

# Exhibit 1:

# Administration

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## 1 LIST OF ATTACHMENTS

- 2 1-A List of Abbreviations
- 3 1-B Certification of Evidence
- 4 1-C 2016 Cost of Service Filing Checklist
- 5 1-D Map of Community Served by Thunder Bay Hydro
- 6 1-E 2014 Thunder Bay Hydro Scorecard
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- 8 1-G 17<sup>th</sup> Annual Electric Utility Customer Satisfaction Survey– UtilityPULSE
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- 10 1-I Employee Satisfaction and Engagement Survey Trend
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- 16 1-O Summary of Impacts to Revenue Requirement from Transition to IFRS
- 17 1-P Requested Approvals, Board Appendix 2-A
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- 19 1-R Bill Impact Survey
- 20



## 1.1 APPLICATION

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IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15, 3 Schedule B, as amended (the “OEB Act”);

AND IN THE MATTER OF an Application by Thunder Bay Hydro Electricity Distribution Inc. under Section 78 of the OEB Act to the Ontario Energy Board for an Order or Orders approving or fixing just and reasonable rates and other service charges for the distribution of electricity as of May 1, 2017.

(This “Application”)

**Applicant’s Name:** Thunder Bay Hydro Electricity Distribution Inc.

(The “Applicant” or “Thunder Bay Hydro”).

### 1.1.1 LIST OF ABBREVIATIONS

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A comprehensive list of commonly used abbreviations used throughout this application and the electricity distribution industry can be found in Attachment 1-A of this Exhibit.

### 1.1.2 CERTIFICATION OF EVIDENCE

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For Thunder Bay Hydro’s Certification of Evidence, please refer to Attachment 1-B of this Exhibit.

### 1.1.3 FILING REQUIREMENTS CHECKLIST

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Thunder Bay Hydro has completed the Ontario Energy Board (“OEB”)’s 2017 Cost of Service Filing Checklist. Please refer to Attachment 1-C of this Exhibit.

### 1.1.4 CONFIDENTIAL INFORMATION

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Thunder Bay Hydro has considered the Board’s expectations regarding the practice direction regarding confidential information.

### 1.1.5 CHAPTER TWO APPENDICES

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Thunder Bay Hydro has filed Chapter two appendices in live excel format.

### 1.1.6 SEARCHABLE PDF

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Thunder Bay Hydro has confirmed pdf documents are text searchable and bookmarked.

### 1.1.7 APPLICATION DOCUMENT

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Thunder Bay Hydro confirms that it has sent two hardcopies of this Application to the Ontario Energy Board.

## 1 **1.2 APPLICANT OVERVIEW**

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### 2 **1.2.1 OVERVIEW OF SERVICE AREA**

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3 Thunder Bay Hydro evolved from the 1890's when customers were served by two separate utilities - Port  
4 Arthur Public Utilities Commission and Fort William Hydro. In 1970, the two utilities amalgamated to form The  
5 Hydro Electric Commission of Thunder Bay. In October 2000 the assets of The Hydro Electric Commission of  
6 Thunder Bay were transferred to Thunder Bay Hydro Electricity Distribution Inc. (an Ontario Business  
7 Corporation) Today, Thunder Bay Hydro services over 50,000 customers within a service territory that covers  
8 387 square kilometers with 208 square kilometers of rural service area. The total municipal population is  
9 108,359.

10 The Thunder Bay Hydro service territory is more specifically described in Thunder Bay Hydro's distribution  
11 License (ED-2002-0529), as encompassing the following:

- 12 • The Corporation of the City of Thunder Bay, as of January 1, 1970
- 13 • Fort William First Nation

14 For Thunder Bay Hydro's service map of the community served, please refer to Attachment 1-D of this Exhibit.

15  
16 Thunder Bay Hydro owns operates and maintains approximately 923 kilometers of overhead primary  
17 distribution circuits, 258 kilometers of underground primary distribution circuits, four 12.5kV distribution stations  
18 and ten 4kV distribution stations. This includes twenty three 25 kV feeders and forty 4kV feeders.

### 19 **1.2.2 IDENTIFICATION OF EMBEDDED OR HOST UTILITIES**

---

20 The Thunder Bay Hydro distribution system electrical supply is sourced from Hydro One Networks Inc.  
21 ("HONI") transformer stations, at a primary voltage level of 25 kV.

22 The Thunder Bay Hydro distribution system is embedded within the HONI system. There are three (3) HONI  
23 stations servicing Thunder Bay Hydro: Port Arthur TS, Birch TS and Fort William TS. Primary voltages of 24kV  
24 are stepped down to utilization voltages of 4kV and 12kV through 14 Thunder Bay Hydro-owned distribution  
25 stations.

26 Thunder Bay Hydro is bounded by HONI on all service territory boundaries, as such; Thunder Bay Hydro is not  
27 a host utility or an embedded distributor within HONI's distribution system and confirms that no partially  
28 embedded distributor status exists.

29

1 **1.2.3 TRANSMISSION ASSETS**

---

2 Thunder Bay Hydro has not had any transmission assets (>50 kV) deemed previously by the Board as  
3 distribution assets nor are there any such assets that the Applicant is seeking Board approval to be deemed as  
4 distribution assets in this Application.

## 1.3 EXECUTIVE SUMMARY

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### 1.3.1 RENEWED REGULATORY FRAMEWORK FOR ELECTRICITY

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The Board's Renewed Regulatory Framework for Electricity ("RRFE") is designed to support the cost-effective planning and operation of the distribution network and that of the Local Distribution Company ("LDC") distribution systems. The RRFE takes an integrated and performance-based approach to planning with the four RRFE outcomes as follows;

- **Customer Focus:** services are provided in a manner that responds to identified customer preferences;
- **Operational Effectiveness:** continuous improvement in productivity and cost performance is achieved; and utilities deliver on system reliability and quality objectives;
- **Public Policy Responsiveness:** utilities deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board); and,
- **Financial Performance:** financial viability is maintained.

This is Thunder Bay Hydro's first application under the RRFE and as such, the organization is committed to supporting the objectives outlined by the Board.

The components of Thunder Bay Hydro's Corporate Strategy, which will be further reviewed in section 1.3.2, have been in place for a number of years and align well with the objectives of the RRFE. The Long Term Corporate Goals as identified in the Strategy are as follows:

- ***Ensure that the health and Safety of our Employees and the Public is the Utility's first Priority;***
- ***Provide a reliable supply of electricity to the residents and businesses of Thunder Bay;***
- ***Protect and grow the value of the utility to our Shareholder.***

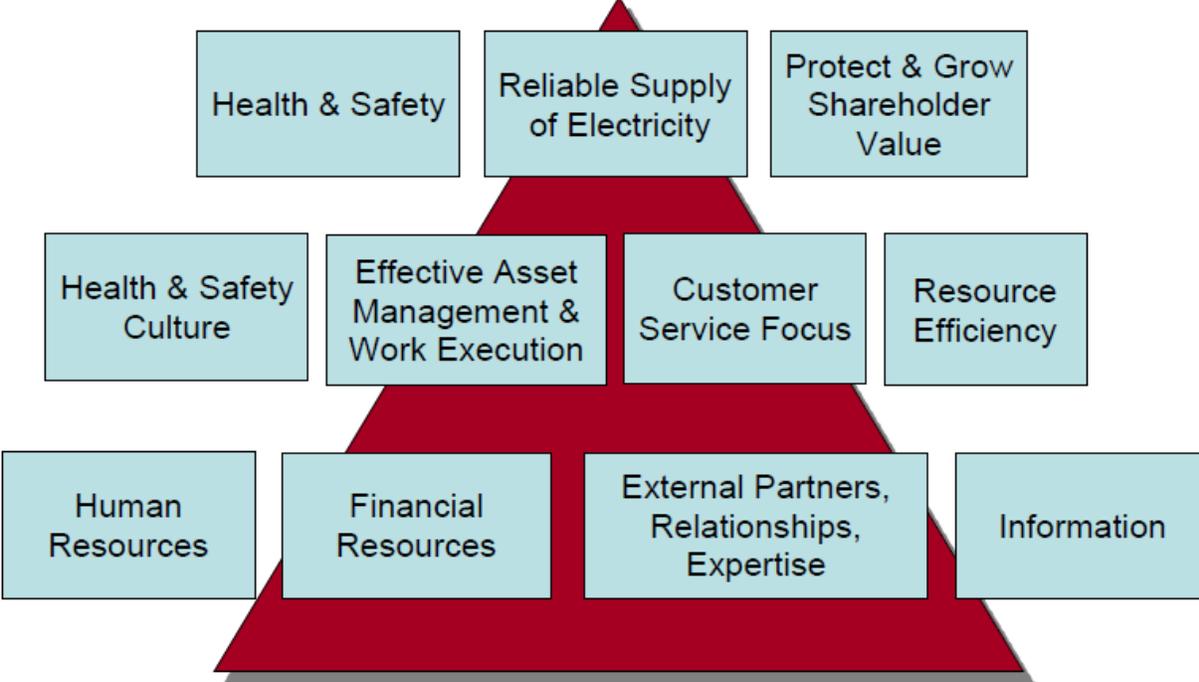
Thunder Bay Hydro's strategy document presents a hierarchal relationship between the Long Term Corporate Goals and what is necessary to achieve these goals and is summarized in Table 1-1 below.

23  
24  
25  
26  
27  
28

1 **TABLE 1-1: ALIGNMENT BETWEEN THUNDER BAY HYDRO'S CORE VALUES AND THE RRFE**

2  
3  
4  
5

THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.  
CORPORATE STRATEGY MODEL



6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

Four distinct areas of focus are pursued in order to support the Long Term Corporate Goals. Those areas are as follows: a culture of health & safety, effective management of assets and execution of work, attention to customer needs and efficient use of resources. It is these areas of focus that align and support the Board's RRFE and this alignment can be further viewed in Table 1-1A below.

1 **TABLE 1-1A: ALIGNMENT BETWEEN THUNDER BAY HYDRO'S CORPORATE STRATEGY AND THE RRFE**

RRFE Outcome	Aligns with Thunder Bay Hydro Corporate Strategy Component
Customer Focus	<ul style="list-style-type: none"> <li>• Health &amp; Safety Culture Initiatives</li> <li>• Customer Service Focus Initiatives</li> <li>• Resource Efficiency Initiatives</li> <li>• Reliable Supply of Electricity Goal</li> </ul>
Operational Effectiveness	<ul style="list-style-type: none"> <li>• Health &amp; Safety Culture Initiatives</li> <li>• Effective Asset Management &amp; Work Execution Initiatives</li> <li>• Customer Service Focus Initiatives</li> <li>• Resource Efficiency Initiatives</li> <li>• Protect and Grow Shareholder Value Goal</li> </ul>
Public Policy Responsiveness	<ul style="list-style-type: none"> <li>• Health &amp; Safety Culture Initiatives</li> <li>• Effective Asset Management &amp; Work Execution Initiatives</li> <li>• Customer Service Focus Initiatives</li> <li>• External Partners, Relationships, Expertise Resources</li> </ul>
Financial Performance	<ul style="list-style-type: none"> <li>• Health &amp; Safety Culture Initiatives</li> <li>• Effective Asset Management &amp; Work Execution Initiatives</li> <li>• Resource Efficiency Initiatives</li> <li>• Protect and Grow Shareholder Value Goal</li> </ul>

2

3 Thunder Bay Hydro approached customer engagement through an education lens, by providing background  
 4 information regarding industry practices and allowing customers to provide meaningful input on the four major  
 5 areas of the distribution system plan. Education was done through one-on-one phone interviews with  
 6 customers from each class, which was conducted by a third party. The interviews followed a protocol; however  
 7 each participant was free to provide input on any topic relevant to their electricity service. This process led to  
 8 free flowing, guided conversations that provided Thunder Bay Hydro with as much relevant feedback as  
 9 possible. The one-on-one conversation produced qualitative results and was followed up with an online survey  
 10 to confirm the results quantitatively.

11

12 In general, the result of the above discussion aligned well with the direction already unfolding within the  
 13 Distribution System Plan (DSP). However, Thunder Bay Hydro has specifically implemented a program to  
 14 address comments from these engagement activities. The Grid Modernization Plan (Appendix D of the DSP,  
 15 Exhibit 2, and Attachment 2-B) was developed with regard to positively impacting the reliability and general

1 performance of the grid in targeted areas. This initiative is in response to small commercial and large user's  
2 preference for ensuring reliability.

3 Pursuant to the aforementioned phone and online surveying Thunder Bay Hydro undertook an additional online  
4 survey with customers to gain further opinion from customers with particular attention to the bill impacts  
5 resulting from this application. Suffice to say, although customers do not want rate increases they do realise  
6 the necessity of increasing costs in order to properly operate, maintain and build robust electricity distribution  
7 systems.

8 In addition to its biannual surveys, trade show interactions and meetings with customers, Thunder Bay Hydro  
9 plans to initiate a Local Advisory Council ("LAC"). The purpose of the LAC will be to keep a representative  
10 group of customers apprised of Thunder Bay Hydro's activities, future plans and allow for opportunities to  
11 provide feedback and suggestions on those activities and plans. The LAC will be based on the Patient Advisory  
12 Model ("PAM") implemented by the Thunder Bay Regional Health Sciences Centre. The PAM has been  
13 instrumental in providing input and feedback during development and implementation of any policy impacting  
14 patients. Thunder Bay Hydro recognizes that this LAC will not be available to provide input through the current  
15 filing, but will be in place by January 2017. As the next Cost of Service approaches, more specific projects and  
16 full rate impacts will be shared with customers well in advance of the filing, allowing Thunder Bay Hydro to  
17 better incorporate relevant and important customer feedback.

18  
19 Thunder Bay Hydro determines customer needs almost entirely via surveys which are completed every two  
20 years. In addition, various departments like Billing & Settlements, Engineering, Operations, Conservation and  
21 Customer Service meet with customers on both ad hoc and regularly occurring basis where feedback is  
22 elicited. Ad hoc interactions typically occur at trade shows and customer appointments and regularly occurring  
23 interactions center around meetings with interest groups like those involved with road, telecom and cable  
24 planning. Specific customer engagement around the actual business plan does not occur. Instead Thunder  
25 Bay Hydro takes the survey results, the customer interaction moments and uses information derived from those  
26 to shape future direction. More self-service online abilities for customers are just one example of taking  
27 feedback to make changes.

28

### 29 **1.3.2 THUNDER BAY HYDRO BUSINESS PLAN STRATEGY, CORE VALUES AND THE RRFE**

30 The following is Thunder Bay Hydro's Vision, Motto and Core Values:

#### 31 **VISION**

32 Thunder Bay Hydro is people working together, providing services of the best value and quality to our  
33 customers

34

1 **MOTTO**

2 Committed to Customer Satisfaction

3 **CORE VALUES**

4 Thunder Bay Hydro...

5 Is committed to continually improving our level of service to all our customers, internal and external;

6 Treats all individuals with respect, fairness, trust and dignity;

7 Strives to respond to customer and employee concerns effectively;

8 Emphasizes our commitment to safety, training and respect for the environment;

9 Develops and implements leading edge technology to benefit our customers.

10 Thunder Bay Hydro's Vision is clearly aligned with the RRFE components. In particular the company's  
11 customers are focused front and center and framed within the context of value and quality, two important  
12 considerations when speaking of the RRFE's attention to Operational Effectiveness and Financial  
13 Performance. Moving into the Core Values again the focus on the customer is prominent. And in fact, as  
14 evidenced on the Scorecard Thunder Bay Hydro's customers benefit from excellent Operational Effectiveness  
15 and Financial Performance. These results are shown in Attachment 1-E and 1-F.

16

17 Apart from the Scorecard, Thunder Bay Hydro has additional important initiatives that support the RRFE.

18 Those were referenced in Table1-1A and are expanded on below.

19 Primary Initiative: Health & Safety Culture

20  
21 Thunder Bay Hydro is committed to creating and maintaining a Corporate Culture where Health and Safety are  
22 the Utility's top priorities. The Target Zero program has been an unqualified success for the Utility since its  
23 introduction and we have supported this program by ensuring awareness and competency regarding safe work  
24 practices in everything we do. Health and Safety objectives and strategies include:

25  
26 The ultimate objective of Health and Safety efforts is the pursuit of Zero workplace incidents. Specific  
27 supporting goals in obtaining this objective are Zero lost time workplace incidents, focusing on continual trend  
28 improvement for near misses, vehicle incidents, etc.

29

30 Specifically the following are focused on:

- 1
- 2
- Maintaining a corporate culture where safety is of primary importance in decision making.
  - Maintaining the momentum of the Target Zero message and Committed to Safety branding, ensuring the program remains fresh and its profile high within the utility.
  - Continuing the process of documenting safe work practices and procedures, with priority on high risk tasks.
  - Delivering programs to increase safety awareness at work and at home, and to promote employee wellness.
  - Delivering a strong public safety program including specific customer surveying related to the public awareness of powerline safety in the community.
- 10

11

12 Primary Initiative: Effective Asset Management

13

14

15 Thunder Bay Hydro's core business is the safe, reliable delivery of electricity to the residents and businesses of

16 Thunder Bay. In order to ensure the long-term performance of this core activity, a well-developed, long-term

17 approach to infrastructure investment and maintenance is critical. The financial pressures associated with the

18 utility industry have made it imperative that utilities make effective, risk based Capital Expenditure decisions.

19

- The utility's Asset Management Plan and other related initiatives will be converted into a Distribution System Plan for filing with the 2017 COS Rate Application and will be maintained and updated annually.
  - The 20 year rolling Capital Expenditure infrastructure replacement plan is a key component of the Distribution System Plan: maintain the plan for the immediate 3 years (2016-2018) in detail; maintain the next 7 years (2019-2025) in a planning state; establish the final 10 years (2026-2035) in a conceptual state. The plan is to reflect the Utility's strategy of managing annual distribution system investment in order to ensure the long-term reliability and sustainability of the system.
  - The priority components of a formal distribution system maintenance plan have been established and coordinated with the capital expenditure plan. Primary maintenance plan gaps have been identified and integrated into the maintenance plan. Further plan refinement will continue.
  - Selection of an appropriate automated work management system(s) will be finalized. Migration of maintenance plan components/tasks into the work management system(s) will be undertaken.
  - The expertise staff has developed, as well as the resources required to complete Connection Impact Assessments required to evaluate embedded generation projects, has adjusted in response to FIT requirements. As generation projects proceed, expertise is being developed on embedded generation operating issues and these considerations will be integrated into design guidelines, operating procedures, the Distribution System Plan, and System Maintenance plans.
- 37

1 Primary Initiative: Effective Work Execution  
2

3 Electricity distribution is a complex undertaking requiring diverse, complicated work systems and processes.  
4 Managing the effectiveness and efficiency of these undertakings is essential to meeting our core obligations to  
5 our customers and protecting the value of the Utility for our Shareholder. For the past several years, a focus on  
6 operational effectiveness has generated substantial efficiencies. Ongoing strategies to support effective work  
7 execution include:

- 8 • A continued focus on realizing Capital Expenditure and Operating & Maintenance efficiency gains  
9 through process design, performance targets and tracking, accountability management, third party  
10 partnerships and like initiatives.  
11
- 12 • An internal review of the Geographic Information System (“GIS”) system will produce a revised plan for  
13 further evolving the system. This evolution will continue. The migration of System Control data to the  
14 enterprise GIS is underway.  
15
- 16 • A review of System Control update options was undertaken in 2015 in preparation for an investment in  
17 upgrading the 24/7 control center systems. The current SCADA system was at end of life in both  
18 hardware and software support. An investment in updating to windows based SCADA system will be  
19 implemented in 2016. This will enhance remote supervisory and control operations to allow for future  
20 implementation of grid modernization initiatives.  
21
- 22 • Strategies to mitigate I.T. risks related to business continuity and data security were consolidated into a  
23 high level plan and reviewed with the Board in 2014. This plan will be updated and reviewed with the  
24 Board yearly.  
25

26 Primary Initiative: Resource Efficiency  
27

28 All manner of resources required by Thunder Bay Hydro are becoming increasingly scarce. It is critical that  
29 specific strategies are established which ensure these resources are most efficiently deployed by: promoting  
30 increased economies of scope and scale; reducing resources expended on low priority activities, and assigning  
31 the most efficient internal and/or external resources to required activities.  
32

33 Significant efficiencies have been gained in the past through assigning external resources to undertake tasks  
34 where internal staff does not hold a core competency. Historical examples include rental water heater service,  
35 cashier service, meter verification, bill printing and mailing, forestry activities and meter reading.  
36

- 1 • A strategy of continuing to seek external resources to undertake non-core activities and to augment  
2 core staff to gain efficiencies will be pursued.
- 3 • Growth in Thunder Bay Hydro's service territory and customer base through merger, acquisition or like  
4 activity will be pursued in order to increase corporate efficiency and profitability, and increase  
5 shareholder value. Consolidation activities will be subject to previously established Shareholder  
6 principles.

#### 7 8 Primary Initiative: Customer Service Focus 9

10 Thunder Bay Hydro Electricity Distribution Inc. exists to provide reliable electricity supply and related services  
11 to our customers and our community. Meeting this obligation requires an understanding of our customers'  
12 needs and expectations, and a commitment to delivering a high level of service. Strategies which support  
13 Thunder Bay Hydro's Customer Service Focus include:

- 14 • The transition to a new CDM Plan as prescribed in the Conservation First Framework is complete and  
15 the plan is approved. The Conservation First plan will be effectively delivered to meet the required  
16 conservation goals.
- 17 • Develop a sales oriented culture within the Conservation Department to support program delivery.
- 18 • Implement a conservation programming progress management dashboard.
- 19 • Achieve increased efficiencies and service level increases by implementing web based self-service  
20 and other electronic customer service interfaces.
- 21 • Develop and implement a comprehensive customer engagement strategy as it relates to Board  
22 scorecard requirements, rate filings and distribution system plans.
- 23 • Potentially disruptive technologies are emerging which will impact both the business model of the  
24 traditional distribution utility and the way our customers use electricity. The utility will undertake and  
25 promote a pilot/demonstration project(s) to better understand the potential impacts on the utility and  
26 our customers.

27 These four areas of Primary Initiatives need resourcing support. This next section details what is and will be  
28 taking place to ensure the primary initiatives which align with the RRFE outcomes are achieved.

#### 29 30 31 Resource Initiative: Human Resources 32

#### 33 **Employee Strategy Engagement Plan** 34

35 This includes regular updates to staff through meetings and other communications outlining the industry  
36 developments and challenges, and overall Corporate Goals and Strategies. There is also a process of  
37 'translating' Corporate Strategies and Regulatory and Policy requirements into departmental action plans and  
38 specific objectives, and coordination of objectives across the company to avoid conflict. There is ongoing

1 communication of departmental and individual objectives to those responsible, and a regular program of  
2 comparing requirements to results and updating staff on this progress.

3  
4 Management has been pursuing a strategy of balancing target compensation levels with retention risk for both  
5 union and non-union staff. These strategies are based on appropriate comparator data, local and industry  
6 market pressures, and relative skill retention risk. Strategies require periodic update and must be balanced with  
7 cost control requirements.

8 Resource Initiative: Financial Resources  
9

10 Thunder Bay Hydro developed a plan in 2011 to efficiently manage long-term debt. The plan identifies  
11 predicted yearly debt amounts, timing, preferred debt instruments and debt retirement plans. The plan is a 30  
12 year review of projected net income, cash flow, capital investment and debt covenant compliance. The plan is  
13 updated bi-annually to reflect historical results as well as changes in the debt market and regulatory  
14 environment. The plan will also address the desired/required capital structure for the Utility, taking into account  
15 regulatory requirements and the implications of the Rate Minimization Philosophy. The plan will continue to be  
16 updated annually.

17  
18 Resource Initiative: Partners, Relationships, Expertise  
19

20 Thunder Bay Hydro continues to expand its practice of increasing reliance on external contractors and service  
21 providers where this presents economical and/or operational advantages to undertaking these activities  
22 internally. The Utility continues its process of 'developing' local contract services to ensure their availability.  
23 Current initiatives include the expansion of business relationships with local power line contractors, with the  
24 goal of developing a stable, long term local resource. This philosophy will be expanded to other functions, as  
25 practical, over the next three years.

26  
27 Thunder Bay Hydro continues to build relationships with key Ministry of Energy staff, Ontario Energy Board, the  
28 Independent Electricity System Operator ("IESO") staff, and local Members of Provincial Parliament directly.  
29 Additionally, the Utility's strong participation with the Electricity Distributor's Association has helped build  
30 relationships directly with the Ministry of Energy, the Chair of the Ontario Energy Board, Senior IESO staff and  
31 other key industry stakeholders. A commitment to ongoing participation at the EDA Board level, as well as  
32 participation on other industry working groups and organizations, will allow these relationships to grow to the  
33 benefit of the Utility and its customers.

34  
35 Thunder Bay Hydro is seen as a leader in our community from a safety perspective. This reputation is  
36 supplemented by our ongoing work with, and support of, the Ministry of Labour, the Infrastructure Health &  
37 Safety Association and the Electrical Safety Authority ("IHSA"). We will continue to be resources to these

1 authorities to not only promote the health and safety of our community, but to also ensure that we remain  
2 leading-edge in our own work from a safety perspective. The President's appointment to the Electrical Safety  
3 Authority "ESA" Board in late 2013 further enhances the organization's safety leadership position.  
4 Reinforcing the value of Thunder Bay Hydro to our customers is of particular importance during times of  
5 increasing electricity costs. Executive Team members and other utility staff actively promote the value of the  
6 Thunder Bay Hydro in public, business, and like forums as well as through media interactions.

7 Resource Initiative: Information  
8

9 In order to make appropriate management decisions, it is crucial that relevant, timely, accurate information be  
10 available to both evaluate performance and support decision making processes.

11  
12  
13 **Benchmarking and Internal Performance Indicators**

14  
15 Emphasis has been put on developing internal measures aimed at measuring operational efficiency, and these  
16 measures are being used as the basis for measuring many aspects of Utility performance. The Power Systems  
17 Division has developed internal reporting of Key Performance Indicators (KPIs) incorporating both OEB  
18 scorecard measures as well as internally set targets. Targets are set by the Division based on a number of  
19 considerations, including OEB mandated targets, historical results and annually agreed to Division goals. The  
20 Customer Service Division annually reviews various scorecard measures against similar Utilities to assess  
21 performance. Development of these measures will continue. Utility staff will continue to participate in  
22 opportunities to shape the Board's benchmarking initiatives.

23 **Best Practices**

24  
25 Thunder Bay Hydro has had success with its program of seeking and implementing best practices into its  
26 operations in order to realize performance gains.

27  
28 Components of this program include:

- 29
- 30 • The use of independent expertise to evaluate aspects of utility processes and operations and, to  
31 provide improvement advice.
  - 32 • Research into specific industry techniques, practices and tools designed to enhance efficiency.
  - 33 • Staff will continue active participation in industry working groups, EDA Councils and caucus, and  
34 professional associations.

35 **Conservation**

36 Thunder Bay Hydro has been committed to conservation programming for its customers since 2005. For the  
most recently ended framework (2011 to 2014), Thunder Bay Hydro achieved 99.2% of its assigned target of

1 47.38 GWh for its Net Energy Savings at the End User Level. Thunder Bay Hydro also achieved 69.9% of its  
2 assigned target of 8.48 MW, related to Net Peak Demand Savings at the End User Level.

3 After very low level participation in 2011 and 2012, customers began to respond to the offers and incentives.  
4 Acquiring 3<sup>rd</sup> party partners for delivery continues to be an issue in Northwestern Ontario. Overcoming this  
5 obstacle was not easy. Reaching the target on the MWhs was a satisfying accomplishment. Thunder Bay  
6 Hydro is glad to have good vendor relationships in place for the Conservation First Framework (2015-2020)  
7 and has faith that the new targets will be achieved. This same success was not reached with the Demand  
8 target. The Government's policy decision to cancel the DR3 program effectively dropped Thunder Bay Hydro  
9 from a projected 110% target achievement to an actual achievement of 69.93%. As experienced by most  
10 LDC's in Ontario, Thunder Bay Hydro also found it difficult to overcome these midstream changes, particularly  
11 when very successful offerings were removed.

12 The IESO confirmed final verified results from 2011-2014 which can be found in Exhibit 4, Attachment 4-V, as  
13 part of Thunder Bay Hydro's Lost Revenue Mechanism Adjustment Variance Account proposal for disposition.

### 14 **1.3.3 SCORECARD MEASURES AND PERFORMANCE DISCUSSION**

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15 On March 5, 2014, the Board issued its report on *Performance Measurement for Electricity Distributors: A*  
16 *Scorecard Approach*. The report set out the Board's policies on the measures to be used to assess a  
17 distributor's effectiveness and improvement in the four performance outcome areas of the RRFE.

18  
19 Thunder Bay Hydro embraced the Scorecard initiative, and commencing with the 2013 Scorecard (as  
20 published in 2014), Thunder Bay Hydro began utilizing the Scorecard as a source of performance  
21 measurement. The Scorecard provides continuity on many of the Service Quality Indicators ("SQI's") that  
22 Thunder Bay Hydro has tracked in the past, as well as additional new measures.

23  
24 Thunder Bay Hydro is committed to achieving efficiencies throughout the organization through an Operational  
25 Effectiveness focus, which has helped to ensure costs are controlled and opportunities to improve are  
26 cultivated.

27  
28 Thunder Bay Hydro has maintained a very high level of performance with respect to the service quality and  
29 customer satisfaction scorecard categories and generally outperformed all Board targets. Clearly defined goals  
30 along with staff and management focus have contributed to successful outcomes. For example, in 2011,  
31 Thunder Bay Hydro set specific internal goals which were intentionally higher than the Board mandated targets,  
32 whereby customer service aimed to answer greater than 90% of incoming calls in less than thirty seconds. The  
33 objective was to ensure that Thunder Bay Hydro not only met the mandated Board target of 65% but that it was

1 exceeded every year by a wide margin. Thunder Bay Hydro also used this approach with new service  
2 connections and appointments 100% of the time metrics.

3  
4 Thunder Bay Hydro will not rest on past success. For example, a customer service plan will be directed through  
5 the customer service strategy. The resulting customer service strategy highlights three objectives;

- 6 • Customer education,
- 7 • Customer autonomy, and
- 8 • Departmental efficiency.

9 The three objectives will drive a variety of projects. Thunder Bay Hydro will execute these projects within the  
10 next four years to meet these objectives. The alignment of these strategic goals ensures Thunder Bay Hydro  
11 aligns and shapes its vision of customer service excellence.

