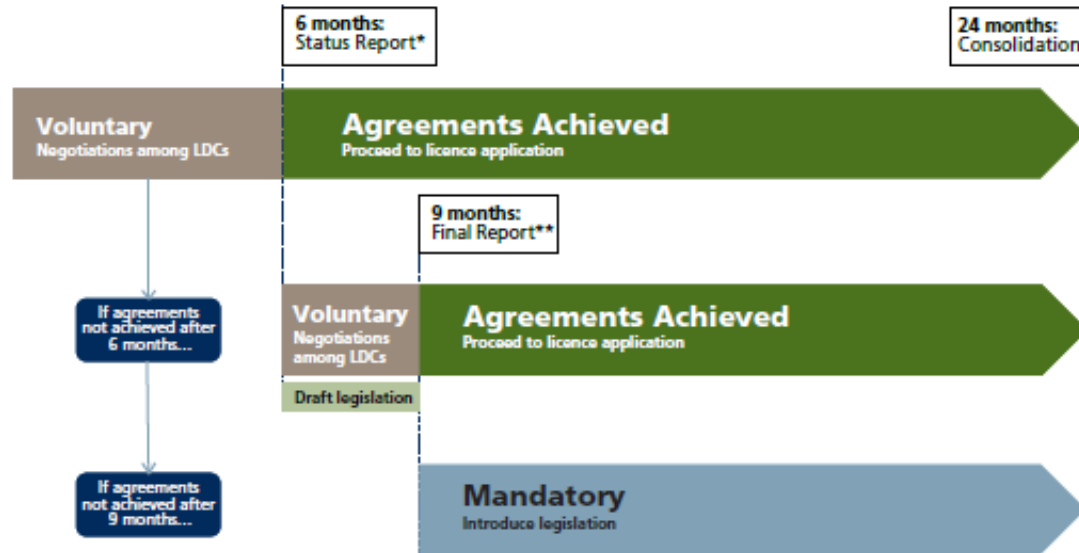


Ontario Distribution Sector Panel – findings

- “Ontario’s electricity distribution sector is at an historic turning point”
- \$16.6 billion of renewal investment required from LDCs over next 20 years
- Another \$4 billion to grow and serve new customers
- \$1.7 billion in cost savings in first 10 years with LDC consolidation
- \$1.3 billion in avoided infrastructure investment after first 10 years with LDC consolidation
- Panel recommended consolidation to 8 to 12 regional utilities, but ran into trouble on implementation



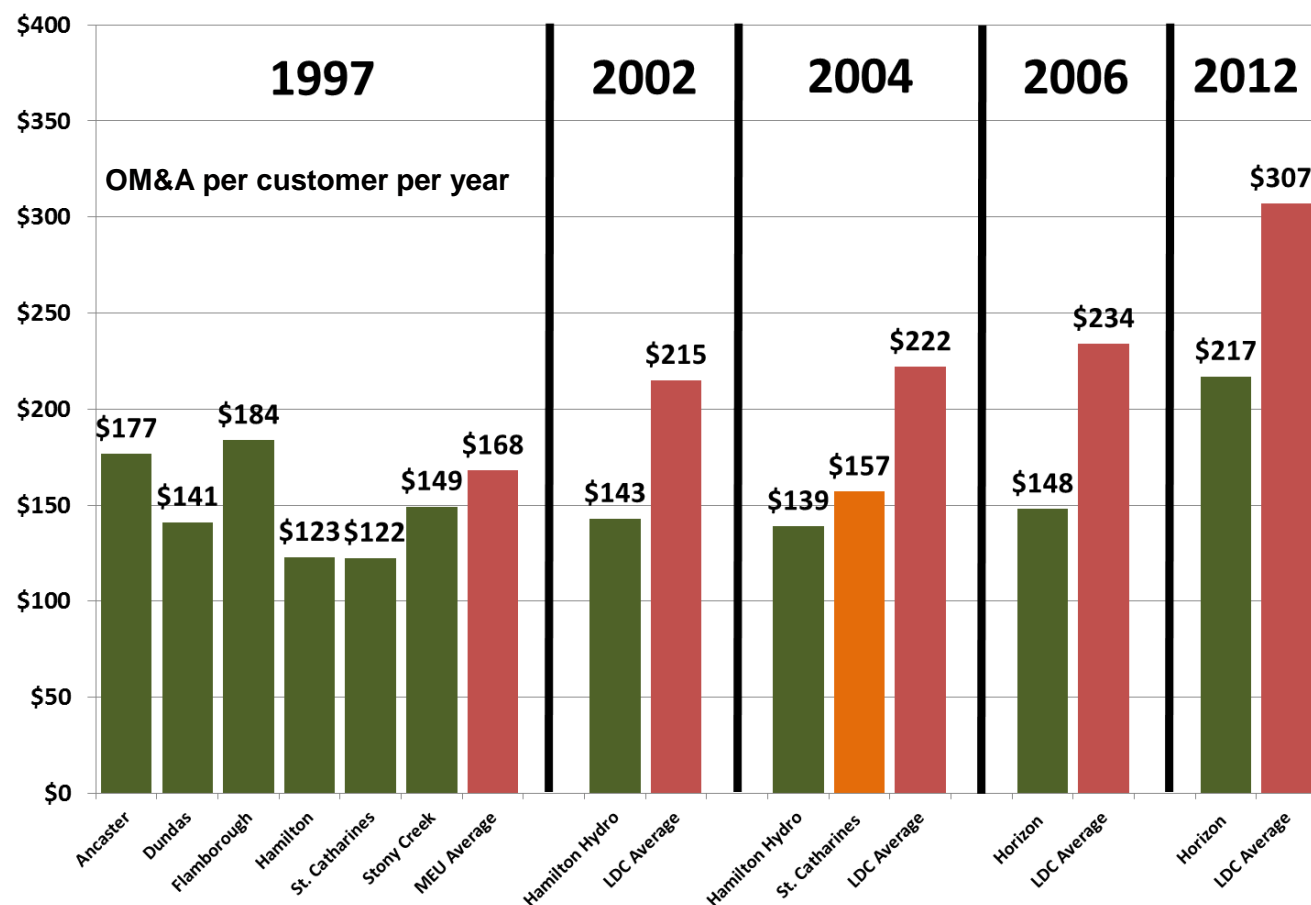
Government now wants voluntary transactions



- Panel had unrealistic 24 month timeframe for “voluntary” multiparty transactions
- Missed milestones meant mandatory consolidation would take over
- Government believes savings are real and now looking for LDCs to proceed voluntarily

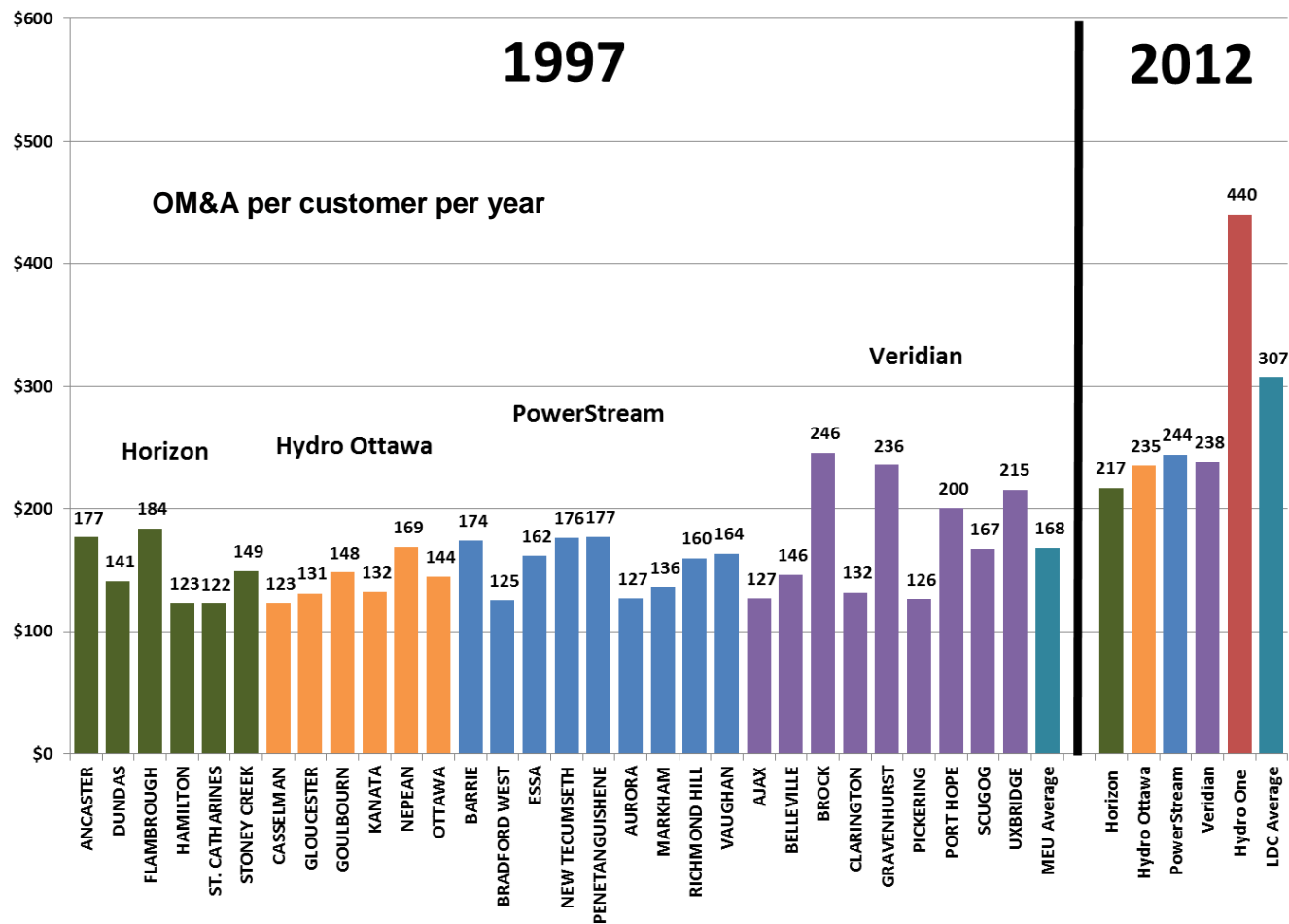
Horizon's mergers and OM&A story

- Horizon's mergers have allowed it to outperform the LDC sector

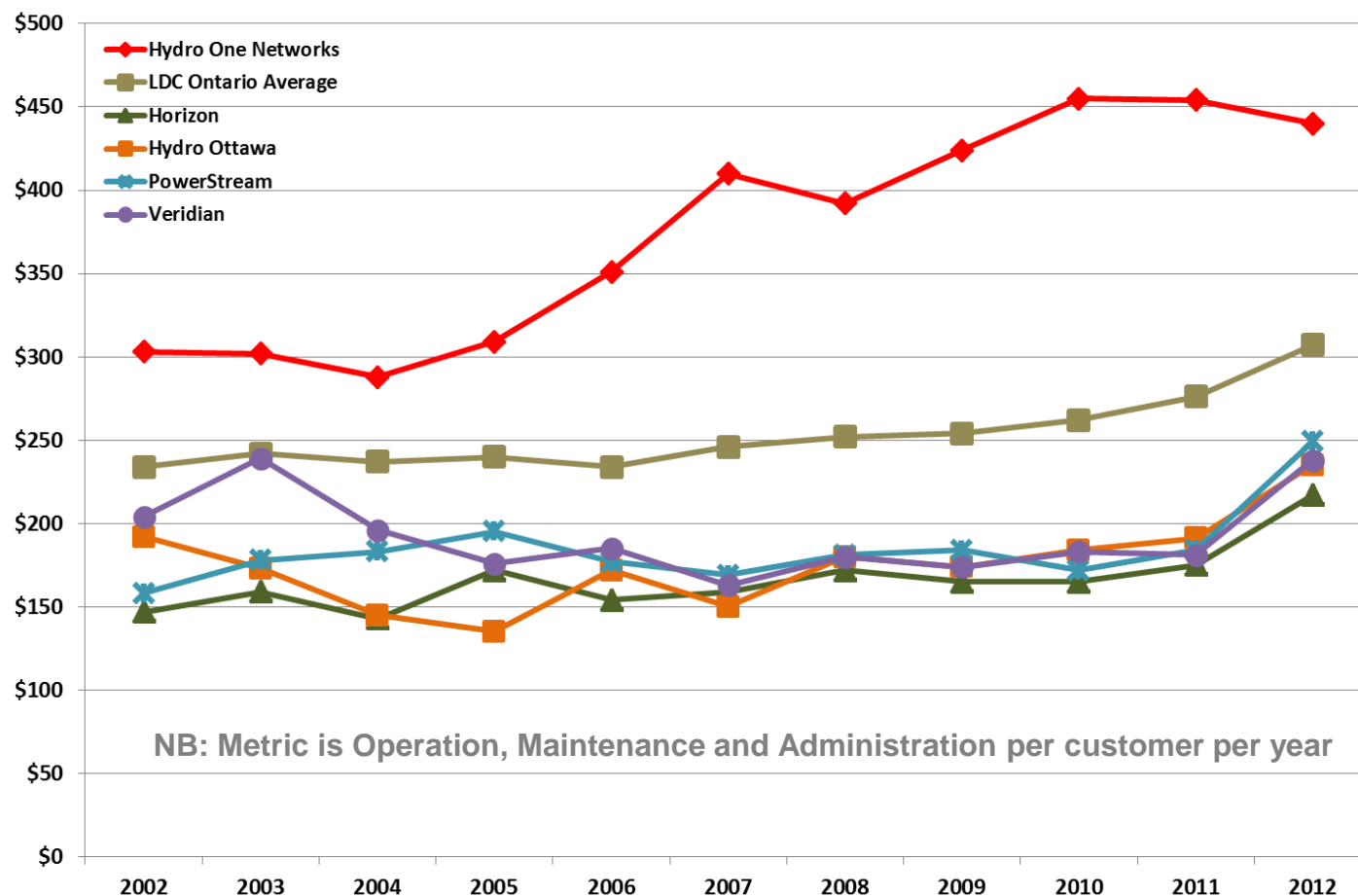


Hydro Ottawa, PowerStream, Veridian mergers and OM&A

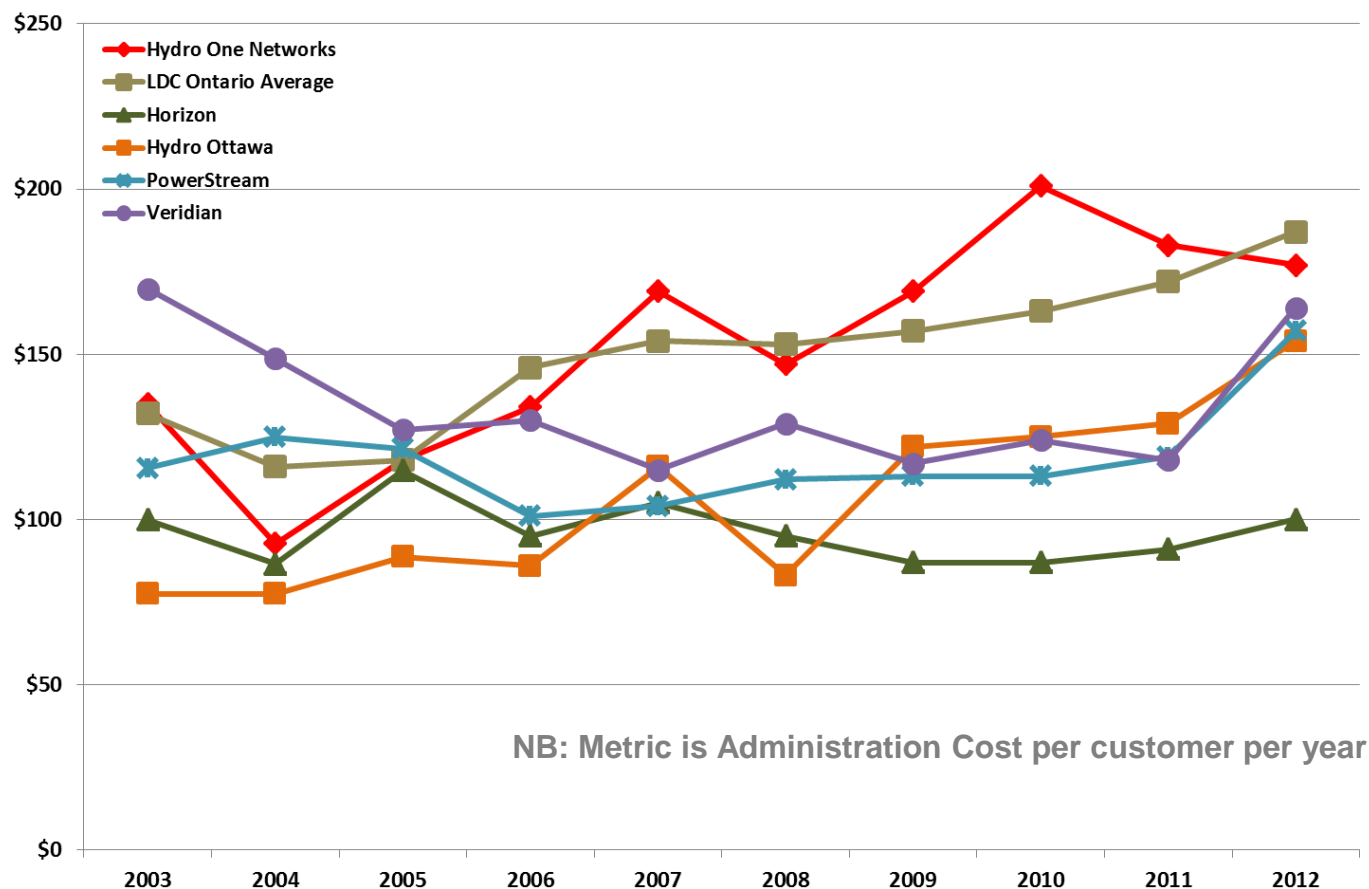
- Other large LDC mergers have also outperformed the sector



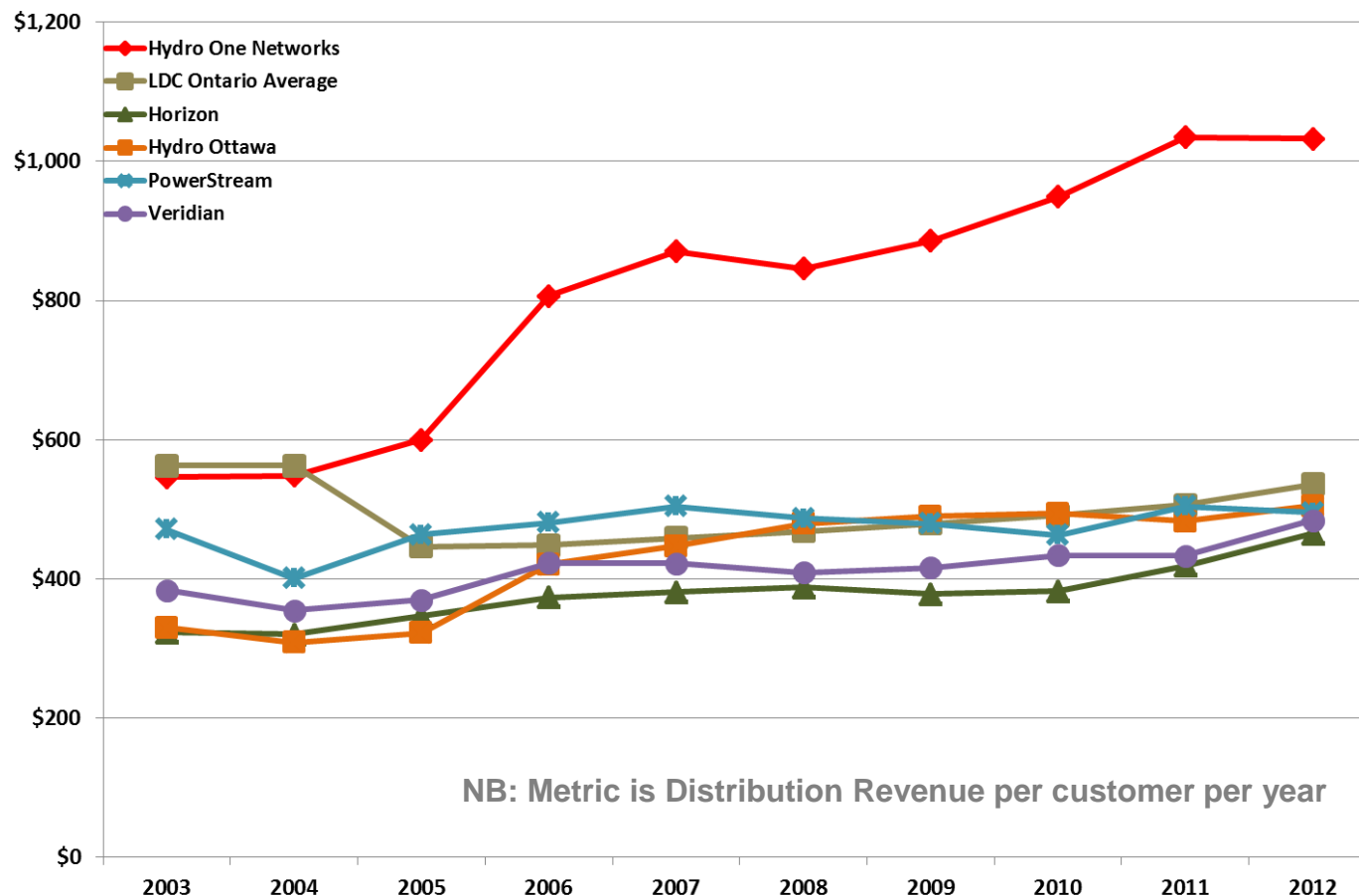
OM&A comparison – large LDC mergers – 2002-12



Admin cost comparison – large LDC mergers – 2003-12

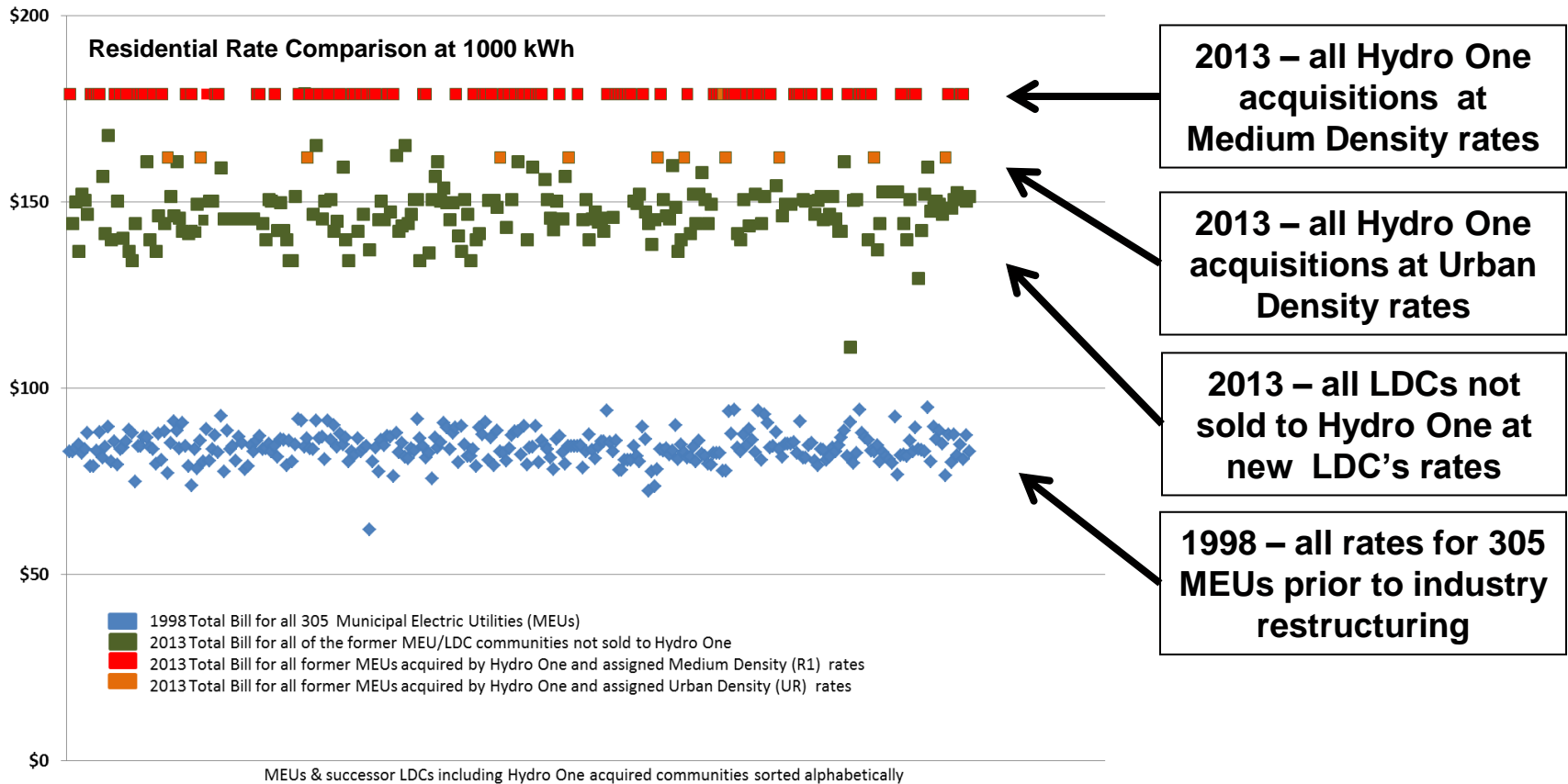


Distribution revenue comparison – 2003-12



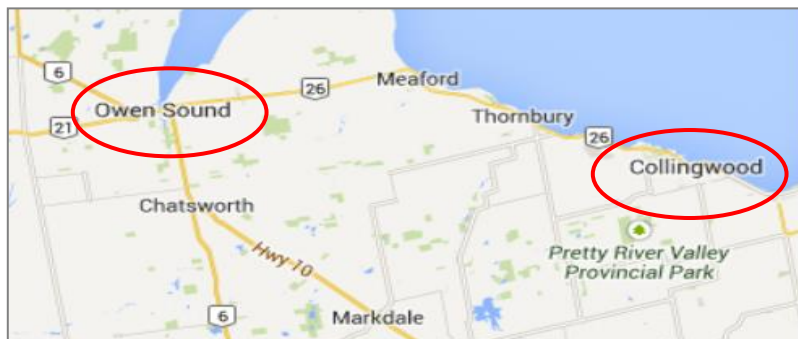
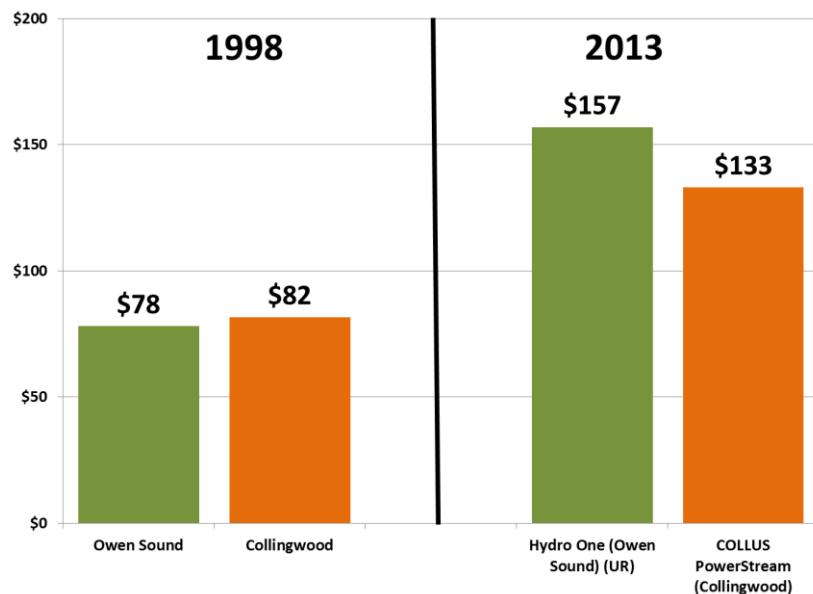
Municipalities now with Hydro One pay more

- Hydro One acquired LDC customers pay approx. \$25 more per month when 2013 residential rates are compared with 1998 for all 305 MEUs



Hydro One urban density – Owen Sound vs. Collingwood

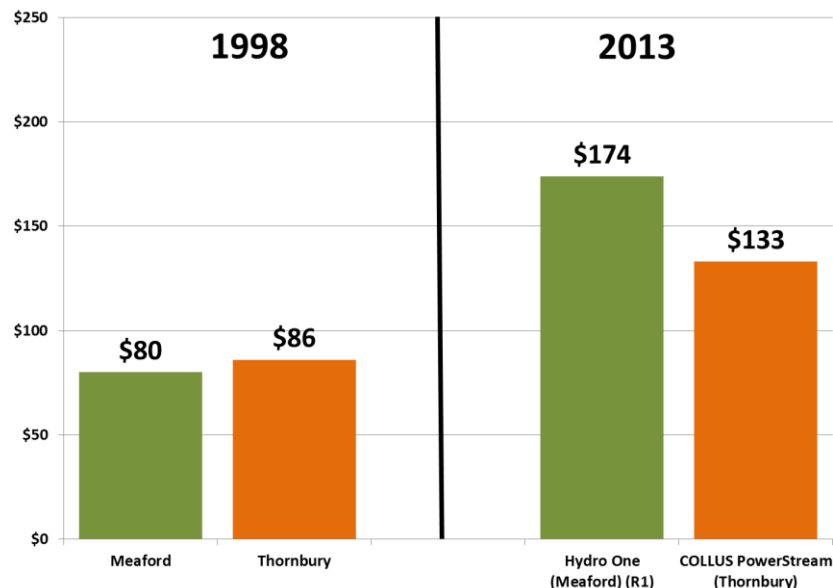
Residential rate comparison at 1000 kWh



- Owen Sound and Collingwood are comparable communities
- Owen Sound (GBE) sold to Hydro One in 2000
- Collingwood (COLLUS) stayed on its own, later selling 50% to PowerStream in 2012
- Monthly total bills in Owen Sound and Collingwood were comparable in 1998
- Owen Sound residential customers now pay \$24 more per month and \$288 more per year than customers in Collingwood
- Owen Sound, with more than 3,000 customers, gets Hydro One's "Urban Density" (UR) rate

Hydro One medium density – Meaford and Thornbury

Residential rate comparison at 1000 kWh



- Meaford and Thornbury are comparable small communities
- Both had similar monthly bills in 1997, with Meaford being lower
- Meaford sold to Hydro One in 2000
- Thornbury sold to Collingwood (COLLUS) in 2000 (with COLLUS selling 50% to PowerStream in 2012)
- Meaford residential customers of Hydro One now pay \$41 more per month and \$492 more per year than Thornbury customers pay to COLLUS
- Meaford, with less than 3,000 customers, gets Hydro One “Medium Density” (R1) rate

Is benchmarking a driver of consolidation?



HOME > Regulatory Proceedings > Policy Initiatives and Consultations > Renewed Regulatory Framework

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Defining and Measuring Performance of Electricity Transmitters and Distributors (EB-2010-0379)

On December 17, 2010, the Ontario Energy Board initiated a consultative process to address how the Board might create conditions which will foster the cost-effective and efficient implementation of Board-approved network investment plans by transmitters and distributors through the establishment of appropriate standards for performance and efficiency, the provision of appropriate incentives, and the review of utility performance.

This initiative is part of a coordinated consultative process to develop a renewed regulatory framework for electricity.