12 Please refer to Attachment 1-E in this Exhibit for Thunder Bay Hydro's 2014 Scorecard and Attachment 1-F of  
13 this Exhibit for Thunder Bay Hydro's 2015 Scorecard. Note that the 2015 scorecard is currently shown in draft.  
14 The final version, including Management Discussion & Analysis ("MD&A"), is scheduled to be published on  
15 Thunder Bay Hydro and Board's websites on September 30, 2016. For the final version, please see  
16 <https://tbhydro.on.ca/corporate/legal-regulatory-notice/scorecard/> or [www.ontarioenergyboard.ca](http://www.ontarioenergyboard.ca) on, or after,  
17 September 30, 2016.

18  
19 As shown in Attachment 1-E 2014 Thunder Bay Hydro Scorecard and Attachment 1-F 2015 Thunder Bay  
20 Hydro Scorecard Draft, Thunder Bay Hydro met all Scorecard targets, with the exception of the Conservation &  
21 Demand Management "Net Annual Peak Demand Savings" and "Net Cumulative Energy Savings" targets. A  
22 full review of Scorecard results are discussed below.

## 23 24 **SAIDI and SAIFI**

25 The average duration of outages is often due to severity of weather events - System Average Interruption  
26 Duration Index ("SAIDI") and the number of times power to a customer is interrupted is often due to accidents,  
27 storms, lightning, high wind and defective equipment - System Average Interruption Frequency Index ("SAIFI").

28  
29 Nearly one quarter of all of Thunder Bay Hydro's outages can be attributed to defective equipment. Key  
30 incidents impacting overall results included severe weather events of high wind storms with 115km/hr. winds in  
31 2011, equipment failure due to wildlife eating through primary cables at a 4KV substation in 2012, and heavy  
32 wet snow storms in 2014 all precipitated an extensive loss of supply.

33 Thunder Bay Hydro's system reliability statistics for both SAIDI and SAIFI are within Thunder Bay Hydro's  
34 targets of 1.28-3.21 and 3.12-3.68 respectively.

1 **Performance Category: Service Quality**  
 2

3 **TABLE 1-2: SCORECARD PERFORMANCE CATEGORY: SERVICE QUALITY**

Measure	2011	2012	2013	2014	2015
Residential/Small Business Services Connected on Time	99.8%	99.1%	99.8%	100.0%	99.9%
Scheduled Appointments Met On Time	91.9%	99.6%	97.8%	100.0%	99.9%
Telephone Calls Answered On Time	91.8%	90.1%	91.8%	87.1%	92.4%

4  
5

6 Thunder Bay Hydro consistently follows a forward looking approach, which has fostered a culture of continuous  
 7 improvement. As a result of this focus, tangible outcomes have occurred. For example, the legacy  
 8 administration phone system was no longer supported as of 2014. Staff implemented a system with a  
 9 completely new design that incorporated Operations and Administration with proper failover redundancy for  
 10 disaster recovery and full recording of calls for quality assurance purposes. This system resulted with a first  
 11 year operating savings in 2015 of approximately \$56,000 and expected incremental operating savings of  
 12 \$14,000 for 2016 for a total annual systems savings of \$70,000. This system now allows supervisory  
 13 monitoring of customer conversations, improved outage call diversions to automated messaging and call  
 14 playback for staff training purposes. Enhanced reporting is now available with fields like customer wait times,  
 15 average hold times, average talking duration and average call durations.

16 As another example, in 2014, gatekeeper modems were changed out for high speed packet access modems.  
 17 This was done for two reasons; the originally installed modems used a network which was to be discontinued.  
 18 Secondly, the change allowed for a network design that reduced organizational data plan costs and encrypted  
 19 communications using virtual private networks. As a result, after an investment of \$54,000, overall operating  
 20 communication costs were reduced by approximately \$50,000 a year.

21 Thunder Bay Hydro made use of new data not available in the legacy meters. For example, the voltage  
 22 readings from the smart metering system are reported back into the Geographic Information System ("GIS")  
 23 system. This information is used for maintenance planning to identify poor voltage areas. The locations shown  
 24 to be receiving a voltage outside of Thunder Bay Hydro's standard can be proactively fixed before any damage  
 25 is done to customer or utility equipment. The voltage reads are also used by the system planning department  
 26 to help plan capital projects. The interval data can be aggregated to show what the load would be if specific  
 27 customers were fed from the same transformer. This data assists engineers in planning transformer sizing.

28 Thunder Bay Hydro has also procured a population of remote disconnect meters during the smart meter  
 29 project. These meters are being used to eliminate a field visit during the disconnect/reconnect process. The  
 30 power to a meter can be turned on remotely from the system control office.

1 Another efficiency achieved, is the ability of the smart meter system to allow system control operators to check  
2 a customer's power and voltage readings on demand. This has resolved some customer inquiries immediately  
3 instead of requiring a field visit to verify power conditions. The smart metering system can also perform on  
4 demand reads. This has been used in both the billing department and in customer service to aid vacancy  
5 requests and billing inquiries while eliminating the need to send a truck.

6 In addition to those recent cost efficiencies, overall meter reading costs have come down. The 2007 spend on  
7 meter reading was \$490,449 compared to \$289,576 in 2015; a savings of approximately \$200,000 annually.  
8 Savings were mostly from reductions in full time equivalents and trucking costs.

9 Going forward, Thunder Bay Hydro is in development to allow customers to sign up and cancel their electricity  
10 service through the MyTBHydro customer portal. This will allow customers to perform account changes without  
11 contacting customer service, which should decrease the workload for customer service.

12 Thunder Bay Hydro is also implementing electronic work orders. This new system will provide field personnel  
13 with an electronic device to complete work orders at the source. This will reduce the latency period to get field  
14 work information into the customer information system and keypunch errors which occur when multiple parties  
15 interact with a paper work order.

#### 16 **New Residential/Small Business Connected On Time**

17 Thunder Bay Hydro's experience with connecting New Residential/Small Business Services on time continues  
18 to be above the industry target through a continued commitment to customers and Thunder Bay Hydro's well  
19 defined process for new connections. Thunder Bay Hydro has consistently performed better than the Board  
20 quality standard of at least 90% on an annual basis.

#### 21 **Scheduled Appointments Met On Time**

22 Thunder Bay Hydro offers its customers appointment scheduling within a window of time that is no greater than  
23 four hours. Thunder Bay Hydro's experience in meeting customer appointments on time continues to be above  
24 the industry standard set by Board of at least 90%.

#### 25 **Telephone Calls Answered On Time**

26 Thunder Bay Hydro's internal customer service department has been mandated to maintain a rate of 90% of  
27 calls answered in less than 30 seconds. Most recently in 2015, the department answered 92% of calls in fewer  
28 than 30 seconds, which is well above the regulator's standard.

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1 **Performance Category: Customer Satisfaction**  
 2  
 3

4 **TABLE 1-3: SCORECARD PERFORMANCE CATEGORY: CUSTOMER SATISFACTION**

Measures	2011	2012	2013	2014	2015
First Contact Resolution				A+	A+
Billing Accuracy				99.9%	99.9%
Customer Satisfaction Survey Results				A	A
Public Safety Awareness					82%

5  
6

7 Thunder Bay Hydro’s employee engagement strategy can be linked to overall improved customer engagement  
 8 outcomes. For example, ongoing communication through departmental meetings, semi-annual employee  
 9 meetings and semi-annual management meetings keep staff aware of/involved in relevant utility activities, and  
 10 thus, are able to deliver better customer support and service. This engagement has allowed Thunder Bay  
 11 Hydro to deliver on some key items, described further below.

12 In 2013, Thunder Bay Hydro implemented a download “my data” type service for its customers for viewing  
 13 meter data. This web service also gives customers the ability to download their bills electronically versus the  
 14 utility mailing or emailing them to customers. Thunder Bay Hydro saw an increase of electronic subscriptions  
 15 from 5,475 in 2013 to 9,836 as of July 2016.

16 Thunder Bay Hydro also launched an outage map service in late 2015. The reaction from customers has been  
 17 overwhelmingly positive. The early statistics show a 32% reduction in abandoned outage calls. The outage  
 18 calls typically have a large abandoned rate due to the influx of phone calls that occur the moment an outage  
 19 event happens. The outage map provides customers with an estimated time to restore power and a visual  
 20 representation of where the outage is occurring.

21 In addition to the above web site improvements, Thunder Bay Hydro also did a major website overhaul in 2015  
 22 to ensure accessibility standards were met. As an additional feature, Thunder Bay Hydro added the ability for a  
 23 customer who is moving, to complete this transaction online, as well as confirm payments

24 **First Contact Resolution**

25 Thunder Bay Hydro aims to minimize and address customer complaints as quickly as possible. In  
 26 doing so, the organization tracks and monitors customer service inquiries.

27 Thunder Bay Hydro’s practice is to enable the customer service representatives (“CSR”) to inform and assist  
 28 customers. The first point of contact must have sufficient information and training to handle a myriad of calls.

29 Thunder Bay Hydro is constantly performing internal training for customer service representatives. The training

1 topics are solicited from the CSRs in attempt to alleviate any topics or questions they may be uncomfortable  
2 with. Also, Thunder Bay Hydro closely monitors the call types for each customer interaction. This enables the  
3 organization to address common customer concerns through other forms of customer engagement. Thunder  
4 Bay Hydro's approach has enabled the exemplary statistical record noted above.

#### 5 6 **Billing Accuracy**

7 Thunder Bay Hydro measures the number of accurate bills it issues throughout the year.

8  
9 During 2014, Thunder Bay Hydro performed better than the Board prescribed accuracy target of 98%.

#### 10 11 **Customer Satisfaction Survey Results**

12 Thunder Bay Hydro is required to measure and report customer satisfaction results at least every other year.  
13 Full details regarding survey results can be found in Attachment 1-G.

14  
15 Thunder Bay Hydro has maintained a very high level of performance with respect to the service quality and  
16 customer satisfaction. Clearly defined goals and management and staff dedication to those goals ensure each  
17 customer is satisfied. In 2011, Thunder Bay Hydro set specific internal goals which were intentionally higher  
18 than mandated targets. As an example, Thunder Bay Hydro's customer service department aims to answer  
19 greater than 90% of incoming calls in less than thirty seconds. This ensures that Thunder Bay Hydro not only  
20 meets the mandated Board target of 65% but that it is exceeded every year by a wide margin. Additionally,  
21 Thunder Bay Hydro aims to meet all new service connections and appointments 100% of the time.

#### 22 **Public Safety Awareness**

23 New to the Scorecard this year, the Public Safety Awareness measures the level of awareness of key electrical  
24 safety precautions among the public within the electricity distributor's service territory. A target for this measure  
25 is under development. Thunder Bay Hydro survey results showed a high level of awareness at 82%. Full  
26 details regarding survey results can be found in Attachment 1-H of this Exhibit.

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1 **Performance Category: Safety**  
 2

3 **TABLE 1-4: SCORECARD PERFORMANCE CATEGORY: SAFETY**

Measures	2011	2012	2013	2014	2015
Regulatory Compliance Ontario <i>Reg 22/04</i>	C	C	C	C	C
Serious Incident Index - # of General Public Incidents	0	0	0	0	0
Serious Incident Index - Rate per 10, 100, 1000 km of line	0.000	0.000	0.000	0.000	0.000

4  
 5  
 6 Thunder Bay Hydro is seen as a leader in the community from a safety perspective. This reputation is  
 7 supplemented by Thunder Bay Hydro's ongoing work with, and support of, the Ministry of Labour, the IHSA and  
 8 the Electrical Safety Authority. Thunder Bay Hydro's will continue to be resources to these authorities to not  
 9 only promote the health and safety of the community, but to also ensure that we remain leading-edge in our  
 10 own work from a safety perspective.

11 **Level of Compliance with Ontario Regulation 22/04**

12 The Board requires all distributors to be in compliance with Ontario Regulation 22/04, which outlines electrical  
 13 safety requirements for the design, construction, and maintenance of electrical distribution systems owned, by  
 14 licensed distributors.

15 *Section 13 of Ontario Regulation 22/04* mandates that all distributors engage an auditor on an annual basis to  
 16 review the distributor's compliance with sections 4, 5, 6, 7 and 8 of the above regulation and provide a report of  
 17 the findings. Each section is evaluated and the auditor provides findings in terms of: compliant (C), non-  
 18 conformance (NC), needs improvement (NI) and not applicable (NA).

19 Thunder Bay Hydro has met the performance target level of compliance with Ontario Regulation 22/04 attaining  
 20 full compliancy for the remaining years 2011-2015 inclusive. Thunder Bay Hydro continues to strive to meet full  
 21 compliancy on Regulation 22/04.

22 Thunder Bay Hydro continues to review and update its practices and documentation to align with *Ontario Reg*  
 23 *22/04*, and has submitted and obtained approval from ESA for updates to its Construction Verification Program  
 24 in 2015. Thunder Bay Hydro will continue to monitor improvements and make the necessary changes moving  
 25 forward.

26 **Serious Incident Index - # of General Public Incidents**

27 The Serious Electrical Incident Index component of the public safety measure is intended to address the  
 28 resultant impact in improving public electrical safety on the distribution networks over time. It measures the

1 number of and rate of serious electrical incidents occurring on a distributor’s assets and is normalized per 10,  
 2 100 or 1,000 km of line.

3 Thunder Bay Hydro has met the performance target level of compliance for serious incidents, as none have  
 4 occurred during this measurement period.

5 **Serious Incident Index – Rate per 10, 100, 1000 km of line**

6 Thunder Bay Hydro strives for a safe work environment and is targeting to maintain this performance level in  
 7 the future.

8 Thunder Bay Hydro has not incurred a serious incident, as such, the measure indicates full compliance.

9  
 10 **Performance Category: System Reliability**  
 11

12 **TABLE 1-5: SCORECARD PERFORMANCE CATEGORY: SYSTEM RELIABILITY**

Measures	2011	2012	2013	2014	2015
Average Number of Hours that Power to a Customer is Interrupted - SAIDI	2.77	1.28	1.03	1.92	2.02
Average Number of Times that Power to a Customer is Interrupted - SAIFI	3.65	3.12	2.02	2.69	2.39

13  
 14  
 15 Thunder Bay Hydro continuously monitors and analyzes reliability metrics making note of underperforming  
 16 assets and worst performing feeders. Investments can then be focused on problematic areas or assets. An  
 17 example of the above, is the replacement of poles, transformers and overhead switches in the projects  
 18 Isabella-James and Victoria-James which are associated with 10M9, which was the worst performing feeder  
 19 due to the “defective equipment’ cause in 2015. Thunder Bay Hydro believes that continued investments in  
 20 system renewal will allow the utility to achieve its reliability targets.

21 System Service investments have been focused in high impact areas that will allow Thunder Bay Hydro to  
 22 quickly identify, isolate and restore power using grid modernization techniques. High impact areas are  
 23 assessed based on criticality (as those that impact large numbers of customers and/or extended outage  
 24 periods), restoration time and system redundancy. This process serves to define project areas and equipment  
 25 to implement in the system.

26 Standardized Designs minimize engineering and installation costs of projects by limiting material diversity.  
 27 Thunder Bay Hydro is part of the Utilities Standard Forum (“USF”) group to standardize installation drawings for  
 28 use in the projects in the DSP.

1 Devices such as portable tablets and the use of web-based applications to replace paper-based data collection  
 2 are in the pilot stages and are expected to improve operational efficiency, reduce the possibility of data  
 3 translation errors, and provide labour savings in data entry.

4  
 5 Going forward, Thunder Bay Hydro will continue to work with other utilities and the municipality to improve  
 6 coordination and achieve efficiencies in infrastructure installation in addition to undertaking larger area  
 7 infrastructure rebuilds allowing for improved economies of scale in the capital expenditure program. Thunder  
 8 Bay Hydro will accelerate pole installation in area rebuild projects late in the year to ensure there are poles in  
 9 the ground prior to the winter freeze. This reduces the costs associated with snow removal and dealing with  
 10 frozen ground and allows for better deployment of labour resources through the winter months. Overall this  
 11 produces efficiencies in infrastructure replacement.

12  
 13 **Performance Category: Asset Management**  
 14

15 **TABLE 1-6: SCORECARD PERFORMANCE CATEGORY: ASSET MANAGEMENT**

Measure	2011	2012	2013	2014	2015
Distribution System Plan Implementation Progress				On-track	On-track

16  
 17 As discussed above, Thunder Bay Hydro's culture of continuous improvement supports evolving efficiencies  
 18 which underpins its asset management strategy. There are several initiatives planned in the DSP where  
 19 Thunder Bay Hydro expects sources of cost efficiencies to be achieved over the forecast period through good  
 20 planning and execution.

21  
 22 Due to its most recent Asset Condition Assessment, Thunder Bay Hydro will be better informed in determining  
 23 the most appropriate pace and level of investment for renewal of its assets. This will lead to an optimized level  
 24 of reactive verses proactive levels of replacements of infrastructure. Where possible Thunder Bay Hydro  
 25 implements life extension programs to reduce costs as compared to replacement programs. An example of life-  
 26 extension programs at Thunder Bay Hydro is the pole transformer painting program, where spare transformers  
 27 located in the yard that are identified as having rusting, are sanded and painted, extending the life of the asset

28  
 29 An investment in Distribution Automation has the potential to create a positive impact on reliability statistics as  
 30 well as potential labour savings. The implementation of the grid modernization plan is expected to automate  
 31 operations in selected areas thus reducing the duration of outages in those areas

32  
 33

1 **Asset Management**

2 The DSP outlines forecasted capital expenditures over a five year period required to maintain and expand  
 3 Thunder Bay Hydro’s electricity system to service its current and future customers.

4  
 5 The Board requires that all distributor DSP’s optimize investments and reflect regional and smart grid  
 6 considerations; serves present and future customers; places a greater focus on delivering value for  
 7 money; aligns the interests of the distributor with those of customers; and supports the achievement  
 8 of public policy objectives.

9  
 10 Thunder Bay Hydro is committed to investing in its assets in an appropriate and timely way to service its  
 11 customers in a cost effective manner.

12 As of the date of filing this Application, Thunder Bay Hydro has completed the Distribution System Plan, and it  
 13 is included as part of this Application in Exhibit 2, as Attachment 2-B.

14 **Performance Category: Cost Control**

15 **TABLE 1-7: SCORECARD PERFORMANCE CATEGORY: COST CONTROL**

Measure	2011	2012	2013	2014	2015
Efficiency Assessment		3	3	3	Not Available
Total Cost per Customer	\$577	\$568	\$585	\$606	Not Available
Total Cost per Km of Line	\$24,196	\$24,533	\$25,631	\$26,864	Not Available

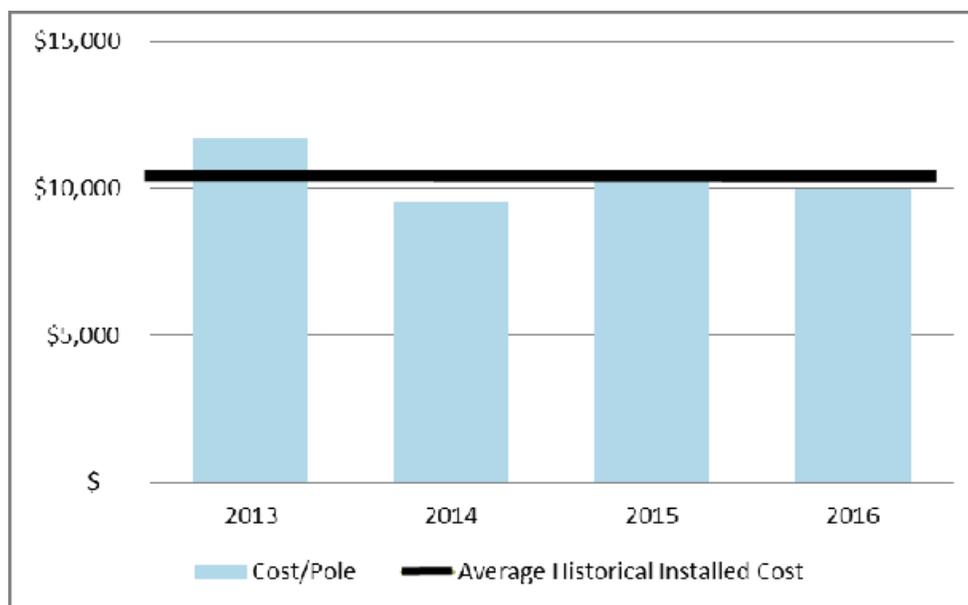
16  
 17 In order to maximize productivity / efficiency performance, Thunder Bay Hydro is in the process of shifting its  
 18 planning regimen to focus on larger capital replacement projects by delaying small renewal projects or reactive  
 19 capital replacements in areas, to the extent possible, where doing so will pose no safety or environmental  
 20 hazard. This strategy relates to the economies of scale. It is much more effective to bear the fixed costs of  
 21 renewal across a large quantity of assets as opposed to a small amount thereby reducing the overall per unit  
 22 cost of the project.

23 Over the historical period, Thunder Bay Hydro has optimized its crew sizes for various aspects of its overhead  
 24 and underground construction in an effort to reduce the associated labour costs. For example crew sizes have  
 25 historically been comprised of 4 men, and now are primarily consisting of 3 men. This change enables Thunder  
 26 Bay Hydro the ability to create an extra crew as well as flexibility in work execution. Although Thunder Bay  
 27 Hydro is confident that this is an efficiency gain, the full impact of this optimization will not be quantifiable until  
 28 such time as sufficient data is gathered from a wide variety of projects in order to obtain metrics comparing  
 29 past performance to current performance.

1 Thunder Bay Hydro has undertaken a seasonal planning approach to its construction activities.  
2 Understanding that some construction activities are most effectively performed for cost efficiency during  
3 specific times of the year; Thunder Bay Hydro has revised its construction practices by executing specific  
4 stages of a project at select times throughout the year and ensuring they are completed on schedule. For  
5 example, pole setting activities require less contractor and internal labour to complete during times of the year  
6 that the ground is thawed. Thus project schedules have been built to reflect these requirements.

7 Due to the efficiency / productivity gains discussed, Table 1-8 below shows that Thunder Bay Hydro has been  
8 able to effectively control its cost per pole despite inflation and increases in labour and material costs.

9 **TABLE 1-8: HISTORICAL COST PER POLE 2013- 2016**



10

11

12 Several areas throughout Thunder Bay Hydro's service territory contain infrastructure that cannot be accessed  
13 utilizing Thunder Bay Hydro's standard fleet. As a result of this, Thunder Bay Hydro has been utilizing cranes  
14 to access and install infrastructure in these areas. Realizing that the crane represents a premium cost,  
15 Thunder Bay Hydro is continually looking for ways to minimize the time on site as well as the instances of  
16 mobilization and demobilization of the crane. In an attempt to improve efficiency Thunder Bay Hydro has  
17 revised its crane setting regime to ensure that all preparatory work at each location is complete to the extent  
18 possible and that the site has been reviewed with the crane operator to stage the crane optimally.

19 Thunder Bay Hydro has also made a number of administrative cost efficiencies. For example, bill printing costs  
20 decreased in 2015 by 43% as result of Thunder Bay Hydro's procurement process. Considering that the

1 organization currently issues customer bills on a bimonthly basis for residential customers, this is significant in  
2 that the utility is moving to monthly billing by the end of 2016. Having not secured this new pricing, monthly bill  
3 printing costs for 2017 would otherwise be \$197,184, versus the new anticipated cost of \$85,000 another  
4 example is in the 2009 collective agreement, Thunder Bay Hydro negotiated lower wage schedules. This was  
5 also applied to some management positions and continues to produce savings. As a final example, the  
6 organization has strategically moved some Customer Service positions from a full time complement to a mix of  
7 full time and part time complement that allows for scheduling flexibility and improved customer service while  
8 lowering staffing costs.

9 Thunder Bay Hydro continues to evaluate cost saving opportunities to consider alternatives to filling vacancies  
10 upon staff retirements, resignations or movements within the company.

### 11 **Efficiency Assessment**

12 The Board's most recent efficiency ranking methodology, entitled "Efficiency Measure" (along with the Total  
13 Cost per Customer Measure and the Total Cost per KM of Line Measure) is based on a statistical total cost  
14 benchmarking study commissioned by the Board, which is designed to make inferences on the cost efficiency  
15 of individual distributors.

16  
17 Total costs for all electricity distribution companies are evaluated by the Pacific Economics Group LLC ("PEG")  
18 on behalf of the Board to produce an efficiency ranking. A "predicted cost" is then calculated. The magnitude of  
19 the difference between distributor's actual and predicted costs will assign a distributor into one of five groups.

20  
21 For a third year Thunder Bay Hydro was placed in Group 3, which is defined as having actual costs within +/-  
22 10 percent of predicted costs. Thunder Bay Hydro has forecasted it's efficiency ranking for the 2017 Test Year  
23 using the PEG forecasting model for the test year. The model can be found at Attachment 1-Q to this Exhibit.  
24 Thunder Bay Hydro will remain in Group 3 as detailed in Table 1-9 below:

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1 **TABLE 1-9: COST BENCHMARKING SUMMARY**

Line No.		2015 (History)	2016 (Bridge)	2017 (Test Year)
1	<b>Cost Benchmarking Summary</b>			
2				
3	Actual Total Cost	32,117,808	33,776,794	34,666,906
4				
5	Predicted Total Cost	29,462,021	30,282,194	31,435,049
6				
7	Difference	2,655,788	3,494,600	3,231,856
8				
9	<b>Percentage Difference (Cost Performance)</b>	<b>8.6%</b>	<b>10.9%</b>	<b>9.8%</b>
10				
11	Three-Year Average Performance			9.8%
12				
13	Stretch Factor Cohort			
14				
15	Annual Result	<b>3</b>	<b>4</b>	<b>3</b>
16				
17	Three Year Average			<b>3</b>

2  
 3 **Total Cost per Customer and Total Cost per Km of Line**

4 An evaluation by the PEG on behalf of the Board produces a cost per kilometer of line metric. This  
 5 measure sums the total capital and operating costs and divides the cost figure by the kilometers of line that  
 6 Thunder Bay Hydro operates to serve its customers.

7  
 8 Total costs include annual operating and capital costs. Operating costs are the costs associated with the  
 9 maintenance, inspection and operation of Thunder Bay Hydro's distribution assets, customer and general  
 10 administration costs. Capital costs include enhancement, betterments and replacement of capital assets that  
 11 are required each year. Capital costs tend to fluctuate depending on the need to replace existing capital  
 12 assets and additional infrastructure to support growth and development.

13  
 14 The increase in costs is consistent with ongoing operating activities and Asset Management Plan, to replace,  
 15 refurbish and modernize our aging distribution system and to connect all new customers. With continued  
 16 dedication to finding efficiencies in operating and performing work Thunder Bay Hydro has managed to  
 17 minimize the cost affecting the customer.

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 21

1 **Performance Category: Conservation and Demand**  
 2  
 3

4 **TABLE 1-10: SCORECARD PERFORMANCE CATEGORY: CONSERVATION AND DEMAND**

Measures	2011	2012	2013	2014	2015
Net Annual Peak Demand Savings (Percent of target achieved)	5.63%	32.68%	43.97%	69.93%	Not Available
Net Cumulative Energy Savings (Percent of target achieved)	17.95%	35.76%	67.29%	99.19%	Not Available

5  
 6  
 7  
 8 Thunder Bay Hydro continues to drive conservation efforts forward in a proactive and thoughtful way. The  
 9 transition to a new CDM Plan as prescribed in the Conservation First Framework is complete and the plan is  
 10 approved. The Conservation First plan will be effectively delivered to meet the required conservation goals.  
 11 The organization has developed a sales oriented culture within the Conservation Department to support  
 12 program delivery. To support all efforts, progress and results are tracked with a “conservation dashboard” and  
 13 reviewed regularly.

14  
 15 Thunder Bay Hydro has been committed to conservation programming for its customers since 2005. For the  
 16 most recently ended framework (2011 to 2014), Thunder Bay Hydro achieved 99.19% of its assigned target of  
 17 47.38 GWh for its Net Energy Savings at the End User Level. Thunder Bay Hydro also achieved 69.9% of its  
 18 assigned target of 8.48 MW, related to Net Peak Demand Savings at the End User Level.

19  
 20 After very low level participation in 2011 and 2012, customers began to respond to the offers and  
 21 incentives. Acquiring 3<sup>rd</sup> party partners for delivery continues to be an issue in Northwestern Ontario.  
 22 Overcoming this obstacle was not easy. Reaching the target on the MWhs was a satisfying  
 23 accomplishment. Thunder Bay Hydro is glad to have good vendor relationships in place for the  
 24 Conservation First Framework (2015-2020) which will ensure that new targets will be achieved.

25  
 26 **Net Annual Peak Demand Savings and Cumulative Energy Savings**

27 The Net Annual Peak Demand Savings are reported by the IESO, who administers the Conservation and  
 28 Demand Management Program. These savings are measured at a point in time and are non-cumulative.  
 29 The current conservation target period runs from January 2, 2011 to December 31, 2014.

30  
 31 As a result of a government policy decision, the Demand Response 3 program was discontinued; impacting  
 32 Thunder Bay Hydro’s achieved net annual peak demand savings and its Cumulative Energy Savings.

33  
 34  
 35

**Performance Category: Connection of Renewable Generation**

**TABLE 1-11: SCORECARD PERFORMANCE CATEGORY: RENEWABLE GENERATION**

Measure	2011	2012	2013	2014	2015
Renewable Generation Connection Impact Assessments Completed On Time	100.0%	100.0%	-	100.0%	100.0%
New Micro-embedded Generation Facilities Connected On Time			100.0%	100.0%	100.0%

A significant strength of Thunder Bay Hydro is the expertise that the staff have developed, as well the resources required to complete Connection Impact Assessments required to evaluate embedded generation projects, has adjusted in response to FIT requirements. As generation projects proceed, expertise is being developed on embedded generation operating issues and these considerations will be integrated into design guidelines, operating procedures, the Distribution System Plan, and System Maintenance plans. The outcome has been successful, as all renewable targets have been achieved.

**Connection of Renewable Generation -Renewable Generation Connection Impact Assessments**

A Connection Impact Assessment is required for all facilities that have a nameplate rated capacity of greater than 10KW. Thunder Bay Hydro has completed all such requests within the time allowed under the Distribution System Code.

**Connection of Renewable Generation -New Micro-Embedded Generation Facilities Connected on Time**

Thunder Bay Hydro is required to connect an applicant's micro-embedded generation facility to its distribution system within five business days of the applicant informing the distributor that it has satisfied all applicable services. This target has been fully met.

**Performance Category: Financial Ratios**

**TABLE 1-12: SCORECARD PERFORMANCE CATEGORY: FINANCIAL RATIOS**

Measures	2011	2012	2013	2014	2015	
Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.85	1.72	1.62	1.85	1.61	
Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.86	0.81	0.66	0.72	0.75	
Profitability: Regulatory Return on Equity	Deemed (included in rates)	3.75%	3.75%	7.00%	7.00%	7.00%
	Achieved	7.24%	7.74%	6.34%	5.99%	5.69%

1 **Liquidity**

2 The current ratio measures whether or not an entity has enough resources to pay its debts over the next 12  
3 months. A current ratio that is greater than 1 means good short term financial strength, as it indicates that  
4 short term debts and financial obligations can be met and that the organization is in good financial health.

5  
6 At 1.61 Thunder Bay Hydro maintains a strong liquidity ratio.

7  
8 Thunder Bay Hydro's target is a current ratio of greater than 1.1 to 1.

9  
10 **Leverage**

11 The Board uses a deemed capital structure of 60% debt, 40% equity for electricity distributors when  
12 establishing rates. This deemed capital mix is equal to a debt to equity ratio of 1.5 (60/40).

13  
14 Thunder Bay Hydro's solid debt to equity ratio of less than 1.5 indicates that the organization is less  
15 levered than the deemed capital structure. In 2013, Thunder Bay Hydro converted a portion of the  
16 outstanding Note Payable to The Corporation of the City of Thunder Bay to equity, thus, reduced the  
17 leverage ratio in that year. This has allowed Thunder Bay Hydro to reinvest 100% of the return on  
18 equity into capital and/or operational costs, thus enabling a lower debt level. Thunder Bay Hydro  
19 completes a long-term financing forecast annually (with a bi-annual update at budget time) to monitor  
20 performance with respect to budget, covenant compliance, financial viability, etc.

21  
22 The Corporation of the City of Thunder Bay is the sole shareholder of Thunder Bay Hydro Corporation  
23 (shareholder of Thunder Bay Hydro). The following governing principle is in the Shareholder Declaration:

24  
25 "DistributionCo shall be operated in accordance with the Rate Minimization Model."

26  
27 *Rate Minimization Model* means a Shareholder philosophy of minimizing electricity rates  
28 for customers of DistributionCo by having these rates reflect the Shareholder forgoing its  
allowable regulated return on shareholder equity from DistributionCo and forgoing  
payment of interest or principal on long term debt held in DistributionCo by the  
Shareholder.

29 The spirit of this principle is to keep electricity rates as low as possible and to encourage economic  
30 development by foregoing debt and dividend payments. The note payable to the City of Thunder Bay was set  
31 up without any provision for the payment of interest or the repayment of principal. Additionally, the Corporation  
32 of the City of Thunder Bay does not seek a dividend from Thunder Bay Hydro.

1 Thunder Bay Hydro's Debt to Capitalization ratio target is less than 0.60 to 1. Additionally, Thunder  
2 Bay Hydro has a targeted Debt Service Coverage ratio of greater than 1.2 to 1.

3  
4 **Profitability**

5 The profitability measure is defined as the approved return on equity that is embedded in Thunder Bay Hydro's  
6 distribution rates. This measure assesses whether distributors are earning a fair return on their investment.

7  
8 Profitability in both 2011 and 2012 reflects better than deemed return on equity due to unanticipated one-  
9 time transactions (Smart Meter revenue for previously expensed interest, regulatory settlement relating to  
10 payment-in-lieu of taxes ("PILS") and Ministry of Finance interest on PILS assessment).

11  
12 In 2014, the actual rate of 5.99% earned was lower than the approved rate of 7.00%. A lower rate is common,  
13 as annual distribution rates are adjusted between Cost of Service applications by an inflationary factor less an  
14 efficiency gain. In practice, this adjustment does not keep up with various costs such as rising salaries and  
15 wages, new initiatives and regulatory compliance requirements. As a result, there is often a decline in the  
16 regulatory rate of return in the years between Cost of Service applications.

17 **1.3.4 EMPLOYEE ENGAGEMENT**

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18 Thunder Bay Hydro values its employees and regularly seeks feedback on organizational dynamics. As such,  
19 Thunder Bay Hydro undertook its 4<sup>th</sup> bi-annual Employee Satisfaction and Engagement Survey in 2015.

20 The results of the survey indicated a high level of engagement and overall satisfaction with employment and  
21 management at Thunder Bay Hydro. Staff understands their roles and feels that they have the opportunity to  
22 provide meaningful input into decisions that affect their work. Staff overwhelmingly acknowledges that safety is  
23 the company's number one priority.

24 In response to the survey results, Thunder Bay Hydro has continued to enhance its communication with  
25 employees, providing additional opportunities for staff to participate on committees and revamping  
26 communication tools. On the safety side, Thunder Bay Hydro has re-branded its internal safety program  
27 including an internal promotion video emphasizing the importance of safety at work and home.

28  
29 The Employee Satisfaction and Engagement Survey Trend results can be found in Attachment 1-I of this  
30 Exhibit.

31

32

## 1 **1.4 CUSTOMER ENGAGEMENT**

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### 2 **1.4.1 OVERVIEW**

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3 At Thunder Bay Hydro, our Motto is “*Committed to Customer Satisfaction*”. To create satisfaction, open  
4 communication and effective positive promotion to receive feedback is necessary. In accordance with the 2016  
5 Board filing requirements document, Thunder Bay Hydro undertook a customer engagement process to help  
6 shape the development of the DSP. The engagement requirement presented a unique challenge as the DSP is  
7 very much a technical document which can be difficult to understand, and Thunder Bay Hydro recognizes that  
8 the electricity industry in Ontario is often misunderstood by customers. This tasked Thunder Bay Hydro to  
9 provide customers with enough background information to gather an informed opinion about the customers’  
10 needs, expectations and preferences with respect to the DSP. Thunder Bay Hydro engaged a research based  
11 consultant to aid the customer consultation process. Thunder Bay Hydro also completed an additional online  
12 survey with customers with respect to overall bill impacts stemming from its application. In addition, Thunder  
13 Bay Hydro regularly participates in a customer satisfaction survey. Details of these consultations can be found  
14 in Section 1.4.2 and 1.4.3 of this Exhibit.

15 Further to the surveys, Thunder Bay Hydro is involved in numerous community events which afford staff the  
16 opportunity to elicit feedback on a regular basis. Social medial interaction also provides the opportunities to  
17 educate customers keep them informed and encourage feedback. The following ongoing initiatives and many  
18 more, are detailed in Attachment 1-J of this Exhibit and are consistent with Board Appendix 2-AC - Customer  
19 Engagement Activities Worksheet:

- 20 » Face-to-Face Community Events
- 21 » Customer Service and System Control Call Centers
- 22 » Walk-in traffic
- 23 » Website and Email feedback
- 24 » Social Media
- 25 » Online outage map
- 26 » Printed media
- 27 » Targeted Audience Presentations

### 28 **1.4.2 METHODS OF ENGAGEMENT**

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#### 29 **Mental Models DSP Survey**

30 Thunder Bay Hydro engaged Decision Partners to conduct broad, professional and scientific research to gain  
31 insight into Thunder Bay Hydro’s customer’s opinion of our proposed Distribution System Plan. The research  
32 was performed from October 2015 through to March 2016. The research opportunity was characterized as  
33 follows:

1 *The opportunity for this project is to design and implement a comprehensive Customer Consultation initiative*  
2 *that applies state-of-the-science Mental Modeling Technology™ to gain in-depth insight into customers' values,*  
3 *interests and priorities regarding Thunder Bay Hydro's proposed Distribution System Plan ("DSP"). The results*  
4 *will be used to develop detailed, sophisticated and compelling evidence that demonstrates Thunder Bay*  
5 *Hydro's commitment and obligation to engage, inform and to seek customer input on the design of its DSP*  
6 *submission. A summary of this research-based consultation initiative will be submitted to OEB in 2016.*  
7 *Additionally, this in-depth understanding of customer preferences will enable Thunder Bay Hydro to strengthen*  
8 *relationships with its customers.*

9 The research used a phased approach. The objective of the first phase was to gather the opinions of informed  
10 customers to gain insight of what they deem their most important objectives. This was done through one-on-  
11 one phone interviews. Each customer was adequately informed of the decisions Thunder Bay Hydro was  
12 facing for the upcoming DSP submission, and asked what they felt were the most important investment areas.  
13 The phone survey participants were comprised of; one representative from each of the 6 large use sectors, 10  
14 small commercial customers and 10 residential customers. The small commercial and residential customers  
15 were randomly selected from each Forward Sorting Area (FSA) within Thunder Bay Hydro's territory. The  
16 interview was a directed conversation and interviewees were encouraged to raise additional topics  
17 spontaneously and to elaborate on their perspectives.

18 The second Phase came in the form of an online survey which was informed through the information gathered  
19 in the first phase. The online survey was distributed to each of Thunder Bay Hydro's Electronic billing  
20 customers (~8500) via direct email, as well as advertised through local media, social media, hard copies  
21 distributed by the customer service department and publicly on Thunder Bay Hydro's website. Only the  
22 completed surveys from active Thunder Bay Hydro customers were used to draw conclusions.

23 Topic areas of the survey were:

- 24 » Perceptions of Ontario Electricity Industry – Including their awareness of recent changes in the  
25 industry and their thoughts on priorities for the industry over the next five years.
- 26 » Perceptions of Thunder Bay Hydro – Including their experiences as a customer, their  
27 perceptions of reliability of their electricity service and what Thunder Bay Hydro does to  
28 prevent outages.
- 29 » Perceptions of Thunder Bay Hydro's DSP – Including their thoughts on what Thunder Bay  
30 Hydro is doing to manage the distribution system and the company's priorities regarding the  
31 various types of investments covered in the DSP.

1           » Thunder Bay Hydro Customer Consultation and Engagement – Including where they receive  
2           information about electricity system topics, what they would like to know about the DSP and  
3           how they would like to receive that information.

4 A copy of the Distribution System Plan Customer Consultation can be found in Attachment 1-K of this Exhibit.  
5 The insights obtained from customer engagement activities as detailed in Section 5.4.1.6 of the DSP discusses  
6 how the results of assessing these activities are reflected in the distribution system plan. Section 5.4.1.8 further  
7 summarizes the planned projects/activities for the 2017 test year relative to customer preferences.

#### 8 **Bill Impact Survey**

9 Thunder Bay Hydro continued its engagement with customers by providing an online survey with respect to the  
10 bill impacts of its filed application. Survey questions and responses can be viewed in Attachment 1-R. The  
11 purpose of the survey was to gain further opinion from customers with particular attention to the bill impacts  
12 resulting from the filing. The previous surveys did not present specific and direct bill impacts. This online  
13 survey was launched through a media release which was carried by all local media outlets via radio, print and  
14 online. As well, direct email contact was made with all electronic billing customers with the invite to participate.  
15 Staff also directed all customers who called the call center or attended our customer service desk to take part  
16 in the survey. This survey was a broad appeal to all. Approximately 1,123 customers responded. Suffice to  
17 say, although customers do not want rate increases they do realize the necessity of increasing costs in order to  
18 properly operate, maintain and build robust electricity distribution systems. This latest survey reconfirmed  
19 results from Mental Models Distribution System Plan Survey that was conducted in the winter of 2016 in that  
20 customers remain supportive of reasonable increases.

#### 21 **Utility Pulse Survey**

22 Thunder Bay Hydro also engaged customers by participating in the 17<sup>th</sup> annual Utility Pulse Survey. The  
23 survey's purpose is to profile the connection between Thunder Bay Hydro and its customers. The survey is a  
24 phone questionnaire which was answered by 417 people who pay or look after the electricity bill. The  
25 participants were randomly selected from a list of residential and commercial customers supplied by Thunder  
26 Bay Hydro. The interviews took place between April 21<sup>st</sup> to April 28, 2015.

27 The Utility Pulse survey covers the following topics; outage frequency and outage response, customer focus,  
28 customer satisfaction, first contact resolution, operational effectiveness, service quality, operating expense,  
29 credibility, and customer affinity.

30 The result of the survey is a Utility Pulse Report Card. This report card provides Thunder Bay Hydro with a  
31 snapshot of performance across six categories that research has shown to be important to customers which  
32 influence satisfaction and affinity levels with their utility.

1 **Face-to-Face Events**

2 The following list of events below has a comprehensive view of Thunder Bay Hydro's engagement activity  
3 which includes Conservation. Thunder Bay hydro endeavors to continuously integrate all types of engagement  
4 at all events for a fulsome customer engagement experience.

- 5 • Social Housing Luncheon (2013)
- 6 • Spring Home & Garden Show (2013, 2014, 2015)
- 7 • peaksaver PLUS Public Information Seminars (2013)
- 8 • Retrofit Awards (2013, 2014, 2015)
- 9 • Aboriginal Conservation Workshop (2013)
- 10 • Retrofit Electrical Distributors Luncheon (2013)
- 11 • Teddy Bear Picnic (2013, 2014, 2015)
- 12 • Prosperity Northwest (2013, 2014, 2015)
- 13 • Lakehead University Thunderwolves Hockey Game (2013, 2014 2015)
- 14 • Earthcare Forum (2014)
- 15 • Demand Response<sup>3</sup> Luncheon (2014)
- 16 • Summer in the Parks (2014, 2015)
- 17 • Chamber of Commerce After Business Event: Small Business Week
- 18 • peaksaver PLUS Children's Colouring Contest
- 19 • Social Media - Frostbites Instagram Challenge (2014, 2015)
- 20 • Routes in Our Community Event (2015)
- 21 • Community Economic Development Commission Showcase (2015)
- 22 • saveONenergy Christmas Challenge (2015)
- 23 • Better Ways Video Contest (2015)
- 24 • Retrofit "We Want You" Social Media Campaign (2015)
- 25 • Frostbites Social Media Campaign (2015)
- 26 • saveONenergy Christmas Challenge Social Media Campaign (2015)

27

28 **Website and Email:** (2013, 2014, 2015)

- 29 • Website feedback
- 30 • Customer contact form and email 2500 interactions
- 31 • Online outage map

32

33 **Printed media –Bill Inserts**

- 34 • Customer Newsletter, bill messages, bill inserts from the Board

35 **Targeted Audience Presentations:**

- 36 • Post-secondary and high schools - education on safety, renewable power, industry and careers in the
- 37 industry
- 38 • Construction Association -> locates and dig-ups
- 39 • First Responders School Bus Drivers -> downed powerlines
- 40 • Brochures and Posters to 55+ and Lakehead Social Planning Council on OESP/LEAP information and
- 41 Winter Outrage readiness

1 **Social Media** (2013, 2014, 2015)

- 2 • Twitter - Major Outages
- 3 • Facebook - Posting of advertisements and media releases and safety messaging

### 4 **1.4.3 CONSULTATION WITH OTHER PARTIES**

---

5 In support of the requirement to engage with third parties, Thunder Bay Hydro initiated and/or participated in  
6 several consultations with various other parties, including the following groups:

- 7 • Regional and Municipal Governments;
- 8 • Third Party Attachers;
- 9 • Local Infrastructure Owners;
- 10 • CDM Program Partners
- 11 • IESO; and
- 12 • HONI;

13 As Thunder Bay Hydro is a wholly owned subsidiary of the City of Thunder Bay, the organization maintains a  
14 very close working relationship with the City of Thunder Bay personnel within the Engineering, Planning and  
15 Administrative departments.

16 As a key stakeholder, Thunder Bay Hydro provides a ten year capital plan overview, as well as detailed plans  
17 to City of Thunder Bay officials on an annual basis. Generally the outcome of these consultations provides  
18 Thunder Bay Hydro with direction on System Access projects relating to; road widening, line relocations and  
19 subdivision creation/expansion. These projects tend to be initiated by the City of Thunder Bay and have  
20 impacted the near-term budgeting process for Thunder Bay Hydro. In addition, this consultation also allows the  
21 City of Thunder Bay the opportunity to coordinate construction activities and beautification projects with  
22 Thunder Bay Hydro's system plans.

23 On a regular basis, Thunder Bay Hydro discusses key priorities, initiatives and projects with City Council  
24 members at its annual meeting. There is regular consultation and participation at a Municipal level on a number  
25 of issues which affect our customers and community. For example, Thunder Bay Hydro was involved with the  
26 City of Thunder Bay's Climate Adaptation Strategy and municipal forestry management issues.

27 Discussions with regional departments such as the Ministry of Transportation ("MTO") and Ministry of the  
28 Environment ("MOE") occur on an as needed basis to address specific project related topics such as permit  
29 requirement and specific details regarding certain projects. The outcome of such specific project discussions  
30 include, for example, plans and direction for the project currently being constructed or a request for a concept  
31 design and estimate to relocate assets related to an upcoming project.

32 Thunder Bay Hydro also actively reaches out to a number of local infrastructure owners including third party  
33 attachers in its service territory and provides them with information relating to renewal efforts throughout the  
34 city. This allows the other infrastructure owners to plan their upgrades in conjunction with Thunder Bay Hydro.

1 The intent is to reduce the occurrence of third parties attaching to infrastructure that is targeted for replacement  
2 in the near term.

3 Thunder Bay Hydro does have a mature planning process relating to System Renewal efforts and as a result  
4 creates a path for several other infrastructure owners to follow during their respective planning processes. The  
5 consultation with other parties' aids in the effective delivery of services throughout the service territory and  
6 helps to prevent increased costs associated with miss-coordinated planning.

7 Thunder Bay Hydro is an active member of the working group and the Local Advisory Committee ("LAC") for  
8 the Thunder Bay Region Integrated Infrastructure Regional Planning. Thunder Bay Hydro representatives have  
9 participated and consulted with the IESO regarding future system considerations. In addition Thunder Bay  
10 Hydro has consulted with IESO and HONI in an effort to keep both groups up to date on the Renewable  
11 Enabling Generation improvements required in the service area.

#### 12 **1.4.4 PAST PERFORMANCE AND CUSTOMER CONFIDENCE**

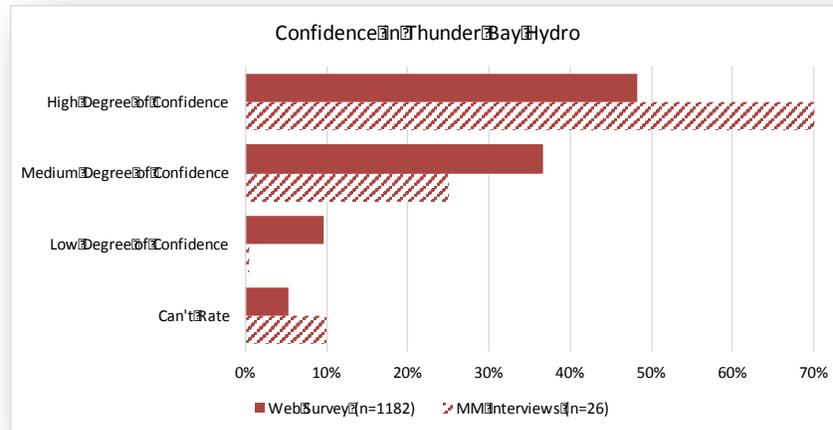
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13 Customers have responded favorably to the performance of Thunder Bay Hydro. The majority of customers  
14 (85%) in the latest customer engagement survey have stated that they have a medium to high degree of  
15 confidence in Thunder Bay Hydro management. Thunder Bay Hydro performed two surveys in 2015 and both  
16 yielded results showing that customers are satisfied and confident in Thunder Bay Hydro. This result can be  
17 attributed to the multiple customer engagement activities (as discussed in Section 1.4.2 of this Exhibit) coupled  
18 with Thunder Bay Hydro's accelerated service standards

19 As a part of Thunder Bay Hydro's Distribution System Plan engagement activities, customers were asked  
20 about their confidence in Thunder Bay Hydro's management of the investments contained within the DSP.  
21 Shown in Table 1-13 below, customers expressed a medium to high degree of confidence in Thunder Bay  
22 Hydro's management. A shown in Table 1-14 below, the majority of customers felt that the level of funding  
23 required for the investments contained within the DSP were somewhat or very appropriate.

24  
25  
26  
27  
28  
29  
30  
31

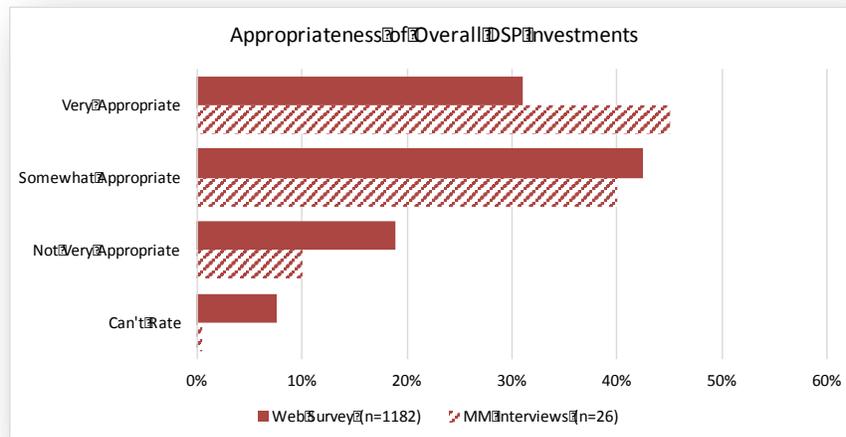
1 **TABLE 1-13: CONFIDENCE IN THUNDER BAY HYDRO**



2

3

4 **TABLE 1-14: APPROPRIATENESS OF OVERALL DSP INVESTMENTS**



5

6 The surveys and scorecard results demonstrate that Thunder Bay Hydro has engaged the customer  
 7 appropriately throughout the DSP process. Thunder Bay Hydro will continue to solicit customer input ensuring  
 8 an ongoing cycle of improvement.

9 Thunder Bay Hydro also received the UtilityPULSE Report Card in 2015 as a result of the most recent  
 10 UtilityPULSE survey. A copy of this survey can be found in Attachment 1-H to this Exhibit. The report card  
 11 details the customer satisfaction with respect to the following six areas:

- 1 - Price and Value
- 2 - Customer Service
- 3 - Company Leadership
- 4 - Corporate Stewardship
- 5 - Operational Effectiveness
- 6 - Power quality and reliability

7 The report card is indicative of Thunder Bay Hydro's commitment to customer engagement. Thunder Bay  
 8 Hydro has participated in past UtilityPULSE surveys in 2009 and 2012 with similar results. As shown in Table  
 9 1-15 below, Thunder Bay Hydro continues to outrank the provincial average.

10

11 **TABLE 1-15: UTILITYPULSE SURVEY RESULTS**

Thunder Bay Hydro's UtilityPULSE Report Card®			
Category		Thunder Bay Hydro	Ontario
1	<b>Customer Care</b>	<b>B+</b>	<b>B</b>
	Price and Value	B+	B+
	Customer Service	A	B+
2	<b>Company Image</b>	<b>A</b>	<b>B+</b>
	Company Leadership	A	B+
	Corporate Stewardship	A	A
3	<b>Management Operations</b>	<b>A</b>	<b>A</b>
	Operational Effectiveness	A	A
	Power Quality and Reliability	A+	A
<b>OVERALL</b>		<b>A</b>	<b>B+</b>

12

13

14 **1.4.5 SUMMARY OF CUSTOMER NEEDS & PREFERENCES**

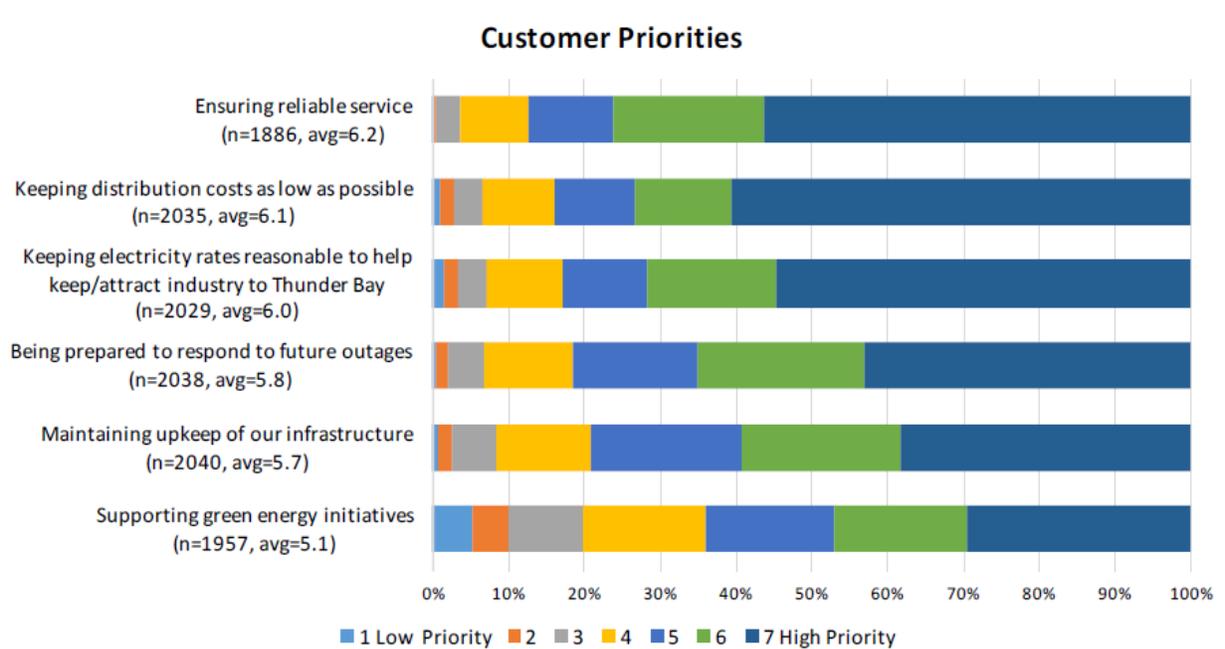
15 The DSP customer engagement process afforded Thunder Bay Hydro the opportunity to inquire with customers  
 16 about their needs, preferences and expectations. As discussed in Section 1.4.1 of this Exhibit, the survey  
 17 method provided the customers with an overview of the DSP, as well as the necessary feedback to Thunder  
 18 Bay Hydro of informed customer opinions. This process proved beneficial for Thunder Bay Hydro, reiterating  
 19 what customers have historically communicated and providing Thunder Bay Hydro a renewed appreciation for  
 20 the customer's perspective.

21 Thunder Bay Hydro has historically heard from customers that they require low cost, reliable electricity. As  
 22 shown in Table 1-16 below, when customers were asked for the top priorities of the electricity industry in the  
 23 next 5 years, a large majority of the surveyed customers replied to reduce/stabilize cost and ensure reliability.

24

25

1 **TABLE 1-16: CUSTOMER TOP PRIORITIES**



2

3 As discussed in Section 1.4.1 of this Exhibit, the second phase of the customer engagement survey was used

4 to focus on the four investment categories outlined within the DSP. These sections were System Renewal,

5 System Service, System Access, and General Investments. All four of these sections were described within the

6 survey and the customer was asked for their opinion about the importance, urgency and appropriateness of

7 Thunder Bay Hydro's plans for each. Please note that System Service and System Access were combined for

8 simplicity as these sections relate to the overall health of the System and the connection to Thunder Bay

9 Hydro's customers. The final question for each investment category outlined Thunder Bay Hydro's planned

10 expenditures, including a statement which outlined the historical expenditure of each investment. The question

11 and response for each investment category are as follows:

12 **System Renewal**

13 Table 1-17 below provides the customers' response to the survey question below.

14 **Q5. Do you think the proposed increase in investment in the System Renewal area is appropriate?**

15 **Please select one of the following options (circle one):**

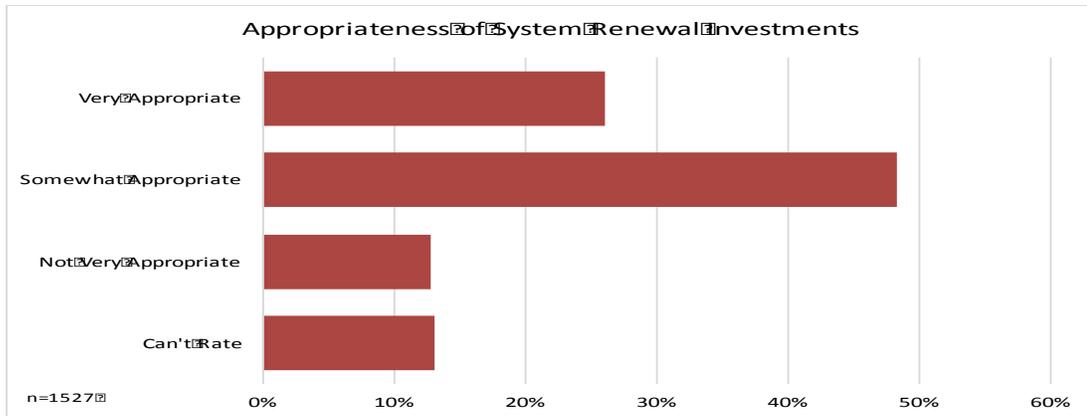
16

17

18

19

1 **TABLE 1-17: APPROPRIATENESS OF SYSTEM RENEWAL INVESTMENTS**



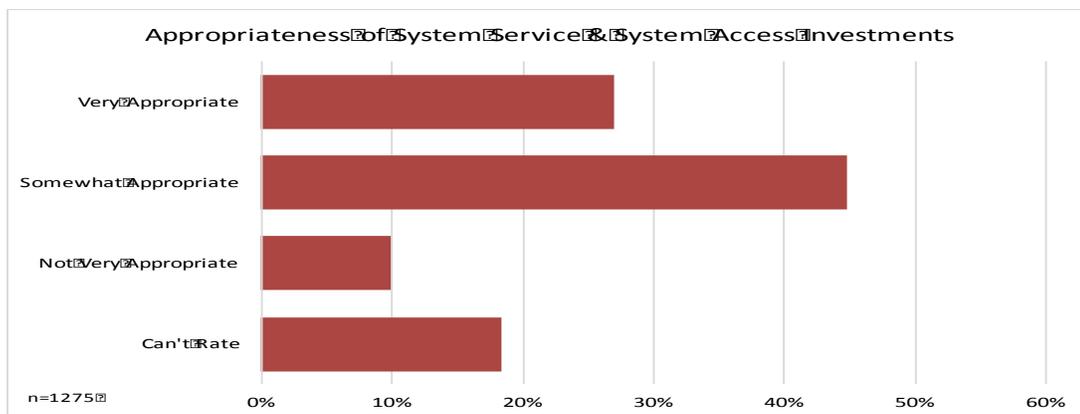
2

3 **System Service and System Access**

4 Table 1-18 below provides the customers response to the survey question below.

5 **Q8. Do you think that this level of investment is appropriate? Please select one of the following**  
6 **options (circle one):**

7 **TABLE 1-18: APPROPRIATENESS OF SYSTEM SERVICE & SYSTEM ACCESS INVESTMENTS**



8

9 **General Investments**

10 Table 1-19 below provides the customers response to the survey question below.

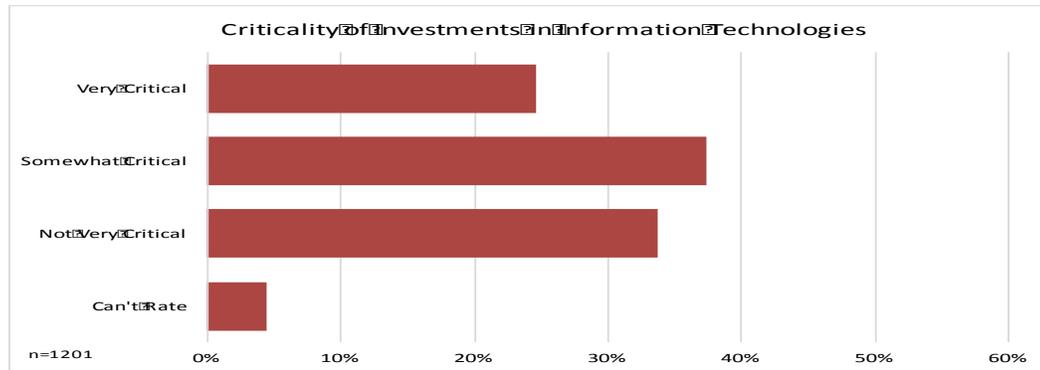
11 **Q11. Please rate how critical it is to you that Thunder Bay Hydro invests in information technologies?**  
12 **This will increase our engagement with customers by providing an enhanced customer portal that**  
13 **would enable you to access new account features like billing alerts? Please select one of the following**  
14 **options (circle one):**

15

16

17

1 **TABLE 1-19: CRITICALITY OF INVESTMENTS IN INFORMATION TECHNOLOGIES**

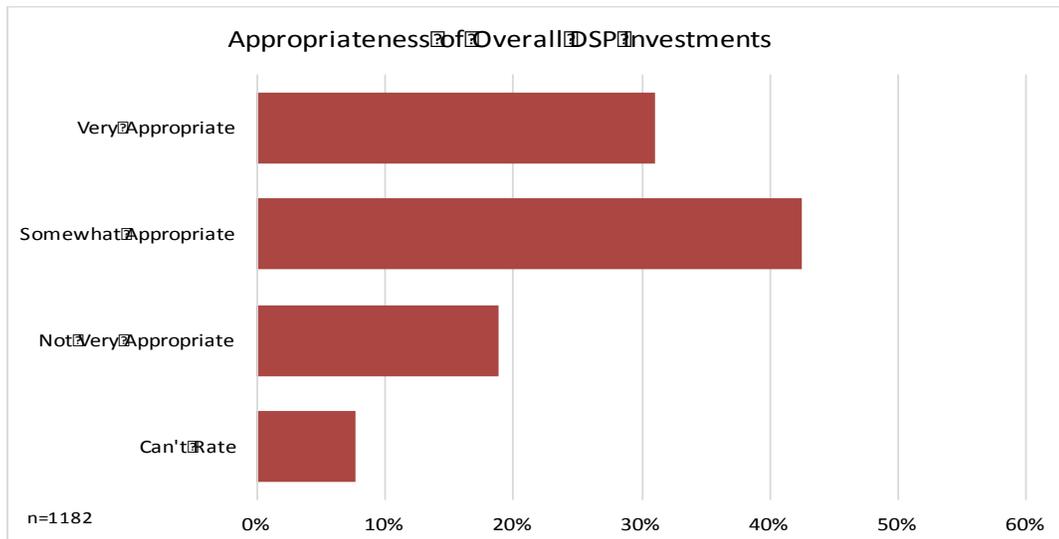


2  
 3 The conclusion of the survey was used to elicit the customer's opinion with respect to the overall Distribution  
 4 System Plan. The total increase over five years was outlined and the customer was asked for the  
 5 appropriateness of this investment. In addition the customer was asked to provide their level of confidence in  
 6 Thunder Bay Hydro management to implement the investments contained within the DSP.