JUMP DOWN:

- Updates
- Working Group Materials

Related Information

[A Renewed Regulatory Framework for Electricity](#)

[Distribution Network Investment Planning \(EB-2010-0377\)](#)

[Approaches to Mitigate \(EB-2010-0378\)](#)

[Defining and Measuring Performance of Electricity Distributors and Transmitters \(EB-2010-0379\)](#)

[Developing Guidelines for the Implementation of the Renewed Regulatory Framework \(EB-2011-0001\)](#)

[Regional Planning and Infrastructure \(EB-2011-0002\)](#)

[Revenue Decisions \(EB-2012-0411\)](#)

[more...\(+\)](#)

BENCHMARKING THE COSTS OF ONTARIO POWER DISTRIBUTORS



EMPIRICAL RESEARCH IN SUPPORT OF INCENTIVE RATE SETTING IN ONTARIO: REPORT TO THE ONTARIO ENERGY BOARD

By [Name]



OEB benchmarking rankings – 2012

- OEB current and proposed benchmarking levels playing field for scale
 - No regulatory advantage for scale
 - 5 of 10 of “best performing” LDCs have less than 10,000 customers
- Framework has not been an effective driver for LDC consolidation

2013 Efficiency Cohort Grouping Results

Company	Cohort
Entegrus Powerlines Inc. (Chatham-Kent Hydro Inc.)	1
Festival Hydro Inc.	1
Grimsby Power Incorporated	1
Hydro Hawkesbury Inc.	1
Hydro One Brampton Networks Inc.	1
Kitchener-Wilmot Hydro Inc.	1
Entegrus Powerlines Inc. (Middlesex Power Distribution Corporation)	1
North Bay Hydro Distribution Limited	1
Northern Ontario Wires Inc.	1
Renfrew Hydro Inc.	1

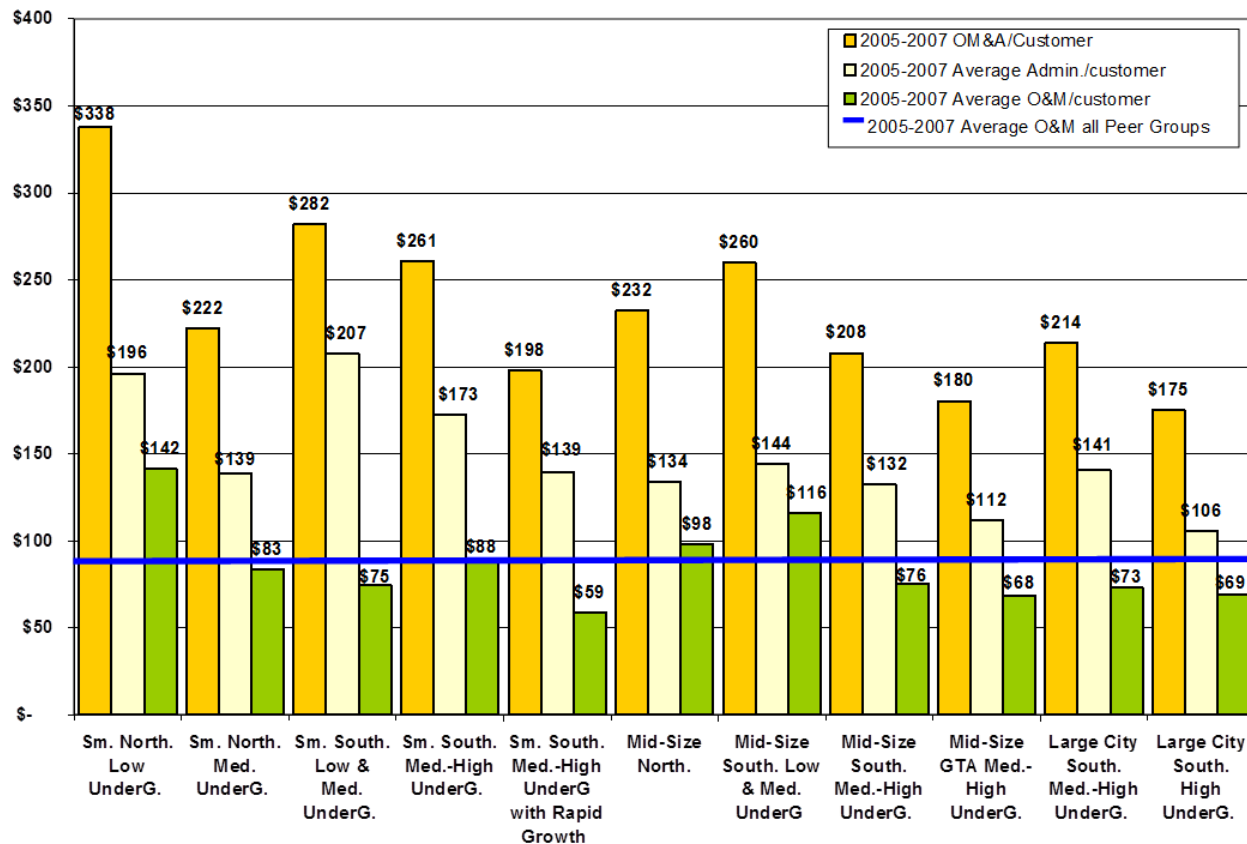
3rd GIRM econometric benchmarking adjusts for scale

- OEB benchmarking has handicapped LDCs for scale – assumes they have no options, like mergers or outsourcing, to get scale
- OEB econometric model holds that every additional unit of LDC scale incurs a 0.95% increase in controllable costs (OM&A)
- Effect is that larger LDCs are expected to have lower costs and this handicap is built into the benchmarking

*“Our research suggests that incremental (albeit modest) scale economies can still be realized from output growth by most distributors in Ontario. For example, at sample mean values of our three output variables, the sum of the estimated output elasticities is 0.95. **Thus, a 1% increase in output is estimated to raise OM&A expenses by 0.95%.**”*

Pacific Economics Group (PEG) Report , March 2008, pg. 54
(emphasis added)

OEB 3rd GIRM also had peer groups based on scale



- Benchmarking based on total OM&A, but O&M cost is largely flat across the groups
- Administration is the distinguishing feature of LDC peer groups, but it does not relate to geography or undergrounding – the key peer group criteria

4th GIRM – merger disincentives

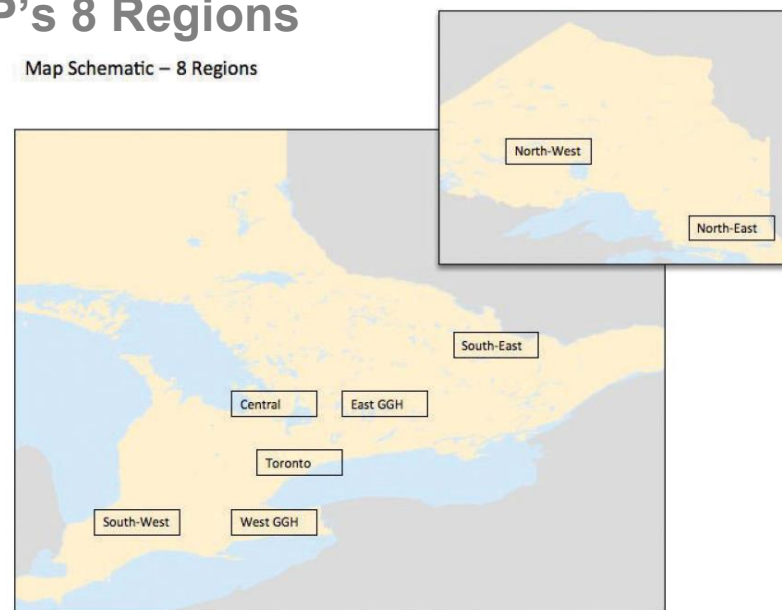
- OEB's new econometric benchmarking framework – peer grouping has been abandoned – acts as a disincentive for mergers
- Benchmarking model, by leveling playing field for scale, prejudices merger savings as attained
- Result is that merger cost savings are not translated into improved benchmarking scores for new utility – new LDC can only stay even by attaining the cost savings the model expects
- Benchmarking model ranks merged LDC with expected performance and thereby creates a far more challenging benchmark for newly merged distributor
- Even if a merger results in lower unit costs, new distributor can actually be penalized and have a worse benchmarking score than the two distributors prior to the merger

Regional planning and electricity markets in Ontario

- Regional energy planning, if it takes hold, could be instrumental to developing a competitive electricity market in Ontario
- Regional LDC consortiums for planning infrastructure could be beginning of contracting power regionally
 - Increases marketplace for transactions – ODSP recommended eight LDCs
 - Lessens / removes need for Province or a provincial agency to act as a counterparty
 - Lessens problem of there being a single / dominant counterparty

ODSP's 8 Regions

Map Schematic – 8 Regions



1-SEC-8

[RRFE Report/p.13] For each of the following, please explain how the Applicant has evaluated the reasonableness of its forecasted:

- a) Revenue;**
- b) Costs;**
- c) Inflation; and**
- d) Productivity**

Response:

a) Horizon Utilities is requesting approval for its distribution revenue requirements for its 2015-2019 rate plan, based on: a forecast for 2015-2019 capital expenditures; OM&A; depreciation expense; cost of capital; Payments in Lieu of Taxes ("PILs") and revenue from other sources ("Other Revenue"). The reasonableness of the forecasted revenues and costs is directly tied to the reasonableness of the underlying components of the revenue requirement. The two main drivers are discussed below.

Capital Expenditures

The major drivers of Horizon Utilities' capital expenditures in the rate plan are the necessary renewal investments in the distribution system; and buildings and related underlying systems. Horizon Utilities performed detailed work on its future capital requirements. It conducted third party asset condition assessments ("ACAs") to identify and confirm the level and timing of investment required to address its' aging infrastructure as provided in Exhibit 2, Tab 6, Schedule 1. Horizon Utilities also retained KPMG LLP (Canada) ("KPMG") to provide an independent assurance review of the methodology and analytics to validate the outcomes of the third party ACA conducted by Kinectrics for distribution capital.

OM&A Expenses

OM&A expenses are increasing principally from wage and price inflation; processes and technology support to provide for the increased investment in distribution system renewal; and customer-oriented initiatives such as a new Geographic Information System and Operating Management System to track assets. Horizon Utilities has mitigated the overall real growth in its operating cost base with sustained productivity

1 savings of \$6.5MM by 2019 as discussed Exhibit 4, Tab 3, Schedule 4. The OM&A
2 Trend Analysis, which commences at page 3 of Exhibit 4, Tab 1, Schedule 1, compares
3 the total growth in OM&A with that which would result from a Price Cap Index approach;
4 identifies the drivers of real growth in OM&A spending; and demonstrates the impact of
5 productivity initiatives in mitigating this growth. Horizon Utilities' section on "Comparison
6 to LDC Sector", which begins at page 31 of Exhibit 1, Tab 2, Schedule 6, demonstrates
7 that despite the OM&A increases sought in this Application, Horizon Utilities would retain
8 its position as a low-cost distributor relative to its peers.

9 b) Please see Horizon Utilities' response to a) above.

10 c) Please see Horizon Utilities' response to Interrogatory 1-EP-3 which validates Horizon
11 Utilities' inflation assumptions in this Application.

12 d) Horizon Utilities has included certain analyses in its response to 1-Staff-16 regarding
13 productivity and Total Factor Productivity ("TFP"). The analysis indicates that
14 productivity has and will contribute: i) a favourable 1.17% CAGR impact on OM&A from
15 2011 to 2019; ii) a favourable 0.64% CAGR impact on Revenue Requirement from 2011
16 to 2019. Relative to the Board approved metrics for TFP, including stretch factor, during
17 this period (1.12% from 2011 to 2013 and 0.15% from 2014 to 2019), this is both a
18 reasonable and a very favourable result. Please see Horizon Utilities' response to
19 Interrogatory 1-Staff-16.

1-SEC-9

[RRFE Report/p.13] Please explain the Applicant's approach to benefit sharing with ratepayers through the test period.

Response:

- 1 Horizon Utilities' Application includes forecasted productivity savings in Exhibit 4, Tab 3,
- 2 Schedule 4. The forecast total annual sustained productivity savings included in the Application
- 3 from 2011 through 2019 is approximately \$6,645,000. These savings are embedded in Horizon
- 4 Utilities' revenue requirement such that the rate increase that Horizon Utilities seeks is lower as
- 5 a result of the above-mentioned productivity savings.
- 6 As identified in Horizon Utilities' response to 1-Staff-4, Horizon Utilities' customers are
- 7 guaranteed to receive these savings throughout the rate term, irrespective of whether Horizon
- 8 Utilities achieves them.
- 9 Please also refer to Horizon Utilities' response to 1-Staff-4.

2-SEC-10

[Ex. 2/2/1] Does the Applicant plan to update any other element of the working capital calculation annually in addition to the cost of power? If so, please provide details.

Response:

- 1 Horizon Utilities does not plan to update any other element of the working capital calculation
- 2 annually, in addition to the cost of power.
- 3 It should be noted that subsequent to the filing of this Application, the Board has commenced a
- 4 proceeding on the *Policy Review of Electricity and Natural Gas Distributors' Residential*
- 5 *Customer Billing Practices and Performance* (EB-2014-0198). Depending on the Board's
- 6 determinations, and the timing of implementation of Board direction for any changes in billing
- 7 practices, Horizon Utilities' Working Capital Allowance may change at some point during the
- 8 rate plan.

2-SEC-11

[Ex.2-6-1] Please explain the Applicant's capital expenditure prioritization process.

Response:

- 1 Horizon Utilities' capital expenditure prioritization process is explained on pages 202-212 of the
- 2 DSP, Exhibit 2, Tab 6, Appendix 2-4, Section 3.2.3 Prioritization and Pacing of Investments.

2-SEC-12

[Ex.2-5-1/p.24] Is it the Applicant's position that the appropriate capital investment level for any given asset class is to have zero 'very poor' assets?

Response:

- 1 Generally yes, the appropriate capital investment level for any given asset class is to have zero
- 2 "very poor" assets. However, given the very large number of devices in operation this is not a
- 3 practical objective.
- 4 The condition of an asset varies by the number of operations, loading of electrical current,
- 5 environmental factors, material breakdown, failure experience, etc. These factors change over
- 6 time and the asset is required to be evaluated on a regular basis. Whether the asset is
- 7 replaced, notwithstanding its "very poor" condition rating, is also determined on a large scale as
- 8 part of a risk managed approach based on affordability and prioritization.
- 9 Horizon Utilities' objective for any asset class is to achieve a stable, level investment
- 10 requirement such that it does not require any significant unexpected capital expenditures year-
- 11 over-year.

2-SEC-13

[Ex.2-6-1/p.64] Please provide a chart showing total vehicle expenditures (incremental additions to overall fleet and replacement for end-of-life vehicles) for each year between 2011-2019.

Response:

1 The capital expenditures for vehicles identified on page 64 in Table 2-60 of Exhibit 2, Tab 6,
2 Schedule 1, are expenditures for vehicle replacements for end-of-life vehicles. All capital
3 expenditures for vehicles between 2011 and 2019 are for the replacement of end-of-life
4 vehicles. Horizon Utilities is not planning to add any incremental vehicles to its fleet. Horizon
5 Utilities provides an amended Table 2-60 below for clarity, to include a column that identifies
6 zero capital expenditures for incremental additions to its fleet.

7 Amended Table 2-60

Year	Total Vehicle Additions	Replacement for End-of-Life Vehicles	Incremental Additions to Overall Fleet
2011 Actual	\$1,033,975	\$1,033,975	\$0
2012 Actual	\$1,057,410	\$1,057,410	\$0
2013 Actual	\$36,365	\$36,365	\$0
2014 Bridge Year	\$785,000	\$785,000	\$0
2015 Test Year	\$778,000	\$778,000	\$0
2016 Test Year	\$780,000	\$780,000	\$0
2017 Test Year	\$775,000	\$775,000	\$0
2018 Test Year	\$785,000	\$785,000	\$0
2019 Test Year	\$785,000	\$785,000	\$0

8

2-SEC-14

[Ex.2-6-3/p.2]

- a) Although a DSP has not previously been filed before this application, please complete Table-62 (Appendix 2-AB) with planned capital expenditures for 2010-2013 based on internal or Board-approved budgets.
- b) Please also provide 2014 forecast actuals based on year-to-date actuals.
- c) Please provide plan versus actual variance % for each year between 2010-2014.
- d) Please explain material variance between plan and actual capital expenditures.

Response:

- 1 Horizon Utilities provides the table below in response to parts a), b), and c). The planned capital expenditures represent Horizon
- 2 Utilities' internal budgets with the exception of 2011 CGAAP which is Board-Approved. Horizon Utilities did not prepare the 2011
- 3 budget on a MIFRS basis. Horizon Utilities' 2014 Q2 forecast includes five months of actuals (January to May 2014) and seven
- 4 months of forecast (June to December 2014).

5 Table 1

CATEGORY				Historical Period (previous plan ¹ & actual)															Forecast Period (planned)				
	2010 (CGAAP)			2011 (CGAAP)			2011 (MIFRS)			2012 (MIFRS)			2013 (MIFRS)			2014 (MIFRS)			2015	2016	2017	2018	2019
	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Q2F	Var					
	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%					
System Access	13,137	13,558	3.2%	5,935	8,914	50.2%	n/a	5,629	--	5,078	6,602	30.0%	6,049	6,369	5.3%	7,540	7,451	-1.2%	8,243	8,472	7,896	8,092	8,273
System Renewal	14,185	14,082	-0.7%	22,254	22,475	1.0%	n/a	17,171	--	15,148	14,091	-7.0%	18,052	18,425	2.1%	15,372	16,071	4.5%	18,070	28,294	33,168	33,208	34,706
System Service	5,183	3,583	-30.9%	3,594	3,125	-13.1%	n/a	2,374	--	3,222	2,885	-10.4%	2,054	2,151	4.7%	4,101	3,401	-17.1%	4,140	295	535	2,032	2,057
General Plant	5,789	6,208	7.2%	7,217	4,584	-36.5%	n/a	4,584	--	7,534	8,748	16.1%	11,627	12,559	8.0%	10,760	11,149	3.6%	9,487	5,887	5,827	5,611	6,236
TOTAL EXPENDITURE BEFORE SMART METERS	38,294	37,432	-2.3%	39,000	39,098	0.3%	-	29,758	--	30,982	32,326	4.3%	37,783	39,505	4.6%	37,774	38,072	0.8%	39,940	42,948	47,426	48,943	51,272
Smart Meter Implementation										27,440	23,278								-				
TOTAL EXPENDITURE INLCUDING SMART METERS	38,294	37,432	-2.3%	39,000	39,098	0.3%	-	29,758	--	58,422	55,604	-4.8%	37,783	39,505	4.6%	37,774	38,072	0.8%	39,940	42,948	47,426	48,943	51,272
Hydro One Contribution		-			-			-		10,000			-			-			-				
TOTAL EXPENDITURES	38,294	37,432	-2.3%	39,000	39,098	0.3%	-	29,758	--	58,422	65,604	12.3%	37,783	39,505	4.6%	37,774	38,072	0.8%	39,940	42,948	47,426	48,943	51,272
Change in WIP	-	2,841			743			743			4,654		-	1,597		2,019	1,201		175				
TOTAL ADDITIONS	38,294	34,590	-9.7%	39,000	39,841	2.2%	-	30,501	--	58,422	70,258	20.3%	37,783	37,908	0.3%	39,792	39,273	-1.3%	40,115	42,948	47,426	48,943	51,272

Please note that the 2011 (CGAAP) column in the revised Appendix 2-AB above balances to the 2011 Board-Approved column in Table 1-8 on page 17 of Exhibit 1, Tab 2, Schedule 6 in total. However, the 2011 Board-Approved figures in Table 1-8 for System Access and General Plant figures were incorrect. A revised Table 1-8 is provided below.

Revised Table 1-8

Category	2011 Board-Approved	2015 Test Year	Variance (\$)	Variance (%)
System Access	\$5,935,383	\$8,242,598	\$2,307,215	38.9%
System Renewal	\$22,253,908	\$18,070,415	(\$4,183,493)	-18.8%
System Service	\$3,593,929	\$4,139,747	\$545,818	15.2%
General Plant	\$7,216,780	\$9,487,208	\$2,270,428	31.5%
Total	\$39,000,000	\$39,939,967	\$939,967	2.4%

Horizon Utilities provides an explanation of any material variances between plan and actual capital expenditures below:

2010 (CGAAP)

Horizon Utilities' 2010 actual capital expenditures of \$37,431,683 were 2.3% or \$862,317 below the 2010 planned capital expenditures of \$38,294,000. 2010 System Service actual expenditures were lower than plan, offset by higher than planned System Access and General Plant investments.

2010 System Access expenditures of \$13,558,203 were \$420,935 higher than plan of \$13,137,268 due to a higher volume of customer connections work and higher expenditures for the City of St. Catharines road relocations than anticipated at the time of the budget. System Access projects are non-discretionary.

General Plant expenditures of \$6,208,326 were \$419,565 higher than planned expenditures of \$5,788,761 due to higher than anticipated expenditures for vehicle replacements and buildings.

The higher than planned expenditures in System Access and General Plant were partly offset by lower than planned System Service expenditures. Actual system service expenditures of \$3,582,988 were \$1,599,553 lower than the plan of \$5,182,541 due to the following:

- The Spadina SP4 Feeder project was delayed to 2011 due to the postponed delivery and construction of specialized materials required for the project contributing \$220,000;

- 1 • A Municipalities, Universities, Schools and Hospitals (“MUSH”) customer load relief
2 project was delayed to 2011 due to project re-design issues contributing \$1,080,000;
3 and
- 4 • Substation transformer purchases for the replacement of aging transformers were
5 delayed to 2011 due to delivery delays from the manufacturer contributing \$300,000.

6 **2011 (CGAAP)**

7 Horizon Utilities’ 2011 actual capital expenditures of \$39,097,840 were 0.3% or \$97,840 higher
8 than the 2011 Board-Approved capital expenditures of \$39,000,000. 2011 System Service and
9 General Plant actual expenditures were lower than 2011 Board-Approved, offset by higher than
10 System Access investments.

11 System Access investments of \$8,913,944 were \$2,978,561 higher than Board-Approved of
12 \$5,935,383 due to the following:

- 13 • The project costs for constructing new circuits to supply a new large customer were
14 higher than Board-Approved due to higher than estimated costs required to construct the
15 circuits underground within the Hydro One transmission right of way;
- 16 • Delays in obtaining the necessary Connection Cost Recovery Agreements (“CCRAs”)
17 with a large MUSH customer delayed the start of the project to upgrade the feeder for
18 this customer. The project was budgeted for completion in 2010 but the delayed start
19 resulted in the project extending into 2011;
- 20 • A higher volume of work was required to support the connection of commercial
21 customers than anticipated at the time of budget;
- 22 • Unanticipated construction costs were incurred to construct additional capacity required
23 for a large use customer in Hamilton. Underground congestion resulted in extra costs
24 required to construct ductwork beneath two major downtown arteries (King and Main
25 streets in downtown Hamilton).

System Service expenditures of \$3,124,521 were \$469,408 lower than plan of \$3,593,929. Horizon Utilities was able to mitigate the increased System Access requirements through deferral of the following System Service projects:

- A feeder upgrade between Vansickle TS and Glendale TS to provide increased load transfer capability between these transformer stations;
- The Glen Morris capacity upgrade project to replace undersized conductor to provide redundancy to the Glendale M16 feeder.

General Plant expenditures in 2011 of \$4,584,443 were \$2,632,337 lower than Board-Approved of \$7,216,780. General Plant expenditures were significantly reduced from Board-Approved to mitigate the non-discretionary increase in System Access obligations. Projects were either deferred or savings were realized during the implementation of 2011 projects. The following projects were either cancelled or deferred:

- The Identity and Access Management tools project was cancelled; and
- Investment in the Microsoft Communications Server was deferred from 2011 to 2015.
- Savings were achieved in the following areas:
 - Reduction in scope for the building renovation and refurbishment projects;
 - Lower than anticipated expenditures required for the radio replacement project
 - The ongoing Corporate Computer & Printer Renewal programs were under budget
 - Reduction in office furniture expenditures

2012 (MIFRS Basis)

Horizon Utilities' 2012 actual capital expenditures of \$32,326,380 (before smart meters) were \$1,344,080 or 4.3% higher than the 2012 planned capital expenditures of \$30,982,300. 2012 System Access and General Plant actual expenditures were higher than plan, offset by lower than planned System Renewal and System Service investments.

1 System Access actual expenditures of \$6,602,316 were \$1,524,675 higher than the plan of
2 \$5,077,641 due to the following:

- 3 • Higher than anticipated project costs were required to relocate the Glendale Transformer
4 Station ("TS") egress feeders in St. Catharines. This project was required due to the
5 Glendale Road widening project in St. Catharines which was initiated by the Region of
6 Niagara; and
- 7 • A higher volume of work was required to support the connection of commercial
8 customers than anticipated at time of budget.

9 General plant expenditures were \$8,747,623 were \$1,213,388 higher than the plan of
10 \$7,534,235 due to the following:

- 11 • Replacement of the John Street electrical main building supply as a result of a fire.
- 12 • Increase in scope of the building renovations project to support the first phase of the
13 Accessibility for Ontarians with Disabilities Act ("AODA") at the Vansickle Road location.
14 These expenditures included the installation of a new elevator and new customer service
15 entrance and reception area.

16 Higher than planned System Access and General Plant expenditures were partly offset by lower
17 than planned System Renewal and System Service expenditures.

18 System Renewal expenditures of \$14,090,964 were \$1,057,353 lower than plan of \$15,148,318
19 levels due to the deferral of renewal projects to offset the increased System Access expenditure
20 requirements. The primary program affected by the deferral was the underground XLPE cable
21 replacement program and Pole Residual programs. Other smaller renewal projects, identified
22 through maintenance and inspection programs were also deferred.

23 System Service expenditures of \$2,885,476 were \$336,629 lower than plan of \$3,222,105 due
24 to the following:

- 25 • Horizon Utilities received a credit from Hydro One Networks upon closure of the
26 Vansickle TS upgrade project completed in 2010;
- 27 • Deferral of some smaller 2012 projects to 2013 to mitigate increased System Access
28 investment requirements; partly offset by;

- The completion of System Service projects deferred in 2011.

Smart meter expenditures of \$23,277,588 were \$4,162,471 lower than plan of \$27,440,059 due to the deferral of the GS<50kW program to re-verification dates; and the deferral of the installation of meters with access restrictions and metering constraints ('hard-to-reach' meters). These meters were and will be installed in 2012 through 2014 as discussed on page 1 of Exhibit 2, Schedule 1, Tab 1.

2013 (MIFRS basis)

Horizon Utilities' 2013 actual capital expenditures of \$39,504,643 were \$1,721,429 or 4.6% higher than the 2013 planned capital expenditures of \$37,783,215.

System Access actual expenditures of \$6,369,274 were \$319,981 higher than the plan of \$6,049,292, which has been a consistent trend over recent years. This trend is being driven by:

- An increased volume of work required to support the connection of commercial customers, and
- The increased size and complexity of road reconstruction projects within Horizon Utilities' service territory. Horizon Utilities services an older service territory. The road infrastructure, similar to the distribution assets, requires renewal and refurbishment resulting in an increased demand and complexity of road relocations. Scope changes to these jobs, beyond the control of Horizon Utilities, often result in cost increases to Horizon Utilities for completion of the electrical distribution work.

System Renewal actual expenditures of \$18,424,977 were \$372,687 higher than the plan of \$18,052,290. Additional costs were largely due to additional reactive costs incurred as a result of the July wind storm and December ice storm.

System Service expenditures of \$2,151,349 were \$97,035 higher than plan of \$2,054,314 due to the completion of a projects carried over from 2012 – specifically the addition of the feeder tie on Centennial between Nebo TS and Lake TS project to support the capacity requirements at the Nebo station was carried over from 2012 and completed in 2013.

General Plant actual expenditures of \$12,559,044 were \$931,726 higher than plan of \$11,627,318 due to increased expenditures related to the long-term renewal and refurbishment of Horizon Utilities' John Street, Nebo Road, and Vansickle Road facilities.

2014 Q2 Forecast vs. 2014 Plan

Horizon Utilities' 2014 forecasted capital expenditures of \$38,071,863 are expected to be \$298,292 or 1.8% higher than the 2014 planned capital expenditures of \$37,773,571. The 2014 forecasted expenditures for System Renewal and General Plant are expected to be higher than plan, partly offset by lower than planned System Access and System Service investments.

System renewal expenditures of \$16,070,564 are forecast to be \$698,511 higher than the plan of \$15,372,053. Horizon Utilities plans to perform additional system renewal work due to the forecasted reduction in System Access and System Service expenditures as identified below. There is no impact to the cumulative 2014 and 2015 capital expenditures - a system renewal project originally budgeted for 2015 will be constructed in 2014. The decrease in 2015 system renewal will be offset by the completion of the Nebo Egress Cable replacement project in 2015, originally budgeted for completion in 2014.

General plant expenditures of \$11,148,756 are forecast to be \$388,291 higher than the plan of \$10,760,465 due to a change in the original scope of:

- Phase 3 of the Vansickle Road refurbishment project:
 - During the demolition phase, conduits carrying 600 volts of power under the cement floor slabs of the current washroom/showers location were discovered that required re-engineering and additional efforts. The as built plans from when the building was constructed in the 1970s did not identify these conduits.
- Phase 2 of the Nebo Road refurbishment project
 - Additional structural and mechanical requirements were required in order to obtain permit and site plan approvals,

System service expenditures of \$3,401,053 are forecasted to be \$700,000 lower than the plan of \$4,101,053 due to the delay in the completion of the Horizon Utilities' portion of the Nebo Egress Cable replacement project in conjunction with the City of Hamilton. Horizon Utilities' portion of the project is scheduled to commence after the completion of work by the City of Hamilton. The City is currently behind schedule.

2-SEC-15

[Ex.2-6-Appendix 2-4]

- a) Please provide a list of asset categories that the Applicant runs to failure.**
- b) Has the Applicant changed which asset categories it runs to failure since its last cost of service application?**
- c) If so, please provide details.**

Response:

- 1 a) Horizon Utilities utilizes the “run-to-failure” or reactive replacement strategy for all asset
- 2 categories. However, this strategy is not always the primary replacement strategy.
- 3 Horizon Utilities utilizes the “run-to-failure” strategy as the primary replacement strategy
- 4 where an unplanned failure represents a low risk to: public or employee safety; significant
- 5 restoration cost, system reliability and customer service. Outage duration directly impacts
- 6 system reliability and customer service. Failures where the impact can be significant in
- 7 terms of public safety, cost, system reliability and customer service necessitate the use of
- 8 a proactive replacement strategy. For asset groups or geographic areas of the system
- 9 that experience prolonged outages, a proactive replacement strategy is used.
- 10 The asset groups and their associated replacement strategies are identified in Exhibit 2,
- 11 Tab 6, Appendix 2-4, Table 22 and provided in the table below for ease of reference.

1 **Table 1: Replacement Strategies**

Assets		Sub-Category	Primary Replacement Strategy	Secondary Replacement Strategy
Substation Transformers			Proactive	Reactive
Substation Circuit Breakers			Proactive	Reactive
Substation Switchgear			Proactive	Reactive
Pole Mounted Transformers			Reactive	Proactive
Overhead Conductors		Primary	Proactive	Reactive
		Secondary	Reactive	Proactive
		Service	Reactive	Proactive
Overhead Line Switches			Reactive	Proactive
Wood Poles			Proactive	Reactive
Concrete Poles			Reactive	Proactive
Underground Cables	XLPE	Primary	Proactive	Reactive
	PILC		Reactive	
	DB	Secondary	Reactive	Proactive
	ID		Reactive	Proactive
	DB	Service	Reactive	Proactive
	ID		Reactive	Proactive
Pad Mounted Transformers			Reactive	Proactive
Pad Mounted Switchgear			Reactive	
Vault Transformers			Reactive	Proactive
Utility Chambers			Reactive	
Vaults			Reactive	
Submersible LBD Switches			Reactive	Proactive

- 2
- 3 b) Horizon Utilities has not changed the asset categories which it runs to failure since its last
- 4 cost of service application.
- 5 c) Not applicable. Please refer to response part b) above.

2-SEC-16

[Ex.2-6-Appendix 2-4/p.100-101] For each class of assets listed, please provide the failure rate.

Response:

- 1 The failure rate used for each class of assets is identified in Appendix B – Kinectrics' 2013
- 2 Asset Condition Assessment ("ACA") in Exhibit 2, Tab 6, Appendix 2-4 and provided in the table
- 3 below. The page reference in the Kinectrics ACA where further details regarding the failure
- 4 curves for each asset are provided is also included in the table below.

5 **Table 1: Failure Curves**

		Point 1		Point 2		Page
		Year	Failure	Year	Failure	
Substation Transformers		45	20%	60	85%	44
Substation Circuit Breakers		45	20%	60	85%	55
Substation Switchgear		45	20%	60	85%	65
Pole Mounted Transformers		40	10%	55	90%	74
Overhead Conductors		60	20%	77	95%	81
Overhead Line Switches		40	50%	50	80%	94
Wood Poles		50	20%	65	80%	103
Concrete Poles		65	50%	80	85%	110
Underground Cables	Primary XLPE	30	50%	40	80%	117
	Primary PILC	60	25%	70	50%	118
	Secondary/Service	40	60%	60	90%	118
Pad Mounted Transformers		40	10%	55	90%	134
Pad Mounted Switchgear		40	50%	55	80%	145
Vault Transformers		40	80%	45	90%	153
Utility Chambers		80	50%	95	85%	163
Vaults		80	50%	95	85%	170
Submersible LBD Switches		40	50%	50	80%	175

6

2-SEC-17

[Ex.2-6-Appendix 2-4/p.208]

- a) What is the VOS value for each rate class?
b) Please provide all underlying assumptions and methodology used in calculating the VOS values.

Response:

- a. Value of Service ("VOS") values are determined by type of customer and duration of outage not by rate class. Horizon Utilities provides the VOS values (\$/kW) by customer type and duration of outage in the table below.

Table 1: Value of Service

	Type of Customer / Duration of Outage	1hr	4hr	8hr	Demographic Split
1	Industrial	12.88	35.68	79.13	
2	Commercial	12.13	44.41	117.71	
3	Residential	0.68	6.97	22.45	
4	Mix (Commerical/Residential)	6.41	25.69	70.08	50/50
5	Mix (Commerical/Industrial)	12.51	40.05	98.42	50/50
6	Mix (Residential/Industrial)	10.44	29.94	67.79	20/80
7	Mix (All Customers)	10.14	33.43	83.23	20/40/40

The VOS values utilized by Horizon Utilities are based on the metrics developed by Dr. Roy Billinton of the University of Saskatchewan.

- b. Horizon Utilities did not calculate the VOS values for the Industrial, Commercial and Residential rate classes as identified in rows 1-3 of the table above. The VOS values for these classes were developed by Dr. Roy Billinton of the University of Saskatchewan.¹ Horizon Utilities determined the VOS values in rows 4-7 of the table above based on the percentage of each type of customer served in the area.

¹ Dr. Billinton has provided consulting services to major Canadian electric power utilities and to many other organizations around the world. Over 100 individual utility courses dealing with power system reliability evaluation have been presented. Dr. Billinton has authored or co-authored eight books on reliability evaluation and over 775 papers on power system reliability evaluation, economic system operation and power system analysis. Dr. Billinton is a Fellow of the IEEE, the EIC, the United Kingdom Safety and Reliability Society and the Royal Society of Canada. He is also Chairman of the Canadian Electrical Association, Consultative Committee in Outage Statistics and a Professional Engineer in the Province of Saskatchewan

2-SEC-18

[Ex.2-6-Appendix 2-4/p.208] Please provide a copy of the retainer and instructions provided to Innovative Research Group.

Response:

Horizon Utilities entered into a letter of agreement (“LOA”) with Innovative Research Group Inc. (“Innovative”). The LOA covers both the method for compensation pertaining to the execution of the customer engagement consultation and a high-level overview of instructions provided to Innovative. A copy of the LOA is being designated as 2-SEC-18 Attch 1 – LOA, however, it is being filed in confidence in accordance with the Board’s *Practice Direction on Confidential Filings* (the “Practice Direction”). The basis for the confidentiality request is as follows:

Innovative is a consulting firm engaged in a competitive business. The public disclosure of its proposed methodologies and pricing with respect to this project could reasonably be expected to prejudice the economic interest of, significantly prejudice the competitive position of, cause undue financial loss to, and be injurious to the financial interest of Innovative since it would enable its competitors to ascertain the scope and pricing of services in similar projects. Similarly, the public disclosure of this information may reasonably be expected to prejudice the economic interest of, significantly prejudice the competitive position of, cause undue financial loss to, and be injurious to the financial interest of Horizon Utilities in that (for example) potential proponents in future consulting engagements may not be willing to submit proposals knowing that their pricing and methodologies may be made public, and/or Horizon Utilities’ ability to obtain truly competitive proposals, reflecting a variety of methodologies and prices may be impaired.

The Practice Direction recognizes that these are among the factors that the Board will take into consideration when addressing the confidentiality of filings. They are also addressed in section 17(1) of the *Freedom of Information and Protection of Privacy Act* (“FIPPA”), and the Practice Direction notes (at Appendix B of the Practice Direction) that third party information as described in subsection 17(1) of FIPPA is among the types of information previously assessed or maintained by the Board as confidential. Horizon Utilities has requested Innovative’s consent to the placement of the LOA on the public record, and Innovative has requested that the document be kept in confidence. Accordingly, Horizon Utilities requests that the LOA be kept confidential. Horizon Utilities is prepared to provide copies of the LOA to parties’ counsel and

1 experts or consultants provided that they have executed the Board's form of Declaration and
2 Undertaking with respect to confidentiality and that they comply with the Practice Direction,
3 subject to Horizon Utilities' right to object to the Board's acceptance of a Declaration and
4 Undertaking from any person.

5 In keeping with the requirements of the Practice Direction, Horizon Utilities is filing a
6 confidential, unredacted version of the LOA. The unredacted version of the document has been
7 placed in a sealed envelope marked "Confidential".

8 In addition to the LOA, instructions were communicated to Innovative verbally through regular
9 meetings with Horizon Utilities' staff. These instructions were further supported through a work
10 plan document that responded to any changes in project tasks, activities and consultation
11 deliverables. Horizon Utilities has included a copy of the work plan used by Horizon Utilities and
12 Innovative staff as 2-SEC-18 Attch 2 – Workplan & Budget.

EB-2014-0002
Horizon Utilities Corporation
Responses to School Energy
Coalition Interrogatories
Delivered: August 1st, 2014
2-SEC-18_Attch 1_LOA CONFIDENTIAL

2-SEC-18_Attch 1_LOA CONFIDENTIAL

EB-2014-0002
Horizon Utilities Corporation
Responses to School Energy
Coalition Interrogatories
Delivered: August 1st, 2014
2-SEC-18_Attch 1_LOA CONFIDNETIAL

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2-SEC-18_Attch 2_Workplan & Budget

[illegible]

2-SEC-19

[Ex.2-6-Appendix 2-4/Appendix D/p.19]

- a) Please explain what the Applicant means when it says “[t]his method resulted in a revenue shortfall for us since investments made over time were not recognized and thus did not allow for any adjustments to our growing rate base”.
- b) Please also provide the derivation of the ‘Estimated Revenue Requirement’ calculation for 2011-2014.