7 Table 1-20 below provides the customers response to the survey question below.

8 **Q12. Given the brief descriptions of each component of our DSP, to what degree do you think that the**  
 9 **overall proposed increase in investment is appropriate? Please select one of the following options**  
 10 **(circle one):**

11 **TABLE 1-20: APPROPRIATENESS OF OVERALL DSP INVESTMENTS**

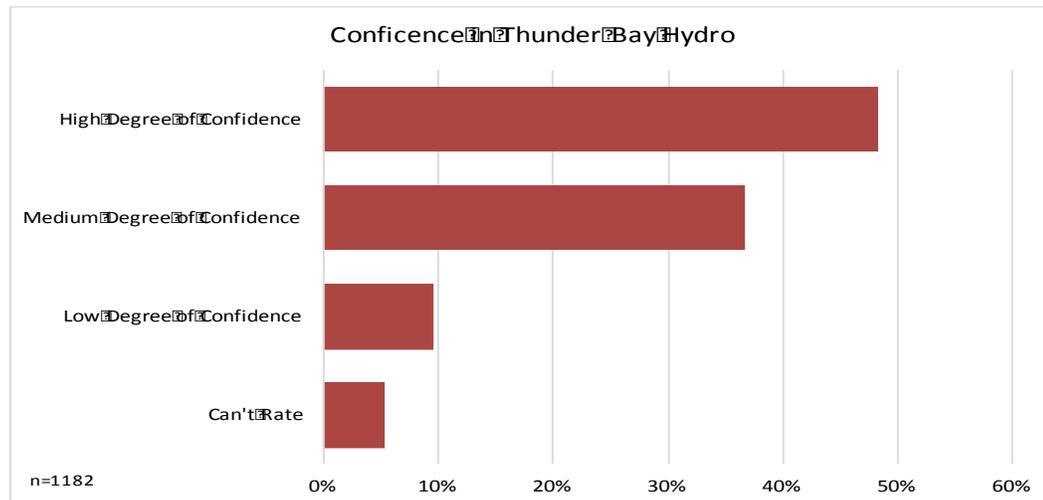


12  
 13 Table 1-21 below provides the customers response to the survey question below.

14

1 **Q13. Thinking about everything that we've presented about our DSP, how confident are you that our**  
2 **team at Thunder Bay Hydro will continue to do a good job of providing safe, reliable, cost effective**  
3 **electricity by implementing the investments associated with the DSP? Please select one of the**  
4 **following options (circle one):**

5 **TABLE 1-21: CONFIDENCE IN THUNDER BAY HYDRO**



6

7

### 8 **1.4.6 CUSTOMER NEEDS, PREFERENCES, EXPECTATIONS, AND THE DSP**

9 Thunder Bay Hydro has engaged and will continue to engage its customers to gain insight into the specific  
10 preferences of the various types of customers within the distribution territory.

11 The general outcome of these engagement activities is that Thunder Bay Hydro consistently performs at or  
12 above industry expectations from across Ontario and Canada. Overall customer satisfaction is high; however,  
13 Thunder Bay Hydro has received feedback regarding reliability and costs.

14 As is the case across the province price and value and overall cost effectiveness is at the top of mind for many  
15 consumers. This has been found to be the case for Thunder Bay Hydro as well. For this reason, Thunder Bay  
16 Hydro is planning capital expenditures based on maximizing resources and improving efficiencies in an attempt  
17 to execute more work at a lower cost. This plan is reflected in the DSP, which can be found in Attachment 2-B  
18 in Exhibit 2. As outlined in the Asset Condition Assessment report included in the DSP, a large portion of  
19 assets have been classified as poor health condition. In order to minimize the cost impact to customers,  
20 Thunder Bay Hydro has chosen a conservative approach and paced alignment with suggested renewal  
21 quantities over a 3 year period. By using a systematic approach to plan and optimize capital investments (as  
22 described in Section 5.3 of Exhibit 2, Attachment 2-B) Thunder Bay Hydro expects to reach the renewal  
23 quantities suggested by Kinectrics in 2019.

1 Feedback regarding reliability was mostly noted from commercial and industrial customers. As a result  
2 Thunder Bay Hydro has embarked on a grid modernization plan to deploy smart devices in strategic areas  
3 throughout the distribution system. The intent of this is to maintain or improve reliability by reducing the impact  
4 of outages to these types of customers. Further details regarding Thunder Bay Hydro's "Grid Modernization  
5 Plan" can be found in the DSP

6 Additionally the latest survey with respect to bill impacts offers some observations. First, despite a less than  
7 desirable familiarity with overall cost of Thunder Bay Hydro's portion of the bill, customers are generally  
8 satisfied with the value they receive from Thunder Bay Hydro (please see results of question 4 in Attachment 1-  
9 R showing 69.28% of respondents are somewhat or very satisfied with the value received for the portion of  
10 money paid to Thunder Bay Hydro). Second, more than half of customers support increases in order to replace  
11 aging infrastructure and close to half believe the operating budget as proposed is reasonable. The final  
12 observation at this point is that the latest survey has not produced a need to further modify this application.

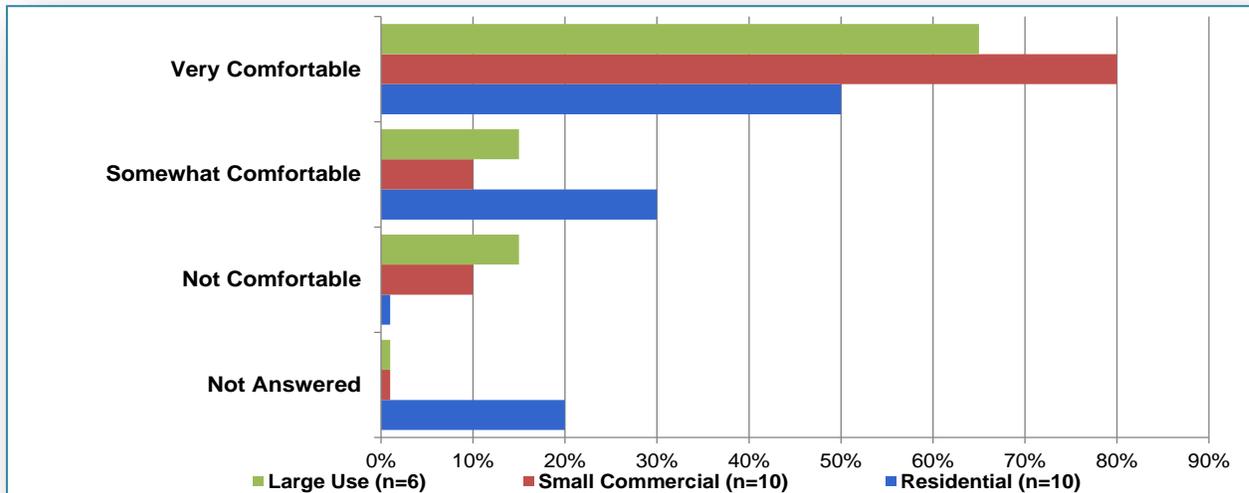
#### 13 1.4.7 Lessons Learned for Future Customer Engagement

14 The customer engagement survey performed by Decision Partners has not only informed Thunder Bay Hydro's  
15 Distribution System Plan; the survey provided additional feedback from customers. The first phase of the  
16 customer engagement survey was performed as an open conversation with some questions to guide the  
17 discussion. There were several questions asked which will be used to help guide future customer engagement  
18 and communication initiatives, specifically, customers were asked to provide their comfort level with online  
19 communications.

20 Table 1-22 below demonstrates the response from customers when asked whether they would be comfortable  
21 with online communication from Thunder Bay Hydro.

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23  
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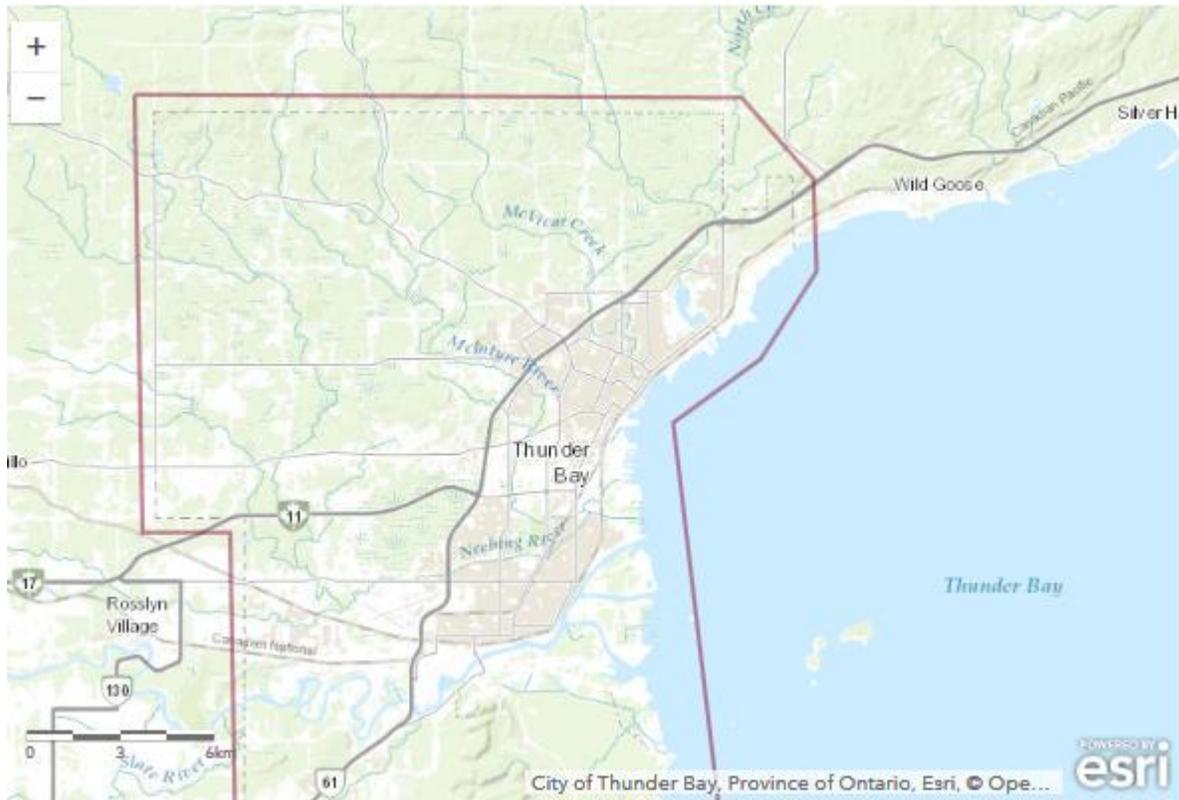
1 **TABLE 1-22: CUSTOMER COMFORT WITH ONLINE COMMUNICATION**



2  
 3 The surveyed customer also provided additional feedback about what type of information they would like  
 4 Thunder Bay Hydro to provide. The large volume customers surveyed expressed interest in seeing a long term  
 5 plan (ie. 30 years) for the distribution system and advocated for more information during outage events.  
 6 Thunder Bay Hydro's approach to system renewal was influenced consideration of rate impact for all  
 7 customers, including residential and small business, who have expressed their opinion on the importance of  
 8 controlling rates.

9 These suggestions have led Thunder Bay Hydro to allot more time in future DSP development for targeted  
 10 workshops. These workshops will be focused on large volume customers and will be used to further educate  
 11 each participant about the long term plans which are achieved through each DSP.

12 The request for more information during outages has been addressed through an outage notification system.  
 13 The Outage Map was launched publicly in December of 2015, it is used to inform the public about each  
 14 ongoing outage event. The system is used for both planned and unplanned outages. Thunder Bay Hydro has  
 15 received favourable feedback and intends on continuing it's use throughout day-to-day operations. The official  
 16 Thunder Bay Hydro twitter feed which is used solely during large outage events was also embedded in the  
 17 webpage, a screen shot of the system is pasted below.



1

2 With regards to survey on bill impacts Thunder Bay Hydro has also learned that it still has some work to do in  
3 educating customers about the overall electricity system and in particular the distribution system itself. Efforts  
4 will be made in the future to increase customer familiarity with the various components of the system and how  
5 they interact. Second, Thunder Bay Hydro needs to improve on customer familiarity with the various  
6 components of the bills customers receive. A better educated and informed customer will lead to better  
7 feedback on utility activities.

8

9

10

## 1.5 APPLICATION EXECUTIVE SUMMARY

### 1.5.1 REVENUE REQUIREMENT

Thunder Bay Hydro is requesting the approval of its proposed service revenue requirement of \$25,243,529, an increase of \$4,254,917 or 20.3% from the Board Approved 2013 COS application. The increase details are as shown in the Table 1-23 below:

**TABLE 1-23: SERVICE REVENUE REQUIREMENT**

Line No	Description	Last Rebasing Year - 2013 - Board Approved	2017 Test Year	\$ Variance	% Variance	Reference
1	Revenue Requirement					
2	OM&A, including LEAP & Property Taxes	\$14,300,000	\$15,736,572	\$1,436,572	10.0%	Exhibit 4 - 4.2.2
3	Depreciation	\$3,200,647	\$3,587,239	\$386,592	12.1%	Exhibit 4 - 4.12
4	Payments in Lieu of Corporate Income Tax (PILs)	\$0	\$403,572	\$403,572	100.0%	Exhibit 4 - 4.13
5		\$874,470	\$1,391,750	\$517,280	59.2%	Exhibit 5 - 5.2.1-5.2.2
6	Return on Equity	\$2,613,495	\$4,124,396	\$1,510,901	57.8%	Exhibit 5 - 5.2.5
7	<b>Total</b>	<b>\$20,988,612</b>	<b>\$25,243,529</b>	<b>\$4,254,917</b>	<b>20.3%</b>	
8						
9	<b>Rate Base</b>	<b>\$93,339,122</b>	<b>\$112,197,921</b>	<b>\$18,858,799</b>	<b>20.2%</b>	

The main drivers of the increase are described the following:

Thunder Bay Hydro's OM&A expenses have increased by \$1,429,872 as detailed in Table 1-26 at 1.5.5 Operations, Maintenance and Administration.

The growth in Thunder Bay Hydro's rate base has resulted in depreciation expense increase of \$386,592 over the Last Rebasing Year.

In the Last Rebasing Year, Thunder Bay Hydro did not include a component for PILs given that the change in the depreciation with the adoption of longer useful asset lives (moving towards the transition to IFRS) resulted in capital cost allowance for tax purposes sufficient to eliminate any PILs liabilities. The increase in the ROE is the biggest driver for the \$403,572 increase in the PILs component for the 2017 Test Year given that this return is funded from after PILs dollars.

As noted in previous applications, Thunder Bay Hydro's capital renewal strategy results in capital investment that exceeds annual depreciation and reinvested profits and has been since 2008. This has necessitated the borrowing of external funds to finance the capital investment. Annual financing has occurred since the Last Rebasing Year and is anticipated to continue over the forecast period. As Thunder Bay Hydro's external financing increases the weighted debt cost increases (2.1% from 1.53%) representing approximately 69% of the increase. The other 31% of the increase in Return on Debt is due to the \$18,858,799 increase in Thunder Bay Hydro's rate base. The total increase for the Return on Debt is \$517,280.

1 In the 2017 Test Year, Thunder Bay Hydro is seeking a Return on Equity of 9.19% (currently the maximum  
2 Board capital parameter), up from 7% as approved in the Last Rebasement Year. This results in an increase of  
3 \$983,000. As with the Return on Debt, the total increase of \$1,510,901 is the result of both an increase in  
4 Thunder Bay Hydro's rate of return on equity as well as the increase in the rate base. The increase in the rate  
5 base increased the return on equity by \$527,901. Thunder Bay Hydro acknowledges that the parameter is  
6 subject to further update.

7 Thunder Bay Hydro's net book value of property, plant and equipment increased by \$23,095,450; however, the  
8 working capital allowance component of rate base decreased by \$4,236,651 for the net change of \$18,858,799  
9 in Rate Base.

## 10 **1.5.2 BUDGETING & ACCOUNTING ASSUMPTIONS**

11 Thunder Bay Hydro compiles budget information for the three major components of the budgeting process:  
12 revenue forecasts, operating, maintenance and administration expense forecast and capital budget forecast. A  
13 philosophy of cost control underpins our annual budget process. Early in the annual budget process, internal  
14 guidance is given by the President for establishing budget amounts for 'regular', ongoing budgeted activities.  
15 This guidance consists of a maximum percentage increase by which total budgets for these activities may  
16 increase annually. The maximum increase allowed reflects inflationary pressures on cost components.  
17 Proposed budget increases for specific items which exceed the maximum increase amount are discussed and  
18 decided upon at the Executive Team level. Budget items which exceed the maximum increase amount may  
19 include activities related to public policy responsiveness or items which support savings and efficiencies. It is  
20 the responsibility of the Finance Division to coordinate the development of the operating budget, capital budget  
21 and forecast processes. Each division is responsible for preparing its operating budget, capital budget, and  
22 rolling forecasts.

23 The Vice President of Finance completes the final process in the budget preparation which is to update the  
24 financing and cash flow projections. The cash flow projections are populated with the historical actuals typically  
25 at annual financial statement review and with projections and budget at the time of budget preparation. The  
26 cash flow projections are a tool to evaluate the sustainability of Thunder Bay Hydro's capital and OM&A plans  
27 and to provide assurance with respect to compliance with debt covenants. The Vice President Finance and the  
28 President review the budget in detail as well as the cash flow projections, discussing with the respective Vice  
29 Presidents as necessary.

30  
31 The President is responsible for presenting and recommending the budget to the Board of Directors for  
32 approval and it is the responsibility of the Board of Directors, on behalf of the shareholders, to approve the  
33 budget.

34

1 The budget is an important planning tool for Thunder Bay Hydro. It puts capital and operational plans into a  
2 common financial plan. The budget is a key metric used by both management and the Board of Directors to  
3 ensure plans align with the Corporate Strategy and monitoring of plan achievement.

4 The 2016 Bridge Year is based on a combination of actual results to date and forecasted. Both the bridge and  
5 test year are prepared using the MIFRS method of presentation.

6 In preparation of the budget for Cost of Service rate application purposes, Thunder Bay Hydro notes that it has  
7 annualized material one-time costs that are planned to occur between 2017 and 2021 in the 2017 Test Year as  
8 per established Board practice. Costs that have been annualized include regulatory costs associated with the  
9 preparation and follow-up of the 2017 Cost of Service rate application.

#### 10 **Revenue Forecast**

11 Thunder Bay Hydro's energy sales and revenue forecast for the 2016 Bridge year is based on a combination of  
12 actual results and projections based on counts, consumption and demand data from the corresponding prior  
13 year period. The revenue forecast at existing rate of \$19.8M for 2017 is based on applying the current rates  
14 approved by the Board to the load forecast explained at 1.5.3 Load Forecast Summary section below.

15 For detailed revenue information, refer to Exhibit 3.

#### 16 **Operating Maintenance and Administration ("OM&A") Expense Forecast**

17 The OM&A expenses for the 2016 Bridge Year and the 2017 Test Year have been based on an in-depth review  
18 of operating priorities and requirements and is strongly influenced by prior year experience, year-to-date results  
19 and expected changes for the forecast periods. Thunder Bay Hydro has used an inflation rate of 2% where an  
20 expense increase was not specifically identified. Each item is reviewed account by account for each of the  
21 forecast years with indirect costs allocated to direct costs for budget presentation.

22  
23 Staffing levels are based on a labour resource budget for Operations, Maintenance and Capital Infrastructure  
24 work and workload review for Administration work. Other considerations include succession planning as  
25 outlined in Exhibit 4. The 2017 Test Year includes a complement decrease of 5 FTEs or a 3.5% decrease from  
26 Last Rebasings 2013 OEB Approved. See Table 1-26 below at Section 1.5.5.

27  
28 Further information can be found in Exhibit 4.

29

1 **Capital Budget**

2 The capital budget forecast 2016 and 2017 is based on the DSP and Thunder Bay Hydro's capacity to obtain  
 3 external financing. Refer to the DSP, Section 5.4 for details of the planning and prioritization of the capital  
 4 investments.

5 See Exhibit 2 for further capital investment information.

6 **1.5.3 LOAD FORECAST SUMMARY**

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7 Thunder Bay Hydro's load forecast is weather normalized and considers factors such as historical customer  
 8 consumption, weather, calendar related factors, CDM activity and economic conditions. As outlined in Exhibit  
 9 3, Thunder Bay Hydro used the same regression analysis methodology approved by the Board in its 2013 Cost  
 10 of Service application (EB-2012-0167) The regression analysis was conducted on an individual class basis,  
 11 based on historical customer consumption, to produce an equation that will predict weather normalized  
 12 customer consumption in 2017.

13 Based on the load forecast methodology, the total 2017 Test Year GWh forecast is 921.1 which is a 3.7%  
 14 decrease over the 2013 Board Approved GWh forecast of 956.4. This decrease reflects the impact of CDM  
 15 savings as well as the slower economic conditions in Thunder Bay.

16 The forecast of customers by rate class was generally determined using a geometric mean analysis. Based  
 17 upon the geometric mean analysis, the expected number of customers/connections for the 2017 Test Year is  
 18 64,524 which is a 1.1% increase over the 2013 Board Approved customers/connections of 63,767 and 1.2%  
 19 over the actual 2013 level.

20 **1.5.4 RATE BASE & CAPITAL PLAN**

---

21 Thunder Bay Hydro's change in rate base and capital expenditures from the last Board approved are as  
 22 provided in the following table:

23 **TABLE 1-24: CAPITAL EXPENDITURE FORECAST**

	Description	Last Rebasing Year - 2013 - Board Approved	2017 Test Year	\$ Variance	% Variance
1					
2	Rate Base	\$93,339,122	\$112,197,921	\$18,858,799	20.20%
3					
4	Capital Expenditures requested	\$13,239,139	\$11,113,764	\$ (2,125,375)	(16.05%)

25 The main driver for the reduction in the capital expenditures was the last Board approved capital expenditures  
 26 included \$3.3M for a new Garage.

1 In creating the DSP (refer to Exhibit 2, Attachment 2-B), Thunder Bay Hydro has aligned the objective and  
2 scope of the 2017 - 2021 investment plan directly to the RRFE and Thunder Bay Hydro's core values, ensuring  
3 that the Board's DSP evaluation criteria of efficiency, customer value and reliability are embedded into the  
4 future plans. The main drivers in the DSP are voltage conversion, system renewal of overhead lines and  
5 underground plant, and investments in grid modernization to improve Thunder Bay Hydro's ability to provide  
6 reliable power to small commercial and large industrial customers through distribution automation. The DSP  
7 and Thunder Bay Hydro's Capital Expenditure Plan seeks to find the right balance between capital investments  
8 in new infrastructure, and operating and maintenance costs so that the combined total cost over the life of an  
9 asset is minimized. The proposed levels of capital investment are on average increasing in the first two years,  
10 then system access, system renewal and system service vary slightly for 2018 onwards, and General Plant  
11 fluctuates due to the Fleet and IT capital replacement. This is reflective of Thunder Bay Hydro's belief that over  
12 the forecast period, investment drivers will remain characteristically similar to 2018 and that there are no  
13 foreseen extraordinary expenditures. These capital expenditures are spread out over four categories (as seen  
14 in Table 1-25 below): System Renewal (SR), System Access (SA), System Service (SS) and General Plant  
15 (GP).

#### 16 Capital Expenditures for the 2017 Test Year

17 In the 2017 Test Year, Thunder Bay Hydro has planned for an increase in capital spending in comparison to  
18 the 2016 Bridge Year primarily due to increases in the System Renewal investment category. As outlined in  
19 Thunder Bay Hydro's DSP, System Renewal projects represent investments required due to assets reaching  
20 the end of their Typical Useful Life ("TUL") and have a poor health index as represented in the Kinectrics Asset  
21 Condition Assessment (ACA) report (see Exhibit 2, Attachment 2-B, Appendix C of the DSP). The results of  
22 this report resulted in a shift in infrastructure investment for Thunder Bay Hydro, which begins in 2017.

#### 23 24 System Renewal

25  
26 In previous Asset Management Plans, the focus of Thunder Bay Hydro's investment was the decommissioning  
27 of 4kV substations as per the TUL report provided by Kinectrics to the OEB. The detailed analysis of the  
28 Thunder Bay Hydro owned 4kV substation transformers completed by Kinectrics resulted in an extension of  
29 TUL due to winter peaking, low loading levels, and technical analysis of oil results.

30  
31 Due to this, Thunder Bay Hydro has determined that a shift to a more balanced System Renewal plan is  
32 necessary. Thunder Bay Hydro defines a balanced System Renewal plan as one which accounts for renewal of  
33 assets on 4kV as well as 12kV and 25kV, and of both overhead and underground classifications. This  
34 approach results in an increase from historical levels of investment in underground infrastructure and 25kV  
35 pole replacements. The shift in expenditures from historical levels of replacement will begin in 2017 and

1 Thunder Bay Hydro anticipates becoming aligned with the renewal levels suggested from Kinectrics by the  
 2 2019 fiscal year.

3  
 4 For the 2017 test year, in the System Renewal category, Thunder Bay Hydro forecasts \$5.5M in major projects  
 5 for voltage conversion, and an additional \$1.7M in wood pole replacements and \$1.1Mk to replace  
 6 underground cables, transformers and switches.

7 System Service

8 The System Service category includes \$230k for Distribution Automation expenditures to enhance Thunder  
 9 Bay Hydro's ability to provide improved reliability to Small Commercial and Large User Customers. This project  
 10 also includes investments in improved SCADA infrastructure and was developed in response to customer  
 11 preferences as received from feedback in the 2016 DSP customer engagement survey. For additional details  
 12 regarding the 5 year pacing of the Grid Modernization plan, as well as benefits to customers and the utility, see  
 13 Exhibit 2, Attachment 2-B Appendix D.

14 System Access

15 Thunder Bay Hydro does not expect to see any material changes in the System Access category in 2017 as  
 16 compared to 2016 expenditures.

17 General Plant

18 The General Plant category will slightly decrease in 2017 due to the SCADA upgrade implementation project  
 19 completion in 2016.

20  
 21 Thunder Bay Hydro is not seeking recover money from all Ontario ratepayers for renewable energy connection  
 22 cost per *O.Reg. 330/09*.

23  
 24 **Capital Expenditures for the Forecast Period**

25 Over the 2017 to 2021 Forecast period, Thunder Bay Hydro expects to see gradual increases year over year  
 26 on the Total Expenditure in the percentages as seen the table below.