Response:

- a) On Page 19, Horizon Utilities has discussed the difference between the dollars approved in rates in an IRM period and the actual dollars spent by the utility that would be captured in the Revenue Requirement under a cost of service scenario. The revenue shortfall refers to this difference.
- b) Horizon Utilities provides the derivation of the estimated revenue requirement in Table 1 below.

Table 1: Estimated Revenue Requirement (In ‘000s)

Service Revenue Requirement	2011	2012	2013	2014
OM&A Expenses	\$ 53,837	\$ 52,762	\$ 57,662	\$ 60,368
Amortization Expenses	\$ 18,044	\$ 20,656	\$ 21,624	\$ 22,467
Total Distribution Expenses	\$ 71,881	\$ 73,417	\$ 79,286	\$ 82,836
Regulated Return On Capital	\$ 28,356	\$ 30,194	\$ 25,804	\$ 26,847
PILs	\$ 7,068	\$ 3,718	\$ 2,704	\$ 2,528
Service Revenue Requirement	\$ 107,305	\$107,329	\$ 107,795	\$ 112,211
Other Revenue	\$ 4,874	\$ 6,997	\$ 5,251	\$ 4,571
Distribution Revenue Requirement	\$ 102,431	\$100,332	\$ 102,543	\$ 107,639

2-SEC-20

[Ex.2-6-Appendix 2-4/Appendix G] With respect to the Major Capital Project Templates:

- a) Please confirm that not a single major capital project will result in a material reduction on O&M costs in the test year.**
- b) Is the materiality threshold utilized by the Applicant for the purposes of determining if there is the material reduction in O&M costs in the test period the same as the materiality threshold set out in the Filing Requirements. If not, please provide the definition of material O&M reduction.**
- c) Does the Applicant have a forecast for the aggregate O&M reduction for test year, as a result of proposed major capital projects it proposed to undertake? If so, please provide details. If not, please explain why it is not able to provide this information.**

Response:

- 1 a) Horizon Utilities confirms not a single major capital investment will result in a material
2 reduction in O&M costs, exclusive of productivity savings, in a single Test Year.
- 3 b) The materiality threshold utilized by Horizon Utilities for the purposes of determining if
4 there is a material reduction in the O&M costs in the test period is not the same as the
5 materiality threshold set out in the Filing Requirements identified in Section 2.4.4.
6 Horizon Utilities' materiality threshold as set out in the Filing Requirements is computed
7 as 0.5% of distribution revenue requirement, as it is a distributor with a distribution
8 revenue requirement greater than \$10MM and less than or equal to \$200MM. The
9 materiality threshold as per the Filing Requirements is \$564,780 (0.5% of Horizon
10 Utilities' 2015 Distribution Revenue of \$112,956,026). Horizon Utilities selected a lower
11 materiality threshold of \$300,000 for the purposes of identifying material capital
12 investments and determining if there is a material reduction in O&M costs in the test
13 period.
- 14 c) Horizon Utilities has forecast aggregate O&M reductions from distribution system capital
15 investments in the amount of \$610,000 for the 2015 to 2019 Test Years as identified
16 below:

1 Station Decommissioning

- 2 • Estimated O&M reductions of \$335,000 resulting from the decommissioning of nine
3 substations in the 2015 to 2019 Test Years.
- 4 ○ \$23,000 realized in 2016
- 5 ○ \$82,000 realized in 2017
- 6 ○ \$52,000 realized in 2018
- 7 ○ \$178,000 realized in 2019

8 Corrective Maintenance

- 9 • Forecasted O&M reductions of \$55,000 annually resulting from reduced reactive
10 maintenance requirements anticipated due to the 4kV and 8kV Renewal Program
11 investments.

12 Horizon Utilities has forecast aggregate O&M reductions from General Plant capital
13 investments in the amount of \$871,000 for the 2015 to 2019 Test Years as identified
14 below:

15 Hughson Substation and John Street 5th Floor Renovations

16 Estimated O&M reduction of \$70,000 realized annually commencing in 2016 due to the
17 reduction in asbestos testing and mitigated repair costs; and reduction of hydro and gas
18 consumption.

19 Building Security Replacement

20 Estimated O&M reduction of \$100,000 realized annually commencing in 2017 due to the
21 reduction in 3rd party after hours security patrol services; reduction in 3rd party
22 dispatching due to false alarms after hours; and reduction in equipment repair costs.

23 John Street Roof Replacement

24 Estimated O&M reduction of \$10,000 realized annually commencing in 2016 due to the
25 reduction in repairs and maintenance and patching efforts to roof and surrounding walls.

1 John Street Window Replacement

2 Estimated O&M reduction of \$35,000 realized annually commencing in 2018 due to the
3 reduction of hydro and gas consumption; and reduction in repairs to windows and
4 internal walls and carpet.

5 John Street 2nd Floor Renovation

6 Estimated O&M reduction of \$25,000 realized annually commencing in 2017 due to the
7 reduction in hydro and water consumption; and reduction in repairs and maintenance of
8 carpet, lighting and HVAC.

9 John Street 6th Floor Renovation

10 Estimated O&M reduction of \$5,000 realized annually commencing in 2018 due to the
11 reduction in hydro and water consumption; and reduction in repairs and maintenance of
12 lighting and HVAC.

13 John Street Basement/Lobby Renovation

14 Estimated O&M reduction of \$5,000 realized in 2019 due to the reduction in hydro and
15 water consumption; and reduction in repairs and maintenance of lighting, HVAC and
16 washroom components.

17 Transportation Equipment Replacements

18 Estimated decrease in O&M due to a reduction in fuel consumption; and repairs and
19 maintenance of:

- 20 o \$19,000 realized in 2016
- 21 o \$27,000 realized in 2017
- 22 o \$18,000 realized in 2018
- 23 o \$27,000 realized in 2019

3-SEC-21

[Ex.3-3-1/Table 3-40] Please provide year-to-date actuals.

Response:

- 1 Please refer to Horizon Utilities' Response to Interrogatory 3-Energy Probe-23 b) for 2014 year-
- 2 to date actuals of Table 3-40.

4-SEC-22

[Ex.4-2-2/p.3] Please provide a copy of the current collective agreement between the Applicant and its union(s).

Response:

- 1 Horizon Utilities is providing a copy of the current collective agreement as 4-SEC-22_Attch
- 2 1_Copy of Collective Agreement.

EB-2014-0002
Horizon Utilities Corporation
Responses to School Energy
Coalition Interrogatories
Delivered: August 1st, 2014
4-SEC- 22_Attch_1_Copy of Collective Agreement

4-SEC- 22_Attch_1_Copy of Collective Agreement

COLLECTIVE AGREEMENT

Between

HORIZON UTILITIES CORPORATION

And

**LOCAL 636 OF THE INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS**

Effective June 1, 2011 to May 31, 2015

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PURPOSE

The purpose of this Agreement is to promote and maintain a harmonious relationship between the Corporation and its employees and to provide an amicable and timely method of settling any grievances as defined in the Collective Agreement.

WHEREAS the electrical utility industry has become a competitive marketplace and is facing deregulation and change;

The Corporation, its employees, and the Union have a mutual interest in becoming and remaining leaders in the industry, and,

The Corporation, its employees, and the Union recognize the importance of providing cost effective service to the customer and fair compensation for all employees,

Therefore the Corporation, its employees and the Union agree to meet on an ongoing basis to explore options of mutual interest and benefit that will promote the Corporation and its employees as frontrunners in the electrical industry.

ARTICLE 1 – RECOGNITION CLAUSE

1.01 The Corporation recognizes the Union as the sole and exclusive bargaining agent for all employees of the Corporation save and except Directors, Supervisors and Managers, Foremen and those above the rank of Foremen, Administrative Assistants including the President's Administrative Assistant and Secretary to the Corporation, Human Resources Staff, Programmer Analysts, Revenue Protection Specialist, Regulated Market Specialist, Safety and Training Coordinator(s), SCADA Coordinator, Payroll Specialist, Engineers employed in their professional capacity, students employed during the school vacation period, which may be outside of the standard May to September vacation period. Students shall not work any more than six months in any calendar year unless mutually agreed upon.

1.02 The wages, hours of work and conditions of employment of any new classification created or established within the bargaining unit during the life of the Agreement will be negotiated with the Union within thirty (30) days of such establishment and become part of this Agreement.

1.03 The Corporation will print and distribute to the Union a copy for each employee of this Collective Agreement in booklet form within sixty (60) days after the parties have completed proofing of the Collective Agreement.

1.04 Wherever reference is made in the Agreement to the masculine or feminine gender, it shall be interpreted as referring equally to the other gender.

1.05 Corporation employees not in the bargaining unit shall not perform work regularly performed by members of the bargaining unit except as outlined below:

- a) Instruction; training; research; and experimenting required for development of new initiatives;
- b) In the case of emergency or urgent matters when regular employees are not available;
- c) Where work and customer matters are elevated to management for resolution or processing

1.06 All rights and benefits conferred under this Collective Agreement to employees on the basis of a spousal relationship shall be equally conferred when the employee's partner is of the same gender.

ARTICLE 2 – MANAGEMENT RIGHTS

2.01 The Union acknowledges and agrees that it is the exclusive function and right of the Corporation to generally manage the enterprise or enterprises in which the Corporation is from time to time engaged. Without limiting the generality of the foregoing, the Corporation's functions shall include the right to:

(a) maintain order, discipline and efficiency, and in connection therewith, to make, alter and enforce from time to time reasonable rules and regulations, policies and practices, to be observed by its employees; the right to discipline or discharge employees for just cause, provided that a claim for unjust discipline or discharge may be the subject matter of a grievance and dealt with as hereinafter provided;

(b) select, hire, transfer, assign to shifts, promote, demote, classify, direct, lay-off, and recall employees;

(c) determine the location of operations and their expansion or their curtailment, the direction of the working forces, the contracting of work, the schedules of operations, the number of shifts, the methods, processes and means of production, job content, quality and quantity standards, the right to use improved methods, machinery and equipment, the right to decide on the number of employees needed by the Corporation at any time, starting and quitting times and the determination of financial policies including general accounting procedures and customer relations, and

(d) manage all operations, buildings, machinery and equipment.

2.02 The Corporation agrees that it will not exercise its functions in a manner inconsistent with the provisions of this Agreement.

ARTICLE 3 – UNION MEMBERSHIP AND CHECKOFF

3.01 All employees of the Corporation covered by the Agreement shall become and remain members of the Union during the term of this Agreement and shall have Union dues deducted in accordance with Article 3.02 and the Ontario Labour Relations Act.

3.02 The Corporation agrees to deduct an amount equivalent to the regular monthly Union dues as certified in writing by the Union from employees' pay as per section 47 of the Labour Relations Act of Ontario. These deductions shall be made in equal amounts on a weekly basis. An employee shall, upon commencement of employment, sign a written authorization for the deduction of an amount equivalent to the regular Union dues as certified by the Union. The amounts so deducted shall be submitted by the 10th day of the following month to the Financial Secretary of Local 636 of the I.B.E.W. and shall be accompanied by an alphabetical listing of the names of each employee on behalf of whom the deductions were made, the amount deducted on behalf of each employee and the total gross income on which the deduction was based.

3.03 In consideration of the deduction and forwarding service by the Corporation, the Union agrees to indemnify and save harmless the Corporation against any claims or liability arising out of or resulting from the collection and forwarding of the regular weekly dues. The Corporation will also deduct a one-time initiation fee as described by the Union upon commencement of employment.

3.04 The Unit Chairperson and Business Representative of the Union shall be notified in writing immediately of the new employee and his job classification in the bargaining unit. Upon completion of the six (6) month probationary period, a new employee shall be introduced to the Unit Chairperson or his appointed designate and the Union and employee shall be allowed thirty (30) minutes paid time during regular working hours in order that the employee may be introduced to the Union and its activities. The Corporation will provide the employee with a copy of the Collective Agreement and benefit booklet.

3.05 The Corporation will provide to the Unit Chairperson and Business Representative of the Union an updated listing of employees' addresses as required.

ARTICLE 4 – SENIORITY

4.01 For the purpose of this Agreement, seniority shall be defined as the continuous length of service from the last date of hire as an employee of the Corporation. For employees hired on the same day, seniority will be determined through a transparent lottery system witnessed by the impacted employees and a union steward. Regular part-time employees shall have their seniority pro-rated based on the hours of work of the designated department.

4.02 The term “regular employees” includes all employees falling within the scope of this Agreement, who are employed in a full time position of a continuing nature and who have successfully completed their probationary period.

The term “regular employee part-time” includes all employees who are employed in a part-time position of a continuing nature, work 25 hours per week to a maximum of 30 hours and have successfully completed their probationary period. Opportunities for regular part-time employment will only apply to classifications within the Customer Service Department and shall be limited to a maximum of 8 employees.

Article 21 – Designated Holidays – regular part time employees. Paid holidays shall be paid based on the previous four (4) weeks base pay divided by twenty (20), but not less than what the employee would be entitled to under the Employment Standards Act.

Article 22 – Vacation. Regular part-time employees shall have a pro-rated vacation entitlement based on regularly scheduled hours of work. Vacation benefits shall be as follows:

(a) Employees with less than 1 year of service as of June 30th in any year

- will be paid in accordance with the Employment Standards Act.
- (b) Employees with one (1) year of service or over as of June 30th in any year shall receive 2 weeks vacation with pay during such year.
 - (c) Employees with three (3) years of service or over as of June 30th in any year shall receive 3 weeks vacation with pay during such year.
 - (d) Employees with eight (8) years of service or over as of June 30th in any year shall receive 4 weeks vacation with pay during such year.
 - (e) Employees with fifteen (15) years of service or over as of June 30th in any year shall receive 5 weeks vacation with pay during such year.
 - (f) Employees with twenty-one (21) years of service or over as of June 30th in any year shall receive 6 weeks vacation with pay during such year.
 - (g) Employees with twenty-eight (28) years of service or over as of June 30th in any year shall receive 7 weeks vacation with pay during such year.

Article 23 – Sick Leave. A regular part time employee will accumulate sick leave on a month by month basis and carry over from year to year at the rate of seven and one half (7.5) hours per month provided that the employee has worked at least 25 hours in the calendar month excluding vacation or WSIB. Reductions in the sick time hours will be based on scheduled hours for the first day, and on five (5) hours per day for each subsequent day off on sick leave.

Article 25 – Bereavement Leave and Article 26 – Court Duty, regular part-time Employees. Such leaves shall be paid in accordance with the Employment Standards Act.

Article 27 – Health and Welfare Plan

Benefits outlined in Article 27.01 shall be provided to regular part-time employees. The Corporation agrees to pay 75 per cent of the monthly premium for each part-time employee and their eligible dependents for the Health and Welfare Plan provided the employee pays the remaining 25 per cent of the monthly premium costs through mandatory payroll deductions in accordance with the Corporation's normal benefit process. The employee will cooperate fully in providing the Company with their authorization to withdraw their share of premium costs in each pay period. If the employee works in excess of twenty six (26) hours, the premiums will be adjusted to reflect pro-rated premium costs. This reconciliation will occur on a quarterly basis.

Retiree Benefits – LOU #5

A regular part-time employee who retires in accordance with LOU #5-Retiree Benefits will be eligible for retiree benefits. Years of service shall be prorated for the purpose of calculating eligibility for the benefits under LOU #5. Pro-rated service shall be based on twenty-five (25) hours per week plus additional hours worked at straight time, up to a total of thirty (30) hours per week. Any combination of full or pro-rated time years of service shall be used to determine the twenty (20) year eligibility requirement.

4.03 Probationary employees are persons hired on a trial basis to determine their suitability for employment in regular positions. An employee shall be considered probationary for up to six (6) calendar months worked. A probationary employee shall be entitled to all benefits of this Agreement after completing six (6) calendar months worked. Seniority and sick leave credits shall not accumulate unless and until the employee acquires a regular status and shall then accumulate from the date of hiring. At the expiration of an employee's six month probationary period, he will be considered a regular employee.

4.04

a) Subject to exception set out in this Article, a temporary employee is one hired for a specified job of limited duration not exceeding six (6) months. This period may be extended by mutual agreement.

Where a temporary employee is hired as a maternity or parental leave replacement, the Corporation may hire the temporary employee for the duration of the leave even if the leave exceeds six (6) months, but no longer than fourteen (14) months except by mutual agreement.

The Corporation and the Union will discuss those cases where, in the opinion of either, the use of a temporary employee continues so long as to indicate that a regular position exists. This shall not obligate the Corporation to create a new regular position.

A temporary employee shall not acquire the benefits of a regular employee, nor shall he have recourse to the grievance procedure.

The Corporation will give the Union written notice of the name, position, start date for all persons hired as Temporary employees.

b) The Corporation may participate in government-sponsored return to work programs to facilitate the employment of individuals. The hiring of employees through government sponsored programs shall not be used by the Corporation to prevent the hiring of full-time employees.

4.05 An employee shall lose his/her seniority and shall cease to be an employee of the Corporation if he:

a) Quits voluntarily;

b) Is discharged for cause and not reinstated through the grievance and/or arbitration procedure;

- c) Fails to report to work after a layoff within ten (10) working days of recall, notice of which has been sent to the last address reported to the Corporation by registered letter and a copy to the Chairperson, unless he has an acceptable explanation. The Corporation's decision may be the subject of a grievance;
- d) Is laid off for a period in excess of twenty-four (24) consecutive months;
- e) Retires;
- f) Is absent from work for more than five (5) consecutive working days without an acceptable explanation or permission from their Supervisor. The Supervisor's decision may be the subject of a grievance, or
- g) Is absent due to non-compensable illness or injury for a cumulative period of twenty-four (24) consecutive months.

4.06 An employee shall continue to accumulate seniority when absent from work for the following reasons:

- a) On an approved leave of absence;
- b) On a non-compensable illness or injury seniority shall accumulate for the first twenty-four (24) months of absence after which time he will not accumulate seniority;
- c) On an approved Worker's Compensation claim;
- d) On paid sick leave;
- e) On authorized vacations and recognized holidays;
- f) On maternity/parental leave as per the Employment Standards Act of Ontario, or
- g) On jury duty, coroner's inquest or as a witness in a court proceeding.

4.07 The Corporation shall maintain a seniority list for those employees covered by this Agreement. The seniority list shall show the name, job classification and seniority date for each employee. The seniority list shall be revised when any change occurs, and the most recent revision shall be posted on all Union bulletin boards. A copy of the seniority list shall be sent to the Union Business Representative and the Unit Chairperson each time it is posted.

4.08 An employee who transfers to a position outside the bargaining unit and returns within six (6) months shall retain their seniority previously accumulated in the bargaining unit plus all the seniority accumulated while working in the position outside the bargaining unit. The seniority accumulated while excluded from the bargaining unit shall be used for vacation credits only and not for job posting or lay-off. Employees filling in on temporary acting classification will continue to accumulate seniority.

4.09 An employee who desires a transfer shall file a request with the Human Resources Department in writing. The Corporation will keep such request on file for six (6) months. Such requests are not applications to job postings. The Corporation, the employee and the Union will discuss whether the employee's request may be granted. This article does not impose on the Corporation any obligation to grant the request of an employee.

ARTICLE 5 – JOB POSTING

5.01 In all cases of job vacancies, including the creation of new jobs coming within the scope of this Agreement, the Corporation shall post a notice on the employees' bulletin boards outlining the vacant position, the qualifications required for the position and the rate of pay. This notice shall be posted for a minimum of ten (10) working days. All regular employees of the Corporation shall have the first opportunity to make application for the job in writing within ten (10) working days from the date of the posting. Posting for part-time positions will include the hours of work. Any changes to these hours must be mutually agreed upon by the Union in accordance with Article 17.06.

The Corporation will give notice in writing to any applicant selected as well as post a notice on the bulletin boards stating the employee selected. The Corporation will give the Union notice in writing, if it does not intend to fill a vacancy or if they intend to postpone the posting or selection, or if there are no suitable applicants from within the bargaining unit.

The Company will notify the Union of all temporary vacancies. The Company will place a notification of temporary vacancies that are of twelve months (12) or longer in duration on the Company bulletin boards.

5.02 With qualifications of the job given full consideration, an employee having the greatest seniority will be given preference in job postings providing the applicant has merit, skill and ability relatively equal to the applicant with lesser seniority. The opinion of the Corporation shall not be exercised in an arbitrary or discriminatory manner.

5.03 All promotions or lateral transfers made within the scope of this Agreement will be on a six (6) month trial basis and such promotions will carry the suffix "acting" until the expiration of the six (6) month period. Employees who do not qualify within the period mentioned shall be returned to their former jobs and will be notified in writing as to why they have not qualified. Employees will be given the right to revert back to their previous position by giving written notice to the Corporation within thirty (30) business

days of starting the new position.

Employees will normally remain in positions acquired through internal or external competition for a period of six (6) months before applying for other internal competitions unless otherwise agreed to by management.

5.04 Those employees who are not successful in their application will be given the reasons in writing within five (5) working days, if requested.

5.05 Employees who will be absent for more than five (5) working days due to vacation, leave of absence, etc. may request in writing that Human Resources notify them of any postings during their absence, each employee absence will require a separate written request. Human Resources will make reasonable effort to so notify such employee. Failure by the Human Resources Department to notify the employee will not prevent the employee from applying for the position as outlined. Any such employee will be required to make application to Human Resources within two (2) working days of the closing of the posting and be able to take the new position within five (5) working days of being advised, should they be the successful applicant.

ARTICLE 6 – LAY-OFF AND RECALL

6.01 After completion of the probationary period, each laid off employee shall have twenty-four (24) months recall rights. The employee shall provide the Corporation in writing his/her current address and telephone number.

6.02 In the event of layoff the Corporation shall endeavour to notify the Union of the job classifications to be laid off as soon as practically possible but in any case, at least fifteen (15) working days before the effective day of the layoff, to discuss alternative measures to avoid the layoff.

6.03 Prior to a layoff of regular full time employees in the bargaining unit, all students, temporary, probationary, co-op students, contract employees and individuals employed on government sponsored programs shall be laid off first, provided there are regular full time employees with sufficient skill and ability to perform the work being performed by the above individuals. Students, temporary, probationary, co-op students, contract employees and individuals on government sponsored programs will not be hired while regular employees with sufficient skill and ability to perform the work being performed by the above individuals are on layoff.

6.04 In the event that it is necessary to reduce employees, the Corporation agrees

that regular full time employees shall be laid off by job classification within the bargaining unit in the reverse order of seniority provided that qualified employees remain to perform the work available.

6.05 Regular full time employees who are to be laid off may exercise their bumping rights within any job classification in the bargaining unit, providing they are bumping a regular full time employee with less seniority and they possess sufficient skill and ability to perform the job. When bumping into a lower job classification the rate of pay shall be the highest for that job classification.

6.06 A familiarization period of up to fifteen (15) working days will be provided to employees who exercise their bumping rights.

6.07 Regular full-time employees shall be recalled in the reverse order of seniority in which they were laid off provided they are qualified to perform any work required. The Corporation will send notice by registered mail to the last known address, which the employee has filed with the Corporation.

6.08 The Union shall be notified in writing of all layoffs and recalls.

6.09 The Corporation shall pay the premium costs for the health and welfare plans for any employee who is laid off for a period of twelve (12) months or less.

6.10 The Corporation will not contract out work that would result in the discharge or layoff of bargaining unit employees.

6.11 In the event that the Corporation closes or ceases to operate in any of its locations, the Corporation shall give the Union 60 business days advance notice of change.

ARTICLE 7 – GRIEVANCE PROCEDURE

7.01 It is the mutual desire of the parties hereto that complaints of both employees and the employer shall be resolved as quickly as possible, and will be resolved as outlined in the grievance procedure outlined below.

It is understood that an employee has no grievance until he has first given the immediate supervisor and/or the supervisor involved the opportunity of resolving the complaint. Such complaint shall be discussed with the immediate supervisor and/or

the supervisor involved within ten (10) working days of the time the employee became aware of the incident. This shall be replied to in writing within five (5) working days of the complaint. The Corporation and the Union both agree to encourage the parties to resolve the complaint on their own at this stage. However, the employee may still request the assistance of a Union Committee person if it will help facilitate the meeting. Failing settlement within ten (10) working days, the complaint shall be taken up as a grievance in the following manner and sequence.

It is understood that the Company may request a meeting with the Unit Chair for the purpose of presenting a complaint to the Union. If such a complaint by the Company is not settled it may be treated as a grievance and referred to mediation or arbitration in the same way as a grievance of an employee.

7.02 Any difference concerning the interpretation, application, administration or alleged violation of the provisions of this Agreement shall be dealt with in the manner set out in this article. A probationary employee can grieve discharge only if the discharge was made in bad faith, arbitrarily or in a discriminatory manner.

7.03 In cases of disciplinary action taken against an employee, the employee and the steward present will be given a copy of any written reprimand or notified in writing that disciplinary action is being taken. Copies shall be sent to the Unit Chairperson and Business Representative.

7.04

Step 1

The employee and a Union Steward shall present the grievance in writing to the Department Manager and/or supervisor involved within ten (10) working days of the receipt of the immediate supervisor's reply to the employee's complaint. The employee shall indicate the nature of the grievance and the remedy sought. The Department Manager and/or supervisor involved shall reply in writing within five (5) working days after having received the grievance.

Step 2

If the reply of the Department Manager is not satisfactory to the employee concerned, the employee accompanied by the Union grievance committee shall submit a written grievance to the Director of Human Resources or designate within five (5) working days of receiving the reply of the Department Manager. The written grievance shall state the nature of the grievance, the article(s) of the Collective Agreement which were violated and the circumstances giving rise to the grievance. The Director of Human Resources or designate shall meet with the employee and grievance committee within

five (5) working days of receipt of grievance. After the meeting has been held at this stage of the grievance procedure, the Director of Human Resources or designate will issue a written disposition of the matter within five (5) working days.

Step 3

Failing settlement at Step 2, the Union may within twenty (20) working days of the issuance of the disposition at Step 2 notify the other party of its intention to submit the grievance to arbitration.

7.05 Notwithstanding the above, the Union and the Corporation may reach settlement to a grievance through the services of a Grievance Settlement Officer or other mutually agreeable third party facilitator. The parties shall jointly bear the expenses of the Grievance Settlement Officer or other agreed to third party facilitator.

7.06 The time limits outlined in the grievance procedure may be extended by mutual agreement between the Corporation and the Union.

7.07 The grievance committee shall consist of the grievor, the Steward referred to in Step 1, the Unit Chairperson and the Area Business Representative. The Union may appoint designates when necessary.

7.08 In the event of a group grievance, a policy grievance or a grievance respecting the discharge or suspension of a regular employee, the grievance shall be submitted in writing indicating the nature of the grievance, the article(s) of the Collective Agreement which were violated and the circumstances giving rise to the grievance. The grievance will be processed commencing at Step 2 of the grievance procedure. This clause shall not be used for the purpose of abridging the right of the employee to process grievances, nor shall it be used for the purpose of submitting matters to be handled through the grievance procedure by employees.

7.09 All steps of the grievance procedure, including any meetings with the grievance mediation officer, shall be held during regular hours of work with no loss of regular wages. Reimbursement of wages of Union employees during arbitration will be the responsibility of the Union.

ARTICLE 8 – ARBITRATION PROCEDURE

8.01 When either party to this Agreement requests that a grievance be submitted to arbitration, it shall make such request in writing addressed to the other party, and at the same time, submit the names of three (3) potential arbitrators.

8.02 Within five (5) days thereafter, the party receiving the request will advise the other party of their concurrence with one of the submissions or failing agreement, further submit the names of three (3) other potential arbitrators.

8.03 If the parties are unable to come to an agreement on the selection of a single arbitrator, the party submitting the grievance to arbitration shall then make application to the Ontario Labour Relations Board and request that the Minister of Labour appoint a sole arbitrator.

8.04 Except by mutual agreement between the parties, no matter may be submitted to arbitration which has not been properly carried through the grievance procedure.

8.05 The arbitrator shall not be authorized to render any decision inconsistent with the terms of this Agreement, nor shall they alter, modify, add to or amend any of the provisions nor adjudicate any matter not specifically assigned to it by the statement of grievance.

8.06 In the case of discharge, or in the case of a suspension where the grievor satisfies the arbitrator that such discharge or suspension is without just cause, the arbitrator may modify the penalty to one which is just and equitable in the circumstances.

8.07 Each of the parties hereto shall jointly bear the expenses, if any, of the single or sole arbitrator.

8.08 The decision of the arbitrator shall be final and binding upon the parties.

8.09 The time limits outlined in the arbitration procedure may be extended by mutual agreement between the Corporation and the Union.

ARTICLE 9 – GOODWILL

9.01 Written and verbal warnings will be removed and not referenced after twelve (12) months provided the employee's record has remained discipline free for twelve (12) months. Suspensions of one (1) day will be removed and not be referenced from the employee's record after eighteen (18) months provided the employee's record has remained discipline free for eighteen (18) months. Suspensions of greater than one (1) day will be removed and not referenced after twenty-four (24) months provided the employee's record has remained discipline free form twenty-four months.

b) Discipline on safety, harassment or violence related incidents as outlined under Health & Safety Legislation, shall be kept on record but not referenced in accordance with the above timelines.

9.02 It is a condition of this Agreement that the Union will not permit its members to discriminate against, interfere with, or unduly influence or coerce into membership, any employee of the Corporation who is not a member of the Union.

The Corporation undertakes not to discriminate against, interfere with, unduly influence or coerce any member of the Union because of such membership or interfere with the rights of the employees to become members of the Union.

9.03 The Union recognizes that Horizon Utilities Corporation provides an essential public service and as such may find it necessary to have its employees work at times other than, and over and above, their “normal” work period in order to maintain service to the public.

9.04 The Corporation will ensure that new or revised policies and procedures are posted for a minimum of one (1) month on designated company bulletin boards and that copies are available through the Department Manager. An up-to-date policy manual shall be made available for employee review.

9.05 The Union will not engage in Union activities during working hours or hold meetings at any time on the premises of the Corporation without the permission of the Corporation. The Business Representative or designate may have access to the workplace upon request to the Corporation. Permission shall not be unreasonably withheld.

ARTICLE 10 – SAFETY AND HUMAN RIGHTS POLICIES

10.01

a) Both the Corporation and the Union recognize their respective responsibilities under legislation impacting health and safety and applicable standards, rules and guidelines. As parties concerned about the health and safety of all employees, the Corporation agrees to maintain and post a Health and Safety Policy in the workplace. The Corporation agrees it will comply with the Occupational Health and Safety Act in effect as of the signing of the Collective Agreement as it pertains to the worker’s right to refuse unsafe work and the training to be provided to the certified worker.

b) All Health and Safety Committee members shall be paid consistent with the applicable legislation. The parties will notify each other in writing of the respective

names of its representatives on the Committee.

10.02 Both the Corporation and the Union recognize their respective responsibilities under the Ontario Human Rights Code and any other similar statutory requirements. Accordingly, the Corporation agrees to post an anti-discrimination, anti-harassment and respect in the workplace policy in the workplace. The Corporation will maintain the current Discrimination and Harassment in the Workplace policy dated October, 2010 as a minimum standard.

ARTICLE 11 – STRIKES/LOCKOUTS

11.01 During the term of this Agreement the Corporation agrees not to lock out its employees and the Union agrees that it will not sanction or call a work stoppage as defined in the Ontario Labour Relations Act.

11.02 The Corporation and the Union further agree that they will not involve any employee of the Corporation in any dispute which may arise between any employer and the employee of such other employer.

ARTICLE 12 – BULLETIN BOARD

12.01 Bulletin boards shall be provided for the use of the Union, but notices shall not be placed on these boards unless signed by an authorized representative of the Union.

ARTICLE 13 – ACCESS TO PERSONNEL FILES

13.01 Employees shall be granted permission to view their personnel files upon request.

ARTICLE 14 – NEGOTIATING COMMITTEE

14.01 The Corporation agrees to compensate a maximum of six (6) employee members of the negotiating committee only for actual time spent negotiating the renewal of this agreement, during such employees' regularly scheduled working hours. Such compensation is to be at the employees' straight time rate of pay exclusive of any premiums, and is to be only for negotiations during the period of negotiations leading to conciliation or mediation and shall cease and be discontinued during conciliation or mediation.

ARTICLE 15 – LABOUR MANAGEMENT COMMITTEE

15.01 The parties to this Agreement shall establish an ad hoc Labour Management Committee comprising of up to four (4) representatives of the Corporation, the Unit Chairperson or designate, the Union Business Representative, and up to two (2) committeepersons appointed by the Union. The Committee shall meet as required to discuss and resolve labour/management issues with the exception of grievances. Additional members may be brought in at the mutual acceptance of the parties.

Meetings of the Labour Management Committee will be held at one of the operating locations, as required, at a time mutually agreeable to Union and the Corporation representatives. An agenda outlining the matters for discussion will be submitted by each party to the other not less than two (2) working days prior to the scheduled meeting, except in cases of emergency.

Union representatives who are regular employees of the Corporation will be allowed up to one (1) hour preparation time, at straight time rate of pay exclusive of any premiums, prior to each meeting provided that this preparation time is during the employees' regular hours of work.

15.02 Both Management and the Union agree to notify the other party of the names and date of appointment of Committee Members, when changes occur. Both parties may designate another employee to fill in for the absence of a member of their respective group. It is mutually agreed that either party may bring an observer to a meeting provided the other party has been given a minimum of five (5) working days notice.

15.03 All communications relating to matters arising out of the Labour Management Committee shall be addressed and delivered to the Union Business Representative and copied to the Unit Chairperson.

15.04 Employee members of the Labour Management Committee shall be paid their regular hourly rate, exclusive of premiums, for the actual time spent at the meetings.

ARTICLE 16 – DESIGNATED STEWARDS

16.01 The Corporation agrees to acquaint new employees with the fact that a Union Agreement is in effect, and with the conditions of employment set out in articles dealing with Union membership, security and dues check-off.

16.02 The Union may appoint one Shop Steward per department and one Shop Steward in each operating location to represent the membership. In addition, any department with forty (40) or more employees shall have two (2) Stewards. The Union shall notify the Corporation in writing of the names of the Stewards and the

department (or location) each represents and of any changes of personnel before the Corporation shall recognize them.

16.03 It is understood that Stewards and committee members have their regular work to perform on behalf of the Corporation. If it is necessary for a Steward or committee member to attend to Union business to service a grievance during working hours, he shall not leave their work without:

- a) Notifying his immediate Supervisor in the case of planned meetings with the Corporation;
- b) First obtaining permission from his immediate Supervisor in the case of unplanned meetings.

ARTICLE 17 – HOURS OF WORK

17.01 The normal hours of work for full-time Schedule B employees covered by this Agreement shall be 35 hours, Monday through Friday with the exception of office employees at the St.Catharines work centre. For those employees, the regular hours of work will be 36.25 hours. For 35 hour employees, the normal hours of work shall be from 8:30a.m. to 4:30p.m. with a 1 hour unpaid lunch period that will be assigned between 12pm and 2pm. For 36.25 hour employees, the normal hours of work shall be from 8:15a.m. to 4:30pm with a 1 hour unpaid lunch period that will be assigned between 12p.m. and 2p.m. CSR's and General Clerk's will have their lunch period assigned between 11:30a.m. and 2:30p.m.

On a voluntary basis only, for employees in the Customer Service Department the normal hours of work for either 36.25 hours or 35 hour employees shall be scheduled between 8:00a.m. and 6:00p.m. Shifts will be a consecutive 7 hour or 7.25 hour day Monday to Friday. Seniority shall be the determining factor in the selection of volunteers. These employees will receive a 1 hour unpaid lunch that will be assigned over a two (2) hour period as defined by the department manager.

17.02 The normal hours of work for Day Workers (Schedule A) shall be 40 hours per week, from 7:30a.m. to 3:30p.m. (St.Catharines work site) or 8:00am to 4:00pm (Hamilton work site) for the first 5 days of the week, Monday to Friday, with a 25 minute paid lunch, including travel time if applicable, taken approximately in the middle of the work period, either on the job site or at the nearest appropriate Hydro building. At the Supervisor's discretion, allowance may be made to cover special circumstances.

17.03 The normal work week for Shift Workers shall be one of 40 hours and for the purposes of this contract shall be represented in the equivalent of 5, 8 hour shifts per week. For mutual convenience of the Corporation and Union, modified work schedules may be developed which affect the number of hours worked in any given shift. In these cases the aggregate hours worked over the duration of the schedule cycle shall be equivalent to that of an 8 hour shift schedule. Employees assigned to

trouble duties shall have the option to be paid the aggregate hours at straight time rate.

17.04 The word Shift Workers where it appears in this Agreement is defined as employees in the Operating and Trouble Departments.

17.05 The normal hours of work the part-time Cleaning Staff shall be 22 hours per week spread over 5 shifts Monday to Friday. No regular shift shall exceed 5 hours. The starting and stopping times of each shift shall be established by the Corporation.

17.06 The Corporation and the Union agree that changes to the hours of work in a particular department may be discussed during the duration of this Agreement. Hours of work must be mutually agreed upon by the Union and Corporation before any changes occur. The Corporation must give written notice to the Union that they wish to discuss permanent change of hours of work for any department.

The Corporation and Union agree that changes to the hours of work in a particular department can be changed with Union consultation where regulatory or legislative requirements necessitate change or require efficiency and productivity improvements. Any changes to hours of work must be mutually agreed to however, the Union will not unreasonably deny such a request.

17.07 The foregoing is intended to define the normal hours of work and shall not be construed as a guarantee of hour of work per day, week or otherwise.

ARTICLE 18 – OVERTIME

18.01 Overtime will be paid at the rate of double the employee's normal rate excluding any shift premiums, for all hours worked doing normal duties outside of their regularly scheduled hours except as noted below.

18.02 Distribution of Overtime: Corporation will endeavour to offer overtime as equally as practical to qualified bargaining unit employees. Each employee is expected to co-operate with the Corporation in the performance of such work unless the employee has a reason acceptable to the Corporation for declining such work. The Corporation shall not exercise this right in an arbitrary or unfair manner.

Pre-arranged overtime will be balanced in the calendar year as equally as practical within the work groups dependent on classification. (i.e., Apprentice Line Maintainer, separate from Lead Hand, Truck Driver, Billing Clerk etc.)

Pre-arranged overtime will normally be offered to employees with the least amount of pre-arranged hours worked (as noted below). Pre-arranged overtime, which is sometimes a continuation of a day's work or is part of a project, where continuity of workers or job planning supports the safety of workers and work effectiveness, may result in exceptions.

In order to monitor the above, a monthly list will be posted in each department. The overhead and underground departments will post a full employee list weekly in each

service centre. This list will detail the following information:

- a) Employee name (classification and work group if possible)
- b) Running total of pre-arranged hours worked (includes pre-arranged hours declined)
- c) Running total of pre-arranged hours declined.

Definitions of Pre-Arranged Overtime

- 1) If it is decided during the day that work will continue after 4pm, this is not counted as pre-arranged overtime.
- 2) If overtime is arranged by 4pm of the previous day, it is counted as pre-arranged overtime.
- 3) Overtime list is posted every Friday (First Friday in the month for monthly lists) and employees will have one week to check and make sure their hours are correct.
- 4) Calling in sick: If someone has agreed to work on pre-arranged overtime and they call in sick, their hours will be counted as declined.
- 5) If you are scheduled for vacation on Friday or Monday before weekend work is arranged, you may still be asked to work, but if you decline, the hours will not be recorded as declined.

Cancellation of Pre-Arranged Overtime

If pre-arranged overtime is cancelled by the Corporation, an employee given notice of such work shall receive one-and-a-half (1 ½) hours' pay at the appropriate overtime rate unless

- a) he receives one (1) hour's notice of the cancellation by reason of an emergency situation such as weather, or
- b) he receives four (4) or more hours' notice of the cancellation for any other reason.

Emergency Overtime

Any overtime not within the definition as outlined above will be considered Emergency Overtime.

18.03

- a) Overtime will not be paid for any time outside of what is considered the employee's normal working hours while attending Corporation approved training courses.
- b) Overtime will not be paid for traveling time outside the employee's normal working hours when attending Corporation approved training courses.

18.04 Employees on shift shall be paid a shift premium for all hours worked between 7:30p.m. and 7:30a.m. The shift premium shall be calculated based on 5% of the hourly wage rate for the classification and shall apply only to hours worked consistent with Article 18.07.

18.05 Shift employees requested to report to work for training purposes, outside their normal work schedule shall be paid at the applicable overtime rates. Whenever possible, Corporation will endeavour to schedule training on regular scheduled work days.

18.06 For the purposes of covering shifts a planned vacancy is defined as one which provides the employee 24 hours notice of upcoming work. Failure to provide 24 hours notice will be defined as an unforeseen vacancy.

A troubleperson shall be given the first opportunity to fill a vacant shift with the exception of day shifts (Monday to Friday), whereby the full shift will be offered to a First Class Line Maintainer. All shifts worked outside of a troubleperson's normal trouble shift shall be paid at the appropriate overtime rate.

Regular day workers asked to work shift work beyond the regular daily or weekly hours shall be paid at the appropriate overtime rate.

Covering of any Trouble shift both in whole or in part will be at the discretion of management.

18.07 There shall be no pyramiding of the premiums under this Agreement.

18.08 Overtime work shall be distributed to employees who normally perform the work unless it directly affects the efficient operation of the business.

ARTICLE 19 – REST PERIODS

19.01 Employees will be entitled to two rest periods, each of a total of 10 minutes duration, one in the first half and one in the second half of each working day.

19.02 A continuous rest period of eight (8) hours is required in each twenty-four (24) hour work period and will be administered on Monday through Friday on the following basis:

- No rest period for call-out work completed on Saturday or Sunday.
- No rest period for call-out work completed by 00:30a.m. (7:30a.m.-3:30p.m. shift)
- No rest period for call-out work completed by 01:00a.m. (8:00a.m.-4p.m. shift)
- A rest period applies if the call-out work is completed between 00:30a.m. and 04:30a.m. (7:30a.m.- 3:30p.m. shift)
- A rest period applies if the call-out work is completed between 01:00a.m. and 05:00a.m. (8:00a.m.-4p.m. shift)
- Employees will be excused for the next regularly scheduled shift if:
 - The call-out work is completed within three (3) hours of their regular start time, and
 - They have worked at least three (3) hours.
- Employees called-out within three hours of their regular shift are assumed to have had their rest and should report for their next regularly scheduled shift.

Any portion of the rest period falling within regular hours of work will be paid for at regular rates of pay.

Any employee requested to work into their rest periods, will be paid at the appropriate overtime rate until the job is complete or the crew is relieved, based on the approval of the supervisor.

ARTICLE 20 – ON-CALL DUTY AND MINIMUM CALL-OUT

20.01 A call-out occurs when an employee who is not at work is called upon to work and where he must respond immediately to the reporting point.

20.02 Qualified bargaining unit employees are required to perform “on-call” duties as and when designated on a rotating basis by their department head as outlined below. “On-call” duty will be scheduled as equally as practical over the year.

Emergency “On-Call” in Overhead and Underground Construction Departments District and Schedule

In keeping with the intent of Article 20 of the Agreement, an annual emergency on-call list will be posted in these two departments. This list will schedule the qualified staff as equally as practical for the “on-call” duties as determined by the Corporation. For the Overhead Department, the City of Hamilton will be divided into East and West and two lists set up accordingly. The Line Department of St. Catharines has one list.

In the Overhead Department, the four Line Maintainers will go “on-call” each week commencing at 16:00 HR on each Friday, until 08:00 HR the following Friday. Each on-call team will consist of a Lead Hand or Temporary Lead Hand as part of the “on-call” team (total 2 employees per area). In the Underground Department effective January 1st, 2012, two Cable Splicers will go on-call each week commencing at 16:00 HR on each Friday, until 08:00 HR the following Friday. Each on-call team will consist of Lead Hand or Temporary Lead Hand as part of the “on-call” team. In terms of the above clause all current terms of the agreement ending May 31st, 2011 will be in effect. A Mobile Crane Operator may be added in the peak summer months or other times as necessary to work in either district.

In Horizon’s Niagara Region, two line maintainers will go “on call” each week commencing consistent with the end of the day shift on Friday and ending prior to the start of the day shift the following Friday. The on-call team will include a lead hand.

All line staff will have equal opportunity/responsibility for “on-call” shifts subject to the availability of qualified staff. The schedule will be set up to balance the experience levels of staff in the various areas of the system.

Each employee is responsible for the coverage of their assigned shift. Substitutions are permitted subject to the notification and permission of the Supervisor.

On-Call

In responding to emergency calls, staff assigned to “trouble duties” will respond to the call if available.

Should further assistance be required, the Operators will call out personnel as follows:

a) The “on-call” team will be called out first during their scheduled “on-call” duties and the week immediately following the weekend “on-call” shift for underground on-call team.

b) Should further help still be required, they are to call the “on-call” team in the other district if it is during their “on-call” shift for the week. If it is outside the weekend “shift” for the Underground Dept., the operators shall proceed to the employee list for that department.

Call Out

c) Should the “on-call” teams require additional staff, the operators will then call out other staff in that district on a rotational basis. Operating will maintain a running list of who was called last and commence calling at the name immediately following the last person called.

If an employee is missed for a call-out, he shall have the opportunity to be called out first the next time. The Corporation shall not be required to pay monetary compensation as a result of any errors made in the call-out process.

d) Should the Operators be unsuccessful in contacting sufficient help after going through the list of qualified staff for that district, they will then contact the employees in the other district and then proceed to the employees in the “B” List.

When operators have called out 2 crews, they shall notify the on-call Supervisor for further instructions. In exceptional circumstances, the Department Manager is to be advised and may be consulted regarding calling out staff.

It is understood that it may be necessary to call in the “on-call” staff in order to handle first calls, should the work load exceed what the troublepersons are able to handle.

“B” List Employees

Staff may choose to place their name on a secondary list for call-outs which would be used only when other staff in a specific district are not available. This list will be updated twice yearly, January 2nd and July 2nd. Employees may transfer on or off this list by notifying the department manager by December 15th and June 15th each year.

All staff, including the “B” list employees will be responsible to go “on-call”. There will be no attempt to balance “on-call” overtime.

20.03 An employee called out on an emergency call-out, will be paid at the overtime rate, which will start when he reaches the reporting point.

20.04 A minimum of two (2) hours time, at the overtime rate, shall apply for overtime call-outs.

20.05 Where an employee who is not “on-call”, is called-out on overtime, an additional ½ hours time at the overtime rate will be allowed, regardless of how long he takes to reach the reporting point.

20.06 Those employees as and when designated, on a rotating basis, by the department manager as being 'on-call' shall receive:

Year 1 of the contract:

- \$270 per full week of on-call, plus \$2.25/hr for what would be normal hours of work that fall on a statutory holiday
- For all on-call hours worked less than a full week, hours will be paid at \$2.25.

Year 2 of the contract:

- \$275 per full week of on-call, plus \$2.30/hr for what would be normal hours of work that fall on a statutory holiday
- For all on-call hours worked less than a full week, hours will be paid at \$2.30.

Year 3 of the contract:

- \$280 per full week of on-call, plus \$2.35/hr for what would be normal hours of work that fall on a statutory holiday
- For all on-call hours worked less than a full week, hours will be paid at \$2.35.

Year 4 of the contract:

- \$285 per full week of on-call, plus \$2.40/hr for what would be normal hours of work that fall on a statutory holiday
- For all on-call hours worked less than a full week, hours will be paid at \$2.40.

ARTICLE 21 – DESIGNATED HOLIDAYS

21.01 The following holidays will be recognized by the Corporation:

New Years Day	Labour Day
Family Day	Thanksgiving Day
Good Friday	1/2 day Christmas Eve
Easter Monday	Christmas Day
Victoria Day	Boxing Day
Canada Day	
Civic Holiday	

In the event the Provincial government declares future holidays, they will be added to the above list of paid holidays.

21.02 If a holiday as specified in article 21.01 falls on a Saturday or Sunday, it shall normally be observed on the immediate adjacent Friday or Monday for Day Workers. The day chosen for this observance shall be at the sole discretion of the Corporation.

21.03 An employee shall not be paid for a recognized holiday if:

- a) He fails to work on such holiday when he has been scheduled to do so, or
- b) He is absent without good cause in the opinion of his Supervisor, on the scheduled working day immediately preceding or following such holiday.

21.04 If a regular employee is required to work on any of the above recognized holidays he shall be paid at the rate of double time for all hours so worked in addition to holiday pay.

21.05

- a) Shift workers will observe recognized holidays in article 21.01 on the actual day.
- b) Shift workers will be entitled to the equivalent of 8 hours off with pay in lieu of an additional 8 hours pay, should a recognized holiday fall on their scheduled day off. Such lieu day shall be taken within the calendar year at the mutual agreement of the employee and his supervisor, or where not feasible, may be paid out.

21.06 Two (2) additional paid holidays per year will be available to regular employees. This holiday may be taken on such day as the employee and their supervisor mutually agree upon, following reasonable advance notice on the part of the employee.

ARTICLE 22 – VACATION

22.01 The vacation with pay schedule shall be as follows:

- a) Employees with less than 1 years service as of June 30th in any year will be paid in accordance with the Ontario Employment Standards Act and the amendments thereto and the regulations established thereafter.
- b) Employees with 1 years service or over as of June 30th in any year shall receive 2 weeks vacation with pay during such year.
- c) Employees with 3 years service or over as of June 30th in any year shall receive 3 weeks vacation with pay during such year.
- d) Employees with 8 years service or over as of June 30th in any year shall receive 4 weeks vacation with pay during such year.
- e) Employees with 15 years service or over as of June 30th in any year shall receive 5 weeks vacation with pay during such year.
- f) Employees with 21 years service or over as of June 30th in any year shall receive 6 weeks vacation with pay during such year.
- g) Employees with 28 years service or over as of June 30th in any year shall receive 7 weeks vacation with pay during such year.

22.02 Employees entitled to additional vacation in accordance with article 22.01 (e), (f) and (g) will have the option of taking the vacation time with pay or requesting that the vacation owing

be paid out in exchange for the time off. The time at which the additional vacation with pay may be taken shall be at the discretion of the Supervisor.

22.03 An employee after securing approval of their supervisor may carry over up to five (5) days vacation to be taken prior to March 31st of the following year. These days to be declared before December 1st of the current year.

22.04

- a) Employees who are absent without pay or on sick leave for a total of more than thirty (30) working days in a calendar year shall have their vacation entitlement prorated in the following vacation year on the first four (4) weeks of vacation pay entitlement only.
- b) Employees who are absent due to an accepted W.S.I.B. claim shall not be prorated for the initial time lost due to the claim; all subsequent absences assigned to that claim shall be part of the proration calculation. The proration calculation shall be based on 261 working days per year. Calculation of days lost for proration purposes shall be the total of days lost in the calendar year proceeding the year in which the employee's vacation is taken.
- c) The supervisor will provide employees with their pro-rated vacation data in writing by mid-February of each year.

22.05 Application of article 22.04 will exclude any employee on pregnancy or parental leave and any employee on approved Union business.

22.06 In the event that sickness, disability or compensable accident occurs prior to and interferes with the scheduled vacation of an employee, the vacation will be re-scheduled whenever practicable, within the calendar year. The vacation period will not be extended because of sickness or non-occupational disability incurred while on vacation with the exception of a situation in which the employee has been admitted to hospital. In this circumstance the vacation period will be rescheduled by an amount equal to the hospitalization period. Proof of hospitalization satisfactory to the Corporation will be required.

If prolonged disability occurs prior to an employee's vacation and makes it impossible for him to take such vacation that year, he shall be allowed his normal vacation pay.

ARTICLE 23 – SICK LEAVE

23.01 An employees will accumulate sick leave on a month by month basis and carry over from year to year at the rate of 1-1/2 days per month provided that a Schedule A employee has worked at least 40 hours, or a Schedule B employee has worked at least thirty-five (35) hours in the calendar month, excluding vacation or WSIB. As these sick days accumulate, month by month, they will be credited to this employee's "sick leave bank" and will be available to prevent loss of wages due to bona fide illness in the time at which they were accumulated, or any subsequent time.

23.02 Sick leave credits will be accumulated year by year with no limit to the number of days.

23.03 Sick leave credits shall be paid for at the straight time hourly rate of pay.

23.04 If a former Hamilton Hydro Inc. employee retires or leaves the service of the Corporation for reason other than discharge for just cause, ½ of their accumulated sick leave credits as of January 1 1982, to a maximum of 35 weeks, will be paid at their then current rate to the employee or to their beneficiary.

If a former St. Catharines Hydro Utility Services Inc. employee who was hired prior to April 1, 1988 and has not accepted a buyout of vested sick leave and whose employment with the Corporation is terminated and who has five (5) years or more continuous service, he shall receive fifty per cent (50%) of their balance, up to a maximum of 130 days of their accumulated Sick Leave Pay, subject to the provisions of the Municipal Act.

23.05 The Corporation may grant leave of absence without pay for a maximum of 70 weeks to an employee who is sick, provided the sick leave and leave of absence do not exceed the employee's entitlement under article 4.05 (g).

23.06 An employee who has been absent due to sickness may be required to submit a statement from their doctor stating he is in fit condition to return to work. If the Corporation requires additional medical documentation concerning the employee's ability to return to work, then this cost shall be borne by the Corporation.

23.07 In the event of sickness, which prevents an employee from reporting to work, the employee shall be responsible for informing their supervisor without delay. An employee who is off work may be required to provide a doctor's note reasonably acceptable to the Corporation, to substantiate the illness before he is eligible for sick pay. Preventative health care appointments which exceed three (3) hours will be counted as a sick time occurrence.

23.08 If an employee works elsewhere for gain during the hours he is normally employed at Horizon Utilities Corporation, that employee will be subject to dismissal.

23.09 An employee who successfully sues a third party for losses sustained during an absence for which sick leave credits were expended by the Corporation is required to reimburse the Corporation to the full extent of that expenditure in exchange for reinstatement of equivalent sick leave credits.

ARTICLE 24 – LEAVE OF ABSENCE

24.01 A request for leave of absence must be presented in writing to the employee's immediate Supervisor at least seven (7) days in advance of the commencement of the leave of absence and such request must state the length of time required and the reason for the request.

24.02 When a personal leave of absence, save and except pregnancy and parental leave, exceeds forty-five (45) calendar days, the employee shall be responsible for all costs of benefits.

24.03 A leave of absence without pay insofar as the operation of the Corporation will permit, will be granted to duly appointed Union delegates to conventions, seminars, meetings, etc. when such leave is applied for in writing by the Union.

24.04 Pregnancy and parental leaves of absence without pay will be granted as provided by the Employment Standards Act of Ontario. Accordingly, seniority and vacation entitlement will accrue. Regular benefits will continue to be paid by the Corporation during pregnancy and parental leaves of absence unless the employee submits to the Corporation a written notice that the employee does not intend to pay the employee's contributions, if any.

24.05 The Corporation agrees that if an employee is elected or appointed to any public office he may receive leave of absence with no loss of seniority providing adjustments can be made to allow such time off work to fulfill the duties of that office.

24.06 Notwithstanding the seven days notice mentioned in article 24.01, the Corporation may grant leave of absence without pay to an employee for personal reasons if in the opinion of the Corporation such request is genuine and valid.

ARTICLE 25 – BEREAVEMENT LEAVE

25.01 In the case of death occurring in the family of a regular employee, he shall be granted bereavement leave with pay for the purpose of attending the funeral and making funeral arrangements as follows:

- (a) In the case of a spouse, (step) son, (step) daughter, mother or father, bereavement leave shall be five (5) consecutive working days.
- (b) In the case of a sister, brother, step-mother, step-father, mother-in-law, father-in-law, son-in-law, daughter-in-law, bereavement leave shall be three (3) consecutive working days.
- (c) In the case of a grandparent, grandparent in-law, grandchild, brother-in-law and sister-in-law, bereavement leave shall be two (2) consecutive working days.
- (d) Bereavement clause shall apply to common-law relationships provided the Human Resources Department has been previously notified of the relationship.

25.02 Bereavement leave during an employee's scheduled vacation will extend the vacation with pay by the number of qualified days. Extended vacation will be taken at a time mutually agreeable to the Corporation and the employee.

25.03 Bereavement leave will not be granted to employees when they are on a leave of absence, their regular days off and days off due to illness or accident. The amount of bereavement leave as shown in (a), (b) and (c) is to prevent a loss of regular wages during the normal work week and is not a guarantee for automatic time off regardless of when a death

might occur. The amount of bereavement leave with pay shall not be deducted from the employee's sick pay allowance.

ARTICLE 26 – COURT DUTY

26.01 Employees who are required to serve jury duty or are subpoenaed as a witness in a court proceeding shall suffer no loss in their regular wages.

26.02 Shift workers shall not be required to work a scheduled shift during the same day that they qualify as above.

26.03 Employees absent for the above reasons must present proof of such service and remit to the Corporation the amount of compensation they received exclusive of mileage, meals or parking allowances.

ARTICLE 27 – HEALTH & WELFARE PLANS

27.01 The Corporation agrees to pay 100% of the cost of the monthly premiums and the Employer Health Tax for each regular employee and their eligible dependants for the following health and welfare plans:

a) Major Medical Plan:

- Prescription drug coverage using generic substitution plan unless otherwise prescribed by a physician and a \$10.00 cap increase on dispensing fee in 2011 and to \$11 in 2013.
- Drug Card
- Semi-private hospital coverage
- "Deluxe" out of province coverage
- Smoking cessation products: \$1,000 lifetime maximum
- Orthotics: \$450 yearly maximum
- Ambulance service
- Global medical assistance
- Private duty nurse: 100% of charge; \$10,000 yearly maximum

b) Vision Care:

- Vision care for prescription glasses or contact lenses: maximum of \$375.00 every 24 months in Yr. 1, Yr. 2, Yr.3 and to \$400 in Yr.4.
- This amount can be used towards laser eye surgery
- \$100.00 for eye exam bi-annually
- Contact lenses for special conditions: \$975 lifetime maximum

c) Dental Care: equivalent to Blue Cross Dental Plan #7, Riders 1, 2, 3 (orthodontic – 50% covered \$2250 lifetime max) and 4 (Crowns and Caps 50% covered; \$2000 max/year) with a yearly update of the ODA schedule.

Present maximums apply.

- d) Physiotherapy fees not covered by Ontario Health Plan, to a maximum of \$2,000 per year.
- e) Chiropractor, Massage, Acupuncture, Naturopath, Osteopath, Podiatrist - \$1,000 combined per annum
- f) Group life insurance which provides a basic term benefit of 150% of annual wages with optional insurance available at the employee's expense
- g) Hearing aid plan maximum \$500 per individual every two years
- h) Long Term Disability Plan based on 75% of earnings with a monthly maximum of \$4,200/month effective June 1, 2008 and \$4,300/month effective June 1, 2009. An employee with sick leave credits in excess of the elimination period of 180 calendar days required by the LTD plan, may at his option, continue to draw from his sick leave bank beyond the elimination period.

27.02 Both parties agree that the employee's share of any rebate received by the Corporation from a premium reduction under the Employment Insurance Act will be deemed to have been applied against other benefits.

27.03 Coverage shall be extended to the legal spouse and dependent children of deceased regular employees at the same level of benefit coverage as retirees. Employees hired after the signing of this contract will maintain these benefits for their legal spouse and dependants in accordance with the following:

- 6 months to 5 years service = 2 years benefits
- 5 to 10 years service = 3 years benefits
- 10 to 20 years service = 4 years benefits
- 20 years and over = 5 years benefits

27.04 The Corporation has the right to change carriers provided equal or improved coverage is provided with thirty (30) days prior notice to the Union.

27.05 The Corporation will provide employees with employee benefit booklet and all printed information related to the plan within thirty (30) days of changes to the plan.

ARTICLE 28 – PENSION PLAN

28.01 All eligible employees shall participate on an equally shared basis with the Corporation from date of hire, in the following pension plans:

- a) Canada Pension Plan, and
- b) OMERS Basic FAE on such terms as the OMERS Board may designate.

28.02 It is further agreed that the terms and conditions of the OMERS pension plan are established by the OMERS Board and legislated by the Province of Ontario and are not subject to negotiations between the Union and the Corporation.

ARTICLE 29 – CLOTHING, TOOLS AND EQUIPMENT

29.01 A safety footwear allowance shall be paid to all regular employees who are required to wear safety footwear as a condition of employment. Workers are required to select safety footwear that comply with all applicable health and safety legislation and Horizon Utilities policies. Receipts must be submitted at time of purchase for reimbursement up to a yearly maximum as outlined below:

- Overhead, Underground, Station Maintenance, Metering, Stores, Facilities and Mechanics shall receive an allowance of \$200 – Yr.1, \$205 – Yr.2, \$210 – Yr.3 and \$215 – Yr.4.
- Employees in other departments required to wear safety footwear shall receive \$115.00 – Yr.1 through Yr.3 and \$120 – Yr.4.

29.02 Gloves and Rainwear shall be supplied and paid for by the Corporation to those employees who, in their Supervisor's opinion, require them due to the nature of their work. Replacements will be issued when the originals are unfit and are turned in; otherwise the employee will bear the cost of replacement.

29.03 The Corporation shall supply the protective clothing to employees who are required to wear them in accordance with legislation. The type of clothing and minimum amounts supplied shall be in accordance with the attached Appendix 1.

The Corporation shall clean all the above clothing detailed in Appendix 1 with the exception of shirts and pants, which will be the responsibility of the employees.

Clothing provided will be replaced when the originals are unfit and are turned in; otherwise, the employee will bear the cost of the replacement.

29.04 Employees are required to wear the appropriate Corporation issued clothing as required per IHSA rules.

29.05 The Corporation will reimburse the cost of prescription flash or safety glasses up to a maximum of \$350 every 24 months per employee for employees who are required to wear them. The Corporation will also cover the cost for repairs provided the bi-annual combined amount does not exceed \$350.

29.06 No employee is required to use defective equipment but is required to immediately report to the Supervisor any such defective equipment. As climbing equipment, belts, pole straps, spurs and straps become defective, they will be replaced by the Corporation and remain the property of the Corporation. All employees have a responsibility to work safely and shall adhere to the regulations as prescribed in the EUSR Book or the appropriate Province of Ontario legislation, whichever offers the best protection. Failure to comply with these regulations may result in disciplinary action, provided that such action may be subject to the grievance procedure.

29.07 Tools and Equipment: Employees in all departments will supply their own hand tools of Corporation approved design for safety. The Corporation will replace personal tools as defined when worn out or damaged on Corporation work, where the employee shows that he has taken reasonable care and responsibility.

ARTICLE 30 – MEALS

30.01 Meal allowance in the amount of \$13.50 Yr.1; \$14 Yrs.2 & 3 and \$14.50 Yr.4 will be given for all approved claims. This allowance will be paid as a separate item on the employee's weekly pay.

30.02 Meal allowance will be paid as follows:

Call-out Overtime

- a) If an employee reports for work less than 4 hours before the start of their regular shift, he shall receive a meal allowance. For a meal period of no more than 25 minutes, time will not be deducted while eating their meal. If he continues his regular work without returning home, he will also be supplied with a meal allowance for his regular mealtime on their shift. He shall receive his overtime rate of pay in accordance with article 18.01.
- b) An employee called out to work shall be provided a meal break and allowance for each consecutive four (4) hours of work. Such meal will be taken at a suitable time and no time shall be deducted unless the job is complete, in which case his time shall cease when he leaves the reporting point.

Other Overtime

- c) An employee working two (2) hours or more before his regular shift shall be given a meal allowance.
- d) An employee working three (3) hours or more after his regular shift shall be given a meal allowance and every four (4) hours thereafter.
- e) An employee working on a day which is not his regular workday shall be given a meal allowance after 11 hours and every 4 hours thereafter. This shall not apply to employees working a 12-hour shift. Time will not be deducted while eating the above meals.
- f) Time will not be deducted while eating the above meals.
- g) Shift workers asked to cover a shift without 24 hours notice will be provided with a meal allowance in accordance with 30.02b).

ARTICLE 31 – WORKERS' COMPENSATION

31.01 Employees will be paid their regular wages on the first day of an on the job injury. Beyond the first day, compensation will be paid by the W.S.I.B. directly to the employee. The Corporation may advance to an employee, if requested, monies on a weekly basis to a maximum of six (6) weeks' regular pay. It is understood that any

advances will be based on what the employee would have received from W.S.I.B. and are subject to availability of time in the employee's sick bank. Upon payment by W.S.I.B., reimbursement is to be made in the amount paid out from the above.

31.02 During an absence covered by W.S.I.B. an employee may elect to purchase the OMERS credited service, and if this election is made, the Corporation will match the OMERS contribution.

31.03 If an employee has been assessed by the W.S.I.B. as having a permanent partial disability and is unable to return to their regular job, the Corporation will assign this employee to another vacant position within Horizon Utilities Corporation. This assignment will be made outside of the normal job posting procedures and shall not be the subject of a grievance or arbitration. Employees so affected by this article shall be physically able to perform the work assigned and possess the minimum qualifications for the job in question.

31.04 An employee who suffers an injury on the job, i.e., a compensable injury, and who is recalled to work and temporarily assigned to a job other than their regular job, will, for a period of up to 6 months, receive a rate of pay, inclusive of compensation payments, if any, equivalent to the rate of pay he was receiving at the time of their injury. After the expiration of such 6 months period he shall be paid the rate of the job to which he is temporarily assigned. In no event shall the injured employee receive from W.S.I.B. and the Corporation an amount that exceeds the employee's regular straight time weekly wages at the time of injury, unless the employee is assigned to a higher classification, at which time he will be paid the appropriate classification rate.

ARTICLE 32 - TEMPORARY ACTING CLASSIFICATION

32.01 Payment for "temporary acting classification, positions or supervision" will be paid as follows upon commencement of reassignment. This does not apply to emergency call-out conditions or where such transfer is made for the purpose of training or instructions. The payment to which an employee who qualifies pursuant to the provisions of this article is entitled, shall be:

- a) If the temporary acting classification position is within the bargaining unit he shall receive his regular rate of pay or the rate of pay of that classification, whichever is greater
- b) If the temporary acting classification is a Schedule "A" supervisor, he shall receive a 7.5% increase above the Lead Hand rate.
- c) If the temporary acting classification is a Schedule "B" supervisor, he shall receive a 15% increase.

32.02 Where an employee is required to perform in an Acting capacity for longer than 3 months, the employee will receive the Acting rate of pay on all hours paid for the duration of the Acting assignment. The Company will identify the length of assignment at the start.

The Company shall notify and consult the union when an Acting assignment of longer than 3 months in duration.

ARTICLE 33 – INCLEMENT WEATHER

33.01 No time shall be lost as a result of adverse weather conditions by an employee who reports for work.

33.02 Where a decision is made by the lead hand on-site to cease work for health and safety reasons, this shall be communicated as soon as possible to the supervisor.

ARTICLE 34 – DRIVER LICENCE/PROFESSIONAL FEES

34.01 The Corporation will reimburse the employee only where additional costs are incurred above the cost of a normal Class G license renewal. This will apply to permanent employees who require an 'upgraded' permit for their job function.

34.02 Currently all renewal fees for drivers permits are the same. For example, a one year renewal for a Class G license is the same as a Class AZ license. Therefore, the Corporation will not reimburse employees for these drivers permit renewals. If in the future the fees change whereby the Class DZ and AZ are more costly than a Class G, then the Corporation will reimburse the employee the difference in cost between the Class G and Class DZ or AZ.

34.03 Additional costs such as medical fees, testing fees etc. will be reimbursed in the amount of their actual cost.

34.04 The Corporation will not reimburse probationary employees for the costs associated with upgrading from a Class G to Class DZ or AZ.

34.05 The Corporation will pay for test time and will provide a suitable vehicle for the test for a current employee (who is not changing job functions) who is required to upgrade a permit or who is required to be retested in order to renew a permit.

34.06 New or transferred employees who require an upgraded permit as a condition of the job will be provided a vehicle only for the necessary test. Time for the test and all costs associated with the test and initial permit will be paid by the employee. To be obtained within six months of starting.

34.07 The Corporation will not pay for any permit testing required due to suspensions.

34.08 In order to be reimbursed, employees must submit a Ministry or other bona fide receipt to the Fleet Manager.

34.09 Employees who are required by the Corporation to maintain the following professional accreditation will have the cost of the annual fee paid directly by the Company;

- a) O.A.C.E.T.T.
- b) Certified General Accountant (CGA)
- c) Certified Management Accountant (CMA)
- d) License fees required to maintain professional/trades accreditation from a regulatory or licensing body required for the business of the Corporation.

ARTICLE 35 – DUTY TO ACCOMMODATE EMPLOYEES

35.01 The Corporation and the Union accept their joint duty to accommodate employees who become or are disabled and/or those who are unable to continue to work in their regular classification. The Corporation and the Union will review each case and reach agreement on the accommodating measures to be implemented. All exceptions to the seniority provisions of this Agreement must be mutually agreed to. This article does not obligate the Corporation to create a new position as an accommodating measure.

35.02 A doctor's certificate of disability must be submitted by the employee's doctor. The Corporation reserves the right to have the employee examined by the Corporation's doctor to confirm the disability. In the event of a disagreement, the issue shall be resolved by referral to a neutral physician who will be selected by mutual agreement between the parties. The Ontario Medical Association will be requested to supply an area physician in the given field of medicine.

35.03 If a job vacancy occurs which the Corporation and the Union determine an employee requiring accommodation has sufficient skill and ability to perform and can do so safely, the Corporation and the Union may mutually agree to place the employee in such job without the necessity of complying with the job posting article.

35.04 An employee who is being accommodated will have his/her status reviewed at least every six (6) months and updated medical opinions may be required. The employee, upon becoming fit to do so shall be returned to their pre-injury classification provided they have sufficient seniority.

35.05 An employee requiring accommodation shall not be required to work more hours than is within his limitations.

35.06 An employee can post into a position only if the job he/she wishes to bid on is within his restrictions and the employee meets the requirements of the job posting article.

ARTICLE 36 – NEW TECHNOLOGY

36.01 The Corporation agrees to notify the Union as far as in advance as possible before introducing significant technological changes. Affected employees will receive on-the-job training for new technology, the cost of which will be borne by the Corporation.

ARTICLE 37 – VALIDITY OF AGREEMENT

37.01 If the enactment of legislation or a determination by a court of final jurisdiction in a proceeding between the parties invalidates any portion of this Agreement, it shall not affect the validity of the rest of this Agreement, which shall remain in full force according to its terms, in the same manner and with the same effect as if such invalid portion had not originally been included.

ARTICLE 38 – REPRESENTATION OF LOCAL 636, IBEW IN THE EVENT OF MERGER

38.01 In the event that there is a merger or amalgamation or acquisition with or of another Commission, Corporation or Corporations, in which the covered employees therein are represented by another Union, the representation rights and Collective Agreement in respect of those members and the status quo of Local 636 IBEW members shall be maintained until a final determination is made under the Labour Relations Act of Ontario or any successor organization as to the proper representation of the combined group.

38.02 Should the Corporation merge, amalgamate or combine any of its operations or functions with, or acquire another Commission, Corporation or Corporations, the Corporation agrees to give the Union as much notice as practicably possible prior to any intent by the Corporation to implement the above.