27 **TABLE 1-25: CAPITAL EXPENDITURE FORECAST**

Category	2017	2018	2019	2020	2021	Forecast Variance 2017 to 2021
System Access	\$2,662,432	\$2,422,273	\$2,432,053	\$2,444,765	\$2,505,497	(\$156,935)
System Renewal	\$8,379,756	\$8,818,369	\$8,975,721	\$9,216,828	\$9,261,478	\$881,722
System Service	\$230,375	\$300,000	\$280,000	\$280,000	\$300,000	\$69,625

General Plant	\$1,167,500	\$1,359,760	\$946,131	\$900,514	\$969,308	(\$198,192)
Total Expenditure	\$12,440,063	\$12,900,402	\$12,633,905	\$12,842,107	\$13,036,284	\$596,221
% Change in Total		4%	-2%	2%	2%	5%

1

2 System Renewal

3 The gradual increases in Total Expenditures for the forecast period are primarily the result inflationary  
 4 increases in the System Renewal category. As a continuation of the strategy initiated in 2017, Thunder Bay  
 5 Hydro plans to continue the implementation of a more balanced level of asset replacement as recommended  
 6 by Kinectrics. These asset replacements include investments of assets reaching the end of their Typical Useful  
 7 Life (“TUL”) and have a poor health index as represented in the Kinectrics Asset Condition Assessment  
 8 (“ACA”) report (see Exhibit 2, Attachment 2-B, Appendix C).

9 The increases in expenditures from historical levels of replacement will begin in 2017 and Thunder Bay Hydro  
 10 anticipates becoming aligned with the renewal levels suggested from Kinectrics by the 2019 fiscal year. Once  
 11 the levels of asset replacement have been reached Thunder Bay Hydro expects that expenditures in the  
 12 System Renewal category to remain static from 2019 to 2021.

13

14 System Service

15 Over the 2017 to 2021 forecast period, Thunder Bay Hydro expects expenditures in System Service to remain  
 16 steady.

17

18 System Access

19

20 Over the 2017 to 2021 Forecast period, Thunder Bay Hydro expects expenditures in System Service to vary  
 21 slightly with a tendency towards an overall decrease. The System Access category is primarily influenced by  
 22 customer preferences, and can be difficult to forecast and budget. Thunder Bay Hydro has used historical  
 23 figures and consultations with the City of Thunder Bay to determine budgets, but in many cases connections  
 24 are requested and executed within the same year, resulting in large fluctuations year over year.

25

26 General Plant

27

28 Over the 2017 to 2021 Forecast period, Thunder Bay Hydro expects expenditures in the General Plant to  
 29 gradually decrease due to expenditures in the Fleet as per the Vehicle and Equipment Resource Justification  
 30 Plan Exhibit 2, Attachment 2-B, Appendix E.

**1.5.5 OPERATIONS, MAINTENANCE AND ADMINISTRATION EXPENSE (OM&A)**

Thunder Bay Hydro is requesting approval of \$15,736,572 for the 2017 Test Year which represents an increase of \$1,429,872 or 10% from the 2013 Board approved amount of \$15,729,872. The overall drivers and cost trends are as outlined in the following table:

**TABLE 1-26: OVERALL COST DRIVERS AND COST TREND SUMMARY**

Description	Amount
Last Rebasing Year - 2013 Board Approved	\$14,300,000
Description of Cost Drivers	
Salaries, Wages and Benefits	\$558,933
Outside Services	\$307,962
Postage / Courier	\$244,359
Administrative	\$181,771
Trucking	\$136,673
Memberships, Licenses, Fees	\$134,212
Telephone / Circuits	(\$90,994)
Cost Drivers less than materiality	(\$43,044)
OM&A increase from the 2013 OEB approved	\$1,429,872
OM&A %age increase	10.00%
<b>2017 Test Year OM&amp;A</b>	<b>\$15,729,872</b>

Salaries, wages and benefits are the most significant driver of Thunder Bay Hydro's OM&A costs, showing a \$558,933 increase from the Last Rebasing Year. Thunder Bay Hydro's complement has decreased by 5 FTE (after restating the 2013 Board Approved FTE to include overtime); however total corporate salaries and wages have increased by \$813,215 and benefits by \$139,237 as outlined in Table 1-27 as follows:

**TABLE 1-27: OVERALL COMPENSATION TREND SUMMARY**

Line No	Description	Last Rebasing Year - 2013 - OEB Approved	2017 Test Year	Variance
1	Salaries/Wages	\$10,670,317	\$11,483,532	\$813,215
2				7.6%
3	Benefits	\$2,682,178	\$2,821,415	\$139,237
4				5.19%
5	Total Compensation (Salary, Wages & Benefits)	\$13,352,495	\$14,304,947	\$952,452
6				7.13%

1 Outside Services are another significant cost driver. Thunder Bay Hydro is budgeting to increase the Tree  
2 Trimming Maintenance program as well as the Overhead and Underground Maintenance program (porcelain  
3 insulator replacement) with the objective of increasing reliability and reducing safety risks.

4 Postage/Courier costs are increasing to by \$244,359 to \$521,319 in 2017 Test Year costs from \$276,960 in the  
5 2013 Board Approved given that Thunder Bay Hydro will have fully implemented monthly billing for all  
6 customers by December 31, 2016 (previously Residential customers were billed on a bi-monthly basis).

7 Administrative costs is increasing by \$181,771 from the 2013 Board Approved; however, there are no  
8 functional expenses that are significant (greater than \$50K) in this grouping.

9 Trucking costs are increasing from the last rebasing by \$136,673 in the 2017 Test Year, largely attributable to  
10 depreciation on the new fleet facility and fleet.

11 Memberships, licenses and fees are another material cost driver for Thunder Bay Hydro. The Board revised its  
12 Cost Assessment Model (CAM) in 2016 which resulted in a 2017 Test Year expense of \$245,000 which is an  
13 increase of \$118,000 or a 93% increase over the Last Rebasing Year.

14 Telephone costs have decreased by \$90,994 from the 2013 Board Approved amounts in part, as a result of  
15 cost effective equipment replacement as discussed in the Performance Category: Service Quality section  
16 above.

17

18 See Exhibit 4 for detailed discussion of Thunder Bay Hydro's compensation and OM&A variances.

### 19 **1.5.6 COST OF CAPITAL**

---

20  
21 Thunder Bay Hydro has prepared its Application in accordance with the Board's guidelines provided in the  
22 *Report of the Board on Cost of Capital for Ontario's Regulated Utilities* (the "Cost of Capital Report") dated  
23 December 11, 2009. For the purposes of preparing this Application, Thunder Bay Hydro has used the cost of  
24 capital parameters issued by the Board on October 15, 2015 for 2016 Cost of Service rate applications for  
25 rates with effective dates in 2016.

26

27 Thunder Bay Hydro will update its evidence to reflect future Board cost of capital parameters for rates with  
28 effective dates in 2017, prior to the issuance of the Board's decision for its Application Thunder Bay is not  
29 proposing any deviation from the Boards Cost of Capital Methodology

1 **1.5.7 COST ALLOCATION & RATE DESIGN**

---

2 The data used in the updated cost allocation study is consistent with Thunder Bay Hydro's cost data that  
 3 supports the proposed 2017 revenue requirement outlined in this Application. The breakout of assets, capital  
 4 contributions, depreciation, accumulated depreciation, customer data and load data by primary, line  
 5 transformer and secondary categories were developed from the best data available to Thunder Bay Hydro, its  
 6 engineering records, and its customer and financial information systems.

7 As shown in Table 1-28, the 2017 cost allocation study indicates the revenue to cost ratios for General Service  
 8 > 1000 kW, Large User and Street Lighting classes are outside the Boards range. For 2017, it is proposed the  
 9 ratios for these classes are brought within the Board's range and a slight change be made to the General  
 10 Service < 50 to 999 kW class in order to maintain revenue neutrality.

11 **TABLE 1-28: REVENUE TO COST RATIOS**

Line No.	Rate Class	2017 Updated Cost Allocation Study	2017 Proposed Ratios	2018 & 2019 Proposed Ratios	Board Targets Min to Max	
1	Residential	99.6%	99.6%	99.6%	85.0%	115.0%
2	General Service < 50 kW	109.4%	109.4%	109.4%	80.0%	120.0%
3	General Service > 50 to 999	84.6%	84.9%	84.9%	80.0%	120.0%
4	General Service > 1000 kW	120.9%	120.0%	120.0%	80.0%	120.0%
5	Large Use	63.6%	85.0%	85.0%	85.0%	115.0%
6	Street Lighting	142.5%	120.0%	120.0%	80.0%	120.0%
7	Sentinel Lighting	98.3%	98.3%	98.3%	80.0%	120.0%
8	Unmetered Scattered Load	115.3%	115.3%	115.3%	80.0%	120.0%

13 **Rate Design**

14 Except for the Residential class, Thunder Bay Hydro proposes to maintain the fixed/variable proportions  
 15 assumed in the current rates to design the proposed monthly service and the distribution volumetric charges.  
 16 The charge for the Residential class reflects the implementation of the Board Policy on A New Distribution Rate  
 17 Design for Residential Electricity Customers (EB-2012-0410)

18  
 19  
 20

1 **TABLE 1-29: DISTRIBUTION CHARGES**

Line No.	Rate Class	Current 2016 Monthly Service Charge	Proposed 2017 Monthly Service Charge	% Difference	Unit of Measure	Current 2016 Volumetric Charge	Proposed Distribution Volumetric Charge incl Transformer Allowance Adjustment	% Difference
1	Residential	\$15.24	\$20.84	36.7%	kWh	\$0.0097	\$0.0078	(19.6%)
2	General Service < 50 kW	\$27.14	\$32.83	21.0%	kWh	\$0.0140	\$0.0169	20.7%
3	General Service > 50 to 999 kW	\$204.24	\$247.95	21.4%	kW	\$2.5993	\$3.1361	20.7%
4	General Service > 1000 kW	\$2,922.18	\$3,506.77	20.0%	kW	\$2.3087	\$2.6534	14.9%
5	Large User	\$2,922.18	\$4,796.27	64.1%	kW	\$2.3087	\$2.8045	21.5%
6	Street Lighting	\$1.16	\$1.17	1.2%	kW	\$7.0017	\$7.0863	1.2%
7	Sentinel Lighting	\$6.96	\$8.42	21.0%	kW	\$5.5838	\$6.7548	21.0%
8	Unmetered Scattered Load	\$7.05	\$8.53	21.0%	kWh	\$0.0103	\$0.0125	21.4%
9	Transformer Discount					-\$0.60	-\$0.60	0.0%

2  
 3 The percentage increases in the Residential charges outline the implementation of the Board's policy on  
 4 residential rate design. The percentage increases for General Service < 50, Sentinel Lighting and Unmetered  
 5 Scattered Load reflect the overall increase in distribution costs since the revenue to cost ratios were not  
 6 adjusted for these classes. The percentage increases for General Service > 50 to 999 kW and General  
 7 Service > 1000 kW class includes the impact of the overall increase in distribution costs, a change in revenue  
 8 to cost ratios and the impact of the transformer allowance adjustment which has remained the same from  
 9 current to proposed rates. The change in Large User rates includes the impact of the overall increase in  
 10 distribution cost, a change in the revenue to cost ratio and the impact of eliminating the transformer allowance  
 11 for this class. Lastly, the Street Lighting change reflects the impact of the overall increase in distribution costs  
 12 and a change in revenue to cost ratio.

13 **1.5.8 DEFERRAL AND VARIANCE ACCOUNTS**

14  
 15 As outlined in Exhibit 9, Thunder Bay Hydro is requesting approval of the disposition of Group 1, Group 2 and  
 16 Other Deferral and Variance Accounts ("DVAs") in the amount of \$282,484 as a refunded to customers. This  
 17 includes an RSVA – Global Adjustment amount of \$932,635 owed to Thunder Bay Hydro by Non-RPP  
 18 customers only and \$241,599 for Sub-Account 1580, Capacity Based Demand Response Class B customers.  
 19 Thunder Bay Hydro has used the Board's prescribed interest rates when calculating carrying charges on the  
 20 DVA balances. Forecasted interest is based upon the most recent posted interest rate published for the 3<sup>rd</sup>  
 21 quarter 2016.

22 **1.5.9 BILL IMPACTS**

23 In preparing this application, Thunder Bay Hydro undertook customer engagement activities which emphasized  
 24 to Thunder Bay Hydro the importance of focusing on affordable distribution rates.

1 Thunder Bay Hydro has carefully considered the effects of bill impacts on its customers with a goal of  
 2 minimizing those impacts. Bill impacts are within the Board's acceptable range, as shown in the table below.

3 **TABLE 1-30: BILL IMPACTS SUMMARY**

	CUSTOMER CLASS	Distribution Allocation	Total Bill Impact
Line No.		%	%
1	RESIDENTIAL SERVICE CLASSIFICATION - RPP	20.9%	1.57%
2	GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION - RPP	24.8%	2.31%
3	GENERAL SERVICE 50 to 999 kW SERVICE CLASSIFICATION - Non-RPP (Other)	27.0%	-0.98%
4	GENERAL SERVICE 1,000 to 4,999 kW SERVICE CLASSIFICATION - Non-RPP (Other)	22.0%	-1.30%
5	LARGE USE SERVICE CLASSIFICATION - Non-RPP (Other)	39.3%	-0.73%
6	UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - RPP	22.2%	0.67%
7	SENTINEL LIGHTING SERVICE CLASSIFICATION - RPP	21.3%	8.34%
8	STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	1.6%	-9.96%

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## 1.6 FINANCIAL INFORMATION

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### 1.6.1 AUDITED FINANCIAL STATEMENTS

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Copies of Thunder Bay Hydro's 2013, 2014 and 2015 Audited Financial Statements are provided in Attachment 1-L.

### 1.6.2 ANNUAL REPORT

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Copies of Thunder Bay Hydro's 2013, 2014 and 2015 Annual Reports are provided in Attachment 1-M.

### 1.6.3 RECONCILIATION - AUDITED FINANCIAL STATEMENTS & REGULATORY ACCOUNTING

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Reconciliations of Thunder Bay Hydro's Audited Financial Statements to the annual Regulatory Reporting Requirement ("RRR") Trial Balance for 2013, 2014 and 2015 are provide as Attachment 1-N.

### 1.6.4 RATING AGENCY REPORT

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Thunder Bay Hydro does not hold public debt, as such, does not require a rating agency report.

### 1.6.5 PROSPECTUSES OR INFORMATION CIRCULARS

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Thunder Bay Hydro has no past or planned prospectuses, information circulars, or other similar documents.

### 1.6.6 ACCOUNTING ORDERS

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The Accounting Standards Board ("AcSB") deferred mandatory adoption of IFRS for qualifying rate regulated entities to January 1, 2015. However, per the Board's letter of July 17, 2012, electricity distributors electing to remain on Canadian Generally Accepted Accounting Practices ("CGAAP") were required to implement regulatory accounting changes for depreciation and capitalization policies by January 1, 2013.

Thunder Bay Hydro confirms that it implemented the regulatory accounting changes for depreciation and overhead capitalization in 2013. Thunder Bay Hydro has prepared this Application on a Modified International Reporting Standards ("MIFRS") accounting basis, as required.

Thunder Bay Hydro has no further existing or proposed accounting orders.

### 1.6.7 CHANGES IN TAX STATUS

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Thunder Bay Hydro is incorporated pursuant to the Ontario *Business Corporations Act* and has not had a change in tax status since its last Cost of Service Application (EB-2012-0167).

### 1.6.8 STATEMENT OF ACCOUNTING STANDARD USED

---

Thunder Bay Hydro transitioned to IFRS on January 1, 2015 and restated 2014 Financial Statements to IFRS. This Application is being filed using MIFRS Accounting Standards. Historical years are represented under the following Accounting Standards: 2013 using CGAAP and MIFRS 2014 through to 2017.

1 Material changes as a result of IFRS adoption

2 Constructive Obligation and Actuarial Valuations were modified due to International Financial Reporting  
3 Standards ("IFRS"). Effective January 1, 2014, Thunder Bay Hydro was obligated to recognize the constructive  
4 obligation in relation to the future decommissioning of our station assets. Also, Thunder Bay Hydro was  
5 required to account for unamortized Future Employee Benefit valuation gains and accrue for the non-vested  
6 sick leave

7  
8 A summary of the impacts to revenue requirement between MIFRS and CGAAP can be found in the Board  
9 Appendix 2-Y, which can be found in Attachment 1-O to this Exhibit.

10 The accrual of the constructive obligation and non-vested sick leave totaling \$537, 277 would not be required to  
11 be reported under CGAAP and because the OEB required PP and E adjustments to be recorded in account  
12 1575, there is no MIFRS/ CGAAP difference. The only difference is a result of the requirement to amortize  
13 future employee benefit gains. This would have been immaterial for 2017

14

15 **1.6.9 NON-UTILITY BUSINESS ACCOUNTING**

16 Thunder Bay Hydro is involved in a number of non-utility business activities including:

17

- 18 • Renewable generation activities,
- 19 • Metering services to large industrial customers in the region,
- 20 • Locate services to the community, and
- 21 • Back office systems and support, IT hosted applications and program management that includes  
22 conservation programs to other electric utility companies in the district.

23 Thunder Bay Hydro confirms that accounting for these activities was segregated from Thunder Bay Hydro's  
24 rate regulated activities in accordance with the Board's Guidelines: Regulation and Accounting Treatments for  
25 Distributor-Owned Generation Facilities G-2009-0300 dated September 15, 2009.

26

27 Further, Thunder Bay Hydro is engaged in the delivery of the IESO's Conservation and Demand Management  
28 programs. The accounting for these activities is segregated from Thunder Bay Hydro's rate regulated activities  
29 in accordance with the Board's Accounting Procedures Handbook for Electricity Distributors.

30 **1.6.10 SEPARATION OF DISTRIBUTOR FUNCTION**

31 Thunder Bay Hydro confirms that this application only contains amounts attributable to the rate regulated  
32 business

33

34

1 **1.7 MATERIALITY THRESHOLD**

2 Chapter 2 of the Filing Requirements issued by the Board on July 14, 2016 sets out the materiality levels based  
3 on the magnitude of the revenue requirement. Thunder Bay Hydro's revenue requirement is greater than \$10  
4 million and less than \$200 million, therefore its materiality level is 0.5% of distribution revenue requirement.  
5 Thunder Bay Hydro's materiality threshold for the 2017 Test Year is \$118,670 as provided in Table 1-31 below.  
6 Thunder Bay Hydro has used a threshold of \$119,000 for assessing materiality for the purposes of this  
7 Application.

8  
9 **TABLE 1-31: MATERIALITY THRESHOLD FOR THE 2017 TEST YEAR**

Line No	Description	2017 Test Year
1	Distribution Revenue Requirement	\$23,996,075
2	Materiality Threshold	0.5%
3	Materiality Calculated	\$119,980
4	Materiality Used	\$119,000

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1 **1.8 ADMINISTRATION**

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2 **1.8.1 TABLE OF CONTENTS**

---

3 Table of Contents has been included for each Exhibit in this Application.

4 **1.8.2 CONTACT INFORMATION**

---

5 **The Applicant's Address for Service:**

6  
7 Thunder Bay Hydro Electricity Distribution Inc.  
8 34 Cumberland Street N.  
9 Thunder Bay, ON P7A 4L4  
10 Email: [regulatory@tbhydro.on.ca](mailto:regulatory@tbhydro.on.ca)  
11 Fax: 807-343-1009  
12  
13

14 **Contacts:**

15  
16 President and CEO  
17 Mr. Robert Mace, MBA  
18 Telephone: 807-343-1122  
19 Email: [rmace@tbhydro.on.ca](mailto:rmace@tbhydro.on.ca)  
20

21 Vice President, Finance  
22 Ms. Cindy Speziale, CPA, CA  
23 Telephone: 807-343-1118  
24 Email: [cspeziale@tbhydro.on.ca](mailto:cspeziale@tbhydro.on.ca)  
25

26 **Primary Application Contact**

27  
28 Vice President, Finance  
29 Ms. Cindy Speziale, CPA, CA  
30 34 Cumberland Street N.  
31 Thunder Bay, ON P7A 4L4  
32 Telephone: 807-343-1018  
33 Email: [cspeziale@tbhydro.on.ca](mailto:cspeziale@tbhydro.on.ca)  
34 Fax: 807-343-1009  
35

36 **1.8.3 LEGAL AND OTHER REPRESENTATION**

---

37  
38 Borden Ladner Gervais LLP  
39 40 King Street West  
40 Suite 4100  
41 Toronto, Ontario  
42 M5H 3Y4  
43  
44  
45  
46  
47

1 Effective October 17, 2016 the new address for Borden Ladner Gervais LLP  
2 Bay Adelaide Centre, East Tower  
3 22 Adelaide Street West  
4 Toronto, Ontario  
5 M5H 4E3

6  
7 Bruce Bacon  
8 Senior Utility Rate Consultant  
9 Telephone: 416-367-6087  
10 Cell: 416-825-4144  
11 Fax: 416-361-7366  
12 Email: [bbacon@blg.com](mailto:bbacon@blg.com)

13  
14 John Vellone  
15 Partner  
16 Telephone: 416-367-6730  
17 Cell: 416-801-7207  
18 Fax: 416-361-2758  
19 Email: [jvellone@blg.com](mailto:jvellone@blg.com)

20  
21

#### 22 **1.8.4 INTERNET ADDRESS & SOCIAL MEDIA**

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23 The Application and related materials will be posted on Thunder Bay Hydro's website, and will be available for  
24 viewing at the following internet address:

25

26 <https://tbhydro.on.ca/corporate/legal-regulatory-notice/notice>

27

28 The Application will further be communicated to customers and media via Facebook, through the following  
29 channel address:

30

31 <https://www.facebook.com/ThunderBayHydro>

32

33 The Application will also be available on the Board's website at:

34

35 [www.ontarioenergyboard.ca](http://www.ontarioenergyboard.ca), under Board File Number EB-2016-0105

#### 36 **1.8.5 AFFECTED CUSTOMERS & PUBLICATION**

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37 The persons affected by this Application are the ratepayers of Thunder Bay Hydro who reside within the City of  
38 Thunder Bay and Fort William First Nation Reserve. This includes residents, businesses and institutions within  
39 Thunder Bay Hydro's service territory.

40

1 Thunder Bay Hydro understands that the Board has implemented a new publication process that no longer  
2 requires the distributor to publish the notice of hearing. As such, Thunder Bay Hydro recommends that the  
3 notice of application be published in the primary publication (the Chronicle Journal newspaper) for both the City  
4 of Thunder Bay and Fort William First Nation Reserve in order to reach out to the affected customers. This is a  
5 paid publication with a daily readership and circulation of approximately 23,000.

#### 6 **1.8.6 BILL IMPACTS FOR PUBLICATION**

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7 In accordance with the filing instructions, Thunder Bay Hydro confirms that it has used 750 kWh per month for  
8 residential customers and 2000 kwh per month in its bill impacts calculation for its notice of application.

#### 9 **1.8.7 FORM OF HEARING**

---

10 The bill impacts resulting from this Application are with the Board's requirements, as shown in Section 1.5.9  
11 above. Accordingly, Thunder Bay Hydro requests that this Application be disposed of by way of a written  
12 hearing in order to expedite the proceeding.

#### 13 **1.8.8 EFFECTIVE DATE**

---

14 Thunder Bay Hydro requests that the Board make its Rate Order effective May 1, 2017 in accordance with the  
15 Filing Requirements.

16  
17 In the event that the Board is unable to provide a Decision and Order in this application for implementation by  
18 the Applicant as of May 1, 2017, the Applicant requests that the Board declare its current rates interim, effective  
19 May 1, 2017, pending the implementation of the Board's Rate Order for the 2017 rate year.

20  
21 In the event that the effective date does not coincide with the Board's decided implementation date for 2017  
22 distribution rates and charges, Thunder Bay Hydro requests permission to recover the incremental revenue  
23 from the effective date to the implementation date.

#### 24 **1.8.9 APPROVALS REQUIRED**

---

25  
26 In accordance with Chapter 2 Appendices, Thunder Bay Hydro has completed Board Appendix 2-A -  
27 Requested Approvals, which can also be found in Attachment 1-P of this Exhibit. Accordingly, in this  
28 proceeding, Thunder Bay Hydro is requesting the following approvals:

- 29
- 30 1. Approval to charge distribution rates effective May 1, 2017 to recover a service revenue requirement of  
31 \$25,243,529 which includes a Revenue Deficiency of \$4,160,021 as detailed in Exhibit 6. The schedule of  
32 proposed rates is set out in Exhibit 8. 2
  - 33 2. Approval of the DSP as outlined in Exhibit 2, Attachment 2-B.

- 1 3. Approval to adjust the Retail Transmission Rates – Network and Connection as detailed in Exhibit 8.
- 2 4. Approval to continue to charge Wholesale Market, Ontario Electricity Support Program and Rural Rate
- 3 Protection Charges approved in the Board Decision and Order in the matter of Thunder Bay Hydro's 2016
- 4 Distribution Rates (EB-2015-0103).
- 5 5. Approval to continue the Specific Service Charges and Transformer Allowance approved in the Board
- 6 Decision and Order in the matter of Thunder Bay Hydro's 2016 Distribution Rates (EB-2015-0103).
- 7 6. Approval of the proposed loss factors as detailed in Exhibit 8.
- 8 7. Approval of the rate riders for a one year disposition of the Group 1 and Group 2 and Other Deferral and
- 9 Variance Accounts as detailed in Exhibit 9.
- 10 8. Approval of the rate riders for a one year period to dispose of Constructive Obligation and Actuarial
- 11 Valuations due to the adoption of IFRS as detailed in Exhibit 9.
- 12 9. Approval of the rate riders for a one year disposition of the Lost Revenue Adjustment Mechanism
- 13 Variance Account ("LRAMVA") and Lost Revenue Adjustment Mechanism ("LRAM") for lost revenue for
- 14 the 2011-2014 program years, with persistence from January 1, 2011 to December 31, 2014. For
- 15 additional information, please refer to Exhibit 4.
- 16 10. Approval of the rate riders for a one year period to dispose of the remaining difference in incremental ITCs
- 17 received on distribution revenue requirement items that were previously subject to PST and became
- 18 subject to HST.

19  
20 Thunder Bay Hydro may request such other approvals as counsel for Thunder Bay Hydro may submit and the  
21 Board may allow.

#### 22 **1.8.10 ALIGNMENT OF RATE YEAR WITH FISCAL YEAR**

---

23 Thunder Bay Hydro does not seek approval to align its rate year with its fiscal year, as such, has not made this  
24 request as required in the Filing Requirements for Electricity Distribution Rate Applications ("Filing  
25 Requirements").

#### 26 **1.8.11 DEVIATION FROM FILING REQUIREMENTS**

---

27 Thunder Bay Hydro has not, to the best of its knowledge, deviated from the final Board's Filing Requirements.

#### 28 **1.8.12 METHODOLOGY CHANGES**

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29 Thunder Bay Hydro has not made any methodology changes from the Last Rebasing – 2013 OEB Approved  
30 other than conversion to MIFRS effective January 1, 2015 as discussed at Section 1.5.2.

#### 31 **1.8.13 BOARD DIRECTIVES**

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32 Thunder Bay Hydro has not received any other utility-specific directions from the Board since submitting its last  
33 Cost of Service application (EB-2012-0167) for May 1, 2013 distribution rates.

1 **1.8.14 MONTHLY BILLING**

---

2 Thunder Bay Hydro confirms that it is in the process of implementing monthly billing for all customers by  
3 December 31, 2016, pursuant to the Boards Distribution System Code Amendment of April 15, 2015.

4 **1.8.15 CONDITIONS OF SERVICE**

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5 The current version (January 18, 2016) of Thunder Bay Hydro's Conditions of Service is available on Thunder  
6 Bay Hydro's website at:

7 <https://tbhydro.on.ca/corporate/legal-regulatory-notice/conditions-service/>.

8 Thunder Bay Hydro submitted its original Conditions of Service in 2007 and has made the following changes  
9 since then:

- 10 • September 16, 2009 - Appendix E. Updated with Miscellaneous charges per Rate Order Approved.
- 11 • December 4, 2014 - Clarifications to Unmetered Services Section 1.6.1 and Section 3.8
- 12 • January 18, 2016 - Revisions to document to reflect changes in Distribution System Code and changes  
13 in standards. Removed historical rates from previously approved Rate Orders. Rates and charges  
14 which are the subject of past and future Applications are no longer contained in the Conditions of  
15 Service.

16 The revisions to the Conditions of Service are as a result of changes in regulations and industry practices and  
17 not as a result of this Application.

18 Thunder Bay Hydro confirms that there are no rates or charges listed in the Conditions of Service that are not  
19 on the Tariff of Rates and Charges.

20 **1.8.16 DISTRIBUTOR CONSOLIDATION**

---

21 Thunder Bay Hydro confirms that it has not amalgamated with another distributor since it was last rebased.

22

## 1.9 CORPORATE GOVERNANCE

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### 1.9.1 CORPORATE & UTILITY ORGANIZATIONAL STRUCTURE

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The Company is comprised of four (4) entities: Thunder Bay Hydro Corporation and its subsidiaries: Thunder Bay Hydro Electricity Distribution Inc. (Thunder Bay Hydro), Thunder Bay Hydro Utility Services Inc. (“TBHUSI”) and Thunder Bay Hydro Renewable Power Incorporated (“TBHRPI”). The Corporation of the City of Thunder Bay is the sole owner (Shareholder) of Thunder Bay Hydro Corporation and appoints a Board of Directors to oversee The Company.

The Board of seven (7) Directors serves Thunder Bay Hydro Electricity Distribution Inc., and three (3) of those directors, including the Chair, sit on the boards for Thunder Bay Hydro Corporation, Thunder Bay Hydro Utility Services Inc., and Thunder Bay Hydro Renewable Power Incorporated. Thunder Bay Hydro Corporation and its’ subsidiaries are governed by the Shareholder Declaration. The first Governing Principle in Section 2.2 is as follows:

“DistributionCo shall be operated in accordance with the Rate Minimization Model.”