ARTICLE 39 – CLASSIFICATION & WAGES

39.01 The attached Schedule “A” and Schedule “B” covering job classifications and hourly rates of pay will be part of this Agreement.

39.02 All wages will be paid by direct deposit into employees’ bank account each Friday.

39.03 Employees will normally progress from minimum to maximum hourly rate of pay in accordance with the time periods set out in Schedule "B". Progressions within each job classification are not automatic but subject to satisfactory performance.

39.04 In the event that an employee does not make satisfactory progress during a normal time period, that time period will be extended for a period of up to six (6) additional months during which the employee's progress will be reviewed. If the employee makes satisfactory progress during the review, the advance withheld will be granted at the end of the extended period and, in the event of continued satisfactory progress, the normal progression time periods will resume from that date. The employee whose normal advance is withheld will be given a written explanation.

ARTICLE 40 – DURATION

40.01 This Agreement shall become effective on the 1st day of June 2011 and shall remain in full force and effect until the 31st day of May, 2015, and shall continue to operate automatically thereafter during annual periods of one year each, unless either party notifies the other in writing not less than thirty days and not more than ninety days prior to the expiration date, that a revision or discontinuance is desired.

DULY EXECUTED by the parties thereto at the City of Hamilton on the _____ day of August, 2011.

On Behalf of Horizon Utilities Corp.:

On Behalf of IBEW Local 636:

Board Chair-Robert Dolan

IBEW Business Representative
Domenic Murdaca

President & C.E.O
Max. A. Cananzi

Unit Chair-Ian Morris

Peter Gould-Committee

Norm Botts-Committee

Terilea Pitton-Committee

Steve Abramovich-Committee

Eric Rolfe-Committee

Rick Wacheski-Business Manager/
Financial Secretary

WAGE SCHEDULES

General Increases

Yr.1 - 2.8%, Yr.2 - 2.9%, Yr.3 - 3.1%, Yr.4 - 3.1%

SCHEDULE A

	June 1/11	June 1/12	June 1/13	June 1/14
Construction				
Lead Hand	39.86	41.02	42.29	43.60
Troubleperson	39.86	41.02	42.29	43.60
Inspector	36.81	37.88	39.05	40.26
Line Maintainer - 1st Class	36.81	37.88	39.05	40.26
Line Maintainer - 2nd Class	34.11	35.10	36.19	37.31
Line Maintainer - 3rd Class	31.16	32.06	33.05	34.07
Apprentice Line Maintainer - 3rd 6 months	28.27	29.09	29.99	30.92
Apprentice Line Maintainer - 2nd 6 months	25.64	26.38	27.20	28.04
Service Lineperson	32.08	33.01	34.03	35.08
Labourer	26.77	27.55	28.40	29.28
Labourer - 2nd 6 months	24.62	25.33	26.12	26.93
Labourer - 1st 6 months	23.47	24.15	24.90	25.67
Cable Splicer - 1st Class	36.81	37.88	39.05	40.26
Cable Splicer - 2nd Class	34.11	35.10	36.19	37.31
Cable Splicer - 3rd Class	31.16	32.06	33.05	34.07
Apprentice Cable Splicer - 3rd 6 months	28.27	29.09	29.99	30.92
Apprentice Cable Splicer - 2nd 6 months	25.64	26.38	27.20	28.04
Underground Duct Crew Lead Hand	34.14	35.13	36.22	37.34
Transformer Maintainer - 1st Class	34.11	35.10	36.19	37.31
Transformer Maintainer - 2nd Class	30.56	31.45	32.42	33.43
Transformer Maintainer - 3rd Class	27.73	28.53	29.41	30.32
Transformer Maintainer - 1st 6 months	25.16	25.89	26.69	27.52
Mobile Crane Operator	31.16	32.06	33.05	34.07
Truck Driver - 1st Class	29.71	30.57	31.52	32.50
Truck Driver - 2nd Class	28.86	29.70	30.62	31.57
Truck Driver - 3rd Class	26.77	27.55	28.40	29.28
Utility Vac Truck - 1st Class "A"	31.16	32.06	33.05	34.07
Utility Vac Truck - 2nd Class	28.86	29.70	30.62	31.57
Utility Vac Truck - 3rd Class	26.77	27.55	28.40	29.28
Construction Clerk	28.25	29.07	29.97	30.90
Construction Clerk - 2nd 6 months	26.79	27.57	28.42	29.30
Construction Clerk - 1st 6 months	25.38	26.12	26.93	27.76
Substation Maintainer - 1st Class	36.81	37.88	39.05	40.26
Substation Maintainer - 2nd Class	34.10	35.09	36.18	37.30
Substation Maintainer - 3rd Class	31.16	32.06	33.05	34.07
Substation Maintainer - 3rd 6 months	28.27	29.09	29.99	30.92

Substation Maintainer - 2nd 6 months	25.64	26.38	27.20	28.04
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Metering	June 1/11	June 1/12	June 1/13	June 1/14
Meterperson Lead Hand	39.86	41.02	42.29	43.60
Meter Dept. Clerk	26.77	27.55	28.40	29.28
Meter Dept. Clerk - 2nd 6 mos.	24.62	25.33	26.12	26.93
Meter Dept. Clerk - 1st 6 mos.	23.47	24.15	24.90	25.67
Meterperson - 1st Class	36.81	37.88	39.05	40.26
Meterperson - 2nd Class	34.11	35.10	36.19	37.31
Meterperson - 3rd Class	31.16	32.06	33.05	34.07
Apprentice Meterperson - 3rd 6 months	27.28	28.07	28.94	29.84
Apprentice Meterperson - 2nd 6 months	25.10	25.83	26.63	27.46
Apprentice Meterperson - 1st 6 months	23.93	24.62	25.38	26.17
Meterperson Labourer	26.77	27.55	28.40	29.28
Meterperson Labourer - 2nd 6 months	24.62	25.33	26.12	26.93
Meterperson Labourer - 1st 6 months	23.47	24.15	24.90	25.67

Operating				
Operating Team Leader	42.09	43.31	44.65	46.03
Day Shift Operator	40.98	42.17	43.48	44.83
System Operator 1	39.45	40.59	41.85	43.15
System Operator 2	37.93	39.03	40.24	41.49
System Operator 3	33.69	34.67	35.74	36.85
System Operator 4	30.65	31.54	32.52	33.53
System Operator 4, 3rd year	29.12	29.96	30.89	31.85
System Operator 4, 2nd year	27.96	28.77	29.66	30.58
System Operator 4, 2nd 6 months	26.78	27.56	28.41	29.29
System Operator 4, 1st 6 months	25.10	25.83	26.63	27.46

Stores				
Storekeeper	30.78	31.67	32.65	33.66
1st Class Storeperson	27.78	28.59	29.48	30.39
2nd Class Storeperson	26.94	27.72	28.58	29.47
Storeperson - 2nd 6 months	24.62	25.33	26.12	26.93
Storeperson - 1st 6 months	23.47	24.15	24.90	25.67
Inventory Control Clerk	26.77	27.55	28.40	29.28
Inventory Control Clerk - 2nd 6 months	24.62	25.33	26.12	26.93
Inventory Control Clerk - 1st 6 months	23.47	24.15	24.90	25.67

	June 1/11	June 1/12	June 1/13	June 1/14
Facilities Maintenance				
Lead Hand Facilities Maintainer	33.67	34.65	35.72	36.83
Lead Hand Facilities Maintainer - 2nd 6 months	31.68	32.60	33.61	34.65
Lead Hand Facilities Maintainer - 1st 6 months	29.68	30.54	31.49	32.47
Facilities Maintainer	29.69	30.55	31.50	32.48
Facilities Maintainer 2nd 6 months	27.73	28.53	29.41	30.32
Facilities Maintainer 1st 6 months	25.76	26.51	27.33	28.18
Cleaner (Part-Time)	20.32	20.91	21.56	22.23
Cleaner - 2nd 6 months	19.32	19.88	20.50	21.14
Cleaner - 1st 6 months	18.31	18.84	19.42	20.02
Fleet				
Lead Hand Mechanic	37.59	38.68	39.88	41.12
Mechanic	34.82	35.83	36.94	38.09
Mechanic - 2nd 6 months	29.43	30.28	31.22	32.19
Mechanic - 1st 6 months	27.65	28.45	29.33	30.24
Fleet Coordinator	28.25	29.07	29.97	30.90
Fleet Coordinator - 2nd 6 months	26.79	27.57	28.42	29.30
Fleet Coordinator - 1st 6 months	25.38	26.12	26.93	27.76
Fleet Labourer	26.77	27.55	28.40	29.28
Fleet Labourer - 2nd 6 months	24.62	25.33	26.12	26.93
Fleet Labourer - 1st 6 months	23.47	24.15	24.90	25.67
Fleet Clerk	26.77	27.55	28.40	29.28
Fleet Clerk - 2nd 6 months	24.62	25.33	26.12	26.93
Fleet Clerk - 1st 6 months	23.47	24.15	24.90	25.67

SCHEDULE B

		Start	After 6 mos.	After 1st Yr	After 2nd Yr	After 3rd Yr
Rates Analyst						
	June 1/11	\$ 35.66		\$ 37.65	\$ 39.60	\$ 41.57
	June 1/12	\$ 36.69		\$ 38.74	\$ 40.75	\$ 42.78
	June 1/13	\$ 37.83		\$ 39.94	\$ 42.01	\$ 44.11
	June 1/14	\$ 39.00		\$ 41.18	\$ 43.31	\$ 45.48
Accounting Analyst						
	June 1/11	\$ 35.66		\$ 37.65	\$ 39.60	\$ 41.57
	June 1/12	\$ 36.69		\$ 38.74	\$ 40.75	\$ 42.78
	June 1/13	\$ 37.83		\$ 39.94	\$ 42.01	\$ 44.11
	June 1/14	\$ 39.00		\$ 41.18	\$ 43.31	\$ 45.48
Engineering Technologist						
	June 1/11	\$ 35.66		\$ 37.65	\$ 39.60	\$ 41.57
	June 1/12	\$ 36.69		\$ 38.74	\$ 40.75	\$ 42.78
	June 1/13	\$ 37.83		\$ 39.94	\$ 42.01	\$ 44.11
	June 1/14	\$ 39.00		\$ 41.18	\$ 43.31	\$ 45.48
Accountant						
	June 1/11	\$ 31.68		\$ 33.67	\$ 35.66	\$ 37.65
	June 1/12	\$ 32.60		\$ 34.65	\$ 36.69	\$ 38.74
	June 1/13	\$ 33.61		\$ 35.72	\$ 37.83	\$ 39.94
	June 1/14	\$ 34.65		\$ 36.83	\$ 39.00	\$ 41.18
GIS Developer						
	June 1/11	\$ 31.68		\$ 33.67	\$ 35.66	\$ 37.65
	June 1/12	\$ 32.60		\$ 34.65	\$ 36.69	\$ 38.74
	June 1/13	\$ 33.61		\$ 35.72	\$ 37.83	\$ 39.94
	June 1/14	\$ 34.65		\$ 36.83	\$ 39.00	\$ 41.18
Purchasing Assistant						
	June 1/11	\$ 31.68		\$ 33.67	\$ 35.66	\$ 37.65
	June 1/12	\$ 32.60		\$ 34.65	\$ 36.69	\$ 38.74
	June 1/13	\$ 33.61		\$ 35.72	\$ 37.83	\$ 39.94
	June 1/14	\$ 34.65		\$ 36.83	\$ 39.00	\$ 41.18
Engineering Technician 1						
	June 1/11	\$ 31.68		\$ 33.67	\$ 35.66	\$ 37.65
	June 1/12	\$ 32.60		\$ 34.65	\$ 36.69	\$ 38.74
	June 1/13	\$ 33.61		\$ 35.72	\$ 37.83	\$ 39.94
	June 1/14	\$ 34.65		\$ 36.83	\$ 39.00	\$ 41.18
Senior PC Technician						
	June 1/11	\$ 31.68		\$ 33.67	\$ 35.66	\$ 37.65
	June 1/12	\$ 32.60		\$ 34.65	\$ 36.69	\$ 38.74
	June 1/13	\$ 33.61		\$ 35.72	\$ 37.83	\$ 39.94
	June 1/14	\$ 34.65		\$ 36.83	\$ 39.00	\$ 41.18

		Start	After 6 mos.	After 1st Yr	After 2nd Yr	After 3rd Yr
Engineering Records Coordinator	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
PC Technician	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
Engineering Technician 2	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
Call Centre Coordinator	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
Head Billing Clerk	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
MV90 Operator	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
CIS Analyst	June 1/11	\$ 27.75		\$ 29.68	\$ 31.68	\$ 33.67
	June 1/12	\$ 28.55		\$ 30.54	\$ 32.60	\$ 34.65
	June 1/13	\$ 29.44		\$ 31.49	\$ 33.61	\$ 35.72
	June 1/14	\$ 30.35		\$ 32.47	\$ 34.65	\$ 36.83
Engineering Draftsperson	June 1/11	\$ 25.76		\$ 27.74	\$ 29.68	
	June 1/12	\$ 26.51		\$ 28.54	\$ 30.54	
	June 1/13	\$ 27.33		\$ 29.42	\$ 31.49	
	June 1/14	\$ 28.18		\$ 30.33	\$ 32.47	

		Start	After 6 mos.	After 1st Yr	After 2nd Yr	After 3rd Yr
Console Operator	June 1/11	\$ 25.76		\$ 27.74	\$ 29.68	
	June 1/12	\$ 26.51		\$ 28.54	\$ 30.54	
	June 1/13	\$ 27.33		\$ 29.42	\$ 31.49	
	June 1/14	\$ 28.18		\$ 30.33	\$ 32.47	
Regulatory Coordinator	June 1/11	\$ 25.76		\$ 27.74	\$ 29.68	
	June 1/12	\$ 26.51		\$ 28.54	\$ 30.54	
	June 1/13	\$ 27.33		\$ 29.42	\$ 31.49	
	June 1/14	\$ 28.18		\$ 30.33	\$ 32.47	
Customer Service Rep (CSR)	June 1/11	\$ 25.38		\$ 26.79	\$ 28.25	
	June 1/12	\$ 26.12		\$ 27.57	\$ 29.07	
	June 1/13	\$ 26.93		\$ 28.42	\$ 29.97	
	June 1/14	\$ 27.76		\$ 29.30	\$ 30.90	
Customer Service Coordinator	June 1/11	\$ 25.38		\$ 26.79	\$ 28.25	
	June 1/12	\$ 26.12		\$ 27.57	\$ 29.07	
	June 1/13	\$ 26.93		\$ 28.42	\$ 29.97	
	June 1/14	\$ 27.76		\$ 29.30	\$ 30.90	
Sr.Customer Service Clerk	June 1/11	\$ 25.38		\$ 26.79	\$ 28.25	
	June 1/12	\$ 26.12		\$ 27.57	\$ 29.07	
	June 1/13	\$ 26.93		\$ 28.42	\$ 29.97	
	June 1/14	\$ 27.76		\$ 29.30	\$ 30.90	
Billing Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Conservation Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Pre-Authorized Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Engineering Records Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	

		Start	After 6 mos.	After 1st Yr	After 2nd Yr	After 3rd Yr
Collections Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Senior Cashier	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Public Relations Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Maintenance Clerk	June 1/11	\$ 23.47		\$ 24.62	\$ 26.77	
	June 1/12	\$ 24.15		\$ 25.33	\$ 27.55	
	June 1/13	\$ 24.90		\$ 26.12	\$ 28.40	
	June 1/14	\$ 25.67		\$ 26.93	\$ 29.28	
Meter Support Clerk	June 1/11	\$ 24.12		\$ 25.48	\$ 26.77	
	June 1/12	\$ 24.82		\$ 26.22	\$ 27.55	
	June 1/13	\$ 25.59		\$ 27.03	\$ 28.40	
	June 1/14	\$ 26.38		\$ 27.87	\$ 29.28	
Key Clerk	June 1/11	\$ 22.76		\$ 23.98	\$ 25.27	
	June 1/12	\$ 23.42		\$ 24.68	\$ 26.00	
	June 1/13	\$ 24.15		\$ 25.45	\$ 26.81	
	June 1/14	\$ 24.90		\$ 26.24	\$ 27.64	
Accounting Clerk	June 1/11	\$ 22.76		\$ 23.98	\$ 25.27	
	June 1/12	\$ 23.42		\$ 24.68	\$ 26.00	
	June 1/13	\$ 24.15		\$ 25.45	\$ 26.81	
	June 1/14	\$ 24.90		\$ 26.24	\$ 27.64	
Cashier	June 1/11	\$ 22.00		\$ 23.22	\$ 24.46	
	June 1/12	\$ 22.64		\$ 23.89	\$ 25.17	
	June 1/13	\$ 23.34		\$ 24.63	\$ 25.95	
	June 1/14	\$ 24.06		\$ 25.39	\$ 26.75	
General Clerk	June 1/11	\$ 18.31	\$ 19.32	\$ 20.32	\$ 21.46	\$ 22.57
	June 1/12	\$ 18.84	\$ 19.88	\$ 20.91	\$ 22.08	\$ 23.22
	June 1/13	\$ 19.42	\$ 20.50	\$ 21.56	\$ 22.76	\$ 23.94
	June 1/14	\$ 20.02	\$ 21.14	\$ 22.23	\$ 23.47	\$ 24.68

		Start	After 6 mos.	After 1st Yr	After 2nd Yr	After 3rd Yr
Creditron Operator	June 1/11	\$ 20.31		\$ 21.46	\$ 22.57	
	June 1/12	\$ 20.90		\$ 22.08	\$ 23.22	
	June 1/13	\$ 21.55		\$ 22.76	\$ 23.94	
	June 1/14	\$ 22.22		\$ 23.47	\$ 24.68	
Mail Messenger	June 1/11	\$ 20.31		\$ 21.46	\$ 22.57	
	June 1/12	\$ 20.90		\$ 22.08	\$ 23.22	
	June 1/13	\$ 21.55		\$ 22.76	\$ 23.94	
	June 1/14	\$ 22.22		\$ 23.47	\$ 24.68	

Employees currently earning more than these rates will have their rates red-circled until the job rate exceed their rate of pay.

Notes to Wage Schedules

Overhead

1. An Overhead Labourer hired to become a Line Maintainer will progress from “Overhead Labourer, 1st 6 months” through to “Line Maintainers, 3rd Class” within the times shown subject to the following qualifications and conditions:
 - a) An employee in “Apprentice Line Maintainer, 2nd 6 months” shall be on a trial basis only, and if the employee’s performance in such category is not satisfactory, he may be dismissed.
 - b) Subject to the foregoing, an employee who does not make satisfactory progress in an Apprentice Line Maintainer category may have their advancement withheld for a period of 6 months. Should progression thereby be withheld, the Corporation shall notify the employee and give the reasons for withholding progression. A re-evaluation will be made within 6 months from the date on which progression was first withheld. If their progress is still not satisfactory, the Corporation shall have the right to dismiss them, assign them to other duties or hold them in their current position.
2. Upon the recommendation of the Supervisor, a Line Maintainer, 3rd Class will be promoted to Line Maintainer, 2nd Class.
3. A 2nd Class Line Maintainer will advance to 1st Class, following successful completion of Stage 4 of the training school, completion of industry standard hours and on the recommendation of the Supervisor.
4. Permanent Lead Hand positions shall be posted in accordance with article 5 – job posting. Those employees appointed to Lead Hand on a temporary basis shall receive the same rate as a full time Lead Hand. Where temporary appointments to the position of Lead Hand are being made, with qualifications, skill and ability to perform the job given full consideration, the employee with the greatest seniority will be given appointment.

Underground

1. An Underground Labourer hired to become a Cable Splicer, Substation Maintainer or Transformer Maintainer will progress from “Underground Labourer – 1st 6 months to “Cable Splicer, Substation Maintainer, or Transformer Maintainer – 3rd Class” within the times shown, subject to the following qualifications and conditions:
 - a. An employee in “Cable Splicer, or Substation Maintainer – 2nd 6 months” shall be on a trial basis only, and if the employee’s performance in such category is not satisfactory, he may be dismissed.
 - b. Subject to the foregoing, an employee who does not make satisfactory progress in a “Cable Splicer, Substation Maintainer or Transformer Maintainer” category may have their advancement withheld for a period of 6 months. Should progression thereby be withheld, the Corporation shall notify the employee and give the reasons for withholding progression. A re-evaluation will be made within 6 months from the date on which progression was first withheld. If their progress is still not satisfactory, the Corporation shall have the right to dismiss them, assign them to other duties, or hold them in their current position.
2. Upon the recommendation of the Supervisor, a “Cable Splicer, Substation Maintainer or Transformer Maintainer – 3rd Class” will be promoted to “Cable Splicer, substation Maintainer or Transformer Maintainer – 2nd Class”.
3. Permanent Lead Hand positions shall be posted in accordance with article 5 – job posting. Those employees appointed to Lead Hand on a temporary basis shall receive the same rate as a full time Lead Hand. Where temporary appointments to the position of Lead Hand are being made, with qualifications, skill and ability to perform the job given full consideration, the employee with the greatest seniority will be given appointment.
4. Subject to successful completion of the E.D.A. Training Program and upon recommendation of the Underground Manager, Cable Splicer, 2nd Class, Substation Maintainer, 2nd Class, or Transformer Maintainer, 2nd Class shall progress to Cable Splicer, 1st Class, Substation Maintainer, 1st Class or Transformer Maintainer, 1st Class.
5. An employee who accepts a permanent position as a Truck Driver, will start at Truck Driver 3rd Class and subject to annual satisfactory performance reviews and recommendation of the Manager, will progress from Truck Driver 3rd Class to 2nd Class Truck Driver to Truck Driver 1st Class to Mobile Crane Operator in a period of 3 years as long as they meet the Ministry’s requirements of certification and minimum operation of equipment hours. Mobile Crane Operator – To receive this rate, the operator must hold a valid AZ license and Branch 2 Hoisting Certificate. With these certifications, the operator can drive any tractor-trailer combination and operate any attached hydraulic equipment.

Truck Driver 1st Class – To receive this rate, the operator must hold a valid AZ licence. The truck driver can drive any truck and trailer combination.

Truck Driver 2nd Class- To receive this rate, the operator must hold a valid DZ license. The truck driver can drive any truck provided the towed vehicle is not over 4600kg.

A labourer will only receive Truck Driver rate if he meets the above requirements and there is a direction by the Corporation to temporarily transfer him to a truck driver position while operating a truck

The Cable Crew will continue to utilize a Mobile Crane Operator when available. Availability will be based on operational needs for hoisting.

Meter

1. A "Meterperson, 1st 6 months" hired to become a "Meterperson" will progress From:
 - a) "Meterperson, 1st 6 months" to "Meterperson, 3rd Class" within the times shown:
 - b) An employee in "Meterperson, 2nd 6 months" shall be on a trial basis only, and if the employee's performance in such category is not satisfactory, he may be dismissed.
 - c) Subject to the foregoing, an employee who does not make satisfactory progress in an inexperienced category may have their advancement withheld for a period of 6 months. Should progression thereby be withheld, the Corporation shall notify the employee and give the reasons for withholding progression. A re-evaluation will be made within 6 months from the date on which progression was first withheld. If their progress is still not satisfactory, the Corporation shall have the right to dismiss them, assign them to other duties or hold them in their current position.
2. Upon recommendation of the Supervisor, a "Meterperson, 3rd Class" will be promoted to "Meterperson 2nd Class".
3. Subject to successful completion of the E.D.A. Training Program or equivalent and upon the recommendation of the Meter Department Supervisor, a Meterperson, 2nd Class shall progress to Meterperson, 1st Class.
4. The Meterperson's Labourer's hours are from 1:00p.m. to 9:00p.m.

Operating

1. An "OP-4, 1st 6 months" hired to become an "OP-1" will progress from "OP-4" within the times shown.
 - a) An employee in "OP-4, 2nd 6 months" shall be on a trial basis only, and if the employee's performance in such category is not satisfactory, he may be dismissed.
 - b) Subject to the foregoing, an employee who does not make satisfactory progress in the "OP-4" category may have their advancement withheld for a period of 6 months. Should progression thereby be withheld, the Corporation shall notify the employee and give the reasons for withholding progression. A re-evaluation will be made within 6 months from the date on which progression was first withheld. If

their progress is still not satisfactory, the Corporation shall have the right to dismiss them, assign them to other duties or hold them in their current position.

2. Subject to satisfactory progress and upon the recommendation of the Supervisor, an "OP-4" will be promoted to "OP-3".
3. Subject to satisfactory progress in the Operator Development Program and upon the recommendation of the Supervisor, an "OP-3" will be promoted to "OP-2".
4.
 - a) Subject to successful completion of the E.D.A. Training Program and upon the recommendation of the Supervisor, OP-2's shall progress to OP-1's.
 - b) Permanent Team Leader positions shall be posted in accordance with Article 5 – Job Posting. When an OP1 relieves as the Team Leader, he is paid at the Team Leader rate. Where temporary appointments to the position of Team Leader are being made, with qualifications, skill and ability to perform the job given full consideration, the OP1 on shift with the greatest seniority will be given the appointment.

Stores

After 1 year service in the Stores Department and on the recommendation of the Stores Manager, an employee will advance from Storeperson to 2nd Class Storeperson.

Schedule "B"

When an employee is promoted to a Job in a higher grade, he will be paid at the rate in the range of the new grade, which is closest to a 3% increase in the rate he was receiving in their prior classification.

When an employee posts into a vacancy in the Customer Service Representative classification, that employee must have completed the wage progression stages of a General Clerk. If not he will be placed in the progression steps of the General Clerk prior to moving to the Customer Service Representative wage progression.

General Clerk's shall perform the following functions: Collections Follow-up, Solicitors Inquiries, Collection Phone Calls and Contract Follow-up. These duties will be distributed equally on a rotating basis so that employees are fully trained on each function.

Mail messengers wishing to post into the General Clerk position will enter the position at their current rate within the classification.

All General Clerks in the Customer Services Department except Customer Service Representatives may be required to perform customer service duties not to exceed 30% of the regular year's employment.

An employee designated as a Trainee who does not make satisfactory progress in a category may have their advancement (i.e. rate increase) withheld for a period of six months. Should progression thereby be withheld, the Corporation shall notify the employee and give the reasons therefore. The Corporation will make a re-evaluation within six months from the date at which progression was first withheld. If their progress is still not satisfactory, the Corporation shall have the right to dismiss them, assign them to other duties or hold them at their current rate.

An Engineering Technician 1 shall progress to the Engineering Technologist level, upon completion of a 3 year diploma course (or equivalent) in an appropriate discipline, obtainment of C. Tech. or higher designation from OACETT, and upon the recommendation of the supervisor.

Temporary Pay for Schedule “B” Employees.

Upon satisfactory completion of training and upon the recommendation of the Department Manager, employees shall receive the top rate of the job class they are assigned to.

LETTER OF UNDERSTANDING #1

- TEMPORARY SPECIAL ASSIGNMENTS

between

Horizon Utilities Corporation
(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers
(hereinafter designated as the "Union")

RE: Temporary Special Assignments

Corporation will endeavour to give senior employees the opportunity over junior employees to perform special assignments (not a classification in the Collective Agreement) that exceed four months in duration and occur or will occur more than twice a year. Any employee displacement to cover the incumbent must not result in a further training process, nor impact operational productivity of the departments.

On Behalf of IBEW, Local 636:

On Behalf of Horizon Utilities Corporation:

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #2

- TROUBLEPERSON

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

RE: Troubleperson

Further discussion between Local 636 and the Corporation will take place to review the status of the Troubleperson and the future disposition of their duties.

On Behalf of IBEW, Local 636:

**On Behalf of Horizon Utilities
Corporation:**

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice President, Corporate Services

LETTER OF UNDERSTANDING #3 - RETIREE BENEFITS

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

RE: Retiree Benefits

This letter of understanding is to advise the members of Local 636, I.B.E.W. that Horizon Utilities Corporation will continue its policy of providing benefit coverage to its retired employees as noted below.

A retiree will receive benefits for life if:

- a) he was hired by Hamilton Hydro Inc. or its predecessor companies prior to October 1, 2001, and
- b) he has twenty (20) years of service with the Corporation on the date of retirement.

A retiree will receive benefits from retirement to the age of sixty-five (65) if:

- a) he was hired by Hamilton Hydro Inc. or its successor companies after October 1, 2001, and
- b) he has twenty (20) years of service with the Corporation on the date of retirement.

For employees of St. Catharines Hydro Utility Services Inc. as of February 28, 2005, the minimum requirement of twenty (20) years of service is waived. All former employees of St. Catharines Hydro Utility Services Inc. as of February 28, 2005 who retire during the term of this Agreement shall receive retiree benefits as outlined under article 14.12 of the Collective Agreement in effect April 1, 2003 until March 31, 2006 between the CAW and the St. Catharines Hydro Utility Services Inc. with the exception of the pay direct drug card.

Existing retirees of Stoney Creek, Dundas, Ancaster and St. Catharines Hydro Utility Services Inc. will continue to be covered by the existing terms and coverages they presently have.

The Corporation will provide the following "retiree" benefits to retirees and dependants as applicable at no cost:

- a) Major medical plan in effect on July 31, 1987, except removal of deductibles, \$8.50 cap on dispensing fees and removal of semi-private hospital coverage.
- b) Vision Care maximum of \$275.00 every two years.
- c) Hearing aid plan maximum of \$300.00 every five years.
- d) Equivalent to Blue Cross Dental Rider #1 and #2 with a yearly update of the ODA Schedule.

Employees who declare that they are retiring will be provided, within thirty (30) days of their declaration, a copy of the benefit booklet which outlines their retiree benefit coverage.

On Behalf of IBEW, Local 636:

On Behalf of Horizon Utilities Corporation:

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice President, Corporate Services

LETTER OF UNDERSTANDING #4
- BANKING OF OVERTIME AS LIEU TIME

between

Horizon Utilities Corporation
(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers
(hereinafter designated as the "Union")

Banking of Overtime as Lieu Time

Employees will have the option of banking overtime in lieu to be taken in each calendar year, which if not taken will be paid out at the end of each calendar year. Such banking will be capped at 80 hours per calendar year. Hours withdrawn from the lieu bank may not be replenished during the calendar year.

This clause is to come into effect on January 1, 2006. All other practices will remain in force until that date.

On Behalf of IBEW, Local 636:

On Behalf of Horizon Utilities Corporation:

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice President, Corporate Services

LETTER OF UNDERSTANDING #5

- APPRENTICE COMMITMENT OF TWO YEARS

between

Horizon Utilities Corporation
(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers
(hereinafter designated as the "Union")

RE: Apprentice Commitment of Two Years

Recognizing the financial commitment of the Corporation in sending apprentices for training, any employee posting into the following positions and being trained by the Corporation will commit to the position for a period of two (2) years before applying to post into another position:

- Truck driver
- Line Maintainer
- Cable Splicer
- Substation Maintainer
- Meterperson

On Behalf of IBEW, Local 636:

Domenic Murdaca
Business Representative, IBEW

On Behalf of Horizon Utilities Corporation:

Marjorie Richards
Vice President, Corporate Services

LETTER OF UNDERSTANDING #6
- VOLUNTEERING FOR COMMUNITY EVENTS

between

Horizon Utilities Corporation
(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers
(hereinafter designated as the "Union")

RE: Volunteering for Community Events

When an employee participates in a community event which requires specific skilled trades people, they will be paid at their straight time rate or bank lieu time. When it is a volunteer situation, there will be no pay.

On Behalf of IBEW, Local 636:

**On Behalf of Horizon Utilities
Corporation:**

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice President, Corporate Services

LETTER OF UNDERSTANDING #7 – TEMPORARY LEAD HANDS

between

Horizon Utilities Corporation

(hereinafter designated as the “Corporation”)

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the “Union”)

The senior person appointed on service trucks, excluding the lamp truck, where there is normally no permanent lead hand assigned, shall receive a premium of 50% of the difference between 1st class line maintainer and the lead hand rate for all regular hours worked on projects that do not fall into the temporary lead hand criteria. Should they fall under the criteria of the lead hand, the lead hand rate will apply.

When temporary lead hands are appointed to cover permanent lead hands, the temporary lead hands will be paid as a lead hand if they perform the duties per Corporation's criteria and will be paid for the amount of time, covering for the permanent lead hand.

1st Class Cable Splicers asked to run the Cable Crew (that do not include lead hand splicer duties) shall receive a premium of 50% of the difference between 1st Class Splicer rate and Lead Hand Splicer rate.

On Behalf of IBEW, Local 636:

On Behalf of Horizon Utilities Corporation:

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #8
- TRAVEL ALLOWANCE -
TEMPORARY WORK ASSIGNMENTS

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

A personal vehicle expense reimbursement will be provided to an employee who uses his personal vehicle to travel for approved business reasons. This includes reporting to a work location other than the normal location at which the employee is required to report to work.

An employee traveling from home to a company office/service centre other than that normally assigned will receive reimbursement from his home to the temporary work location. Mileage will also be reimbursed from the temporary work location to the employee's residence or back to their normal work location whichever location the employee is directed to report to by the employer. It is understood that if employees carpool only the driver will receive the travel reimbursement. The mileage reimbursement amount will be \$0.47 per kilometre. Mileage reimbursement shall be reviewed annually comparative to other Utilities and adjustments will be made to comply with CRA rules as required.

A temporary work location is defined as:

- i) Any company office/service centre;
- ii) Outside training centre;
- iii) A location deemed by management as a temporary work location consistent with the requirements of the Occupational Health & Safety Act – Part II Section 28 and 29.

When a company vehicle is available and approved for use, employees travelling to temporary work locations will not receive the travel reimbursement.

In addition to the motor vehicle reimbursement, employees reporting to a temporary work location will be reimbursed for direct out of pocket expenses for parking and/or train/bus/subway costs accompanied by a receipt.

An advance per diem of \$25 will be provided for Apprentices attending training for durations longer than a day provided the Apprentice submits a requisition to his Supervisor ten (10) business days in advance of attendance.

No employee will drive a designated CVOR vehicle on their own time.

On Behalf of IBEW, Local 636:

**On Behalf of Horizon Utilities
Corporation:**

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #9

CUSTOMER SERVICE REPRESENTATIVE RATE HARMONIZATION

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

This letter of understanding addresses the harmonization of the hourly wage rate and hours of work for employees in the classification of Customer Service Representative. The terms and conditions shall be as follows:

1. Effective May 31st, 2011 all employees in the classification of Customer Service Representative shall be paid an hourly wage of \$28.10.
2. Effective May 31st, 2011 all employees in the classification of Customer Service Representative shall work a thirty-five hour work week.
3. Following the implementation of section 1 and 2 above, the former St. Catharines Hydro employees who are being reverted to a thirty-five hour work week, shall have their former regular weekly pay prior to May 31st, 2011 maintained by the employer until such time as the harmonized rate equals or exceeds their former weekly pay.

On Behalf of IBEW, Local 636:

On Behalf of Horizon Utilities Corporation:

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #10 – Pay Equity, Employee Rates Grandfathered as a Result of Pay Equity Review 2004

between

Horizon Utilities Corporation

(hereinafter designated as the “Corporation”)

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the “Union”)

RE: Pay Equity, Employee Rates Grand fathered as a result of Pay Equity review 2004

This letter of understanding is to confirm that the incumbents specified below will continue to be paid at the grade level listed below. Should they choose to apply and be the successful candidate in another classification, they will receive that rate of pay. The incumbents listed below will continue to receive any negotiated wage increase as well. Any new incumbents applying into these positions as of April 4, 2004, will be paid the rate of the new grade level agreed to during Pay Equity 2004.

Classification	Incumbent	Pay Grade
Head Billing Clerk	Norma Wilson	Formerly Grade 9
	Marilyn Conrad	
MV-90 Operator	Marni Penny	
Console Operator	Dianne Graves	Formerly Grade 8
Fleet Coordinator	Rita Morris	Formerly Grade 7
PR/Safety Clerk	Valerie McKenna	Formerly Grade 6

On Behalf of IBEW, Local 636:

**On Behalf of Horizon Utilities
Corporation:**

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #11

TRAVEL FOR THE PURPOSES OF TRAINING

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

For the purposes of training/meetings, employees will be paid at their straight time rate of pay. Travel for the purposes of mandatory training/meetings that results in the extension of a work day will be compensated at the employee's regular straight time rate of pay as per Article 18.03.

Where Schedule A and B employees are required to attend a full day training that continues longer than 7 hours of work, those Schedule B employees will receive their regular pay at straight time.

Working hours and lunches/breaks may be adjusted from time to time to accommodate training/meeting schedules.

Travel time to and from company offices/service centres is consistent with the following:

	Stoney Creek	John Street	Nebo	St.Catharines
Stoney Creek		25 minutes	20 minutes	40 minutes
John Street	25 minutes		20 minutes	50 minutes
Nebo	20 minutes	20 minutes		45 minutes
St.Catharines	40 minutes	50 minutes	45 minutes	

A temporary work location is defined as:

- i. Any company office/service centre;
- ii. Outside training centre;

The scheduling of training will be consistent with Horizon practices. The Company will endeavor to schedule training during normal working hours and on scheduled work days.

On Behalf of IBEW, Local 636:

Domenic Murdaca
Business Representative, IBEW

**On Behalf of Horizon Utilities
Corporation:**

Marjorie Richards
Vice-President, Corporate Services

LETTER OF UNDERSTANDING #12

PROGRESSIONS (ENGINEERING TECHNICIANS, SYSTEM OPERATORS, CUSTOMER SERVICE REPRESENTATIVES)

between

Horizon Utilities Corporation

(hereinafter designated as the "Corporation")

- and -

Local Union 636, International Brotherhood of Electrical Workers

(hereinafter designated as the "Union")

The Corporation is committed to attracting and retaining competent employees as well as providing an environment where employees can enhance personal and career development.

It is agreed that the Corporation will complete an assessment of progressions for Engineering Technicians, System Operators and Customer Service Representatives by May 31, 2012. The Corporation will further consult with the Union with respect to levels of competency and duration of the progressions.

This agreement is without precedent or prejudice to any future matters of a similar or identical nature.

**On Behalf of IBEW, Local 636:
Corporation:**

On Behalf of Horizon Utilities

Domenic Murdaca
Business Representative, IBEW

Marjorie Richards
Vice-President, Corporate Services

APPENDICES

APPENDIX 1

The Corporation shall supply the following protective clothing to employees at time of hire.

	Long Sleeve Work Shirt or <u>Long Sleeve</u> T-Shirt	Pants (blue)	Coverall, Non-Insulated	Overall, Non-Insulated	Bomber Jacket or Lineman Jacket Non-Insulated	Winter Parka or Fleece jacket	Fleece Hoodie
Overhead, Underground & Station Maintenance	5	5	1 Cable Splicers to be issued 1 extra coverall for lead	2	2	1	1
Metering	5	3	0	0	1	1	1
Designated System Operators	0	0	1	0	0	0	0
Stores	3*	0	0	0	Employees can choose 1 (Bomber Jacket or Lineman Jacket and Winter Parka or a fleece hoodie), ARC Rated		0
Engineering (includes Connection Techs)	0	1	0	0			0
Fleet	0	0	Cleaned coveralls provided	0			0
Facilities	3	3	Cleaned coveralls provided	0			0

* Stores employees not exposed to electrical hazards but are exposed to vehicular traffic hazards may select short sleeved traffic safety shirts (100% Cotton).

APPENDIX 2

The Corporation shall Administer Statutory Holiday Pay for Shift Workers according to the following table:

Hours Scheduled at Work	Codes			Weekly Hours Paid
	Regular	OT Code 1	OT Code 2	
0	0	8	0	48
4.5	4.5	3.5	4.5	52.5
7.5	8	0.5	7.5	55.5
10	10	0	10	60
12	12	0	12	64

Regular – Hours are included in the 40 averaged hours

OT Code 1 and OT Code 2 – Hours are paid in addition to the 40 averaged hours.

4-SEC-23

[Ex.4-2-/p.3]

- a) Please provide the cost assumptions embedded in this application regarding the Applicant's next collective agreement scheduled to take effect in June 1, 2015.**
- b) If the next collective agreement is not expected to extend to the end of the test period, please provide the cost assumptions underlying the Applicant's subsequent collective agreement.**

Response:

- 1 a) Horizon Utilities has forecast wage and benefits inflation of [REDACTED] from 2015 to 2019.
- 2 b) The term of the collective agreement to take effect June 1, 2015 is unknown and will be
- 3 determined during 2015 negotiations.

4-SEC-24

[Ex.4-2-2/p.10] Please provide further details about the Applicant's "upgrade of the server environment used to read Smart Meters in order to mitigate business risks related to maintain vendor support". Specifically, please provide further details about the referenced business risk.

Response:

- 1 The business risk referenced in Exhibit 4, Tab 2, Schedule 2, page 10 is risk related to the end
- 2 of vendor support for the version of software used to read Smart Meters. The vendor supports
- 3 the most recent version and one previous version only. Currently, Horizon Utilities is using
- 4 version 7.6 of the Elster Application Server. The current version is 9.0. Version 10.0 will be
- 5 released in 2015. If Horizon Utilities remains on version 7.6 once version 10.0 is released, then
- 6 Horizon Utilities would no longer receive technical support, security updates, or error corrections
- 7 for that version. This presents an unacceptable business risk for this critical system that is used
- 8 to collect data that is sent to the provincial MDM/R and further used by Horizon Utilities for the
- 9 timely and accurate billing of Horizon Utilities' customers

4-SEC-25

[Ex.4-2-2/p.19] Please provide the Applicant's formal business case regard its CIS/OMS upgrade initiative.

Response:

- 1 Horizon Utilities provides the business case for the renewal of the GIS system as 4-SEC-
- 2 25_Attach_GIS_Business_Case.

4-SEC-25_Attach_GIS_Business_Case



Horizon Utilities

GIS Upgrade Business Case

Prepared by:

Utility Solutions Corporation

June 2011

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Executive Summary

Current Situation

Horizon Utilities has been a long time user of GIS for tracking distribution assets in a mapping environment, producing summary and selected data reports and supplying specific data for other information systems to use. Horizon was an early adopter of GIS technology and selected one of the original leading and popular GIS systems designed specifically for use in an electrical utility (CableCad). Over time, Horizon has developed, both technically and organizationally, a strong and effective CableCad GIS system. Most of Horizon's departments realize benefits from access to information provided by the CableCad GIS.

Horizon recently completed a GIS study that illustrated the need for enterprise level GIS. More specifically, the study showed that Horizon would not be able to realize many of its strategic and IT initiatives without a more modern, open and interoperative GIS. Much of Horizon's strategic future is based on successful deployment of additional systems and applications that harness spatial data held in an enterprise level GIS.

Business Problem

Horizon's current GIS System, CableCad, was selected 15 years ago to meet departmental needs at that time. Although the system has been enhanced over the years by the manufacturer and by Horizon's staff, CableCad remains a departmental level solution. It is clear today that Horizon cannot use its current technology to satisfy the information needs of Horizon at an enterprise level.

Horizon's current GIS technology has reached end of life and the provider does not offer enterprise level upgrades. Without an enterprise GIS system, Horizon cannot adopt some of the strategic future initiatives that are currently desired. Important future systems that will be supported by an enterprise GIS like Outage Management, Mobile Applications and Work Management systems, will be difficult, expensive and less effective without the use of modern open GIS technologies that are specifically designed for enterprise level interoperability.

In addition to the internal issues with respect to moving forward with CableCad, there are a number of external factors that support identifying alternate enterprise level GIS options.

These external factors include:

- Regulatory need for managing and reporting on asset information
 - To meet current and future regulatory requirements, Horizon will need to track more system information (e.g., asset condition) and details which cannot be done efficiently in the existing CableCad system.
- Implementation of Smart Grid, Smart Meters and other Green Energy initiatives

- CableCad has no inherent support for the above initiatives and is not being updated from current capabilities. A new GIS will have, or will develop, functions designed for Smart Grid/Meters and other Green Energy Initiatives.
- External pressure to improve infrastructure systems and assets
 - The new GIS will have functions that support better analysis of the electric distribution system and assets and will be able to interoperate with engineering and asset management systems.
- Pressure to reduce costs but increase service levels
 - The new GIS will increase service levels by empowering more employees with better information. The cost of providing and maintaining this information will be lower on a per unit basis than the existing CableCad System.
- Adopting technologies that allow external agencies, customers and the public to view geospatial data
 - The new GIS will support web based access for Horizon's customers and external agencies to view distribution data. Sharing data with external agencies will be greatly enhanced.

Proposed Solution

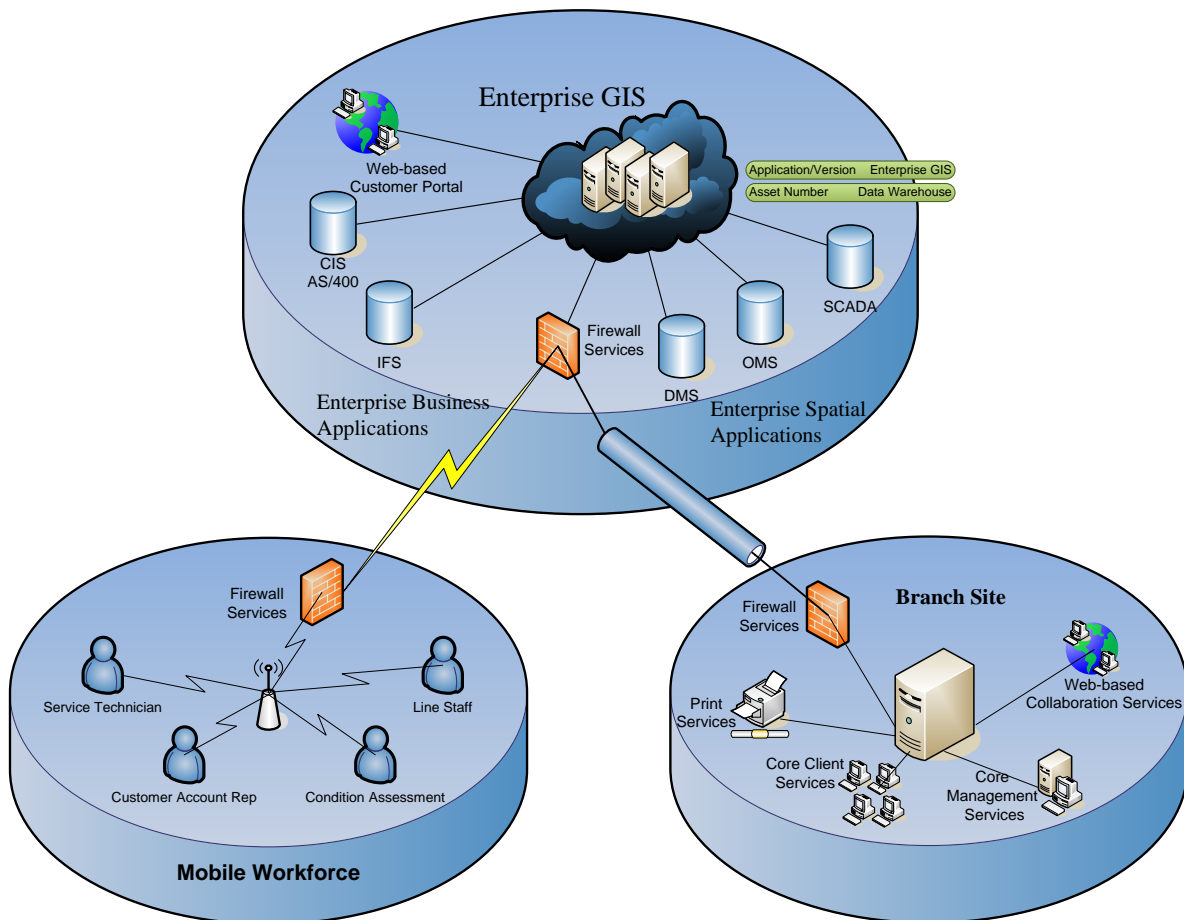
The proposed solution is to replace CableCad with an enterprise level GIS designed and configured for specific use with electric power distribution systems.

There are a number of suitable enterprise level GIS systems on the market from which to choose. Horizon has already obtained very detailed information from four leading GIS vendors through a Request for Information (RFI) process. In these detailed RFIs, each vendor has explained in detail how they would approach the upgrade process including data conversion, system configuration, training, and interoperability solutions. Each claims to be able to provide all the functionality, both existing and future, that Horizon has identified as strategic requirements.

System Architecture

The new GIS will be the central point for spatial data storage and management, interoperate with Horizon's other major systems and support mobile computing.

The illustration below is a conceptual model of how enterprise GIS supports Horizon's key business applications and associated business functions. This model, or future vision, cannot be effectively realized without upgrading Horizon's older department level GIS.



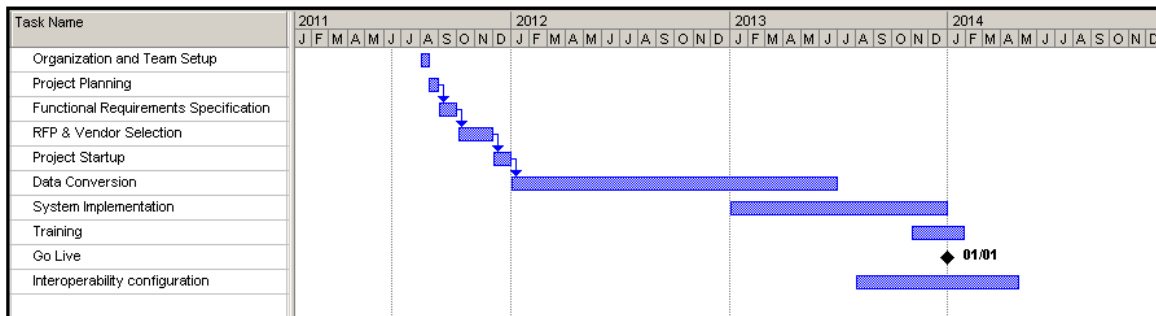
Conceptual GIS System Architecture

Timeline

High Level Project Schedule

The high-level project schedule below is based on information from the responses received from the four vendors who received Horizon's GIS RFI. Each vendor approaches the project differently in terms of how they order the project components and the overall project duration can vary from 1.5 year to 3 years. Much of this uncertainty is related to project scope issues around the data model, volume of data and complexity of the resulting conversion process.

Horizon's own internal experience with years of maintaining the volume of GIS data currently in the CableCad system will help in assessing the effort that will come with data model changes and additions. An experienced conversion vendor can assist with the whole process and help reduce the significant schedule risks inherent in data conversion.



Financial Summary

To large degree, the financial benefit of upgrading will be future cost avoidance. Keeping CableCAD operating and making it suitable for the future will require Horizon to Horizon's existing staff compliment will be able to take advantage of the technology to improve efficiency and meet the increasing demands for improved service without increasing resource costs. Significant improvements in efficiency across the organization can be expected once the GIS has been upgraded.

Overall cost for the upgrade project is estimated to be \$2,000,000 but will vary depending on which GIS system is selected and how the project is scoped. Ongoing annual maintenance/licensing costs are estimated to be approximately \$125,000 but are dependent on the GIS system selected.

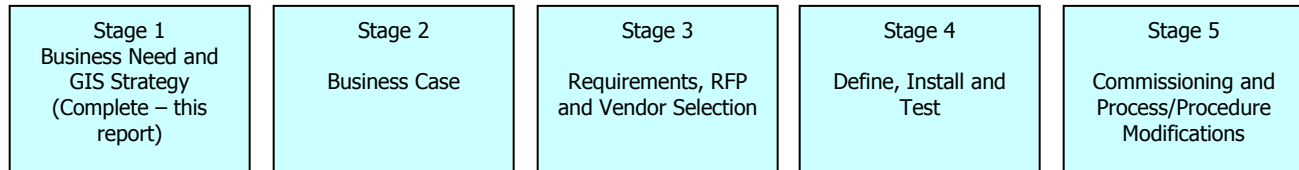
A return on investment will begin in 2014. Project payback occurs in 2017.

Recommendation

Implement Stage 3 of the Horizon GIS Strategy

The Horizon GIS Strategy identified five basic stages as an overall approach to the upgrading Horizon's GIS. Horizon is currently completing Stage 2, Business Case, which is this document.

The five strategic stages are depicted below:



It is recommended that Horizon proceed to Stage 3 of the GIS Strategy. This recommendation is strongly supported by the following business case facts:

1. CableCad has reached the end of its useful life and must be upgraded or Horizon's corporate strategic progress will be severely hobbled.
2. CableCad itself cannot be upgraded to an enterprise level solution.
3. There are no reasonable alternatives to upgrading (replacing) CableCad.
4. A number of potentially suitable competitive enterprise level GIS systems are available in the market.
5. Each of the four leading GIS vendors who received the Horizon GIS RFI, made credible claims to be able to meet all of Horizon's strategic and detailed GIS and conversion requirements (as described in Horizon's GIS RFI).
6. The cost of implementation of the new GIS will be offset by the value of gains in efficiency across the organization generating a significant return on investment by 2014 with full payback by 2017.
7. A new GIS will bring within reach not yet envisioned functional benefits beyond those currently identified in support of this business case.
8. Horizon has the staff, experience and capability to meet the challenges of the GIS Upgrade Project at a low risk to ongoing operations while achieving a high level of success.

To be clear, the rationale for moving forward with this upgrade is principally to position Horizon to meet its strategic business and IT goals and enable Horizon to enjoy continued success with GIS technology.

Project Description

The recommended business case solution to address existing operational issues and improvement opportunities is to replace Horizon's existing CableCad system with a modern, enterprise level GIS that will satisfy Horizon's current and future asset information needs. Undertaking the upgrade of Horizon's GIS will include a substantial effort in planning and managing the upgrade project itself.

The following description outlines the common components of the GIS upgrade project involving data conversion and provides an idea of the scope of the upgrade project.

Horizon Project Team

GIS Project Team will analyse Horizon's GIS needs in detail, prepare project plans, specifications and an RFP to select a vendor who can meet Horizon's needs. The project team will develop a detailed Functional Requirements Specification which will be used in the RFP. The selection process will involve a detailed review of each potential vendor (there are at least four) and their GIS solution as compared to the functional specifications. This may involve visiting other companies using the various GIS solutions to gain direct knowledge about the benefits and challenges of using each solution.

Horizon IT Support

With the establishment of an enterprise level GIS solution, Horizon's IT department will be required to undertake new responsibilities not currently needed by the CableCad system, which is not an enterprise level solution. These new requirements will likely be outside the capacity of the existing IT department resources during the GIS project implementation period and possibly after go-live for continued IT support.

Horizon's IT department has identified, a number of major IT upgrade projects, including the need for a central data warehouse to exchange and work with the data from all the Horizon IT systems (GIS, SCADA, IFS, CIS, etc.). These projects all place new demands on the IT department and all will be at risk if sufficient IT resources are not available to provide critical support. IT resource availability has been identified as a high level risk to the GIS project and is included in the Risk Assessment Table later in this document.

Vendor Selection

The GIS Project Team will be issuing an RFP to help select the best GIS system for Horizon. Horizon, as part of preparing this business case, issued an RFI to the four leading GIS vendors and received very detailed information on all aspects of the vendors' applications and how each would approach the upgrade process. Horizon can use the RFI responses to define the Functional Requirements Specification in view of what is being offered in the market and prepare a very detailed and effective RFP.

Data Model

Part of the GIS Upgrade and Conversion project will be to establish a new data model. The new data model will be designed to suit the requirements of the new GIS system and to support new functionalities. The new data model may involve an increase in the scope of data being stored in the system. Some vendors offer standard data models that are known to support their system. Some GIS users find these models to be insufficient for their purposes and will therefore work with the vendor to build out their standard model. Some data requirements in a vendor's standard data model may exist to support functions that are of no interest to Horizon but carry a substantial data maintenance cost if not ignored or removed from the model. Decisions made about the data model have downstream cost ramifications that need to be considered carefully.

Translating the old data into a new data model is complex and challenging. In addition, connectivity, which is an essential requirement in an electric GIS data model, may have to be re-established through automation, manual intervention, or most likely some combination. Establishing this element of the GIS data model, and other data relationships like parent/child are critical for enabling all GIS functions and the functionality of external systems that might rely on the GIS data.

White Space Management and Labelling

White space management rules and label positioning must also be developed in order that Horizon's new GIS presents graphic data like conductors, equipment, structures, etc. in a standard way. Horizon's extensive use of CableCad for many years benefit Horizon greatly since all the basic issues of depicting the distribution system in a GIS environment have been worked out and can be largely transferred to the new environment.

Maintaining CableCad Services

During the GIS upgrade process, which may require a year or more to complete, Horizon must continue normal company operations and therefore will need CableCad to continue to function along with maintaining the availability of output products dependant on CableCad. This will result in a parallel requirement for the same resources – those at Horizon with knowledge and experience in handling the GIS system. Strategic project planning and management can minimize the coincident demand for key GIS core resources during critical stages of the project.

Data Updates

Every working day, Horizon makes changes to its distribution system that need to be reflected in the existing CableCad system. During conversion, it is typical to collect all these updates and apply them to the reformatted data after conversion. This can be the first opportunity for Horizon technicians to perform real update work on the new system.

Horizon is fortunate to have an existing pool of capable GIS technicians who can be trained and made capable of providing the core support for the new GIS system. But if CableCad is still being supported, these resources may be in short supply. One solution is to have the conversion vendor undertake the update backlog after conversion of the existing data is completed.

New GIS Functionalities

As the new GIS System services and functions become available, Horizon will need to undertake organization change management to ensure organizational readiness to take up the new opportunities that the GIS will present. The GIS Project Team will address organization change and prepare training programs for all potential users of the new GIS.

Training

Horizon has a great opportunity to remove risk and improve the results of the GIS Upgrade Project through thorough strategic training. The chart below outlines a model training program designed for GIS projects. Horizon's specific training program will be developed by the GIS Project Team and will be tailored to meet the needs of all stakeholders.

Training Component Chart

Training Component	Description	Provider
Project Team Training	Development training for effective team work	Horizon internal or Consultant
System Administration	Administrative IT support and maintenance	GIS Vendor
Core GIS Operators	Data Management Procedures	GIS Vendor
Supervisors and Managers	High Level Training	GIS Vendor/Horizon
User Group Trainers	Train the Trainers	GIS Vendor/Horizon
User Groups	Technical and workflow training	Horizon Trainers

The GIS vendor will supply initial comprehensive technical training to Horizon's core GIS technicians and trainers. This technical training will not be sufficient for Horizon to implement the new GIS effectively as it will not account for deeper organization changes and changes in workflows for individual employees who are being affected by the change to a new GIS.

To ensure front line user needs for support with workflow changes, the training undertaken by Horizon's internal GIS Trainers will include departmental workflow training.

Benefits of Upgrading to a New GIS

The GIS will be the foundation on which Horizon will realize its full GIS Strategic Vision. The GIS will generate extensive change and improvement in how work is performed across the organization. Workflows and communications will be enhanced and mobile GIS technology will present many opportunities to capitalize on spatial data for field work.

Tangible Benefits

While Horizon can justify upgrading the GIS based on strategic benefits alone, the new GIS will usher in many tangible benefits.

Four key areas of tangible benefits have been identified:

1. Improved interoperability of enterprise systems
 2. Greater user access to enterprise GIS data
 3. Integrated workflows (design/construction/estimate/ CUs)
 4. Improved data integrity - elimination of redundant data
- Improved interoperability of enterprise systems
 - The new GIS will make interoperability between different information systems and the GIS much easier, less time consuming and at less cost. Through automation, data exchange between systems will no longer require the generation of manual data extracts or the creation of separate reports by manually compiling data from various systems. Data will be ‘shared’ between information systems and made accessible across platforms providing ‘one-stop’ for accessing all corporate information. Reporting will be ‘on demand’ and users will not have to wait for the next time monthly or periodic reports are manually assembled.
 - Wider and easier user access to enterprise GIS data
 - The new GIS will be able to provide users with improved access to data in more ways than the existing GIS system. Users will access data remotely via the web, while mobile in the field and from within other applications to facilitate work under all conditions. Dramatic savings in time and effort for field operations can be expected.
 - Integrated Workflows
 - Integrating Horizon’s enterprise information systems will lead to improved work flows and a reduction of duplication of effort. Spatial asset data will be stored and managed in one location only (the new GIS). There will no longer be the need for parallel data update work flows to keep multiple systems updated with the same information.

- Improved Data Integrity
 - The new GIS will help Horizon maintain the highest degree of data accuracy and integrity in an improved data model. Elimination of the duplication and overlap of data between systems, such as SCADA and GIS, will improve data integrity. Mobile GIS applications will enable field audits and verification or updates based on actual field conditions. Employees will save time by having their complete needs for asset and corporate data met efficiently and reliably.

Strategic Benefits

The new GIS will allow Horizon to realize important strategic benefits as follows:

- Compliance with corporate enterprise IT standards
 - The new system will meet Horizon's requirements for enterprise level applications ensuring the highest level of protection for the critical data contained within the GIS.
- Easy integration to a proposed common data warehouse
 - The new GIS will be able to interoperate with Horizon's proposed Data Warehouse providing flexible access to spatial and asset data.
- Future expansion of mobile workforce and associated technologies
 - The new GIS will directly support mobile computing technologies making access to detailed distribution system information possible at locations remote from the office.
- Improved customer care and service
 - The important spatial information managed within the GIS will support customer service directly through internet web services or by helping Horizon staff provide faster, more effective responses. Whether its responding to an outage, completing a service order or managing distribution operations, the new GIS will provide better support.
- An enterprise level Geographic Information System is a critical requirement for achieving Horizon's IT business strategies and corporate strategic goals
 - The existing GIS is not an enterprise level solutions and cannot provide full enterprise support efficiently. The new GIS will be an enterprise level solution which will support Horizon's business strategies and strategic corporate goals. Horizon will be able to keep pace with new and changing technologies that will depend on spatial data to an ever greater degree in the future.

Specific Departmental Benefits

During the development of the GIS Strategy, departmental representatives provided input about how their jobs and departmental processes could be improved with an enterprise GIS system. The priority items have been listed below with a statement about how each item will be supported by the new GIS.

Horizon's RFI asked each vendor to explain how their solution would satisfy Horizon's specific needs include the ones listed below. Each vendor's approach is significantly different and there is no typical or standard approach for many of the requirements. Never-the-less, each vendor made a credible claim that their solution could meet every requirement Horizon included in the RFI.

Asset Management

One Map source for both SCADA and GIS

Currently, Horizon maintains separate digital maps for SCADA and for GIS. Some of the data in these two systems overlaps and is therefore double the effort to maintain. The new GIS can eliminate the need for duplicate data and duplicate effort to maintain the duplicate data

Station Details Added to GIS

The new GIS will have functionality designed to model stations in the distribution network including individual feeder tracing from stations.

Common Asset identification method for all enterprise systems

Asset IDs, labelling and symbology can all be improved during the implementation of the new GIS

Map Coordinates required for all assets

Horizon can include more assets into the GIS data model and expand its georeferenced asset base as desired during the implementation of the new GIS

Capital Projects

Access to digital imagery, ortho-imagery, etc.

The new GIS will provide access to images including ortho-imagery and be able to utilize external sources of imagery

Real time loading data

Real time access to SCADA data and access to Smart Meter data and other Smart Grid data will be enabled by the new GIS.

Construction and Maintenance

View proposed work

Based on workflow choices, the new GIS will display proposed work.

Mobile access to current asset data

The GIS will provide support for mobile access to GIS data including the ability to edit the data remotely.

Access to historical data

The new GIS will use a ‘state’ identifier for each asset to indicate its current state such as proposed, in-service, abandoned, removed, etc. Field reports can also be tracked over time and viewed as a history. Horizon may have legacy files or information sources related to historical data. These can be referenced through the GIS and made easily available to interested users.

Meter Department

Model Smart Meter System in GIS including data collector points

The new GIS will have specific support for modeling Smart Meter systems including communications systems for Smart Meters. Smart Meter collector coverages can be analysed using GIS functions.

Ability to issue Service Orders from within the GIS

The new GIS will inter-operate with other enterprise systems like Horizon’s customer information systems and provide support for issuing service orders. The GIS functionality can be extended with integrated, optional systems that provide full dispatching, vehicle tracking and outage management in the GIS environment.

Three dimensional maps to analyse elevations for collector placement

Although it is unusual at this point in time for any utility GIS to be based on a digital terrain model, 3D data and DTMs will become more common in the future. The new GIS will have the capability to work with a digital terrain model and depict the elevation of Horizons assets across its service territory.

Customer Connections

Prepare service layouts in GIS

Horizon's distribution designers will be able to utilize the GIS directly to create design drawings for new services and engineering based on workflow decisions made by Horizon

Access Customer Information

The improved interoperability of the new GIS will provide Horizon a number of options for enabling access to CIS information either for viewing or for analysis within the GIS.

Generate quotes and invoices for service work

The new GIS will be able to support mobile design work, estimate preparation and invoice preparation for service work and other design work

Geo-reference field notes and imagery in the GIS

Field notes, photographs and other field-collected data will be geo-referenced as required in the new GIS. Imagery such as aerial photographs or scale drawings can be geo-referenced into the new GIS

Perform Mobile Red-Lining in the field

The new GIS will support mobile red-lining and also support full design capability in the field including feature placement, attribution and feature relationships.

Information Technology

System to comply with Horizon's corporate IT standards

The new GIS will be based on current IT standards common to industry and will work within Horizon's IT systems and standards.

IT role in future system to be identified

The vendor of the new GIS will assist Horizon in working out the internal IT processes and routines that will be required to maintain the GIS application. The GIS vendor will provide training specific to IT administration for the GIS.

Business Process and Data Flow to be documented

The vendor of the new GIS will train and assist Horizon to develop documented processes for data flows and business processes related to the GIS system requirements and Horizon's desired workflows.

Network Operations

SCADA/GIS use the same process and data source for updates

GIS vendors usually have strong relationships with SCADA providers including interfaces for data sharing and transfer. The vendor will assist Horizon to develop the most efficient approaches to interoperability with Horizon's SCADA system.

Common symbology across GIS, SCADA and other systems

The GIS vendor will assist Horizon to select the best symbology for their GIS in consideration of other uses of symbology at Horizon.

SCADA to be Georeferenced

The GIS can interoperate with the SCADA system and provide a geo-referenced map view of the SCADA system and data.

Real time updating of GIS asset data

Work shown in proposed state can be 'flipped' to in-service state quickly. Some utilities are now updating all field changes on a daily basis to achieve the highest level of currency (near real time). The GIS vendor will assist Horizon to adopt the best workflows for keeping the GIS up to date.

Common to all Departments

Integrate with other corporate information systems like SCADA, IFS, AS400, OMS, etc.

The GIS will be able to easily interoperate with all Horizon information systems.

The GIS will integrate with Outage Management Systems, Work Management Systems, Dispatch Systems and many other external databases. Data flexibility and system interoperability are very advanced for most enterprise electric GIS systems.

Financial Analysis

Cost Summary

The tables below shows component cost estimates for both the GIS Upgrade Project and for ongoing annual costs. The distribution of costs between the project components varies depending on the vendor's project approach and pricing model and the estimates shown below have been generally derived from the vendor's RFI submissions

GIS Project Costs

Project Cost Component	Cost Range	Details
Hardware	\$50,000 - \$100,000	Database and Web servers Data storage Workstations (if required)
Data Conversion	\$750,000 - \$1,200,000	Extraction of data from CableCad, transformation into new data format, loading into new GIS
Software and Professional Services	\$750,000 - \$1,500,000	Installation, setup, configuration of hardware and software, interfaces to other enterprise applications
Training (by vendor)	\$75,000	IT and database administration, core technical training, training Horizon trainers

Horizon GIS Project Resource Costs

Horizon Resource Costs	Cost	Details
Project Manager	\$250,000	Create and maintain project plans, timelines, status reporting, coordination and issue handling
Senior Technical	\$350,000	Coordinate technical activities, define data model and system functionality, user training
Technician	\$100,000	Data updates and augmentation, data testing and QC
Consulting	\$60,000	Assist with Functional Requirements Specification and Request for Proposal

Recommended Annual GIS Project Budget Amounts

To cover the cost of the GIS implementation project, it is recommended that Horizon budget the amounts shown in the table below.

2012	2013	2014
\$1,350,000	\$750,000	\$500,000

Recommended Annual GIS Project – Horizon Resources

To cover the need for internal resources to support the GIS implementation project, Horizon should plan on providing the following FTE (Full Time Equivalents) during the GIS project implementation period.

2012	2013	2014
3 FTE	2 FTE	2 FTE

Annual On-going GIS System Cost Range

The annual external cost of Horizon's new GIS can vary greatly based on the vendor and system selected.

Annual Cost Component	Cost Range	Details
Annual, Licensing, Support and Maintenance	\$65,000 - \$200,000	May include licenses, maintenance, upgrades, 24/7 call centre support, etc.

Note: During the GIS Project implementation period, Horizon will need to draw on its existing skilled GIS resources who are normally preoccupied with maintaining and operating CableCad. Once conversion of the CableCad data begins, the CableCad data itself begins to drop in value. At that point, continued full effort no longer needs to be applied to maintaining CableCad thereby freeing resources for work on the GIS Project. Until that point, Horizon faces a risk of under-resourcing the GIS Project with key senior level GIS

Return on Investment

The upgrade to a new GIS will result in the avoidance of future costs which would result from continuing with CableCAD as Horizon's GIS. These costs would come in the form of additional staff that would be required to support CableCAD and its interfaces to existing and to new applications. Essentially, more skilled staff, including programmers, would be required to extend CableCAD functionality and keep pace with new and improved technologies like mobile computing, handling future Smart Grid Data and interfaces to other enterprise level information systems. The return on investment has been calculated with these avoided costs in mind.

Cash Flow and Return on Investment

BENEFIT DRIVERS	YEAR					
	2012	2013	2014	2015	2016	2017
1) Improved interoperability of enterprise systems	-	\$50,000	\$200,000	\$200,000	\$200,000	\$200,000
2) Greater user access to enterprise GIS data	-	\$50,000	\$300,000	\$300,000	\$300,000	\$300,000
3) Integrated workflows (design/const'n/estimate/CUs)	-	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000
4) Improved data integrity - elimination of redundant data	-	\$50,000	\$250,000	\$250,000	\$250,000	\$250,000
Total annual benefits	-	\$200,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

Costs	2012	2013	2014	2015	2016	2017
Implementation Costs	\$1,200,000	\$600,000	\$300,000	0	0	0
Annual Costs (Licenses and Support)	\$100,000	\$100,000	\$200,000	\$200,000	\$200,000	\$200,000
Training Costs	\$25,000	\$35,000	\$5,000	\$5,000	\$5,000	\$5,000
Total	\$1,325,000	\$735,000	\$505,000	\$205,000	\$205,000	\$205,000

Net Cash Flow	2012	2013	2014	2015	2016	2017
Annual cost/benefit flow	(\$1,325,000)	(\$535,000)	\$245,000	\$795,000	\$795,000	\$795,000
Cumulative cost/benefit flow	-1,325,000	-1,860,000	-1,615,000	-820,000	-25,000	\$770,000

The above analysis shows that Horizon will see a return on its investment in a new GIS starting in 2014.