The Rate Minimization Model is defined is defined at 1.1 (m) as follows:

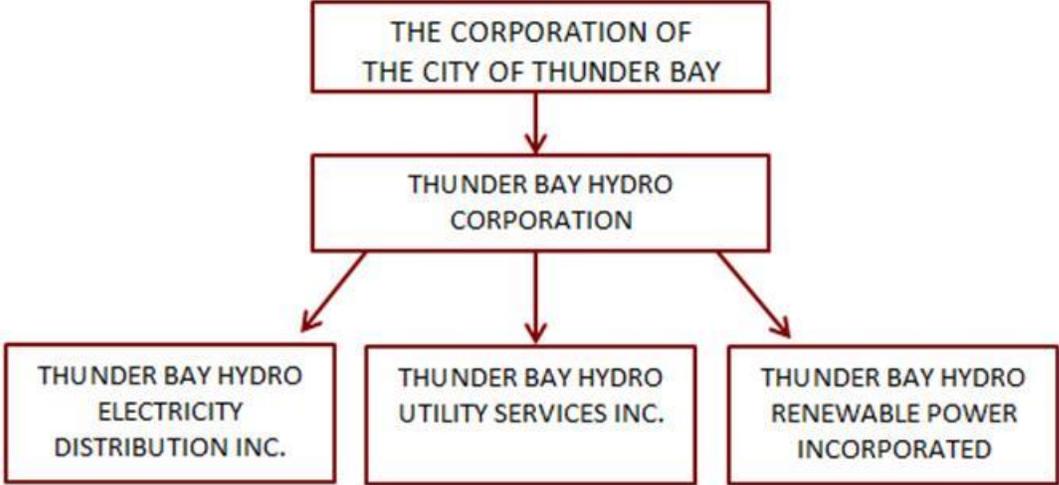
*Rate Minimization Model* means a Shareholder philosophy of minimizing electricity rates for customers of DistributionCo by having these rates reflect the Shareholder forgoing its allowable regulated return on shareholder equity from DistributionCo and forgoing payment of interest or principal on long term debt held in DistributionCo by the Shareholder.

Accordingly, the spirit of this principle is to keep electricity rates as low as possible and to encourage economic development by foregoing debt and dividend payments. The note payable to the City of Thunder Bay was set up without any provision for the payment of interest or the repayment of principal. Additionally, the Corporation of the City of Thunder Bay does not seek a dividend from Thunder Bay Hydro.

In addition, the Shareholder appoints the City Manager, or delegate, to be its representative on each of the Boards. The Shareholder Representative is permitted to attend any and all meetings of any Board; is not considered a Director of the Board for voting or quorum, director liability or any similar purpose; and must abide by all codes or policies created for the Boards of Thunder Bay Hydro.

Table 1-32 outlines the current organizational structure. Thunder Bay Hydro has not planned for changes in corporate or organizational structure.

1 **TABLE 1-32: CORPORATE ORGANIZATION STRUCTURE**

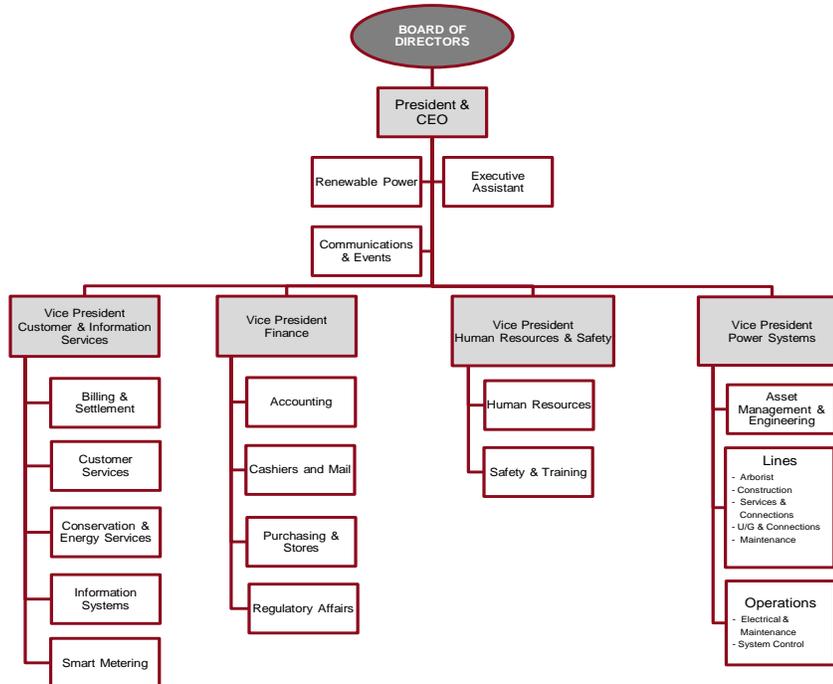


2  
3 The executive team at Thunder Bay Hydro comprises the President & Chief Executive Officer, the Vice  
4 President of Customer & Information Services, the Vice President of Finance, the Vice President of Human  
5 Resources & Safety, and the Vice President of Power Systems. There are no planned changes to corporate or  
6 operational structure, including no planned changes to legal organization or control.

7 The following table represents the organizational structure.

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1 **TABLE 1-33: THUNDER BAY HYDRO ORGANIZATION STRUCTURE**



2

3 Thunder Bay Hydro Corporation is wholly owned 100% by The Corporation of the City of Thunder Bay. It is a  
 4 holding company for shares of each of three subsidiaries; namely Thunder Bay Hydro Electricity Distribution  
 5 Inc., Thunder Bay Hydro Renewable Power Incorporated and Thunder Bay Hydro Utility Services Inc.

6

7 Thunder Bay Hydro is wholly owned 100% by Thunder Bay Hydro Corporation. It owns, operates and manages  
 8 a regulated electrical distribution system providing service to over 50,000 customers within the City of Thunder  
 9 Bay and Fort William First Nation. It is responsible for the power line system within the city limits of Thunder  
 10 Bay and for delivering electricity to the homes and businesses. It is the local, front-line customer service face of  
 11 the province's electrical industry providing for the reading of customer meters, billing, and offering energy  
 12 conservation advice and programs including 24-hour emergency response.

13

14 Thunder Bay Hydro Renewable Power Incorporated ("TBHRPI")

15

16 TBHRPI is wholly owned 100% by Thunder Bay Hydro Corporation. Its strategy is to develop renewable energy  
 17 generation projects in the Thunder Bay area. The company owns, operates and manages the Mapleward  
 18 Renewable Generating Station.

19

20

1 Thunder Bay Hydro Utility Services Inc. ("TBHUSI")  
 2

3 TBHUSI is wholly owned 100% by Thunder Bay Hydro Corporation. It provides back office systems and  
 4 support; IT hosted applications and program management that includes conservation programs to other electric  
 5 utility companies in the district. Metering services are also provided to large industrial customers in the region  
 6 along with Locate services.

7 **1.9.2 BOARD OF DIRECTORS AND INDEPENDENCE**

8 The Company's Board of Directors consists of seven (7) Directors appointed by the City of Thunder Bay  
 9 (Shareholder) through a selection process. Three (3) Directors are independent and one (1) is a City  
 10 Councillor. The Articles of Incorporation state that there is a minimum of one (1) and a maximum of fifteen (15)  
 11 directors on the board.

12  
 13 In order to achieve optimal composition, the Board has identified the following competencies, which are  
 14 reviewed annually: Strategic Planning, Financial Literacy, Risk Management, Mergers & Acquisitions,  
 15 Corporate Governance, Electricity Sector Knowledge, Regulated Market Experience, Corporate/Business Law,  
 16 Political, Senior Management Experience, Human Resources, Financial Management Experience, Succession  
 17 Planning & Executive Compensation, Regulatory and Internal Control. Directors participate in an annual self-  
 18 evaluation of their skillsets, as identified above, and complete an annual Board Effectiveness Survey.

19  
 20 Table 1-33 outlines Thunder Bay Hydro's current Board Members:

21  
 22 **TABLE 1-33: THUNDER BAY HYDRO CURRENT BOARD MEMBERS**  
 23

DIRECTOR	BOARD
Gary Armstrong, FCPA, FCMA	Chair, Thunder Bay Hydro Electricity Distribution Inc. Chair, Thunder Bay Hydro Corporation Chair, Thunder Bay Hydro Renewable Power Incorporated Chair, Thunder Bay Hydro Utility Services Inc.
Mark Bentz	Director, Thunder Bay Hydro Electricity Distribution Inc. Director, Thunder Bay Hydro Corporation Director, Thunder Bay Hydro Renewable Power Incorporated Director, Thunder Bay Hydro Utility Services Inc.
Denise Carpenter, ICD.D*	Director, Thunder Bay Hydro Electricity Distribution Inc.
Ralph Falcioni, P. Eng., MBA*	Director, Thunder Bay Hydro Electricity Distribution Inc.
Art Leitch, P.Eng, MBA, ICD.D*	Vice Chair, Thunder Bay Hydro Electricity Distribution Inc.
Hartley Multamaki, RPF	Director, Thunder Bay Hydro Electricity Distribution Inc. Vice Chair, Thunder Bay Hydro Corporation Vice Chair, Thunder Bay Hydro Renewable Power Incorporated

	Vice Chair, Thunder Bay Hydro Utility Services Inc.
Councillor Frank Pullia, MBA, CMA	Director, Thunder Bay Hydro Electricity Distribution Inc.

\* Independent Directors

1  
2 The Board of Directors has the authority and obligation to protect and enhance the assets (tangible, intangible,  
3 human resources) of Thunder Bay Hydro in the interest of the stakeholders (Shareholder, customers,  
4 employees, suppliers, and community) and is responsible under law for overseeing the actions of  
5 management.

6  
7 It is recognized that Directors are appointed by the Shareholder but the Board as a whole and individual  
8 Directors are not to represent a particular constituency but rather the stakeholders as a whole. The Board and  
9 the Directors are solely accountable to Thunder Bay Hydro.

### 10 **1.9.3 BOARD MANDATE**

11 The most recent version of Thunder Bay Hydro's Board of Directors Mandate is shown as in Attachment 1-P of  
12 this Exhibit.

13

1 **1.10 LETTERS OF COMMENT**

---

2 As of the date of filing this Application, no letters of comment have been received. Thunder Bay Hydro will file  
3 all responses to matters raised in letters of comment filed with the Board during the course of the proceeding in  
4 this Exhibit 1, in accordance with Section 2.4.9 of the Filing Requirement.

5  
6  
7



# **ATTACHMENT 1 – A**

List of Abbreviations

Accounting Procedures Handbook (APH)  
Administrative Services Only (ASO)  
Advanced Metering Infrastructure (AMI)  
Affiliate Relationships Code for Electricity Transmitters and Distributors (ARC)  
Allowance for Funds Used During Construction (AFUDC)  
Alternating Current (AC)  
Asset Condition Assessment (ACA)  
Asset Management Plan (AMP)  
Asset Retirement Obligation (ARO)  
Administrative Services Only (ASO)  
Bankers' Acceptance (BA)  
Base Revenue Requirement (BRR)  
Canadian Electricity Association (CEA)  
Canadian Generally Accepted Accounting Principles (CGAAP)  
Canadian Institute of Chartered Accountants (CICA)  
Canadian Pension Plan (CPP)  
Canadian Radio-Television and Telecommunications Commission (CRTC)  
Canadian Standards Association (CSA)  
Canadian Accounting Standards Board (AcSB)  
Capital Cost Allowance (CCA)  
Capacity Allocation Exempt (CAE)  
Capacity Allocation Required Applications (CAR)  
Capacity Based Demand Response (CBDR)  
Conservation and Demand Management (CDM)  
Construction-Work-in-Progress (CWIP)  
Consumer Price Index (CPI)  
Corporation of the City of Thunder Bay (City of Thunder Bay)  
Cost of Service (COS)  
Cross Link Poly ethylene (XLPE)  
Cumulative Eligible Capital (CEC)  
Customer Average Interruption Duration Index (CAIDI)  
Customer Information System (CIS)  
Customer Service Representatives (CSR)  
Deferral and Variance Accounts (DVAs)  
Direct Current (DC)  
Dissolved Gas Analysis (DGA)  
Distribution Availability Test (DAT)  
Distribution Service Code (DSC)  
Distribution Stations (DS)  
Economic Connection Test (ECT)  
Electrical & Utilities Safety Association (EUSA)  
Electrical Safety Authority (ESA)  
Electricity Distribution Rate (EDR)  
Electricity Distributors Association (EDA)  
Electronic Business Transactions (EBT)  
Eligible Capital Expenditure (ECE)  
Employee and Family Assistance Program (EFAP)  
Enterprise Resource Planning (ERP)  
Ethylene Propylene (EPR)  
Fair Market Value (FMV)  
Feed-In Tariff (Fit)  
First-In-First-Out ("FIFO")  
Fit Application Management Environment (FAME)  
Fort William Transformer Station (FWTS)  
Full Time Equivalent (FTE)  
General Accepted Accounting Principles (GAAP)  
General Service (GS)  
Geographic Information System (GIS)

Green Energy Act (GEA)  
Gross Domestic Product (GDP)  
Harmonized Sales Tax (HST)  
Hourly Ontario Energy Price (HOEP)  
Incentive Regulation Mechanism (IRM)  
Independent Electricity System Operator (the IESO)  
Information Service Division (ISD)  
Information System Department (ISD)  
Information Technology (IT)  
Infrastructure Health & Safety Association (IHSA)  
Input Tax Credit (ITC)  
Integrated Power System Plan (IPSP)  
International Brotherhood of Electrical Workers (IBEW)  
International Financial Reporting Standards (IFRS)  
International Organization for Standardization (ISO)  
Kilo Volt Amperes (kVa)  
Kilowatt (kW)  
Kilowatt hours (kWhs)  
Large Corporation Tax (LCT)  
Local Area Network (LAN)  
Local Distribution Company (LDC)  
Long Term (LT)  
Long Term Disability (LTD)  
Lost Revenue Adjustment Mechanism (LRAM)  
Low Income Energy Assistance Program (LEAP)  
Low Voltage (LV)  
Mapleward Renewable Generation Station (MRGS)  
Market Based Rate of Return (MBRR)  
Meter Data Management/Repository (MDM/R)  
Meter Data Management for Interval Meter Customers (MV90)  
Meter Service Provider (MSP)  
Metering and Electricity Revenue (MER)  
Ministry of Labour (MOL)  
Ministry of Transportation (MTO)  
Ministry of Environment and Energy (MOEE)  
Modified Canadian Generally Accepted Accounting Principles (MCGAAP)  
Modified International Financial Reporting Standards (MIFRS)  
Momentary Average Interruption Frequency Index (MAIDI)  
Municipal Electric Association Reciprocal Insurance Exchange (MEARIE)  
Net Book Value (NBV)  
North American Occupational Safety and Health Week (NAOSH)  
Occupational Health, Safety and Environment (OH&S)  
Occupational Health and Safety Assessment Series (OHSAS)  
Ontario Energy Association (OEA)  
Ontario Energy Board (OEB)  
Ontario Municipal Employees Retirement System (OMERS)  
Ontario Municipal Employees Retirement System Primary Pension Plan (OMERS Plan)  
Ontario Municipal Employees Retirement System Supplemental Plan for Police, Firefighters and Paramedics (Supplemental Plan)  
Ontario Value Added Tax (OVAT)  
Ontario Power Authority (OPA)  
Ontario Power Generation (OPG)  
Ontario Price Credit (OPC)  
Ontario Uniform Transmission Rates (UTRs)  
Operational Data Storage (ODS)  
Operations and Maintenance (O&M)  
Operations, Maintenance and Administration (OM&A)  
Outage Management System (OMS)  
Overhead (OH)

Paid-up Capital (PUC)  
Paper Insulated Lead Covered (PILC)  
Parts Per Million (ppm)  
Parts Per Billion (ppb)  
Payments in Lieu of Taxes (PILs)  
Peak Load Carrying Capability (PLCC)  
Personal Computer (PC)  
Polychlorinated Biphenyls (PCBs)  
Post Retirement Employee Benefits (PREB)  
Power Line Technician (PLT)  
Production Action Reports (PARs)  
Provincial Sales Tax (PST)  
Property Plant & Equipment (PP&E)  
Public Service Works on Highways Act (PSWHA)  
Quality Assurance (QA)  
Quality Control (QC)  
Regulated Price Plan (RPP)  
Remote Terminal Unit (RTU)  
Reliability Centered Maintenance (RCM)  
Reporting and Record Keeping Requirements (RRR)  
Retail Cost Variance Account (RCVA)  
Retail Settlement Code (RSC)  
Retail Settlement Variance Account (RSVA)  
Retail Transmission Service Rates (RTSRs)  
Radical Boom Derrick (RBD)  
Renewable Enabling Improvements (REIs)  
Renewable Energy Standard Offer Program (RESOP)  
Request for Proposal (RFP)  
Return on Equity (ROE)  
Second Generation Incentive Regulation Mechanism (2GIRM)  
Service Agreements (SAs)  
Shared Savings Mechanism (SSM)  
Smart Meters (SM)  
Smart Meter Disposition Rate Rider (SMDR)  
Smart Meter Incremental Rate Rider (SMIRR)  
Smart Meter Initiative (SMI)  
Special Purpose Charge (SPC)  
Sponsors Corporation (SC)  
Stranded Asset Rate Rider (SMRR)  
Supervisory Control and Data Acquisition (SCADA)  
System Average interruption Duration Index (SAIDI)  
System Average Interruption Frequency Index (SAIFI)  
System of Accounts (SOA)  
The Corporation of the City of Thunder Bay (City of Thunder Bay)  
Third Generation Incentive Regulation Mechanism (3GIRM)  
Thunder Bay Hydro Corporation (TBHC)  
Thunder Bay Hydro Electricity Distribution Inc. (TBHEDI)  
Thunder Bay Renewable Power Incorporated (TBRPI)  
Thunder Bay Utility Services Inc. (TBUSI)  
Time Current Characteristics (TCC)  
Time-of-Use (TOU)  
Total Loss Factor (TLF)  
Transmission Availability Test (TAT)  
Transformer Ownership Credit (TOC)  
Transformer Stations (TS)  
Tree Retardant Cross Linked Polyethylene Insulated Cables (TBRXLPE)  
Typical Useful Life (TUL)  
Undepreciated Capital Cost (UCC)  
Underground (U/G)

Uniform System of Accounts (USofA)  
Unmetered Scattered Load (USL)  
Utility Work Protection Code (UWPC)  
Validating, Editing and Estimating (VEE)  
Vice president (VP)  
Vulnerable Energy Consumers Coalition (VECC)  
Wide Area Network (WAN)  
Working Capital Allowance (WCA)  
Workplace Safety and Insurance Board (WSIB)  
Year's Maximum Pensionable Earnings (YMPE)

# **ATTACHMENT 1 – B**

Certification of Evidence



October 5, 2016

**Certification of Evidence**

As President & CEO of Thunder Bay Hydro Electricity Distribution Inc., I certify that the evidence filed in this Application, as amended, is accurate, consistent and complete to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'R. Mace', is positioned above the printed name and title.

Robert Mace, MBA  
President & CEO  
Thunder Bay Hydro Electricity Distribution Inc.

# **ATTACHMENT 1 – C**

2017 Cost of Service Filing Checklist

# 2017 Cost of Service Checklist

Thunder Bay Hydro

EB-2016-0105

Filing Requirement  
Page # Reference

Date: September 9th / 2016

		Yes/No/N/A	Evidence Reference / Notes
<b>GENERAL REQUIREMENTS</b>			
Ch 1, Pg. 2	Certification by a senior officer that the evidence filed is accurate, consistent and complete	Yes	1.1.2
Ch 1, Pg. 3	Confidential Information - Practice Direction has been followed	Yes	1.1.4
Ch 2, Pg. 3	Chapter 2 appendices in live Microsoft Excel format	Yes	1.15
4	If applicable, late applications filed after the commencement of the rate year for which the application is intended to set rates is converted to the following rate year.	Yes	1.8.7/1.8.8
4	Aligning rate year with fiscal year - request for proposed alignment	Yes	1.8.10
5	Text searchable and bookmarked PDF documents	Yes	1.1.6
6	Materiality threshold: additional details beyond the threshold if necessary	Yes	1.7
7	State accounting standard(s) used in historical, bridge and test years. Provide a summary of changes to its accounting policies made since the applicant's last cost of service filing. Identify all material changes or confirm no material changes in the adoption of IFRS. Appendix 2-Y	Yes	1.6.8
RESS Guideline	Two hardcopies of application sent to OEB the same day as electronic filing (p10 of RESS Guideline)	Yes	1.1.7

<b>EXHIBIT 1 - ADMINISTRATIVE DOCUMENTS</b>		
<b>Table of Contents</b>		
9	Table of Contents listing major sections and subsections of the application. Electronic version of application appropriately bookmarked to provide direct access to each section	Yes 1.8.1
<b>Executive Summary</b>		
9	Plain language description of objectives and business plan and how they relate to the application and the RRF objectives. Description should aid the OEB in understanding the impacts of the business plan on key areas such as customer service, system reliability, costs and bill impacts. Description of how customer feedback is reflected	Yes 1.3.1
<b>Administration</b>		
9	Primary contact information (name, address, phone, fax, email)	Yes 1.8.2
9	Identification of legal (or other) representation	Yes 1.8.3
9	Applicant's internet address for viewing of application and any social media accounts used by the applicant to communicate with customers	Yes 1.8.4
10	Statement identifying customers materially affected by the application including any change to any rate or charge and specific statement of what individual customer or customer groups would be affected by the proposed change	Yes 1.8.5
10	Statement identifying where notice should be published and why	Yes 1.8.5
10	Bill impacts - distribution only impacts for 750 kWh residential and 2000 kWh GS<50 (sub-total A of Tariff Schedule and Bill Impact Spreadsheet Model) to be used for notice	Yes 1.8.6
10	Form of hearing requested and why	Yes 1.8.7
10	Requested effective date	Yes 1.8.8
3 & 10	Statement identifying all deviations from Filing Requirements; identify concerns with models or changes to models	Yes 1.8.10 / 1.8.11
10	Statement identifying and describing any changes to methodologies used vs previous applications	Yes 1.8.12
10	Statement confirming that the distributor will have implemented monthly billing for all customers by December 31, 2016	Yes 1.8.14
10	Identification of OEB directions from any previous OEB Decisions and/or Orders. The applicant must clearly indicate how these are being addressed in the current application (e.g., filing of a study as directed in a previous decision)	Yes 1.8.13
10 & 11	Reference to Conditions of Service - LDC does not need to file Conditions of Service, but must provide reference to website and confirm version is current; identify if there are changes to Conditions of Service (a) since last CoS application or (b) as a result of the current application. Confirmation that there are no rates and charges linked in the Conditions of Service that are not in the distributor's Tariff of Rates and Charges must be provided	Yes 1.8.15
11	Description of the corporate and utility organizational structure, showing the main units and executive and senior management positions within the utility. Include a corporate entities relationship chart, showing the extent to which the parent company is represented on the utility company's Board of Directors and a description of the reporting relationships between utility and parent company management. Also include any planned changes in corporate or operational structure, including any changes in legal organization and control	Yes 1.9.1
11	List of approvals requested (and relevant section of legislation), including accounting orders - a PDF copy of Appendix 2-A should be provided in this section	Yes 1.8.9
<b>Distribution System Overview</b>		
11	Description of Service Area (including map, communities served)	Yes 1.2.1
11	Description of whether the distributor is a host distributor and/or embedded distributor. Identification of embedded and/or host distributors; if partially embedded provide %load from host distributor. If the distributor is a host, the applicant should identify whether there is a separate Embedded Distributor customer class or if any embedded distributors are included in other customer classes such as GS > 50 kW	Yes 1.2.2
11	Statement as to whether or not the distributor has had any transmission or high voltage assets deemed by the OEB as distribution assets and whether or not there are any such assets the distributor is seeking approval for in this application	Yes 1.2.3
<b>Application Summary</b>		
At a minimum, the items below must be provided. Applicants must also identify all proposed changes that will have a material impact on customers.		
12	Revenue Requirement - service RR, increase (\$ and %) from change from previously approved, main drivers	Yes 1.5.1
12	Budgeting and Accounting Assumptions - economic overview and identification of accounting standard used for test year and brief explanation of impacts arising from any change in standards	Yes 1.5.2
12	Load Forecast Summary - load and customer growth, % change in kWh and customer numbers, methodology description	Yes 1.5.3
12	Rate Base and DSP - major drivers of DSP, rate base for test year, change from last approved (\$ and %), capital expenditures requested for the test year, change in capital expenditures from last approved (\$ and %), summary of costs requested for renewable energy connections/expansions, any O.Reg 339/09 planned recovery, capex for test year, change from last approved, costs for any REG-related, smart grid, regional planning projects	Yes 1.5.4
13	OM&A Expense - OM&A for test year and change from last approved (\$ and %), summary of drivers, inflation assumed, total compensation for test year and change from last approved (\$ and %).	Yes 1.5.5
13	Cost of Capital - Statement regarding use of OEB's cost of capital parameters; summary of any deviations	Yes 1.5.6
13	Cost Allocation & Rate Design - summary of any deviations from OEB methodologies, significant changes and summary of proposed mitigation plans	Yes 1.5.7
13	Deferral and Variance Accounts - total disposition (RPP and non-RPP), disposition period, new accounts requested	Yes 1.5.8
13	Bill Impacts - total impacts (\$ and %) for all classes for typical customers	Yes 1.5.9
<b>Customer Engagement</b>		
13 & 14	Overview of customer engagement activities; description of plans and how customer needs, preferences and expectations have been reflected in the application.	Yes 1.4. - 1.4.7
14	Discussion on how customers were informed of the proposals being considered for inclusion in the application and the value of those proposals to customers i.e. costs, benefits, and the impact on rates	Yes 1.4. - 1.4.7
14	Discussion of any feedback provided by customers and how the feedback shaped the final application	Yes 1.4. - 1.4.7
14	Reference to any other communication sent to customers about the application i.e. bill inserts, town hall meetings or other forms of out reach and the feedback received from customers through these engagement activities	Yes 1.4. - 1.4.7
14	Complete Appendix 2-AC Customer Engagement Activities Summary - identify how outcomes have shaped the application	Yes 1.4.1
14	All responses to matters raised in letters of comment filed with the OEB.	Yes 1.10
<b>Performance Measurement</b>		
14 & 15	Discussion of performance for each of the distributor's scorecard measures over the last five years; drivers for its performance, plans for continuous improvement, identify performance improvement targets, forecast of efficiency assessment using the PEG forecasting model for the test year, discussion on how distributor's self-assessment has informed its business plan and the application	Yes 1.3.3
<b>Financial Information</b>		
15	Non-consolidated Audited Financial Statements for 2 most recent years (i.e. 3 years of historical actuals)	Yes 1.6.1
15	Detailed reconciliation of AFS with regulatory financial results filed in the application, with identification of any deviations that are being proposed	Yes 1.6.3
15	Annual Report and MD&A for most recent year of distributor and parent company, if applicable	Yes 1.6.2
15	Rating Agency Reports, if available; Prospectuses, etc. for recent and planned public issuances	Yes 1.6.4 / 1.6.5
15	Any change in tax status	Yes 1.6.7
15	Existing accounting orders and departures from the accounting orders and USoA	Yes 1.6.6
15	Accounting Standards used for financial statements and when adopted	Yes 1.6.8
16	Confirmation that accounting treatment of any non-utility business has segregated activities from rate regulated activities	Yes 1.6.9 / 1.6.10
<b>Distributor Consolidation</b>		
16	If a distributor has acquired or amalgamated with another distributor, identify any incentives that formed part of the acquisition or amalgamation transaction if the incentive represents costs that are being proposed to remain or enter rate base and/or revenue requirement.	Yes 1.8.16