Solution Alternatives

Horizon does not have many options to consider for avoiding replacement of the existing CableCad system. The only potential alternative is to delay the upgrade into the future. A second, but unrealistic alternative would be to replace CableCad with a similar departmental level GIS system. Each of these alternatives is outlined below.

Alternative 1 – Delay GIS Upgrade Project

If Horizon does not proceed with upgrading of its existing GIS and chooses to postpone the upgrade until sometime in the future, Horizon will be that much further behind the utility community in Ontario. Most Ontario utilities that used CableCad have already upgraded to a new, enterprise GIS system. The potential benefits identified earlier in the report will be delayed and Horizon employees will continue to put extra effort into working with the existing, sub-optimal GIS environment. Many departments at Horizon are counting on the new GIS to usher in many improvements and would be disappointed to have to wait longer. If delayed any longer, Horizon will be at risk of going from a lead utility in the GIS community to a follower at some distance.

There is a rapidly expanding world of mobile computing and location based applications that will certainly lead to tremendous improvements in productivity and effectiveness of Horizon's internal processes.

A delay in implementation will interfere with Horizon's other strategic initiatives which are based on improvements in spatial data management that will come with an upgraded GIS.

Alternative 2 – Replace CableCad with a similar departmental level GIS

Another alternative would be to select a departmental level system similar to CableCad and continue to support the organization's GIS needs in a fashion similar to today CableCad environment. There could be significant savings in annual licensing costs over the enterprise solutions and a simpler system should be easier to use.

The drawback of this alternative is that Horizon is a large utility and can achieve enterprise wide benefits from an enterprise level solution. The departmental level solutions for power companies are targeted at smaller utilities with a handful of employees. It is also quite possible that the data capacity of such alternate systems is limited and for a large utility, performance would falter. Department level solutions will not meet enterprise IT requirements and will not inherently support interoperability. A departmental level system would not provide the cost benefits of an enterprise system and would result in continuing costs for inefficient, manual or semi-manual data management processes. Horizon would end up in the same untenable situation as now only after a lot of effort and money was spent converting the CableCad data into the new departmental system.

Timeline Analysis

Project Timeline Analysis



The high-level project schedule below is based on information from the responses received from the four vendors who received Horizon's GIS RFI. Each vendor approaches the project differently in terms of how they order the project components and the overall project duration can vary from 1 year to 3 years. Most of this uncertainty is related to project scope issues around the data model, volume of data and complexity of the resulting conversion process.

Horizon's own internal experience with years of maintaining the volume of GIS data currently in the CableCad system will help in assessing the effort that will come with data model changes and additions. An experienced conversion vendor can assist with the whole process and help reduce the significant schedule risks inherent in data conversion.

Project Component Chart

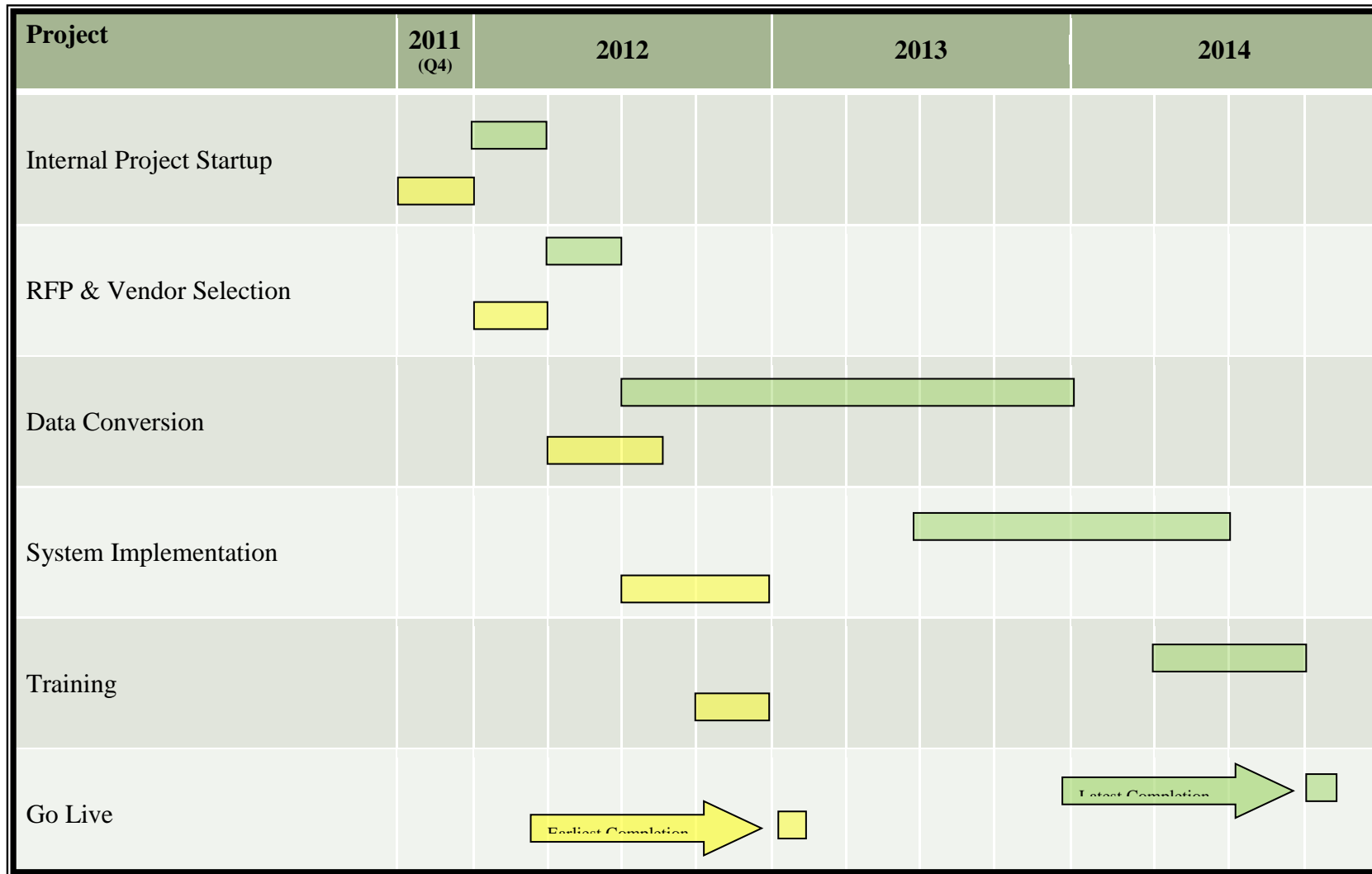
The Project Component Chart on the subsequent page shows the typical major GIS project components common to GIS projects involving data conversion and their approximate relative relationships in time. The chart reveals some of the complexity of GIS projects and why detailed planning and strong project management are required to keep a GIS project on track.

The project approaches proposed by the GIS vendors in their RFI responses varied to a great degree. The component chart is only provided to help appreciate the complexity of Horizon's GIS project.

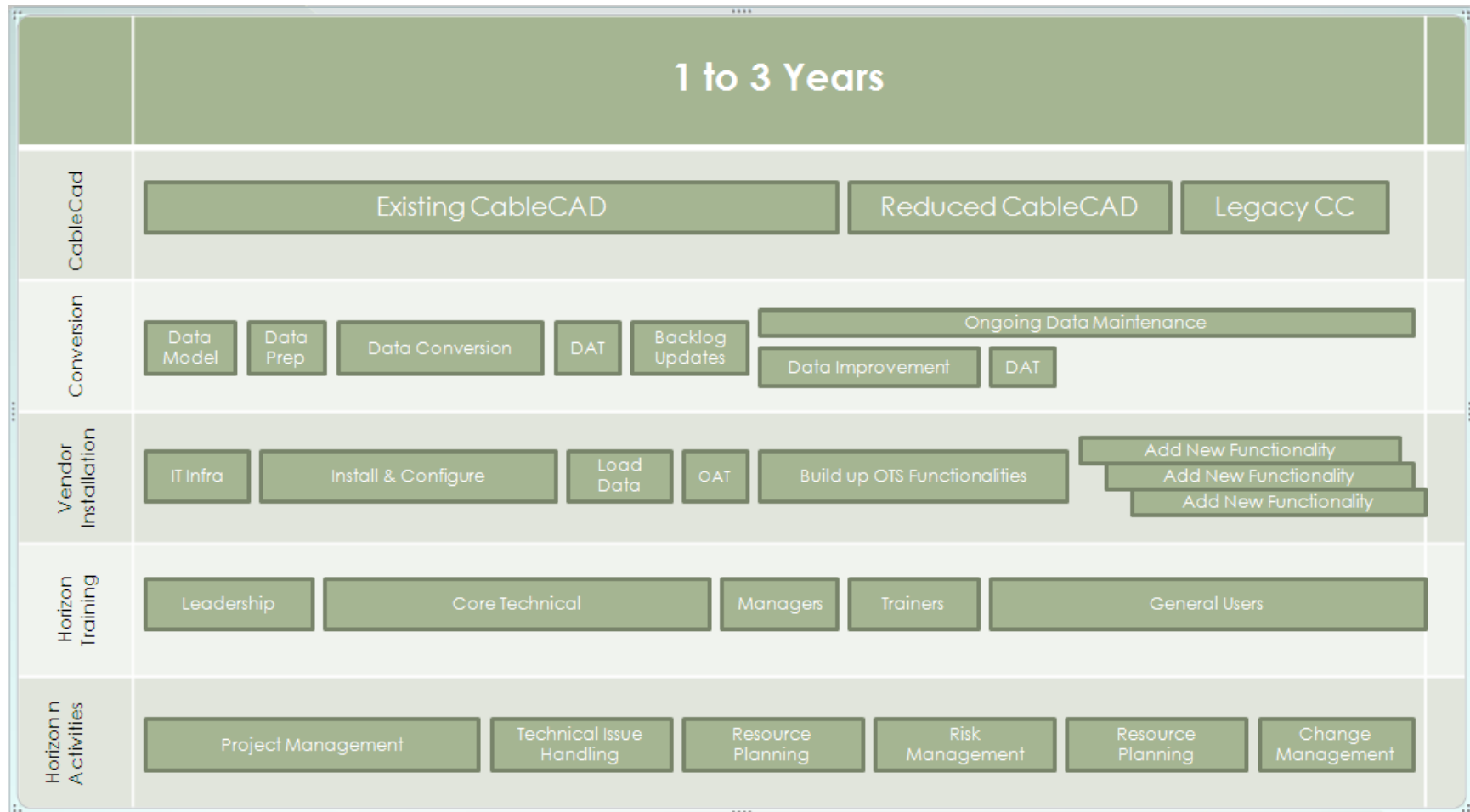
-  Longest project duration
 Shortest project duration

High Level Project Schedule

Range based on RFI Responses



Project Component Chart



DAT – Data Acceptance

OAT – Operational Acceptance

Project Risk Assessment

The following risk analysis includes a description of each risk, response and mitigation strategies for that risk and relative importance among the risks.

The highest risks are cost overruns due to unforeseen complications and scope increases beyond expectations and failing to apply sufficient knowledgeable Horizon resources to the initial planning and development phase of the project.

Horizon's long experience with GIS will be valuable in recognizing risk and avoiding the serious pitfalls that are common to this type of project.

Risk Assessment Table

Project Risk	Response & Mitigation	
Project Duration There are inherent risks associated with multi-year projects as changes may and will occur over time. Changes in the areas of staffing, priority and funding may cause delays or set-backs to the successful implementation of a large scale project implementation.	<ul style="list-style-type: none"> Where possible, ensure that critical and complex project deliverables are carried out during earlier project stages. Longer duration project phases that once started can be carried out relatively problem free (e.g., data conversion) will be carried out during the latter half of the project lifecycle. Ensure project sponsorship and buy-in is obtained at the senior levels of the organization. If possible, phase implementation for early successes and uses of the new technology. 	Medium
Key GIS Resources Unavailable During certain periods during GIS project implementation, some key Horizon resources may not be available due to commitments to continuing CableCad maintenance and operation. This is particularly acute during project startup including specifying requirements and data model development.	<ul style="list-style-type: none"> Avoid over-commitment to CableCad once data conversion begins. Identify mission critical legacy requirements and maintain only those. Take steps to make Horizon tolerant to a poorly supported CableCad Identify and stop unnecessary activities pre-occupying specific resources Backfill specific CableCad resources with alternate employees Utilize premium time for short term overlapping demands on specific resources. 	High
IT GIS Support Resources Unavailable The Horizon IT department will be involved in a number of concurrent upgrade projects to major information systems and may not be able to support the GIS upgrade. Resources are stretched even now.	<ul style="list-style-type: none"> Set priorities between all IT projects to better ensure coverage by IT resources Delay GIS upgrade to allow time to complete interdependent IT projects (data warehouse) Augment IT resources for project(s) period Hire additional permanent IT resources (provide on-going support for GIS and other expanded IT systems) Seek stronger IT support from GIS vendors during project implementation 	High
Project Schedule Delay The project scheduled completion date is	<ul style="list-style-type: none"> As part of the RFI process, each of the four vendors validated that an end date of June, 2014 was reasonable 	Medium

<p>June 1014. Sufficient controls need to be in place to ensure the project is kept on track and not negatively affected by potential schedule delays.</p>	<ul style="list-style-type: none">given the scope of work presented.Project team will ensure that effective controls are in place to track progress versus schedule on a regular basis.Sound PM practices for managing all aspects of project delivery, including risks and issues, need to be in place and followed from the outset of the project.As part of the RFP process and subsequent pilot project, project schedule assumptions will be assessed and changes made if required.	
<p>Overall Implementation Cost Increase</p> <p>The implementation of an Enterprise GIS is considered a large-scale and complex project. Large scale IT projects inherently run the risk of cost overruns. These overruns are largely attributable to project scope problems and unforeseen technical and project delivery issues.</p>	<ul style="list-style-type: none">It is critical in the next phase of the project that Horizon prepare a detailed functional specification that is based on its business and strategic needs. This specification will form the basis of the RFP scope documentation.All project stakeholder departments should have input to the project scope. Business needs and project scope should be prioritized around “must haves, needs and nice-to-haves.” A final balanced project scope document, that balances funding, resources and time considerations, should form the final SOW for the successful vendor.Sound project management delivery methodologies need to be followed closely to help ensure that project delivery meets the business’ needs and is delivered on time and on budget.A competitive RFP will be issued during Phase I of the project. Horizon and the prime vendors will have an opportunity at that point to revisit the economic assumptions should the successful bidder(s) price proposal exceed the budgeted cost.The project schedule should identify several critical implementation milestones that are designed to ensure the project is on-track, on budget and meeting business needs.Project team will ensure that cost management controls are in place and followed throughout the project lifecycle. Turnaround actions will be in place to address any cost concerns.	High
<p>Conversion Vendor - Cost Increase</p> <p>The external conversion cost is a significant component of the overall project cost. Since this cost is not directly under Horizon’s control, adequate measures need to be in place to closely monitor conversion costs and manage potential cost issues.</p>	<ul style="list-style-type: none">As part of the business case development process, an RFI was issued to four vendors for budgetary estimates. The estimates ranged from approximately \$150,000 to \$1,200,000 million to convert Horizon’s CableCad data. The average cost of \$750,000 was used in the business case.A competitive RFP will be issued during Phase I of the project. Horizon and the prime vendors will have an opportunity at that point to revisit the economic assumptions should the successful bidder(s) price proposal exceed the budgeted cost.Following award of project, a pilot area will be converted. The intent of the pilot will be to validate project cost and schedule assumptions.Project team will ensure that cost management controls are in place and followed throughout the project lifecycle. Turnaround actions will be in place to address any cost concerns.	Medium
<p>End user community – change management.</p> <p>The ultimate success of this project is the acceptance by the end user community.</p>	<ul style="list-style-type: none">Process change always has some resentment from staff. May be a result of staff not familiar with today’s technologies, or the simple fear that learning a new system cannot be successfully achieved.	Low

Information flow, productivity and efficiency all depend on the users' ability to leverage the new technology to change their business processes.

Each organization has challenges that must be addressed to prepare the end user for change.

- Keeping staff aware that GIS implementation will occur, they will be trained, and that the process is not “that complicated” will ease staff concerns.
- Effective Change Management plans must be developed and implemented that fit Horizon's corporate culture.

GIS Applications – Scope

Horizon currently supports other Horizon enterprise information systems by providing asset and geographic information through interfaces or manual data processing. Most of the applications and reports currently supported by Horizon's spatial data need to be 're-created' with the new GIS in order to maintain currently corporate functions and activities at the same level of efficiency as now.

The new GIS will be designed to provide support for interfaces, reports and data extraction for external use. Most of the enterprise GIS software already have interfaces ready for the popular external systems (like financial systems, Work management systems, AutoCAD, Microstation and many more). Most also have built-in report writers, data extraction tools and other functions that make interfacing to other systems easy. What may have been difficult and laborious with CableCAD may be much easier with a modern enterprise GIS saving time and effort for Horizon's Network Records (GIS) Group. In fact, Horizon's existing GIS personnel may be able to re-create the required application interfaces, reports and data exchanges without much reliance on the GIS vendor beyond training.

The following table lists the existing information sharing applications that are supported by the Horizon Network Section with data from CableCAD. It is recommended that most of these existing applications be re-created as part of the scope of the GIS Project to ensure timely re-creation of these critical applications while the GIS Project Team is still fully resourced.

GIS Application Scope Tables

Applications included in Project Scope

ID	APPLICATION	DESCRIPTION	TYPE
1	GIS-ERP Data Synchronization	Transfer transformer, pole, switch and chamber data between IFS and GIS.	Interface Data Upload
2	GIS-iSeries CIS Data Transfer	Transfer customer data between iSeries and GIS	Interface Data Transfer
3	Asset Inventory - Annual & Ad hoc	Provide asset information including age, quantity and type.	Listing Report
4	Equipment Maintenance Program – Visual Inspection	Quantify assets for inspection and create forms. Results positioned on ERP asset	Interface Listing Report

5	Scheduled Outage Mapping	Identify affected customers for scheduled power outages.	User application
6	Annual Tree Trimming Program	Track and calculate annual tree trimming activities	User application Query Listing
7	Pole Residual Testing Program	Catalogue and map poles for Residual Testing. Results positioned on ERP asset	Query Listing Interface
8	#6 and #4 Primary Replacement Program	Catalogue and track progress of O/H cable replacement.	User application Report
9	City Street Light Count	Quantify lamps and wattages for the City of Hamilton for billing	User application Listing Report
10	Annual Transfer to City	Extract pole and civil components to the City of Hamilton on a monthly basis.	Data export
11	Design	Extract design areas for Engineering Techs, consultants. For information, preliminary design purposes	Data export
12	Drawing Retrieval	Identify, list drawings within a GIS screen display, select, retrieve and display drawing in appropriate software	Data retrieval Listing
13	External requests for Mark-ups and Plant Information	Pre-design information request for mark-ups.	Data export
14	CableCAD to Access data transfer	Transformer customer list, Cust counts from device, Pole, SL counts for areas	Data export
15	Regulatory Cost Recovery	Project Polygon Reports to track energization date of transformer, service cable and customer	User application Report
16	IFRS - Linear Asset Quantities from GIS	Track linear assets added/removed from GIS for IFRS	User application Listing Report

Applications not included in Project Scope

ID	APPLICATION	DESCRIPTION	TYPE
1	Joint Use	Provide Joint Use Information for tracking/annual billing	Query Listing Report
2	Land Easements and Agreements	Provide Listing of Land Easements	Listing
3	Municipal Consent	Track and process Invoicing for installations on City Road Allowance.	Listing
4	Transformer Loading - Interface	Reflect transformer loading based on CIS/Smart Meter data	Interface Report
5	Outage database	Outage tracking for generating reports, OEB statistics	User application Report Interface
6	GIS to CYME Modeling	Export features and connectivity from GIS to replicate in Cyme	Interface

Note: Out-of-scope items will be undertaken after the completion of the core GIS Project.

GIS Project Team Organization

With potentially three organizations involved (Horizon, GIS Vendor and Conversion Vendor), it will be imperative that Horizon use strong project management methods to ensure the project stays on track and issues are covered off effectively.

GIS projects are inherently complex and challenging and will cause change across many departments and require the whole organization to be on-board with the project. For this reason, a strong project leadership structure is recommended as shown in the table below.

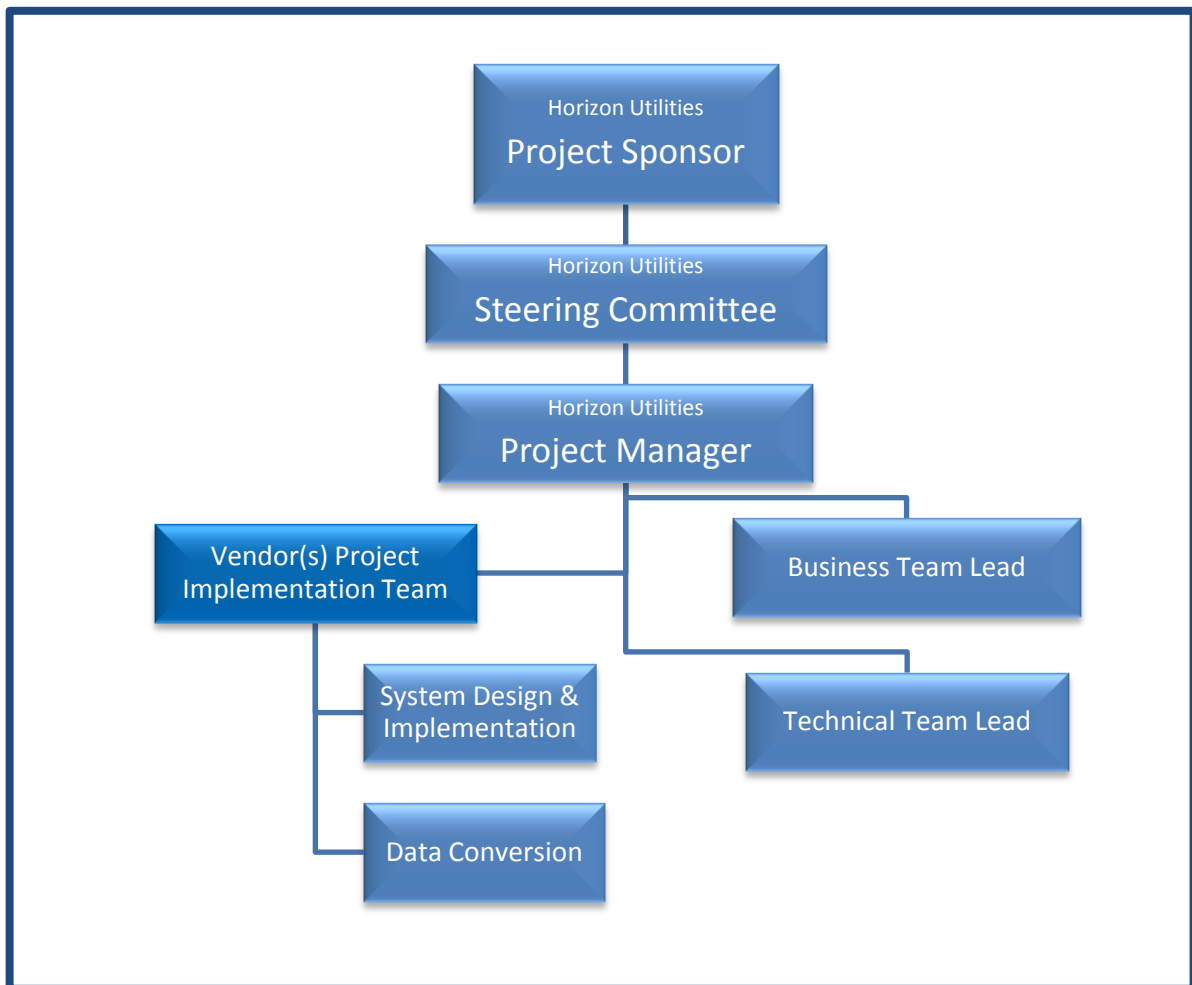
Project Leadership	Leadership role
Project Sponsor	Senior Horizon executive with key interest in the GIS Upgrade Project
Steering Committee Members	Executives and Managers of departments with an interest in the GIS Upgrade Project
Project Manager	PM Professional with experience in managing complex GIS/IT implementation projects who understands the impact to Horizon at an organizational level

Project Structure and Roles

The following chart represents the proposed project structure for implementing enterprise GIS within Horizon Utilities. A description is provided for each team role along with a list of key responsibilities.

The selected GIS vendor will want to incorporate their project management methods into Horizon's methods and provision has been made for this to take place under the Project Manager.

Similarly, the conversion vendor, if there is one, will want to tie their management methods to Horizon's and the conversion vendor's project management processes. Provision for this is made under the GIS Vendor in the project structure below.



Project Sponsor

The Project Sponsor is generally seen as the senior level customer of the project. The sponsor enthusiastically articulates the purpose of the initiative and helps provide a corporate perspective for the team. As a project champion, the sponsor will oversee the delivery of the project.

Key Responsibilities:

- Defines the higher-level business objectives as a framework for the project team to operate within.
- Helps to promote the project's status and importance. Seeks support from other senior executive stakeholders as required.
- In conjunction with the Steering Committee, approves the plans, schedules, budgets and deliverables of the project.
- Seeks project funds as part of the budget process, and allocates funds to the project as appropriate.

- Participates at the Steering Committee level to provide direction on project issues.

Steering Committee

The Steering Committee is comprised of principal stakeholder representatives and is charged with overseeing all major activities of the project. The Steering Committee will address all key project and cross-functional issues and approve any changes in project direction. The Steering Committee will also be the recipient of project status information.

Key Responsibilities:

- Defines the business objectives as a framework for the project team.
- Helps to promote the project's status and importance. Seeks support from other stakeholders as required.
- When appropriate, helps to mitigate and resolve higher level obstacles that may negatively impact the project.
- In conjunction with the Project Sponsor, approves the plans, schedules, budgets and deliverables of the project.
- Provides direction and makes decisions on escalated project issues.
- Appoints staff to participate and contribute to the various implementation activities associated with the project.

Project Manager

The Project Manager assumes day-to-day responsibility for the management of the project. This person will take a hands-on approach to managing the project, and at the same time oversee the activities of other project management and team leader staff.

Key Responsibilities:

- Providing and articulating a vision for the team and project stakeholders.
- Managing communication within the project team and to external stakeholders.
- Organizing the team structure and setting specific responsibilities for team groups/members.
- Managing the project budget and resource allocations.
- Tracking and reporting on project progress, schedule and budget.
- Managing and coaching team members.
- Making project related decisions and/or elevating project or scope issues to the correct authority level.

Business Team Lead

The Business Team Lead assumes day-to-day responsibility for the management of the business activities associated with the project. This person will take a lead role in ensuring that detailed business requirements are well understood and documented. The Business Team Lead will also oversee the data conversion phases of the project and assume overall responsibility for training and business process development.

Key Responsibilities:

- Providing and articulating a business vision for the team and user community.
- Managing communication between the project team and user community.
- Managing resource allocation.
- Managing business milestones and associated budget.
- Tracking and reporting on business project progress, schedule and budget.
- Managing and coaching team members.
- Making project related decisions and/or elevating project or scope issues to the correct authority level.

Technical Team Lead

The Technical Team Lead assumes day-to-day responsibility for the management and technical integrity of the GIS solution being configured for the organization. This person will oversee key development activities, including workflow process modeling, data model design and integration.

Key Responsibilities:

- Directs and oversees the work activities of the technical team
- Works closely with IT department to ensure coordination
- Performs system analyst activities to gather detailed business requirements and specifications (e.g. Use Case Development)
- Works with the vendor to finalize data schema
- Takes the lead role in developing the technical specification for data conversion
- Supports the conversion process
- Defines and manages the internal QA/QC process
- Maintains technical project schedule and advises on resource requirements
- Prepares technical documentation
- Provides technical status updates

▪

Functional Requirements and RFP Process

Acceptance of the recommendation to proceed to Stage 3 involves a significant commitment of Horizon resources. The following details about Stage 3 are provided to help clarify the scope of activities and effort involved.

Stage 3 of the GIS Strategy is initially comprised of a number of start-up elements such as project organization, team establishment, leadership training and establishing PM processes.

Once established, the GIS Team will achieve the following Stage 3 goals:

- *Creation of the GIS Project Organization A Project Plan*
- *Development of a strategic Training and Development Plan*
- *Preparation of a Functional Requirements Specification for the new GIS*
- *Preparation and release of an RFP to vendors of potential GIS systems*
- *Selection of the new GIS System and Vendor*

Functional Requirements Specification

The business and functional requirements component of this stage is particularly critical to the success of the GIS Project. Detailed requirements specifications will aid vendors in proposing solutions that best meet Horizon's needs and will generally cover the topics listed below:

Business Needs

- Business Objectives – what are the organization's business objectives with respect to the project?
- Problem Description – business problem to be solved?
- Organization Scope – e.g., departmental, enterprise, user communities, etc.
- Quantitative Information – e.g., data volumes, users, transactions, print requirements, etc.
- Business Priority – e.g., roll out schedule, short-term success, data sets, etc.
- Delivery Timeframe – implementation rollout, critical milestones

Business Requirements

- Mandatory Requirements – user and corporate “must haves”
- Non-mandatory Requirements – user and corporate “nice to haves”

- Process Integration Requirements – critical business integration systems
- Future Requirements – potential integration points in the future
- Business Scenarios – work flows involving people, processes and systems

User Characteristics

- Types of users – editors, analysts, mobile, view only, etc.
- Applications accessed and functionalities required
- Mobile user requirements
- Special needs – e.g., user rights and data security

Operational Requirements

- Service Level Requirements – hours of service, availability, response times
- Sizing of Business Needs
- IT and Other Requirements

Transition Requirements

- Business Processes and Policies – modifications of business processes
- Data Conversion – data model and conversion requirements
- System Implementation and Roll-Out
- Configuration of system to meet business needs
- Integration with key corporate systems
- Conducting pilot project
- Finalizing implementation plan based on pilot results
- Full data conversion and acceptance
- System functionality testing
- Training & roll-out to user communities

Request for Proposals

The GIS Project Team will prepare and issue an RFP based on the Functional Requirements Specification prepared previously. The selection of the new GIS system will be based on the competitive responses received from GIS vendors.

Following the completion of Stage 3 of the GIS Strategy, Horizon will be ready to begin Stage 4 - the actual design, installation and testing of the new system, including data conversion, in partnership with the selected GIS vendor.

4-SEC-26.1

[Ex.4-2-2/p.19] Has the Applicant forecasted any productivity savings because of its CIS/OMS upgrade initiative? If so, please provide details.

Response:

- 1 Horizon Utilities has provided detail on the productivity savings of the GIS/OMS upgrade as part
- 2 of the response to 1-Staff-15 (a).

4-SEC-26.2

[Ex.4-2-2/p.25] Please provide a breakdown of the Applicant's third-party costs related to its 2015 Custom IR application.

Response:

- 1 Horizon Utilities has provided the breakdown of the third party costs related to its 2015 Custom
- 2 IR application in Exhibit 4, Tab 4, Schedule 6, Table 4-72, (sub-table) and in its response to
- 3 Interrogatory CCC-32.

4-SEC-27

[Ex.4-2-2 Please provide the rationale for all new positions forecasted to be created during the test period.]

Response:

- 1 Horizon Utilities is not forecasting any new positions in the test period.

4-SEC-28

[Ex.4-2-3/p.2] Please explain how the Applicant is continuously improving if its OM&A/customer is increasing each year.

Response:

1 In Horizon Utilities' view, the proposed trend in OM&A/customer does not conflict with
2 continuous improvement.

3 A key determinant of OM&A/customer is the projected trend in customer counts. Horizon
4 Utilities serves two older, built out communities with corresponding low customer growth rates
5 and aging infrastructure as identified in Exhibit 1, Tab 2, Schedule 6. In Exhibit 3, Tab 2,
6 Schedule 1, Table 3-29 on page 2 shows the customer count increasing from 241,692 in 2014
7 to 250,909 in 2019, which represents a compound annual growth rate of 0.7%. Growth in
8 OM&A in excess of this rate, which is significantly lower than the growth rate implicit in a Price
9 Cap adjustment approach, will result in increasing OM&A/customer as identified in Table 4-2 of
10 Exhibit 4, Tab 1, Schedule 1.

11 The majority of the aggregate increase in OM&A over the rate plan term is attributable to the
12 Cumulative Average Growth Rate in wage and price inflation of approximately 2.2% and
13 customer growth of 0.7%. Despite the increase in OM&A, Horizon Utilities demonstrates
14 continuous improvement through initiatives that have been and will be undertaken as follows:

- 15 • Addition of new channels for customer communications and enhanced customer account
16 and energy management tools to provide customers with greater visibility to, and control
17 over, their utility bill (Facebook, Twitter, mobile website, provided outage mapping and
18 self-service options on a new user friendly website);
- 19 • Implemented the Geospatial Information System ("GIS") and the first phase of the multi-
20 phase Outage Management System ("OMS") initiative to improve outage restoration
21 times for customers and provide enhanced multi-channel communications during outage
22 events (scheduled for Q3 2014) as identified in Exhibit 2, Tab 6, Schedule 1;
- 23 • Increased customer accessibility to Customer Care agents through the utilization of an
24 overflow Call Centre service (2014) as identified in Exhibit 4, Tab 3, Schedule 2;
- 25 • Engaged customers, contractors and developers through regular surveys as identified in
26 Exhibit 1, Tab 4, Schedule 1;

- 27 ○ Overall customer satisfaction with Horizon Utilities in 2013 was 95% an
28 improvement from the 2012 and 2011 results of 93% and 90% respectively;
- 29 • Implemented a centralized Planning and Scheduling process, which included the
30 creation of a new Project Controls Office department, to efficiently and effectively deploy
31 labour, vehicles, tools and materials as identified in Exhibit 4, Tab 2, Schedule 2;
- 32 • Launch of an e-mobile paperless work order system (“e-mobile”) as identified in Exhibit
33 4, Tab 2, Schedule 2;
- 34 • Improved the overall health of substation asset groups since the last CoS Application
35 (EB-2010-0131) as identified in the Kinectrics’ 2013 Asset Condition Assessment filed as
36 Appendix B of the DSP filed as Appendix 2-4 of Exhibit 2;
- 37 • Prepared a comprehensive Distribution System Plan (“DSP”) over a twenty year
38 planning horizon which identifies planned and necessary investments in the renewal of
39 Horizon Utilities’ distribution system in order to mitigate system health degradation and
40 related reliability risks and avoid further deterioration of service levels. The DSP is filed
41 as Appendix 2-4 of Exhibit 2; and
- 42 • Implementation of an Occupational Health and Safety Management System (“OHSMS”)
43 as identified in Exhibit 4, Tab 2, Schedule 2, which provides Horizon Utilities with the
44 ability to proactively manage occupational health and safety and the costs associated
45 with work related incidents such as loss of productivity, and retraining.
- 46 Additionally, Horizon Utilities mitigated the overall real growth in its operating cost base with
47 productivity savings of \$6.5MM by 2019 arising from related process improvement initiatives
48 such as: implementing an e-mobile connections workforce; planning and scheduling; attendance
49 management; and refined financial processes as identified in Exhibit 4, Tab 3 Schedule 4.

4-SEC-29

[Ex.4-3-3-p.1] Please provide 2014 year-to-date actuals for Table 4-22 and 4-23.