<b>EXHIBIT 2 - RATE BASE</b>			
<b>Overview</b>			
16	Completed Fixed Asset Continuity Schedule (Appendix 2-BA) - in Application and Excel format	Yes	2.1.2
16 & 17 & 18	Opening and closing balances, average of opening and closing balances for gross assets and accumulated depreciation; working capital allowance (historical actuals, bridge and test year forecast)	Yes	2.1.1
17	Continuity statements (year end balance, including interest during construction and overheads). Explanation for any restatement (e.g. due to change in accounting standards) Year over year variance analysis; explanation where variance greater than materiality threshold Hist. OEB-Approved vs Hist. Actual Hist. Act. vs. preceding Hist. Act. Hist. Act. vs. Bridge Bridge vs. Test	Yes	2.1.3 / 2.22 / 2.2.1
17	Opening and closing balances of gross assets and accumulated depreciation must correspond to fixed asset continuity statements. If not, an explanation must be provided (e.g., WIP, ARO). Reconciliation must be between net book value balances reported on Appendix 2-BA and balances included in rate base calculation	Yes	2.1.2
<b>Gross Assets - PP&amp;E and Accumulated Depreciation</b>			
18	Breakdown by function and by major plant account; description of major plant items for test year	Yes	2.2.2 / 2.2.1
18	Summary of approved and actual costs for any ICM(s) and/ or ACM approved in previous IRM applications	Yes	2.6.11
18	Continuity statements must reconcile calculated depreciation expenses and presented by asset account	Yes	2.1.3 / 2.1.2
18	All asset disposals clearly identified in the Chapter 2 Appendices for all historical, bridge and test years and if any amounts related to gains or losses on disposals have been included in Account 1575 IFRS - CGAAP Transitional PP&E Amount	Yes	2.6.6
<b>Allowance for Working Capital</b>			
18	Working Capital - 7.5% allowance or Lead/Lag Study or Previous OEB Direction	Yes	2.4.1
19	Lead/Lag Study - leads and lags measured in days, dollar-weighted	Yes	2.4.1
19	Cost of Power must be determined by split between RPP and non-RPP customers based on actual data, use most current RPP (TOU) price, use current UTR. Should include SME charge.	Yes	2.4.1
<b>Treatment of Stranded Assets Related to Smart Meter Deployment</b>			
19	Stranded Meters - if the recovery of stranded conventional meters replaced by smart meters has not been reviewed and approved, a proposal for a Stranded Meter Rate Rider must be made Explanation for approaches that are not the OEB approach Completed Appendix 2-S.	Yes	2.5.3
<b>Capital Expenditures</b>			
21	As applicable - file evidence that demonstrates that regional issues have been appropriately considered and where applicable addressed in developing the applicant's proposed capital expenditure plan. As part of its planning an applicant should consider municipal planning, including any plans for expansion of boundaries from a regional perspective to demonstrate the most cost effective solutions are being considered	Yes	2.6.1
22	DSP filed as a stand-alone document; a discrete element within Exhibit 2	Yes	2.6.1 / 2-B
22	Complete Appendix 2-AB - historical years must be actuals, forecasts for the bridge and test years	Yes	2.6.2 / 2-C
22	Complete Appendix 2-AA along with: explanation for variances, including that of actuals v. OEB-approved amounts for last OEB-approved CoS application; for capital projects that have a project life cycle greater than one year, the proposed accounting treatment, including the treatment of the cost of funds for construction work-in-progress	Yes	2.6.2 / 2-D
22	Non-distribution activities - capital expenditures and reconciliation to total capital budget	Yes	2.6.7
22	If applicable, details of any capital contributions made or forecast to be made to a transmitter with respect to a Connection and Cost Recovery Agreement. Details to be provided include, initial forecast used to calculate contribution, amount of contribution (if any), true-up dates and potential true-up payments	Yes	2.6.6
23	Discussion outlining capital and operating efficiencies realized as a result of the deployment and operationalization of smart meters and related technologies (e.g., AMI communications networks, ODS) in its networks. Qualitative and quantitative description and support should be provided as applicable	Yes	2.6.8 / 2.6.11
23	Description of how incremental conservation initiatives have been considered in order to defer or avoid future infrastructure projects as part of distribution system planning processes	Yes	2.6.7
23	If applying for funding through distribution rates to pursue activities such as energy efficiency programs, demand response programs, energy storage programs etc. the application must include a consideration of the projected affects to the distribution system on a long term basis and the projected expenditures. Distributors should explain the proposed program in the context of the distributors five year Distribution System Plan or explain any changes to its system plans that are pertinent to the programs	Yes	2.6.7
23	Changes to capitalization policy since its last rebasing application as a result of the OEB's letter dated July 17, 2012 or for any other reasons, the applicant must identify the changes and the causes of the changes.	Yes	2.6.9-2.6.10
24	Appendix 2-D complete; identification of burden rates and burden rates prior to changes, if any	Yes	2.6.10
25	Generation Facilities - If applicable, proposal to divide the costs of eligible investments between the distributor's ratepayers and all Ontario ratepayers per O. Reg. 330/09; - Appendices 2-FA through 2-FC identifying all eligible investments for recovery	Yes	2.6.11 / 2.6.12 / 2-E
<b>New Policy Options for the Funding of Capital</b>			
25	Distributor may propose ACM capital project coming into service during Price Cap IR (a discrete project documented in DSP). Provide cost and materiality calculations to demonstrate ACM qualification	Yes	2.6.13
<b>Addition of ICM Assets to Rate Base</b>			
26	Distributor with previously approved ICM(s) - schedule of ICM amounts, variances and explanation	Yes	2.3 / 2.6.14
26 & 27	Balances in Account 1508 sub-accounts, reconciliation with proposed rate base amounts; recalculated revenue requirement should be compared with rate rider revenue	Yes	2.3 / 2.6.14
<b>Service Quality and Reliability Performance</b>			
27	5 historical years of ESQRs, explanation for any under-performance vs standard and actions taken	Yes	2.6.15
27	5 historical years of SAIDI and SAIFI - for all interruptions, all interruptions excluding loss of supply, and all interruptions excluding major events; explanation for any under-performance vs 5 year average and actions taken	Yes	2.6.15
27	Distributors may propose SAIDI and SAIFI benchmarks different than 5 year average, provide rationale	Yes	2.6.15
27	Completed Appendix 2-G	Yes	2.6.15
Ch 5 p9	Where applicable, explanation for section headings other than Chapter 5 headings; cross reference table	Yes	DSP - 5.1
Ch 5 p9-10	Distribution System Plan Overview - key elements, sources of cost savings, period covered, vintage of information on investment drivers, changes to asset management process since last DSP filing, dependencies	Yes	DSP - 5.2.1
Ch 5 p10-11	Coordinated Planning with 3rd parties - description of consultations - deliverables of the Regional Planning Process, or status of deliverables - OPA letter in relation to REG investments (Ch 5 p8&9) and Dx response letter	Yes	DSP - 5.2.2.3 / App B & A
Ch 5 p11	Performance Measurement - identify and define methods and measures used to monitor DSP performance - summary of performance and trends over historical period. Must include SAIFI and SAIDI for all interruptions and all interruptions excluding loss of supply - explain how information has affected DSP	Yes	DSP - 5.2.3.1
Ch5 p12	Asset Management Process Overview - description of AM objectives/corporate goals and how Dx ranks objectives for prioritizing investments	Yes	DSP - 5.3.1.1
Ch5 p12	Inputs/Outputs of the AM process and information flow for investments; flowchart recommended	Yes	DSP - 5.3.1.2
Ch 5 p13	Overview of Assets Managed - description of service area (including evolution of features in forecast period affecting DSP), - description of system configuration - service profile and condition by asset type (tables and/or figures) - date data compiled - assessment of degree the capacity of system assets is utilized	Yes	DSP - 5.3.2
Ch 5 p13-14	Asset Lifecycle Optimization - description of asset lifecycle optimization policies and practices, including asset replacement and refurbishment, maintenance planning criteria and assumptions - description of asset life cycle risk management policies and practices, assessment methods and approaches to mitigation	Yes	DSP - 5.3.3.
Ch 5 p14-15	Capital Expenditure Plan Summary for significant projects and activities to be undertaken - capability to connect new load or Gx customers, total annual capex over forecast period by investment category, description of how AMP and Capex planning have affected capital expenditures for each category - list, description and total capital cost of material capital expenditures sorted by category (table recommended) - information related to Regional Planning Process (Needs Assessment Report, Regional Planning Status Letter, Regional Infrastructure Plan - as appropriate) - description of customer engagement - Dx expectations of system development over next 5 years - list, description and total capital cost of projects planned in response to customer preferences, to take advantage of technology based opportunities, to study innovative processes (table recommended)	Yes	DSP - 5.4.4
Ch 5 p15	Capital Expenditure Planning Process Overview - description of capex planning objectives/criteria/assumptions, relationship with AM objectives, policy on consideration of non-distribution alternatives, processes used to identify projects in each investment category, customer feedback and impact on plan, method and criteria used to prioritize REG investments	Yes	DSP - 5.4.2
Ch 5 p16	System Capability Assessment for REG - REG applications > 10 kW, number and MW of REG connections for forecast period, capacity of Dx to connect REG, connection constraints	Yes	DSP - 5.4.3 / App A
Ch 5 p16-18	Capital Expenditure Summary by Investment Category - completed Table 2 of Ch 5 for historical and forecast period, explanation of markedly different variances plan vs actual, explanation of markedly different variances year over year	Yes	DSP - 5.4.4
Ch 5 p24	Table 2 of Ch 5 is provided in Excel format in Appendix 2-AB (must provide actual totals for historical years, as a minimum)	Yes	
Ch5 p19	Overall Plan - comparative expenditures by category over historical period, forecast impact of system investment on O&M, drivers of investments by category, information related to Dx system capability assessment	Yes	DSP - 5.4.5.1
Ch 5 p19-25	Material Investments - For each project that meets materiality threshold set in Ch 2 p10 - general information - total capital, customer attachments, dates, risks, variances, REG investments - evaluation criteria - may include: efficiency, customer value, reliability, etc. - category specific requirements for each project - system access, system renewal, system service, general plant (as applicable)	Yes	DSP - 5.4.5.2

<b>EXHIBIT 3 - OPERATING REVENUE</b>			
<i>Load and Revenue Forecasts</i>			
28	Explanation of causes, assumptions and adjustments for volume forecast. Economic assumptions and data sources for customer and load forecasts	Yes	3.2.2 / 3.2.3
28	Explanation of weather normalization methodology	Yes	3.2.2 / 3.2.3-3.2.9
28	Quantification of any impacts arising from the persistence of historical CDM programs as well as the forecasted impacts arising from new programs in the bridge and test years through the current 6-year CDM framework.	Yes	3.2.5 / 3.2.3-3.2.9
29	Completed Appendix 2-IB: the customer and load forecast for the test year must be entered on RRWF, Tab 10	Yes	3.2.2
29 & 30	Multivariate Regression Model - rationale for choice, regression statistics, explanation of weather normalization methodology, sources of data for endogenous and exogenous variables, any binary variables used to either account for individual data points or to account for seasonal or cyclical trends or for discontinuities in the historical data, explanation of any specific adjustments made; data used in load forecast must be provided in Excel format, including derivation of constructed variables	Yes	3.2.4 / 3.2.5 - 3.2.9
30	NAC Model - rationale for choice, data supporting NAC variables, description of accounting for CDM including licence conditions, discussion of weather normalization considerations	Yes	N / A
30 & 31	CDM Adjustment - account for CDM in 2017 load forecast. Consider impact of persistence of historical CDM and impact of new programs. Adjustments may be required for IESO reported results which are full year impacts	Yes	3.2.5 / 3.2.6 - 3.2.9
31	CDM savings for 2017 LRAMVA balance and adjustment to 2017 load forecast; data by customer class and for both kWh and, as applicable, kW. Provide rationale for level of CDM reductions in 2017 load forecast	Yes	3.2.8 / 3.2.6 - 3.2.9
31	Completed Appendix 2-I	Yes	3.2.5
<i>Accuracy of Load Forecast and Variance Analyses</i>			
31	Completed Appendix 2-IB	Yes	3.2.2 / 3.3.1
31	For customer/connection counts - identification as to whether customer/connection count is shown in year end or average format, year-over-year variances in changes of customer/connection counts with explanation of major changes, explanations of bridge and test year forecasts by rate class, for last rebasing variance analysis between last OEB-approved and actuals with explanations for material differences	Yes	3.3.1 / 3.3.2
31 & 32	For consumption and demand - explanation to support how kWh are converted to kW for applicable demand-billed classes, year-over-year variances in kWh and kW by rate class and for system consumption overall (kWh) with explanations for material changes in the definition of or major changes over time (should be done for both historical actuals against each other and historical weather-normalized actuals over time), explanations of the bridge and test year forecasts by rate class, variance analysis between the last OEB-approved and the actual and weather-normalized actual results	Yes	3.2.9 / 3.3.1 / 3.3.2 / 3.3.3
32	For revenues - calculation of bridge year forecast of revenues at existing rates, calculation of test year forecasted revenues at existing and proposed rates, year-over-year variances in revenues comparing historical actuals and bridge and test year forecasts	Yes	3.3.3 / 3.3.4 / 3.3.5
32	With respect to average consumption, for each rate class, distributors are to provide weather-actual and weather-normalized average annual consumption or demand per customer as applicable for last OEB approved and historical, weather normalized average annual consumption or demand per customer for the bridge and test years, explanation of the net change in average consumption from last OEB-approved and actuals from historical, bridge and test years based on year-over-year variances and any apparent trends in data	Yes	3.2.2 / 3.2.3 / 3.2.6
<i>Other Revenue</i>			
33	Completed Appendix 2-H	Yes	3.3.3
33	Variance analysis - year over year, historical, bridge and test	Yes	3.4.2
33	Any new proposed specific service charges, or proposed changes to rates or application of existing specific service charges	Yes	3.4.3
33	Revenue from affiliate transactions, shared services, corporate cost allocation	Yes	3.4.4
33	Distributors must identify any discrete customer groups that may be materially impacted by changes to other rates and charges	Yes	3.4.1

<b>EXHIBIT 4 - OPERATING COSTS</b>				
<b>Overview</b>				
34	Brief explanation of test year OM&A levels, cost drivers, significant changes, trends, inflation rate assumed, business environment changes	Yes	4.1.1 / 4.1.2 / 4.2.2	
<b>Summary and Cost Driver Tables</b>				
34	Summary of recoverable OM&A expenses; Appendix 2-JA	Yes	4.2.1 / 4-A	
34	Recoverable OM&A cost drivers; Appendix 2-JB	Yes	4.2.2 / 4-B	
34	Recoverable OM&A Cost per customer and per FTE; Appendix 2-L	Yes	4.2.3 / 4-C	
34	Identification of change in OM&A in test year in relation to change in capitalized overhead.	Yes	4.3.2	
35	OM&A variance analysis for test year with respect to bridge and historical years; Appendix 2-D	Yes	4.3.2	
<b>Program Delivery Costs with Variance Analysis</b>				
35	Completed Appendix 2-JC OM&A Programs Table - completed by program or major functions; include variance analysis limited to variances that are outliers, between test year and last OEB approved and most recent actuals, including an explanation for each significant change whether the change was within or outside the applicant's control and explanation of why	Yes	4.3.1 / 4.3.2 / 4-D	
35	For each significant change within the applicant's control describe business decision that was made to manage the cost increase/decrease and the alternatives	Yes	4.3.2	
<b>Workforce Planning and Employee Compensation</b>				
35	Employee Compensation - completed Appendix 2-K	Yes	4.4.6 / 4-F	
35	Description of previous and proposed workforce plans, including compensation strategy	Yes	4.4.4 / 4.4.3	
36	Discussion of the outcomes of previous plans and how those outcomes have impacted their proposed plans including an explanation of the reasons for all material changes to headcount and compensation. Explanation for all years includes: - year over year variances - basis for performance pay, eligible employee groups, goals, measures, and review process for pay-for-performance plans, - relevant studies (e.g. compensation benchmarking)	Yes	4.4.1 - 4.4.6	
36	Details of employee benefit programs including pensions for last OEB approved, historical, bridge and test; must agree with tax section	Yes	4.4.7	
36	Most recent actuarial report on employee benefits, pension and OPEBs	Yes	4.4.7 / 4-F	
36	Completed Appendix 2-KA - accounting method for pension and OPEBs	Yes	4.4.7 / 4-G	
<b>Shared Services and Corporate Cost Allocation</b>				
36	Identification of all shared services among affiliates and parent company; identification of the extent to which the applicant is a "virtual utility"	Yes	4.5.1 - 4.5.3	
36 & 37	Allocation methodology for corporate and shared services, list of costs and allocators, including any third party review	Yes	4.5.1	
37	Completed Appendix 2-N for service provided or received for historical, bridge and test; including reconciliation with revenue included in Other Revenue	Yes	4.5.1 / 4-I	
37	Shared Service and Corporate Cost Variance analysis - test year vs last OEB approved and most recent actual	Yes	4.5.5	
37	Identification of any Board of Director costs for affiliates included in LDC costs	Yes	4.5.4	
<b>Non-Affiliate Services, One-Time Costs, Regulatory Costs</b>				
37	Purchased Non-Affiliated Services - file a copy of procurement policy (signing authority, tendering process, non-affiliate service purchase compliance)	Yes	4.6	
37	For material transactions that are not in compliance with procurement policy, or that were undertaken pursuant to exceptions contemplated within the policy, an explanation as to why as well as a summary of the nature and cost of the product, and a description of the specific methodology used for selecting the vendor	Yes	4.6	
37	Identification of one-time costs in historical, bridge, test; explanation of cost recovery in test (or future years)	Yes	4.7	
38	Regulatory costs - breakdown of actual and forecast, supporting information related to CoS application, proposed recovery (i.e. amortized?). Completed Appendix 2-M	Yes	4.8 / 4-N	
<b>LEAP, Charitable and Political Donations</b>				
38	LEAP - the greater of 0.12% of forecasted service revenue requirement or \$2,000 should be included in OM&A and recovered from all rate classes	Yes	4.9	
38	Detailed information for all contributions that are claimed for recovery	Yes	4.9.4	
38	Charitable Donations - the applicant must confirm that no political contributions have been included for recovery	Yes	4.9.10	
<b>Depreciation, Amortization and Depletion</b>				
39	Explanations for any useful lives of an asset that are proposed that are not within the ranges contained in the Kinectrics Report	Yes	4.12.1 - 4.12.4	
18 & 39	Depreciation, Amortization and Depletion details by asset group for historical, bridge and test years. Include asset amount and rate of depreciation/amortization. Must agree to accumulated depreciation in Appendix 2-BA under rate base	Yes	4.12.4	
39	Identification of any Asset Retirement Obligations and associated depreciation, accretion expense	Yes	4.12.2	
39	Identification of historical depreciation practice and proposal for test year. Variances from half year rule must be documented and supporting rationale provided	Yes	4.12.2 - 4.12.4	
39	Copy of depreciation/amortization policy, or equivalent written description; summary of changes to depreciation/amortization policy since last CoS	Yes	4.12.3	
40	Explanation of any deviations from the practice of depreciating significant parts or components of PP&E separately	Yes	4.12.3-4.12.4	
40	For any depreciation expense policy or asset service lives changes since its last rebasing application: - identification of the changes and detailed explanation for the causes of the changes, including any changes subsequent to those made by January 1, 2013 - use of Kinectrics study or another study to justify changes in useful life - list detailing all asset service lives tied to USoA, detail differences in TUL from Kinectrics and explain differences outside of minimum and maximum TUL range from Kinectrics; Appendix 2-BB - File applicable depreciation appendices as provided in Chapter 2 MIFRS Appendices (Appendix 2-CA to 2-CK)	Yes	4.12.3 - 4.12.4	
<b>PILs and Property Taxes</b>				
40	Completed version of the PILs model (PDF and Excel); derivation of adjustments for historical, bridge, test years	Yes	4.13	
40	Supporting schedules and calculations identifying reconciling items	Yes	4.13.1	
41	Most recent federal and provincial tax returns	Yes	4.13	
15 & 41	Financial Statements included with tax returns if different from those filed with application	Yes	4.13	
41	Calculation of Tax Credits: redact where required (filing of unredacted versions is not required)	Yes	4.13	
41	Supporting schedules, calculations and explanations for other additions and deductions	Yes	4.13	
41	Explanation of how taxes other than income taxes or PILS (e.g. property taxes) are derived	Yes	4.13.1	
<b>Non-recoverable and Disallowed Expenses</b>				
41	Exclude from regulatory tax calculation any non-recoverable or disallowed expenses	Yes	4.14	
<b>Integrity Checks</b>				
41	Completion of Integrity checks listed on p.41; statement confirming completion	Yes	4.15	
<b>Conservation and Demand Management</b>				
43 & 44	LRAMVA - disposition of balance. Distributors must provide new LRAMVA Workform in a working Excel file and provide the following: - statement indicating use of most recent input assumptions when calculating lost revenue - statement indicating reliance on most recent CDM evaluation report from IESO; copy of report - Tables for each rate class showing lost revenue by year, list of programs applicable to rate class. Within each separate rate class table, a list of all the CDM programs/initiatives applicable to that rate class and the energy savings (kWh) and peak demand (kW) savings assigned to those programs/initiatives. For peak demand (kW) savings, the monthly multiplier amount used to convert the peak demand (kW) savings value included in the IESO's final results report into an annual value for each program - lost revenue calculations - energy savings by class and OEB-approved variable charge - statement that indicates if carrying charges are requested	Yes	4.16.1 - 4.16.2	
44	Third party report for any OEB-approved programs	Yes	4.16.1 - 4.16.2	

<b>EXHIBIT 5 - COST OF CAPITAL AND CAPITAL STRUCTURE</b>		
<i>Capital Structure</i>		
45	Statement that LDC adopts OEB's guidelines for cost of capital and confirms that updates will be done. Alternatively - utility specific cost of capital with supporting evidence	Yes 5.1.1
45	Completed Appendix 2-OA for last OEB approved and test year	Yes 5.1.1 / 5A
45	Completed Appendix 2-OB for historical, bridge and test years	Yes 5.2.1 / 5C
45	Explanation for any changes in capital structure	Yes 5.2.1 - 5.2.4
<i>Cost of Capital (Return on Equity and Cost of Debt)</i>		
45	Calculation of cost for each capital component	Yes 5.2.1 - 5.2.4
45	Profit or loss on redemption of debt	Yes 5.2
45	Copies of promissory notes or other debt arrangements with affiliates	Yes 5.2 / 5-B
45	Explanation of debt rate for each existing debt instrument	Yes 5.2.1
45	Forecast of new debt in bridge and test year - details including estimate of rate	Yes 5.2.1 / 5.2.2
46	If proposing any rate that is different from the OEB guidelines, a justification of the proposed rate(s), including key assumptions	Yes 5.2.1
46	Notional Debt - difference between actual debt thickness and deemed debt thickness attracts the weighted average cost of actual long-term debt rate (unless 100% equity financed)	Yes 5.2.6
<i>Not-for-Profit Corporations</i>		
47	Not for Profit Corporations - evidence that excess revenue is used to build up operating and capital reserves	Yes 5.3 - n/a
47	Detailed calculation for test year revenue requirement based on its Reserve Requirement	Yes 5.3 - n/a
47	The proposed reserves and rationale for the need to establish each reserve, the time period of building up the reserves, and the procedure and policy of each reserve	Yes 5.3 - n/a
47	Description of the governance of the not-for-profit corporation	Yes 5.3 - n/a
47	If there are approved reserves from previous OEB decisions provide the following: -any changes to the reserve policies and rationale for the changes since last CoS limits of any capital and/or operating reserves as approved by the OEB and identify decisions -current balances of any established capital and/or operating reserves -list withdrawals from capital and operating reserves, identify amounts and purpose of withdrawal -if limits on capital and operating reserves achieved provide a proposal for utilization of amounts -if limits on reserves not achieved provide rationale and the detail for its forecast of the Reserve Requirement for the test year	Yes 5.3 - n/a
<b>EXHIBIT 6 - REVENUE DEFICIENCY/SUFFICIENCY</b>		
48	Calculation of delivery-related Revenue Deficiency/Sufficiency (excluding cost of power and associated costs): net utility income, rate base, actual return on rate base, indicated rate of return, requested rate of return, deficiency/sufficiency, gross deficiency/sufficiency. Deficiency/sufficiency must also be net of other costs (e.g. LV costs, RSVAs, smart meter and other DVA balances).	Yes 6.1.1 / 6.1.2
48	Summary of drivers for test year deficiency/sufficiency, how much each driver contributes; references in application evidence mapped to drivers	Yes 6.3.1 / 6.4.1
49	Impacts of any changes in methodologies to deficiency/sufficiency	Yes 6.4.1
<i>Revenue Requirement Work Form</i>		
49	RRWF - in PDF and Excel. Revenue requirement, def/sufficiency, data entered in RRWF must correspond with other exhibits	6.1.1 / 6-A
49	If the enhanced RRWF cannot reflect a distributor's proposed rates accurately, the distributor must file its rate generator model	Yes 6.3.1 / 6-A
<b>EXHIBIT 7 - COST ALLOCATION</b>		
<i>Cost Allocation Study Requirements</i>		
50	Completed cost allocation study using the OEB-approved methodology or a comparable model must be filed reflecting future loads and costs and be supported by appropriate explanations and live Excel spreadsheets. Sheets 11 and 12 of the RRWF must also be completed. Live Excel version of 2017 cost allocation model will be filed (updated load profiles or scaled version of HONI CAIF). Model must be consistent with test year load forecast, changes to customer classes and load profiles.	Yes 7.3.1 / 7.1
50	Explanation provided if a distributor is unable to update its load profiles and confirm that it intends to put plans in place to update its load profiles the next time a cost allocation model is filed	Yes 7.3.1
51	Description of weighting factors, and rationale for use of default values (if applicable)	Yes 7.3.2
51	Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)	Yes 7.3.2
51 & 52	Host Distributor - evidence of consultation with embedded Dx - Statement regarding embedded Dx support for approach to allocation of costs - If embedded Dx is separate class - class in cost allocation study and RRWF, Sheet 11 - If new embedded Dx class - rationale and supporting evidence (cost of serving, load served, asset ownership information, distribution charges); include in cost allocation study and RRWF, Sheet 11 - If embedded Dx billed as GS customer - , include with the GS class in cost allocation model and Appendix 2-P. Provide cost of serving, load served, asset ownership information, distribution charges, appropriateness of rate class. File Appendix 2-Q.	Yes 7.2.6
52	Unmetered Loads (including Street Lighting) - Confirmation of communication with unmetered load customers when proposing changes to the level of the rates and charges or the introduction of new rates and charges	Yes 7.2.3
52	microFIT - if the applicant believes that it has unique circumstances which would justify a certain rate, appropriate documentation must be provided	Yes 7.2.5
53	Standby Rates - If seeking approval on final basis, provide evidence that affected customers have been advised. If seeking changes to standby charges, provide rationale and evidence that affected customer have been advised.	Yes 7.2.4
53	New customer class or eliminated customer class - rationale and restatement of revenue requirement from previous CoS	Yes 7.2.1 / 7.3.2
<i>Class Revenue Requirements</i>		
53 & 54	To support a proposal to rebalance rates, the distributor must provide information on the revenue by class that would apply if all rates were changed by a uniform percentage. Ratios must be compared with the ratios that will result from the rates being proposed by the distributor.	Yes 7.3.2
<i>Revenue to Cost Ratios</i>		
54	If R:C ratios outside deadband based on model - distributors must include cost allocation proposal to bring them within the OEB-approved ranges. In making any such adjustments, distributors should address potential mitigation measures if the impact of the adjustments on the rates of any particular class or classes is significant.	Yes 7.3.3
55	If Cost Allocation Model other than OEB model used - exclude LV, exclude DVA such as smart meters	Yes 7.3.1

<b>EXHIBIT 8 - RATE DESIGN</b>			
55	Monthly fixed charges - 2 decimal places; variable charges - 4 decimal places	Yes	8.1.3
<b>Fixed Variable Proportion</b>			
55 & 56	The following is to be provided in relation to the fixed/variable proportion of proposed rates: -Current F/V with supporting info -Proposed F/V proportion with explanation for any changes (billing determinants from proposed load forecast) -Comparison between current and proposed monthly fixed charges with the floor and ceiling as in cost allocation study Analysis must be net of rate adders, funding adders, and rate riders	Yes	8.1.2 / 8.1.3
<b>Rate Design Policy</b>			
56	LDCs must propose changes to residential rates consistent with policy to transition to fully fixed monthly distribution service charge.	Yes	8.1.2
56	Proposal follows approach set out in Tab 12 of RRWF	Yes	8.1.2
57	If applicable, distributor with seasonal residential class must propose identical rate design treatment for such a class	Yes	8.1.2
<b>RTSRs</b>			
57	Retail Transmission Service Rate Work Form - PDF and Excel	Yes	8.4.2 / 8-A
57	RTSR information must be consistent with working capital allowance calculation	Yes	8.4.2
<b>Retail Service Charges</b>			
57	If proposing changes to Retail Service Charges or introduction of new rates and charges - evidence of consultation and notice	Yes	8.9
<b>Regulatory Charges</b>			
57	Wholesale Market Service Rate - reflect current approved rate in application or justify otherwise	Yes	8.5.1
<b>Specific Service Charges</b>			
58	Specific Service Charge description/purpose/reason for new and revised SSC; calculations to support charges	Yes	8.8.1
58	Identification in the Application Summary all proposed changes that will have a material impact on customers, including charges that may affect a discrete group.	Yes	8.8.2
58	Identification of any rates and charges in Conditions of Service that do not appear on tariff sheet. Explain nature of costs, provide schedule outlining revenues or capital contributions 2012-2015, bridge and test years.	Yes	8.8.4
58	Whether these charges should be included on tariff sheet	Yes	8.8.1
58	Ensure revenue from SSCs corresponds with Operating Revenue evidence	Yes	8.8.1
<b>Low Voltage Service Rates</b>			
58	Forecast of LV cost, sum of host distributors charges	Yes	8.3 N/A
58 & 59	Low Voltage Cost (historical, bridge, test), variances and explanations for substantive changes	Yes	8.3 N/A
59	Support for forecast LV, e.g. Hydro One Sub-Transmission charges	Yes	8.3 N/A
59	Allocation of LV cost to customer classes (typically proportional to Tx connection revenue)	Yes	8.3 N/A
59	Proposed LV rates by customer class	Yes	8.3 N/A
<b>Loss Factors</b>			
59	Proposed SFLF and Total Loss Factor for test year	Yes	8.10.2
59	Statement as to whether LDC is embedded including whether fully or partially	Yes	8.10.1
59	Study of losses if required by previous decision	Yes	8.10.1
59	3-5 years of historical loss factor data - Completed Appendix 2-R	Yes	8.10.2
59	If proposed loss factor >5%, explanation and action plan to reduce losses going forward	Yes	8.10.3
59	Explanation of SFLF if not standard	Yes	8.10.2
<b>Tariff of Rates and Charges</b>			
59	Current and proposed Tariff of Rates and Charges filed in the Tariff Schedule/Bill Impacts Model - each change must be explained and supported in the appropriate section of the application	Yes	8.11
60	Explanation of changes to terms and conditions of service if changes affect application of rates	Yes	8.11
<b>Revenue Reconciliation</b>			
60	Calculations of revenue per class under current and proposed rates; reconciliation of rate class revenue and other revenue to total revenue requirement	Yes	8.12
60	Completed RRWF - Sheet 13 - rates and charges entered on this sheet should be rounded to the same decimal places as tariff	Yes	8.12
<b>Bill Impact Information</b>			
60	Completed Bill Impacts Model for all classes in the distributor's tariff schedule. Bill impacts must identify existing rates, proposed changes to rates, and detailed bill impacts.	Yes	8.13
60	Impact of changes resulting from the as-filed application on representative samples of end-users (i.e. volume, % rate change and revenue). Commodity and regulatory charges held constant	Yes	8.13
60	Rates and charges input in the tariff schedule and Bill Impacts Model rounded to the decimal places as shown on the existing tariff	Yes	8.13
61	Bill impacts provided for typical customers and consumption levels. Must provide residential 750 kWh, residential at the lowest 10th percentile and GS<50 2,000 kWh. Bill impacts must be provided for a range of consumption levels relevant to the service territory.	Yes	8.13
61	If applicable, for certain classes where one or more customers have unique consumption and demand patterns, the distributor must show a typical impact and provide an explanation	Yes	8.13
<b>Rate Mitigation</b>			
61	Evidence showing that the monthly service charge would not rise by more than \$4 per year due only to the rate design change, and that the total bill impact, reflecting all proposed changes in the application, will not exceed 10%. If either of these criteria is not met, some form of mitigation may be required (i.e. extending transition period).	Yes	8.14.1
62	Evaluation of bill impact for residential customer at 10th consumption percentile. Describe methodology for determination of 10th consumption percentile. File mitigation plan for whole residential class if impact >10% for these customers.	Yes	8.14.2
62 & 63	Mitigation plan if total bill increase for any customer class is >10% including: specification of class and magnitude of increase, description of mitigation measures, justification, revised impact calculation. The Tariff Schedule and Bill Impacts Model must reflect any mitigation plan proposed.	Yes	8.14.3
63	Rate Harmonization Plans, if applicable - including impact analysis	Yes	8.14.4