Response:

- 1 As requested please find below updated information for Tables 4-22 and 4-23 for May 2014
- 2 Year-to-Date Actuals and Year-to-Date Actuals plus Forecast:
- 3 **Updated Table 4-22 and 4-23**

	2014 Bridge Year (5 months actuals YTD)	2014 Bridge Year (based on five months actuals / seven months forecast)
Programs		
<i>Reporting Basis</i>	MIFRS	MIFRS
<u>Executive</u>		
Corporate	550,578	1,203,100
Sub-Total	550,578	1,203,100
<u>Human Resources</u>		
Corporate Services	208,105	479,026
Healthy Workplace & Safety	217,307	855,806
Human Resources	657,315	1,909,649
Sub-Total	1,082,728	3,244,481
<u>Business Development & Corporate Communications</u>		
Corporate Communications	430,868	1,154,675
Sub-Total	430,868	1,154,675
<u>Regulatory Affairs</u>		
Regulatory Affairs	1,558,742	2,260,228
Sub-Total	1,558,742	2,260,228
<u>Corporate Finance</u>		
Corporate Finance	1,584,222	3,635,267
Sub-Total	1,584,222	3,635,267
<u>IST</u>		
Business Projects	870,179	889,233
PC Services	664,858	1,704,526
Business Applications	73,604	658,521
Information Systems and Technology	-	561,341
Cyber Security	230,884	479,591
Sub-Total	1,839,525	4,293,211
<u>Customer Services</u>		
Customer Care Intracompany Horizon	3,785,385	9,492,748
Customer Service and Customer Connections	-	-
Advance Meter Inventory/Meter Data Management & Repository	205,836	593,997
MV90	55,110	162,834
Sub-Total	4,046,331	10,249,579

Programs	2014 Bridge Year (5 months actuals YTD)	2014 Bridge Year (based on five months actuals / seven months forecast)
<i>Reporting Basis</i>	MIFRS	MIFRS
<u>Customer Connections</u>		
Customer Connections	911,679	2,395,376
Meter Assets and Inside Service	288,551	658,744
Meter Service Providing	-	-
Smart Meters	-	-
Sub-Total	1,200,230	3,054,120
<u>Utility Operations</u>		
Utility Operations	545,959	1,238,810
Sub-Total	545,959	1,238,810
<u>Construction and Maintenance</u>		
Underground	807,729	2,520,588
Contractor Management	819,536	1,925,321
Overhead	2,775,402	5,927,602
Substations	145,630	853,042
Project Controls Office	148,527	464,699
Construction and Maintenance Services	110,650	314,287
Sub-Total	4,807,474	12,005,539
<u>FACILITIES</u>		
Facilities - General	390,043	744,128
Building - Substations	397,100	915,737
Building - John St. Hamilton	386,285	1,086,195
Building - Nebo Rd. Hamilton	523,593	1,332,893
Building - Stoney Creek	128,762	428,006
Building - Vansickle Rd. St. Catharines	255,251	650,444
Sub-Total	2,081,033	5,157,408
<u>Supply Chain Management</u>		
Procurement	343,580	944,477
Fleet	917,999	2,132,481
Logistics	656,596	1,737,620
Supply Chain	144,393	404,358
Sub-Total	2,062,569	5,218,936
<u>Engineering and Operations</u>		
Network Assets	651,196	1,910,353
Network Operating	1,072,154	2,332,828
Network Records	372,325	1,861,369
Capital Projects	352,715	1,210,369
Engineering Operations & Operational Improvement	109,713	233,843
Sub-Total	2,558,103	7,548,763
Total	24,348,361	60,264,113

4-SEC-30

[Ex.4-3-4/p.4] For each 'productivity achievement' in the test period, is the Applicant able to link the test period productivity savings to a specific planned initiative or project?

Response:

- 1 Horizon Utilities' anticipated future productivity savings will be achieved as a result of planned
- 2 initiatives.
- 3 Please refer to Horizon Utilities' response to Interrogatory BOMA-8 part a) for further elaboration
- 4 on productivity savings.

4-SEC-31

[Ex.4-4-2] For each of table 4-53 and 4-54, please provide a breakdown of overtime pay for management and non-management FTEs.

Response:

- 1 The following tables provide a breakdown of overtime pay for management and non-
- 2 management FTEs:

3 Table 4-53 (a) Overtime for Management and Non-Management FTEs

	Last Rebasings Year -2011- Board Approved	Last Rebasings Year -2011 - Actual	2012 Actuals	2013 Actuals	2014 Bridge Year
Total Overtime Pay					
Management (including executive)	\$ 73,060	\$ 129,317	\$ 75,502	\$ 173,261	\$ 54,735
Non-Management (union and non-union)	\$ 1,284,379	\$ 1,962,703	\$ 1,450,965	\$ 2,232,507	\$ 1,776,452
Total	\$ 1,357,440	\$ 2,092,020	\$ 1,526,466	\$ 2,405,769	\$ 1,831,187

5 Table 4-54 (a) Overtime for Management and Non-Management FTEs

	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Total Overtime Pay					
Management (including executive)	\$ 56,268	\$ 57,844	\$ 59,463	\$ 61,128	\$ 62,840
Non-Management (union and non-union)	\$ 1,784,646	\$ 1,793,425	\$ 1,824,343	\$ 1,868,656	\$ 1,929,016
Total	\$ 1,840,914	\$ 1,851,269	\$ 1,883,806	\$ 1,929,784	\$ 1,991,856

4-SEC-32

[Ex.4-4-2/p.1] The Applicant states that “Horizon Utilities participates in a variety of survey and certain of these are of such a confidential nature that we cannot disclose the results but more so we cannot disclose the existence of such survey”. Considering the Board’s recent decisions in EB-2014-0174 (Procedural Order No. 4, dated February 25th 2014), EB-2013-0115 (Procedural Order No. 4, dated March 19th 2014), and EB-2013-0159 (Procedural Order No. 6, dated April 3rd 2014), please provide a copy of the surveys the Applicant has participated in.

Response:

- 1 Please see Horizon Utilities’ response to Interrogatory 4-Staff-26.

4-SEC-33

[Ex.4/4/2/p.8] Please provide a chart showing the Applicant's year-end headcount (broken out by management and non-management employees).

Response:

- 1 The following tables provide year-end headcount for 2011 to 2019 by management and non-
- 2 management employees.

3 Table 1: Year End Headcount

Category	2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year
Management	71	71	71	77
Non-Management	261	265	274	279
Total	332	336	345	356

Category	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Management	77	77	77	77	77
Non-Management	272	269	268	268	268
Total	349	346	345	345	345

4-SEC-34

[Ex.4-4-2/p.8] Please provide a chart showing the amount of total compensation costs, for each year between 2011-2019, that the Applicant has or forecasts to capitalize.
Response:

1 The following table summarized total capitalized compensation costs for 2011-2019:

2 **Table 1: Capitalized Compensation**

	2011 Actuals	2012 Actuals	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Total Capitalized Labour	10,797,684	10,595,809	11,241,167	11,292,956	10,806,577	10,378,627	10,599,939	10,849,468	11,174,850

3

4-SEC-35

[Ex.4-4-4/p.1-3] Please provide the justification for the sole source procumbent of employee benefits programs (Great West Life Assurance Co. and The MEARIE Group).

Response:

Sourcing employee benefits programs through Great West Life Assurance Co. ("Great West Life") and The MEARIE Group ("MEARIE") provides a number of advantages to Horizon Utilities, including:

- economies of scale through lower administrative costs by consolidating extended health and dental benefits with a single firm;
- the avoidance of administrative complexities associated with administering benefits plans across multiple providers;
- the ability to establish and maintain consistent levels of claims management and customer service; and
- a single point of contact for extended health and dental benefits for employees which increases efficiency and contributes to employee satisfaction and engagement.

Horizon Utilities has been successful in managing benefits costs below average group market premium increases with both Great West Life and MEARIE. To achieve this, Horizon Utilities engages in annual discussions with its group benefits provider prior to the renewal of the health, dental, and vision coverage as well as life insurance and long term disability. As described in Exhibit 4, Tab 4, Schedule 2, p.18, "*Horizon Utilities has been successful in managing these benefit costs, with a slight reduction in premiums in 2012 compared to 2011, no premium increase in 2013 and modest increases in 2014 and beyond, in an environment of rising benefits costs. Horizon Utilities has experienced a total increase of 1.8% in healthcare premiums for active employees from 2011 to 2014 while statistics, provided by Great West Life, indicate that in 2011 alone average group market premiums increased by 3.8%.*"

Great West Life and MEARIE continue to be prudent providers of these services for Horizon Utilities. Horizon Utilities works closely with its benefits carrier to contain the cost of benefits programs through drug plan cost management, disability management and plan member

- 1 education. In 2013, The MEARIE Group secured a reduction in life and disability insurance
- 2 effective January 1, 2014 on behalf of Horizon Utilities.

4-SEC-36

[Ex.4-4-3/Appendix 4-3] Please provide a copy of 'Power in Motion Labour Market Information Study' (updated in 2012).

Response:

- 1 Horizon Utilities is filing this study in confidence as per the copyright infringement clause as
- 2 stated in the study. The study is attached as 4-SEC-36 Attch 1 – Power In Motion Study-
- 3 Confidential.

4-SEC-36 Attch 1 – Power In Motion Study-3 Confidential

4-SEC-37

[Ex.4-4-3-/p.6]

- a) With respect to the Applicant's attrition rate, does the Applicant track formally or informally which other companies hire away its employees?**
- b) If so, please provide this information.**

Response:

- 1 Horizon Utilities does not formally track which companies hire its former employees. However,
- 2 informally, Horizon Utilities has observed that many take positions at other LDCs or within the
- 3 utility industry.

6-SEC-38

[Ex.6-1-1/p.1]

- a) Please confirm that the total revenue requirement for the test period \$605.1 million, which is \$90.7 million or 17.6% higher than revenue at current rates for the same five year period.**
- b) Please confirm that, but for the impacts of the conversion of MIFRS, as set forth in Ex. 6/2/1, p. 18, the total proposed revenue requirement would be \$25 million more.**
- c) Please confirm that, under 4th Generation IRM, revenues for the same five years would be \$75 million less, and \$100 million less if the MIFRS adjustment is included.**
- d) Please provide the main differences between the Applicant and other Ontario electricity distributors that justify incremental rates that are five to seven times as much as those applicable to most electricity distributors.**

Response:

- 1 a) Horizon Utilities confirms that the total revenue requirement for the period of the rate
2 plan is \$605,130,187 which is \$90,688,702 or 17.6% higher than revenue at current
3 2014 rates using the 2015 load for the same five year period. (\$102,888,297 X 5 =
4 \$514,441,485). However, the total revenue requirement for the five year period is not
5 set on the same basis as the revenue at current rates for the same five year period. The
6 total revenue requirement is calculated based on the inclusion of smart meters in rate
7 base. Current rates exclude smart meters, the recovery of which is through a rate rider
8 not included in the \$102,888,297 amount. For fair comparison, the current rates should
9 be adjusted to include the smart meter incremental rate rider ("SMIRR"). Such
10 comparison results in a total revenue requirement for the five year period that is
11 \$66,520,290 higher than 2014 revenue at current rates.
- 12 b) Horizon Utilities confirms that the total proposed revenue for 2015 under CGAAP would
13 be approximately \$5MM more than under MIFRS as set forth in Table 6-12 on page 18
14 of Exhibit 6, Tab 2, Schedule 1. The reasons for such difference are driven by
15 differences in: i) computation of income for PILs purposes under IFRS; ii) computation of
16 income for PILs purposes under CGAAP. The magnitude of these differences depends

1 on various additions and deductions computed under IFRS vs. CGAAP to arrive at
2 income for PILs purposes. A specific significant difference corresponding to
3 depreciation and capital cost allowance is principally explained by the issue discussed in
4 Horizon Utilities' response to Interrogatory 6.0-VECC-48. Horizon Utilities has not, and
5 does not have the means to, project these differences forward into 2016 through 2019.
6 Consequently, it cannot confirm that the proposed revenue requirement under CGAAP
7 would be \$25MM higher than that under MIFRS over the test period. In any event, such
8 differences would be of a timing nature only with respect to the impact on Revenue
9 Requirement.

- 10 c) Horizon Utilities cannot confirm that under a 4th Generation IRM revenues for the same
11 five years would be \$75 million less, and \$100 million less if the MIFRS adjustment is
12 included (refer to b)). Based on the discussion in Horizon Utilities' response to
13 Interrogatory 1-BOMA-7, Horizon Utilities confirms that under 4th Generation IRM using
14 the Board's inflation rate and productivity factor, and excluding the MIFRS adjustment,
15 revenues for the same five years would be \$29.2MM less than the total revenue
16 requirement for the rate plan period of \$605MM. Based on the discussion in Horizon
17 Utilities' response to Interrogatory 1-EP-3, the same analysis results in a revenue
18 requirement which is \$23.1MM less than the total revenue requirement for the rate plan
19 period when Horizon Utilities' expected IPI and X factors are substituted for the Board's
20 factors.

21 The proposed revenue requirement under CGAAP for either scenario would not
22 necessarily be \$25MM higher than that under MIFRS over the test period as discussed
23 in part (b).

24 Horizon Utilities' proposed revenues as compared to those calculated under a 4th
25 Generation IRM are driven by necessary increases in investments to renew the
26 electricity distribution grid and improve service responsiveness to customers, and
27 corresponding operating expenses. The major drivers of the increase in capital
28 expenditures are: the necessary renewal of the distribution system, a significant portion
29 of which is beyond the end of its useful life; and refurbishments and upgrades to aged
30 buildings and related underlying systems and processes. Further details on capital
31 expenditures are provided in Exhibit 2, Tab 6, Schedule 1. Operating, Maintenance and

1 Administrative ("OM&A") expenses are increasing principally as a result of wage and
2 price inflation but also to augment staff, process, and technology support to provide for
3 the increased investment in distribution system renewal, and customer-oriented
4 initiatives such as a new Geographic Information System and Operating Management
5 System to track assets, predict and monitor system performance, and provide more
6 responsive customer service. Further details on OM&A expenses are provided in Exhibit
7 4, Tab 1, Schedule 1.

- 8 d) Horizon Utilities does not understand the basis for SEC's statement "incremental rates
9 are five to seven times as much as those applicable to most electricity distributors" and
10 as such Horizon Utilities is unable to comment on this part of the question meaningfully.

11 Horizon Utilities has an impressive record of cost control leadership in Ontario's LDC
12 sector. Horizon Utilities' customers have benefitted from low rates across all customer
13 classes; Horizon Utilities has the 24th lowest average revenue per customer among the
14 73 Local Distribution Companies ("LDC") in the OEB's 2012 Yearbook of Electricity
15 Distributors as identified on page 31 of Exhibit 1, Tab 2, Schedule 6. Notwithstanding
16 the proposed increase in revenue requirement, Horizon Utilities believes that ratepayers
17 will still be well served and will receive good value in service and price.

18 Horizon Utilities' incremental rates may be higher than certain other electricity
19 distributors as a result of unique or differentiating factors such as those identified on
20 pages 1-6 in Exhibit 1, Tab 2, Schedule 4. Horizon Utilities is one of only five LDCs out
21 of 73 with more than 200,000 customers. It is a transmission connected LDC with
22 ownership of assets such as distribution stations and sub-transmission feeder lines
23 which result in higher associated capital and maintenance cost responsibilities relative to
24 embedded distributors. Horizon Utilities also differs from many other LDCs because it
25 serves two older, built out urban communities with correspondingly low customer growth
26 rates. LDCs in older municipalities are confronted by infrastructure maintenance and
27 capital renewal challenges as compared to new suburban LDCs where the focus is on
28 new capital rather than maintenance. New suburban LDCs can finance capital
29 expenditures through capital contributions where capital is largely for new construction.
30 Horizon Utilities' capital requirement in Hamilton and St. Catharines is largely for
31 infrastructure renewal and as such is financed from existing customers through rates.

1 Construction costs for renewal, especially in dense, well developed urban communities
2 like those comprising Horizon Utilities' service area, are more costly than in new
3 suburban communities.

4 Horizon Utilities has one of the highest customer densities in terms of underground lines
5 of any LDC, and especially for an established urban community. Most LDCs with a high
6 degree of underground lines are in new suburban communities, where the
7 undergrounding is relatively new and primarily in subdivisions. The costs of
8 undergrounding are advantageous in these cases because the maintenance is minimal.
9 By comparison, the undergrounding in Horizon Utilities' service area is older and
10 maintenance costs are higher relative to other LDCs.

11 Horizon Utilities is also distinct compared to other LDCs in terms of its residential
12 customer profile and low average revenue per residential customer as identified on page
13 3 of Exhibit 1, Tab 2, Schedule 4. This profile, which is consistent with communities with
14 below average incomes, is characteristic of less volumetric revenue per customer and
15 greater need for low income assistance.

16 Horizon Utilities unique features in conjunction with the need to increase its distribution
17 system investments over the next several years to address the replacement of a
18 significant portion of distribution system infrastructure that is well beyond the end of its
19 useful life necessitate an increase in rates. Addressing such investment is consistent
20 with the principal interest of customers and the public at large for continuous, reliable
21 electricity delivery and public safety. Continuing with the present level of capital
22 expenditure will exacerbate trends of declining reliability and increasing service
23 disruption, and increase public and employee safety risks.

6-SEC-39

[Ex.6-2-1/ p.8] Please provide a copy of the “analysis of cost eligibility” referred to.

Response:

1 A comprehensive analysis of cost eligibility was completed with the guidance of KPMG, IFRS
2 advisors for Horizon Utilities. A formal report of this analysis was not completed by KPMG and
3 therefore cannot be provided as a response.

4 The analysis consisted of:

- 5 (i) a review and understanding of the key principles of IAS 16 Property Plant and
6 Equipment, the relevant IFRS standard with respect to capitalization;
- 7 (ii) a review, understanding, and application of the core principle of “directly
8 attributable” costs – IAS 16 is not a prescriptive accounting standard, and the
9 specific facts and circumstances surrounding each cost and the ability to
10 demonstrate that a cost is directly attributable to an item of property, plant and
11 equipment (“PP&E”) is critical to establishing whether the cost should be
12 capitalized;
- 13 (iii) a review of the Ontario Energy Board’s (“OEB”) Report of the Board:
14 *Transition to International Financial Reporting Standards* (EB-2008-0408)
15 dated July 28, 2009;
- 16 (iv) a review of the Ontario Energy Board’s letter on: *Accounting for Overhead*
17 *Costs Associated with Capital Work*, dated February 24, 2010 which provided
18 clarification to electricity distributors with respect to the capitalization of
19 burdens;
- 20 (v) a review and assessment of activities performed by Horizon Utilities
21 employees included in the CGAAP burden rates;
- 22 (vi) an evaluation of each cost item included in the CGAAP burden rates; and
23 (vii) consultation with other electricity distributors in Ontario.

6-SEC-40

[Ex.6-2-1/p.10] Please provide a copy of the “analysis of PP&E componentization requirements” referred to.

Response:

A comprehensive analysis of property, plant and equipment (“PP&E”) componentization requirements was completed with the guidance of KPMG, IFRS advisors for Horizon Utilities. A formal report of this analysis was not completed by KPMG and therefore cannot be provided as a response.

The analysis consisted of:

- (i) a review and understanding of the key principles of IAS 16 Property Plant and Equipment, the relevant IFRS standard with respect to componentization and depreciation;
- (ii) a review, understanding, and analysis relating to the proposed componentization of items of PP&E as recommended by Horizon Utilities management;
- (iii) a review, understanding, and discussion of the depreciation study completed by Kinectrics on behalf of Horizon Utilities;
- (iv) a review, understanding, and evaluation of the proposed useful lives as recommended by Horizon Utilities management;
- (v) a detailed review of proposed component structures and estimated useful lives for other major electricity distributors in Ontario;
- (vi) a review and comparison of estimated useful lives as provided by the Ontario Energy Board (“OEB”) depreciation study; and
- (vii) consultation with other electricity distributors in Ontario.

6-SEC-41

[Ex.6-2-1/p.12] Please advise the amount of interest capitalized, or expected to be capitalized, in each of 2013 through 2019, and the amount of capitalized interest being closed to rate base in each of those years.

Response:

- 1 Horizon Utilities has provided the amount of interest capitalized, or expected to be capitalized, in
- 2 each of 2013 through 2019, and the amount of capitalized interest being closed to rate base in
- 3 each of those years in the table below:

4 **Table 1: Capitalized Interest**

Year incurred / expected to be incurred	Year closed to rate base	Actual	Budget	Forecast
2012	2013	\$ 201,155	\$ -	-
2013	2014	\$ 73,969	-	-
2014	2015		-	\$ 63,250
2015	2016		-	-
2016	2017		-	-
2017	2018		-	-
2018	2019		-	-

5

6-SEC-42

[Ex.6-2-1/p13,16] Please provide details of the loss on disposal of \$1,521,181 in 2011, and the amounts for derecognition of assets in each of 2012 through 2014.

Response:

- 1 Details of the loss on disposal for 2011 under MIFRS of \$1,512,181 are provided in the table
2 below.

3 **Table 1: Loss on Disposal**

Loss on Disposal		2011 MIFRS		
OEB	Description	Asset	Acc Deprec	Loss
1805	Land - Substations	\$ -	\$ -	\$ -
1808	Buildings - Substations	\$ -	\$ -	\$ -
1810	Leasehold Improvements	\$ -	\$ -	\$ -
1821	Substation transformers	\$ -	\$ -	\$ -
1830	Poles, towers and fixtures	\$ 333,952	\$ 9,225	\$ 324,727
1835	Overhead conductors and devices	\$ 535,358	\$ 11,292	\$ 524,066
1840	Underground Conduit	\$ 35,574	\$ 902	\$ 34,672
1845	Underground Conductors and Devices	\$ 169,469	\$ 5,102	\$ 164,367
1850	Line Transformers	\$ 577,027	\$ 19,635	\$ 557,392
1855	Services	\$ -	\$ -	\$ -
1860	Meters	\$ 59,498	\$ 4,132	\$ 55,366
1905	Land	\$ -	\$ -	\$ -
1906	Land Rights	\$ -	\$ -	\$ -
1908	Buildings and Fixtures	\$ -	\$ -	\$ -
1910	Leasehold Improvements	\$ -	\$ -	\$ -
1915	Office Furniture and Equipment	\$ -	\$ -	\$ -
1920	Computer Equipment - Hardware	\$ -	\$ -	\$ -
1925	Computer Software	\$ -	\$ -	\$ -
1930	Transportation Equipment	\$ -	\$ -	\$ -
1935	Stores Equipment	\$ -	\$ -	\$ -
1940	Tools, Shop and Garage Equipment	\$ -	\$ -	\$ -
1945	Measurement and Testing Equipment	\$ -	\$ -	\$ -
1950	Power Operated Equipment	\$ -	\$ -	\$ -
1955	Communication Equipment	\$ -	\$ -	\$ -
1970	Load Management Controls - Customer	\$ -	\$ -	\$ -
1980	System Supervisory Equipment	\$ -	\$ -	\$ -
1996	Hydro One SS Contributions	\$ -	\$ -	\$ -
1995	Contributions and Grants	\$ (148,408)	\$ -	\$ (148,408)
	Work in Process	\$ -	\$ -	\$ -
	Total PP&E Including WIP	\$ 1,562,469	\$ 50,288	\$ 1,512,181

- 1 The amounts of derecognition of assets net of depreciation for each year from 2012 to 2014 are
- 2 as follows: 2012 -\$1,876,942; 2013 - \$1,637,146; and 2014 - \$1,640,446.

6-SEC-43

[Ex.6-2-1/p.21] Please describe the specific relief the Applicant is requesting from the Board with respect to the taxes payable method of recovering PILs in rates.

Response:

- 1 Horizon Utilities is not seeking any specific relief as it believes the resolution of this issue is
- 2 likely outside the scope of this proceeding. Horizon Utilities has brought this issue to the
- 3 attention of the Board for reasons articulated in Exhibit 6, Tab 2, Schedule 1.
- 4 Please also refer to Horizon Utilities' response to 6.0-VECC-48 which provides a detailed
- 5 analysis and illustration of the issue including potential impacts on the utility and ratepayers.

7-SEC-44

[Ex.7-1-1/p.3]

- a) Please advise which classes will bear the “revenue difference”, and in what proportions, in each year resulting from the decline in revenue requirement for the proposed Large Use (2) class as set out in Table 7-1.
- b) Please recalculate rates for each year 2015-2019 on the assumption that the proposed new class is not approved.

Response:

- a) The introduction of the LU (2) class impacts each rate class to some degree. Detailed tables for each year of the rate plan show the revenue impact of the introduction of the LU (2) class by rate class in Horizon Utilities’ response to Interrogatory 7-EP-48 (a).
- b) Horizon Utilities has recalculated the distribution rates for each rate class assuming the LU (2) class is not introduced. Table 1 provides the fixed distribution rates and Table 2 provides the variable distribution rates.

Table 1: Fixed Distribution Rates (Assuming No LU (2) Class)

	2015	2016	2017	2018	2019
	Proposed	Proposed	Proposed	Proposed	Proposed
Residential	\$ 16.38	\$ 17.13	\$ 17.53	\$ 17.77	\$ 18.28
GS < 50 kW	\$ 36.51	\$ 38.21	\$ 39.11	\$ 39.65	\$ 40.78
GS >50 to 4999 kW	\$ 335.50	\$ 351.17	\$ 359.44	\$ 364.42	\$ 374.88
Standby	\$ -	\$ -	\$ -	\$ -	\$ -
Large User	\$25,664.91	\$26,850.32	\$27,479.94	\$27,855.95	\$28,652.52
Sentinel Lights	\$ 5.02	\$ 5.26	\$ 5.38	\$ 5.45	\$ 5.61
Street Lighting	\$ 2.63	\$ 2.75	\$ 2.81	\$ 2.85	\$ 2.93
Unmetered and Scattered	\$ 9.47	\$ 9.68	\$ 9.91	\$ 10.00	\$ 10.29

Table 2: Variable Distribution Rates (Assuming No LU (2) Class)

	2015		2016		2017		2018		2019	
Customer Class	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Residential		\$ 0.0161		\$ 0.0168		\$0.0172		\$0.0174		\$0.0179
GS < 50 kW		\$ 0.0095		\$ 0.0099		\$0.0101		\$0.0102		\$0.0105
GS >50 to 4999 kW	\$ 2.2947		\$ 2.3878		\$ 2.4369		\$ 2.4665		\$ 2.5285	
Standby	\$ 2.2952		\$ 2.3874		\$ 2.4363		\$ 2.4655		\$ 2.5275	
Large User	\$ 1.5142		\$ 1.5841		\$ 1.6212		\$ 1.6434		\$ 1.6904	
Sentinel Lights	\$ 13.7785		\$ 14.4195		\$ 14.7576		\$14.9595		\$15.3873	
Street Lighting	\$ 6.9919		\$ 7.3172		\$ 7.4888		\$ 7.5913		\$ 7.8084	
Unmetered and Scattered		\$ 0.0147		\$ 0.0150		\$0.0154		\$0.0155		\$0.0160

7-SEC-45

[Ex.7-1-1/p.3] Please quantify for each year the re-allocation to or from each rate class as a result of the review of the sub-accounts.

Response:

Horizon Utilities does not forecast its costs at a sub-account level. The impacts are provided below based on the assumption that the proportion of assets determined to be primary and secondary will be unchanged from the 2011 Cost of Service for those accounts affected by the sub-account review. Horizon Utilities has provided Tables 1 and 2 which show the difference in Revenue Requirement and Rate Base by rate class, assuming the Primary and Secondary splits were kept the same as those approved in the 2011 Cost of Service Application vs those computed as a result of the review of the sub-accounts.

Table 1: Revenue Requirement (\$\$\$)

	2015	2016	2017	2018	2019
Residential	853,171	893,165	897,751	909,868	944,685
GS < 50	373,743	388,012	391,562	397,734	414,142
GS > 50-Regular	(767,699)	(785,483)	(779,202)	(779,883)	(799,641)
Large Use (1)	(257,499)	(270,482)	(276,956)	(284,938)	(300,352)
Large Use (2)	0	0	0	0	0
Street Light	1,284	1,325	1,317	1,320	1,362
Sentinel	13	13	13	13	13
USL	2,016	1,989	1,908	1,834	1,802
Back-up / Standby	(215,029)	(228,540)	(236,395)	(245,948)	(262,010)

10 **Table 2: Rate Base (\$\$\$)**

	2015	2016	2017	2018	2019
Residential	4,022,189	4,161,605	4,387,488	4,740,677	5,091,012
GS < 50	1,740,782	1,807,098	1,912,733	2,071,258	2,230,701
GS > 50- Regular	(3,578,163)	(3,660,764)	(3,809,148)	(4,064,633)	(4,310,715)
Large Use (1)	(1,199,240)	(1,259,608)	(1,352,760)	(1,483,701)	(1,617,620)
Large Use (2)	0	0	0	0	0
Street Light	6,381	6,581	6,892	7,398	7,903
Sentinel	64	65	67	71	75
USL	9,421	9,295	9,356	9,591	9,745
Back-up / Standby	(1,001,434)	(1,064,272)	(1,154,629)	(1,280,661)	(1,411,102)

11

7-SEC-46

[Ex.7-1-1/p.5]

- a) Please explain why it is appropriate to use custom load profiles for the large use classes, but accept the Hydro One load profiles for all other classes.**
- b) Please confirm that the data is available to the Applicant to calculate LDC-specific load profiles for all customer classes. If that is not confirmed, please provide details of the barriers to that calculation.**

Response:

- 1 a) The large use classes are not weather sensitive loads. As a result, historical usage
2 does not need to be weather normalized in using past load profiles as a basis for
3 projecting future load profiles. With large users, the most recent year's load profile can
4 be used for forecasting purposes, subject to adjustments for known operational changes
5 affecting their loads such as the additional or elimination of shifts.
- 6 b) The data is not available to the applicant to calculate LDC-specific load profiles for all
7 customer classes. A greater sample size of Smart Meter data would be required in order
8 to determine these load profiles. As stated in the response to 7-VECC-56, a minimum of
9 four years of Smart Meter data after Smart Meters have been fully deployed is
10 necessary in order to determine weather-sensitivity of load with weather normalization
11 based on 30 years of historic weather data. As of June 2014, Horizon Utilities has 3
12 years of hourly Smart Meter data (Beginning May 2011).

7-SEC-47

[Ex.7-1-2/p.3]

- a) Please confirm that the average Large Use (1) class customer is expected to bear 2015 costs of \$284,799, while the average Large Use (2) class customer is expected to bear 2015 costs of \$108,056.
- b) Please provide a detailed comparative breakdown of the costs to be borne by these average customers, including an explanation for the major differences between them.

Response:

- a) Horizon Utilities confirms that the average Large Use (1) class customer is expected to bear 2015 costs of \$284,799, while the average LU (2) class customer is expected to bear 2015 costs of \$108,056.
- b) Table 1 below provides the key drivers for the allocation of costs.

Table 1: Key Drivers

	Large Use (1)	Large Use (2)
Direct Allocation	\$ -	\$ 10,609
Demand Related	258,811	64,399
Customer Related (billing and collecting, meters, meter reading)	24,501	33,048
Other	1,487	-
Total	284,799	108,056

7-SEC-48

[Ex.7-1-2-Appendix 7-1/p.2,4] Please explain how the “collaborative effort” described, and the fairness review “undertaken in with the assistance Elenchus”, are consistent with the expert’s claim of independence.

Response:

- 1 While completing the Horizon Utilities 2015 – 2019 Cost Allocation and Rate Design Study,
- 2 Elenchus Research Associates (“Elenchus”) relied on information provided by Horizon Utilities’
- 3 staff regarding: the details of the precise nature of facilities included in capital accounts; the
- 4 design of its facilities; and other accounting and engineering detail that required the subject
- 5 matter expertise of operational staff. In essence, Horizon Utilities’ staff responded to numerous
- 6 information requests posed by Elenchus.
- 7 The level of independence maintained was the same as the level of independence maintained
- 8 by intervenors through the information request process that is part of a proceeding. Information
- 9 is provided, but the interpretation of that information and judgment applied is not influenced by
- 10 the process of Horizon Utilities providing the requested essential information.

7-SEC-49

[Ex.7-1-2-Appendix 7-1/p.7] Please explain why saturation surveys are necessary before using updated load profiles for each of the classes other than the large use classes.

Response:

- 1 Saturation surveys are a standard component of a “bottom-up” process of developing a load
- 2 profile. This was the approach used by Hydro One, for example, in developing load profiles for
- 3 the 2006 Cost Allocation Information Filings.
- 4 Saturation surveys are needed because the bottom-up approach relies on information pertaining
- 5 to particular electrical appliances (stoves, air-conditioners, dryers, etc.). The load for a
- 6 customer class (e.g., residential) due to air conditioning load, for example, is derived by
- 7 combining the average load of the type of appliance and the market penetration of that
- 8 appliance. Knowing the load of the average customer with central air conditioning cannot be
- 9 used as input to the total load profile of the class unless the proportion of customers with central
- 10 air conditioning (based on a saturation survey) is also known.

7-SEC-50

[Ex.7-1-2-Appendix 7-1/p 8] Please provide details of the material differences between the 2012 large use load profiles, and the load profiles previously used.

Response:

The significant difference between the two load profiles is that there are two class load profiles where there had previously been one. The load shape (relative demand at different hours of the day and days of the week) is not materially changed, nor materially different between the 2012 load profiles and the load profiles previously used (i.e., 2011). The differences are primarily in the amplitude of the previously used demand and the 2012 demand, scaled to the 2015-2019 forecasts. The impact is best seen when comparing the co-incident and non co-incident peak allocators. For example, the table below compares the 2015 Large Use (1) and Large Use (2) allocators, which are based on the 2012 load profiles, to the 2011 Large Use allocators.

Table 1: Comparison of 2011 and 2015 Load Profiles

	2011 Large Use		2015 Large Use (1)		2015 Large Use (2)		2015 Large Use	
	kW	%	kW	%	kW	%	kW	%
1 CP	175,745	19.2	31,342	3.3	128,289	13.4	159,631	16.7
4 CP	673,366	19.4	129,553	3.5	565,812	15.5	695,365	19.0
12 CP	2,138,999	22.8	415,122	4.2	1,654,061	16.8	2,069,183	21.0
1 NCP	206,451	19.9	40,167	3.6	167,297	15.1	207,464	18.7
4 NCP	815,628	20.6	159,122	3.8	656,503	15.6	815,625	19.4
12 NCP	2,377,788	22.2	471,779	4.2	1,871,544	16.6	2,343,323	20.7

8-SEC-51

[8-1-2/p.10] Please confirm that, if the GS>50 fixed monthly charge is set at \$88.24, the volumetric charge would have to be set at \$4.2286/kW to remain revenue neutral in the class.

Response:

- 1 a) Horizon Utilities does not confirm the above statement. If the GS > 50 kW monthly fixed
- 2 charge were set at \$88.24, the volumetric charge would be set at \$4.0294 to remain
- 3 revenue neutral for the class (with revenue neutral referring to collecting the same total
- 4 dollars of revenue with a different fixed/variable split).

8-SEC-52

[8-3-1] In EB-2012-0047, Hamilton-Wentworth Catholic District School Board argued successfully to have its Bishop Ryan Collegiate Institute, a high school under construction, with a forecast 630 kW average monthly demand, served by the Applicant rather than Hydro One. Please confirm that the current Application proposes to increase the rates for Bishop Ryan school, now that it has been built and is being served by the Applicant, by 38% by 2019.

Response:

- 1 Horizon Utilities has calculated the distribution bill impact for this customer at 34.8% when
- 2 comparing proposed 2019 rates to 2014 existing rates.