<b>EXHIBIT 9 - DEFERRAL AND VARIANCE ACCOUNTS</b>		
63	List of all outstanding DVA and sub-accounts; provide description of DVAs that were used differently than as described in the APH	Yes 9.2 / 9.6
63	Completed DVA continuity schedule for period following last disposition to present - live Excel format	Yes 9.1 / 9-A
63	Confirm use of interest rates established by the OEB by month or by quarter for each year	Yes 9.2.3
64	Explanation if account balances in continuity schedule differs from trial balance in RRR and AFS	Yes 9.2.1 / 9.5.4 / 9.5.6 / 9.5.7
64	Identification of Group 2 accounts that will continue/discontinue going forward, with explanation	Yes 9.6.2
64	Statement as to any new accounts, and justification.	Yes 9.6.1
64	Statement whether any adjustments made to DVA balances previously approved by OEB on final basis; explanation, amount of adjustment and supporting documents	Yes 9.4
64	Breakdown of energy sales and cost of power by USoA - as reported in AFS mapped and reconciled to USoA. Provide explanation if making a profit or loss on commodity.	Yes 9.2.2
64	Statement confirming that IESO GA charge is pro-rated into RPP and non-RPP; provide explanation if not pro-rated.	Yes 9.8.1
<b>One-Time Incremental IFRS Costs</b>		
64 & 65	Request for disposition of Account 1508 sub-account IFRS Transition Costs if balances are still in account and not previously requested for disposition: - completed Appendix 2-YA -statement whether any one time IFRS transition costs are embedded in 2017 revenue requirement, where and why it is embedded, and the quantum -explanation for material variances in Account 1508 sub-account IFRS Transition Costs Variance - explanation on why costs incurred after adoption of IFRS, if any, and the nature of the costs - statement that no capital costs, ongoing IFRS compliance costs are recorded in 1508 sub-account; provide explanation if this is not the case	Yes 9.5.1
<b>Account 1575, IFRS-CGAAP Transitional PP&amp;E Amounts</b>		
65 & 66	1575 IFRS-CGAAP PP&E account - Account 1575 and 1576 can't be used interchangeably - breakdown of balance, including explanation for each accounting change; Appendix 2-EA - listing and quantification of drivers - volumetric rate rider to clear 1575; separate rider must be on a fixed basis for the residential class; - rate of return component is to be applied to 1575 but not recorded in 1575 - statement confirming no carrying charges applied to 1575 - explanation for the basis of the proposed disposition period to clear Account 1575 rate rider - show the balance in DVA continuity schedule	Yes 9.5.8
<b>Account 1576, Accounting Changes under CGAAP</b>		
67	Changes to depreciation and capitalization in 2012 or 2013 - Account 1576 IFRS-CGAAP PP&E - Appendix 2-BA must not be adjusted for 1576 - breakdown of balance related to 1576, Appendix 2-EB or 2-EC - drivers of change in closing net PP&E identified and quantified - volumetric rate rider to clear 1576; the rider for the residential class must be on a fixed basis - rate of return component is to be applied to 1576 but not recorded in 1576 - statement confirming no carrying charges applied to 1576 - explanation for the basis of the proposed disposition period to clear Account 1576 rate rider - show the balance in DVA continuity schedule	Yes 9.5.9
<b>Retail Service Charges</b>		
67 & 68	Retail Service Charges - material balance in 1518 or 1548 - confirm variances are incremental costs of providing retail services; identify drivers for balances - provide schedule identifying all revenues and expenses listed by USoA for 2013, actual/forecast for bridge and test year - state whether Article 490 of APH has been followed; explanation if not followed	Yes 9.5.2 / 9.5.5
68	Retail Service Charges - zero balance in 1518 or 1548 - state whether Article 490 of APH has been followed; explanation if not followed	Yes 9.5.2 / 9.5.5
<b>Disposition of Deferral and Variance Accounts</b>		
68	Identify all accounts for which LDC is seeking disposition; identify DVA for which LDC is not proposing disposition and the reasons why	Yes 9.3
68	Statement whether DVA balances before forecasted interest match the last AFS; explain any variances	Yes 9.2.1
68	Provide an explanation of variance > 5% between amounts proposed for disposition and amounts reported in RRR for each account.	Yes 9.2.1
68	Provide explanations if variances are < 5% threshold if the variances in question relate to: (1) matters of principle (i.e. conformance with the APH or prior OEB decisions, and prior period adjustments); and/or, (2) the cumulative effect of immaterial differences over several accounts total to a material difference between what is proposed for disposition in total before forecasted interest and what is recorded in the RRR filings	Yes 9.2.1
68	Show relevant calculations: rationale for allocation of each account, proposed billing determinants	Yes 9.7.1
68	Propose charge type (fixed or variable) for recovery purposes in accordance with Rate Design Policy	Yes 9.7.2
68	Propose rate riders for recovery or refund of balances that are proposed for disposition. The default disposition period is one year; if the applicant is proposing an alternative recovery period must provide explanation.	Yes 9.7.2
69	Establish separate rate riders to recover balances in the RSVA's from Market Participants who must not be allocated the RSVA balances related to charges for which the MP's settle directly with the IESO.	Yes 9.7.1
69	Proposed disposition of Account 1580 sub-account CBR Class B in accordance with the CBR Accounting Guidance. In the DVA continuity schedule, applicants must indicate whether they serve any Class A customers. Account 1580 sub-account CBR Class A is not to be disposed through rates proceedings but rather follow the OEB's accounting guidance.	Yes 9.4.2
<b>Global Adjustment</b>		
69	Establishment of a separate rate rider included in the delivery component of the bill that would apply prospectively to Non-RPP customers when clearing balances from the GA Variance Account	Yes 9.8.2 / 9.8.3
69	Indicate whether a Class B customer switched to Class A during the 2015 rate year in DVA Continuity Schedule	Yes 9.8.2 / 9.8.3
70	Description of settlement process with IESO or host distributor, specify GA rate used for each rate class, itemize process for providing estimates and describe true-up process, details of method for estimating RPP and non-RPP consumption, treatment of embedded generation/distribution.	Yes 9.8.2 / 9.8.3
<b>Establishment of New Deferral and Variance Accounts</b>		
70	New DVA - information provided which addresses that the requested DVA meets the following criteria: causation, materiality, prudence; include draft accounting order.	Yes 9.6.1

TOTAL "NO"

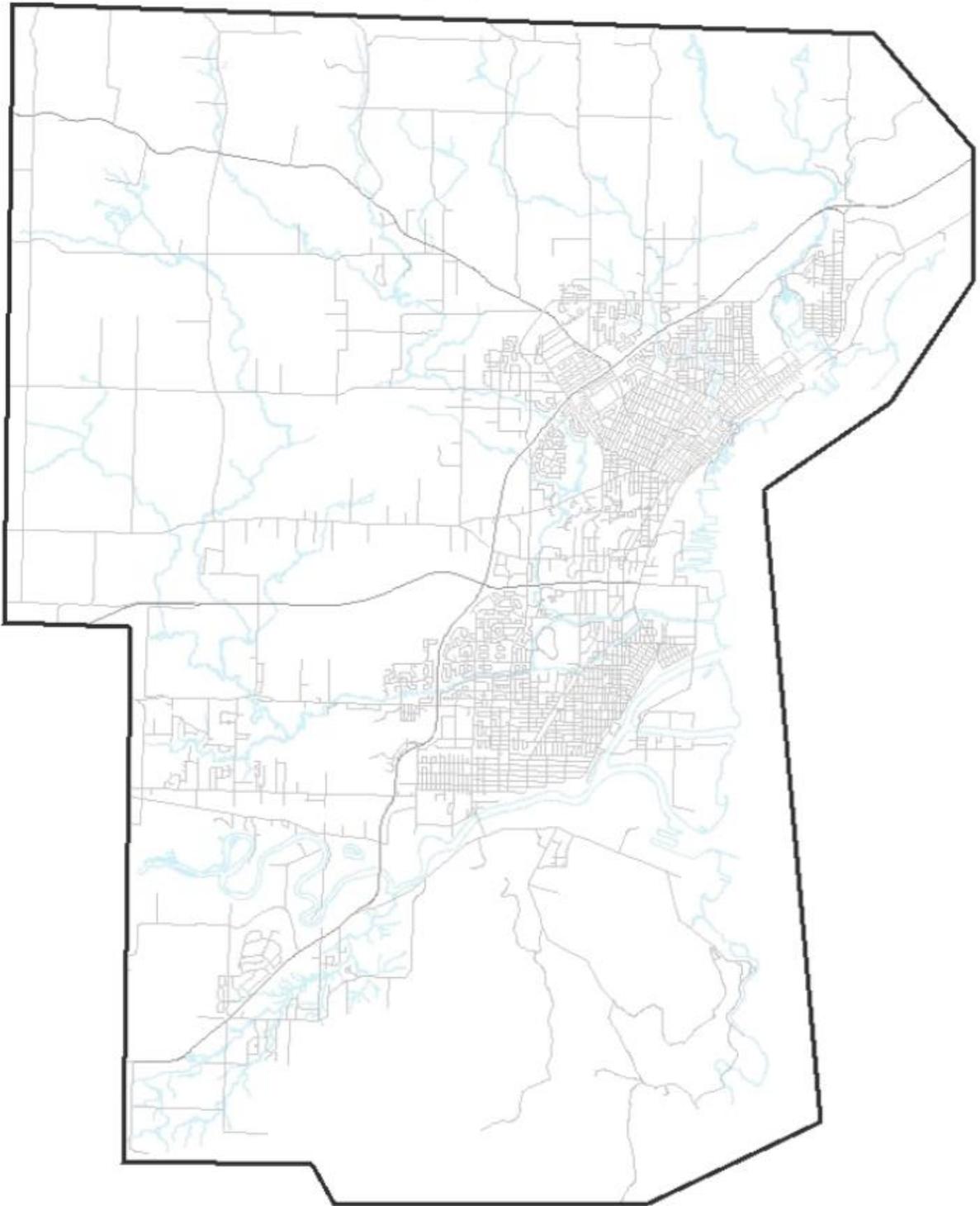
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# **ATTACHMENT 1 – D**

Map of Community served by  
Thunder Bay Hydro

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# Thunder Bay Hydro's Service Area



# **ATTACHMENT 1 – E**

2014 Thunder Bay Hydro  
Scorecard

## Scorecard - Thunder Bay Hydro Electricity Distribution Inc.

Performance Outcomes	Performance Categories	Measures	2010	2011	2012	2013	2014	Trend	Target		
									Industry	Distributor	
<b>Customer Focus</b>  Services are provided in a manner that responds to identified customer preferences.	<b>Service Quality</b>	New Residential/Small Business Services Connected On Time	98.30%	99.80%	99.10%	99.80%	100.00%		90.00%		
		Scheduled Appointments Met On Time	99.10%	91.90%	99.60%	97.80%	100.00%		90.00%		
		Telephone Calls Answered On Time	92.70%	91.80%	90.10%	91.80%	87.10%		65.00%		
	<b>Customer Satisfaction</b>	First Contact Resolution						A+			
		Billing Accuracy						99.97%		98.00%	
		Customer Satisfaction Survey Results						A			
<b>Operational Effectiveness</b>  Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	<b>Safety</b>	Level of Public Awareness [measure to be determined]									
		Level of Compliance with Ontario Regulation 22/04	NI	C	C	C	C			C	
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0			0
			Rate per 10, 100, 1000 km of line	0.000	0.000	0.000	0.000	0.000			0.000
	<b>System Reliability</b>	Average Number of Hours that Power to a Customer is Interrupted	2.60	2.77	1.28	1.03	1.92			at least within 1.03 - 2.77	
		Average Number of Times that Power to a Customer is Interrupted	3.68	3.65	3.12	2.02	2.69			at least within 2.02 - 3.68	
	<b>Asset Management</b>	Distribution System Plan Implementation Progress						On track			
	<b>Cost Control</b>	Efficiency Assessment				3	3	3			
		Total Cost per Customer <sup>1</sup>	\$572	\$577	\$568	\$585	\$606				
		Total Cost per Km of Line <sup>1</sup>	\$24,057	\$24,196	\$24,533	\$25,631	\$26,864				
<b>Public Policy Responsiveness</b>  Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	<b>Conservation &amp; Demand Management</b>	Net Annual Peak Demand Savings (Percent of target achieved) <sup>2</sup>		5.63%	32.68%	43.97%	69.93%			8.48MW	
		Net Cumulative Energy Savings (Percent of target achieved)		17.95%	35.76%	67.29%	99.19%			47.38GWh	
	<b>Connection of Renewable Generation</b>	Renewable Generation Connection Impact Assessments Completed On Time	100.00%	100.00%	100.00%		100.00%				
		New Micro-embedded Generation Facilities Connected On Time				100.00%	100.00%			90.00%	
<b>Financial Performance</b>  Financial viability is maintained; and savings from operational effectiveness are sustainable.	<b>Financial Ratios</b>	Liquidity: Current Ratio (Current Assets/Current Liabilities)	3.68	1.85	1.72	1.62	1.85				
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.90	0.86	0.81	0.66	0.72				
		Profitability: Regulatory Return on Equity	Deemed (included in rates)		3.75%	3.75%	7.00%	7.00%			
			Achieved		7.24%	7.74%	6.34%	5.99%			

**Notes:**

1. These figures were generated by the Board based on the total cost benchmarking analysis conducted by Pacific Economics Group Research, LLC and based on the distributor's annual reported information.  
 2. The Conservation & Demand Management net annual peak demand savings include any persisting peak demand savings from the previous years.

**Legend:** up down flat  
 target met target not met

# 2014 Scorecard Management Discussion and Analysis (“2014 Scorecard MD&A”)

## Scorecard MD&A - General Overview

Weather continues to test our planning and resources. In 2014, we wrapped up the coldest winter in 35 years with frequent and above average snowfalls that lasted through to the end of April. A late spring storm created extensive power outages and equipment damages.

### Service Quality

- **New Residential/Small Business Services Connected on Time**

Connections for a new service request for a low voltage (< 750 volts) service are to be completed within five business days from the day on which all applicable service conditions are satisfied.

Thunder Bay Hydro has consistently performed better than the Ontario Energy Board quality standard of at least 90% of the time on an annual basis.

- **Scheduled Appointments Met On Time**

Offers to schedule an appointment must be made within a window of time that is no greater than four hours. The distributor must then arrive for the appointment within the scheduled timeframe 90% of the time on an annual basis.

Thunder Bay Hydro has consistently performed better than the Ontario Energy Board standard of 90%.

- **Telephone Calls Answered On Time**

Calls must be answered within 30 seconds 65% of the time. This measure is influenced by things such as the number of power outages and staffing levels, which can vary from year to year.

Thunder Bay Hydro has consistently performed better than the Ontario Energy Board standard to answer 65% of the calls that it receives within 30 seconds.

## Customer Satisfaction

- **First Contact Resolution**

Thunder Bay Hydro aims to minimize and address customer complaints as quickly as possible. In doing so, the organization tracks and monitors customer service inquiries.

- **Billing Accuracy**

Thunder Bay Hydro measures the number of accurate bills it issues throughout the year.

During 2014, Thunder Bay Hydro performed better than the Ontario Energy Board prescribed accuracy target of 98%.

- **Customer Satisfaction Survey Results**

Thunder Bay Hydro is required to measure and report a customer satisfaction results at least every other year.

Thunder Bay Hydro completed the 14th annual Electrical Utility Customer Satisfaction Survey, conducted by a 3rd party, UtilityPULSE. Based on telephone interviews, the survey randomly sampled residential and small to medium sized business customers supplied by Thunder Bay Hydro.

The survey findings covered multiple categories: Customer Care (price and value, customer service), Company Image (company leadership, corporate stewardship) and Management Operations (operational effectiveness, power quality and reliability). The UtilityPULSE report card yielded an overall ranking of A.

## Safety

- **Public Safety**

- **Component A – Public Awareness of Electrical Safety**

The Ontario Energy Board is currently developing this measure and as a result, there is no data to report.

- **Component B – Compliance with Ontario Regulation 22/04**

The Ontario Energy Board requires all distributors to be in compliance with Ontario Regulation 22/04, which outlines electrical safety requirements for the design, construction, and maintenance of electrical distribution systems owned by licensed distributors.

Thunder Bay Hydro meets the performance target level of compliance with Ontario Regulation 22/04.

- **Component C – Serious Electrical Incident Index**

The Serious Electrical Incident Index component of the public safety measure is intended to address the resultant impact in improving public electrical safety on the distribution networks over time. It measures the number of and rate of serious electrical incidents occurring on a distributor's assets and is normalized per 10, 100 or 1,000 km of line.

Both the actual number and the rate per km of line are shown on the scorecard.

Thunder Bay Hydro's Serious Electrical Incident Index is 0.0, as there have been no serious incidents.

## System Reliability

- **Average Number of Hours that Power to a Customer is Interrupted**

This average duration of outages is often due to severity of weather events.

Thunder Bay Hydro results are within OEB targets.

- **Average Number of Times that Power to a Customer is Interrupted**

The number of times power to a customer is interrupted is often due to accidents, storms, lightning, high wind and defective equipment.

Thunder Bay Hydro results are within OEB targets.

## Asset Management

- **Distribution System Plan Implementation Progress**

The Distribution System Plan (“DSP”) outlines forecasted capital expenditures over a five year period required to maintain and expand Thunder Bay Hydro’s electricity system to service its current and future customers.

The OEB requires that all distributor DSP’s optimize investments and reflect regional and smart grid considerations; serves present and future customers; places a greater focus on delivering value for money; aligns the interests of the distributor with those of customers; and supports the achievement of public policy objectives.

Thunder Bay Hydro is currently executing its Asset Management Plan and is in the process of developing its DSP in preparation for the next Cost of Service application.

## Cost Control

- **Efficiency Assessment**

Total costs for all electricity distribution companies are evaluated by the Pacific Economics Group LLC (“PEG”) on behalf of the Ontario Energy Board to produce an efficiency ranking. A “predicted cost” is then calculated. The magnitude of the difference between distributor’s actual and predicted costs will assign a distributor into one of five groups.

For a third year, Thunder Bay Hydro was placed in Group 3, which is defined as having actual costs within +/- 10 percent of predicted costs.

- **Total Cost per Customer**

An evaluation by the Pacific Economics Group LLC (“PEG”) on behalf of the Ontario Energy Board produces a cost per customer metric. This measure sums the total capital and operating costs and divides the cost figure by the total number of customers.

Total costs include annual operating and capital costs. Operating costs are the costs associated with the maintenance, inspection and operation of Thunder Bay Hydro’s distribution assets, customer and general administration costs. Capital costs include enhancement, betterments and replacement of capital assets that are required each year. Capital costs tend to fluctuate depending on the need to replace existing capital assets and additional infrastructure to support growth and develop.

The increase in costs is consistent with ongoing operating activities and Asset Management Plan, to replace, refurbish and modernize the utility’s aged distribution system and to connect new customers.

- **Total Cost per Km of Line**

An evaluation by the Pacific Economics Group LLC (“PEG”) on behalf of the Ontario Energy Board produces a cost per kilometer of line metric. This measure sums the total capital and operating costs and divides the cost figure by the kilometers of line that Thunder Bay Hydro operates to serve its customers.

Total costs include annual operating and capital costs. Operating costs are the costs associated with the maintenance, inspection and operation of

Thunder Bay Hydro’s distribution assets, customer and general administration costs. Capital costs include enhancement, betterments and replacement of capital assets that are required each year. Capital costs tend to fluctuate depending on the need to replace existing capital assets and additional infrastructure to support growth and develop.

The increase in costs is consistent with ongoing operating activities and Asset Management Plan, to replace, refurbish and modernize the utility’s aged distribution system and to connect new customers.

## Conservation & Demand Management

- **Net Annual Peak Demand Savings (Percent of target achieved)**

The Net Annual Peak Demand Savings are reported by the Independent Electricity System Operator (“IESO”), who administers the Conservation and Demand Management Program. These savings are measured at a point in time and are non-cumulative. The current conservation target period runs from January 2, 2011 to December 31, 2014.

As a result of a government policy decision, the Demand Response 3 program was discontinued, impacting Thunder Bay Hydro’s achieved net annual peak demand savings.

- **Net Cumulative Energy Savings (Percent of target achieved)**

The Net Cumulative Energy Savings are reported by the Independent Electricity System Operator (“IESO”), who administers the Conservation and Demand Management Program. The current conservation target period runs from January 2, 2011 to December 31, 2014.

Thunder Bay Hydro achieved a net cumulative energy savings of 99%.

## Connection of Renewable Generation

- **Renewable Generation Connection Impact Assessments Completed on Time**

A Connection Impact Assessment is required for all facilities that have a nameplate rated capacity of greater than 10kW. In

2014, Thunder Bay Hydro completed 2 such requests within the time allowed under the Distribution System Code.

- **New Micro-embedded Generation Facilities Connected On Time**

Thunder Bay Hydro is required to connect an applicant's micro-embedded generation facility to its distribution system within five business days of the applicant informing the distributor that it has satisfied all applicable service.

In 2014, Thunder Bay Hydro successfully connected 22 micro-embedded generation facilities, all of which were connected within the 5-day timeline.

## Financial Ratios

- **Liquidity: Current Ratio (Current Assets/Current Liabilities)**

The current ratio measures whether or not a firm has enough resources to pay its debts over the next 12 months. A current ratio that is greater than 1 means good short term financial strength, as it indicates that short term debts and financial obligations can be met and that the organization is in good financial health.

At 1.85, Thunder Bay Hydro maintains a strong liquidity ratio. In 2011, Thunder Bay Hydro's current ratio reflected a change in regulatory accounting to an accrued basis.

- **Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio**

The OEB uses a deemed capital structure of 60% debt, 40% equity for electricity distributors when establishing rates. This deemed capital mix is equal to a debt to equity ratio of 1.5 (60/40).

Thunder Bay Hydro's solid debt to equity ratio of less than 1.5 indicates that the organization is less levered than the deemed capital structure. In 2013, Thunder Bay Hydro converted a portion of the outstanding Note Payable to the Corporation of the City of Thunder Bay to equity, thus, reduced the leverage ratio in that year.

- **Profitability: Regulatory Return on Equity – Deemed (included in rates) and Achieved**

The profitability measure is defined as the approved return on equity that is embedded in Thunder Bay Hydro's distribution rates. This measure assesses whether distributors are earning a fair return on their investment.

Profitability in both 2011 and 2012 reflects better than deemed return on equity due to unanticipated one-time transactions (Smart Meter revenue for previously expensed interest, regulatory settlement relating to payment-in-lieu of taxes (PILS) and Ministry of Finance interest on PILS assessment).

In 2014, the actual rate of 5.99% earned was lower than the approved rate of 7.00%. A lower rate is common, as annual distribution rates are adjusted between Cost of Service applications by an inflationary factor less an efficiency gain. In practice, this adjustment does not keep up with various costs such as rising salaries and wages, new initiatives and regulatory compliance requirements. As a result, there is often a decline in the regulatory rate of return in the years between Cost of Service applications.

## **Note to Readers of 2014 Scorecard MD&A**

The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the distributor regarding their future performance. Some of the factors that could cause such differences include legislative or regulatory developments, financial market conditions, general economic conditions and the weather. For these reasons, the information on future performance is intended to be management's best judgement on the reporting date of the performance scorecard, and could be markedly different in the future.

# **ATTACHMENT 1 – F**

2015 Thunder Bay Hydro

Scorecard (Draft)

## Scorecard - Thunder Bay Hydro Electricity Distribution Inc.

9/6/2016

Performance Outcomes	Performance Categories	Measures	2011	2012	2013	2014	2015	Trend	Target		
									Industry	Distributor	
<b>Customer Focus</b> Services are provided in a manner that responds to identified customer preferences.	Service Quality	New Residential/Small Business Services Connected on Time	99.80%	99.10%	99.80%	100.00%	99.90%	↕	90.00%		
		Scheduled Appointments Met On Time	91.90%	99.60%	97.80%	100.00%	99.90%	↕	90.00%		
		Telephone Calls Answered On Time	91.80%	90.10%	91.80%	87.10%	92.40%	↕	65.00%		
	Customer Satisfaction	First Contact Resolution				A+	A+				
		Billing Accuracy				99.97%	99.93%	↕	98.00%		
		Customer Satisfaction Survey Results				A	A				
<b>Operational Effectiveness</b> Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	Safety	Level of Public Awareness					82.00%				
		Level of Compliance with Ontario Regulation 22/04 <sup>1</sup>	C	C	C	C	C	↔		C	
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0	↕		0
	Rate per 10, 100, 1000 km of line		0.000	0.000	0.000	0.000	0.000	↕		0.000	
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted <sup>2</sup>	2.77	1.28	1.03	1.92	2.02	↕		1.92	
		Average Number of Times that Power to a Customer is Interrupted <sup>2</sup>	3.65	3.12	2.02	2.69	2.39	↕		3.03	
	Asset Management	Distribution System Plan Implementation Progress				On track	On-track				
	Cost Control	Efficiency Assessment		3	3	3	3				
		Total Cost per Customer <sup>3</sup>	\$577	\$568	\$585	\$606	\$635				
		Total Cost per Km of Line <sup>3</sup>	\$24,196	\$24,533	\$25,631	\$26,864	\$27,195				
<b>Public Policy Responsiveness</b> Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	Conservation & Demand Management	Net Cumulative Energy Savings <sup>4</sup>					10.92%		48.42 GWh		
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time	100.00%	100.00%		100.00%	100.00%				
New Micro-embedded Generation Facilities Connected On Time				100.00%	100.00%	100.00%	↕	90.00%			
<b>Financial Performance</b> Financial viability is maintained; and savings from operational effectiveness are sustainable.	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.85	1.72	1.62	1.85	1.61				
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.86	0.81	0.66	0.72	0.75				
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	3.75%	3.75%	7.00%	7.00%	7.00%			
			Achieved	7.24%	7.74%	6.34%	5.99%	5.69%			

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).

2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the fixed 5-year (2010 to 2014) average distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.

3. A benchmarking analysis determines the total cost figures from the distributor's reported information.

4. The CDM measure is based on the new 2015-2020 Conservation First Framework. This measure is under review and subject to change in the future.

**Legend:** 5-year trend  
 ↕ up   ↕ down   ↔ flat  
 Current year  
 ● target met   ● target not met

# **ATTACHMENT 1 – G**

17<sup>th</sup> Annual Electric Utility

Customer Satisfaction Survey



**The purpose of this report is to profile the connection between Thunder Bay Hydro and its customers.**

The primary objective of the Electric Utility Customer Satisfaction Survey is to provide information that will support discussions about improving customer care at every level in your utility.

The UtilityPULSE Report Card<sup>®</sup> and survey analysis contained in this report do not merely capture state of mind or perceptions about your customers' needs and wants - the information contained in this survey provides actionable and measurable feedback from your customers.

This is privileged and confidential material and no part may be used outside of Thunder Bay Hydro without written permission from UtilityPULSE, the electric utility survey division of Simul Corporation.

All comments and questions should be addressed to:

Sid Ridgley, UtilityPULSE division, Simul Corporation

Toll free: 1-888-291-7892 or Local: 905-895-7900

Email: [sidridgley@utilitypulse.com](mailto:sidridgley@utilitypulse.com) or [sridgley@simulcorp.com](mailto:sridgley@simulcorp.com)



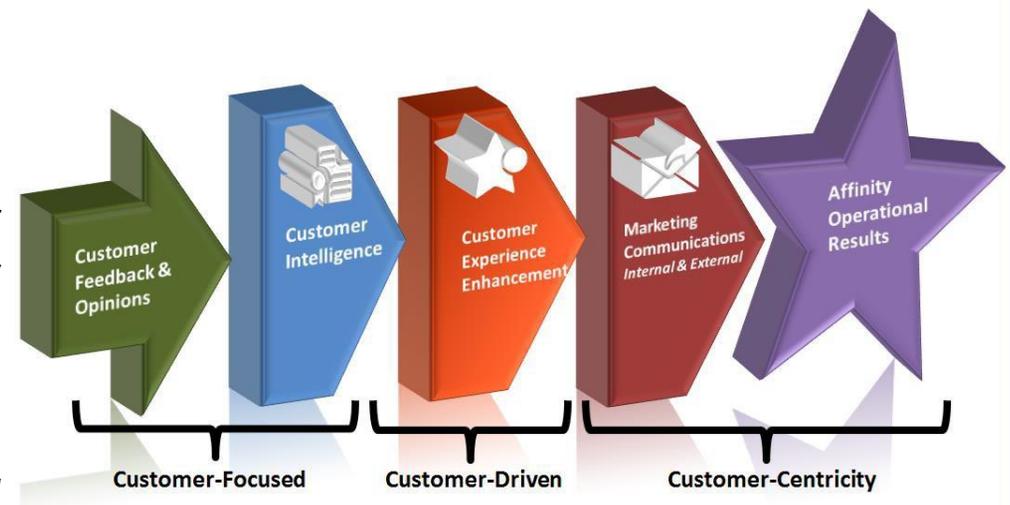
# Executive summary

Customer engagement is a key driver for the success of energy efficiency, demand response, adoption of smart energy technologies and other programs the LDC manages. The key to effective engagement lies in understanding customers' attitudes, want, needs, motivations, and in recognizing that customers are smart people. Customer engagement is crucial for the longer term success of the LDC.

Chapter 5 of the Ontario Energy Board publication *"Filing Requirement's for Electricity Transmission and Distribution Applications"* (March 28, 2013) set out the requirements for performance outcomes in a number of areas. One of those areas, Customer Focus is defined as *"services are provided in a manner that responds to identified customer preferences"*. Another area is Operational Effectiveness: *"continuous improvement in productivity and cost performance is achieved; and utilities deliver on system reliability and quality objectives."*



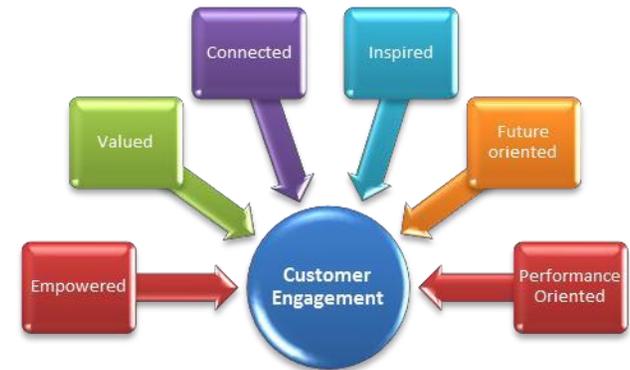
## Customer Engagement ROI



## Customer Centric Engagement Index (CCEI)

It is important to note there are 2 sides of engagement. One side is getting customer participation in various activities while the other is about getting higher levels of emotional connection (affinity). Conducting surveys (like this one), holding town hall meetings, focus groups, etc. are examples of engaging your customers that is, getting your customers to participate in something. This survey also provides you with an emotional look at engagement. The CCEI index is a gauge of the amount of goodwill that has been generated. High

numbers in CCEI suggest there is a high level of goodwill amongst your customers. Goodwill helps when things go awry for the utility and goodwill encourages active participation.



Utility Customer Centric Engagement Index (CCEI)			
	Thunder Bay	National	Ontario
<b>CCEI</b>	84%	83%	80%

Base: total respondents

Engagement is how customers think, feel and act towards the organization. Ensuring that customers respond in a positive way requires that they are rationally satisfied with the services provided AND emotionally connected to your LDC and its brand. Connecting both rationally and emotionally strengthens and intensifies the degree to which the customer becomes engaged with the organization.





## Customer Focus - Customer Satisfaction - Satisfaction Survey Results

The Ontario Energy Board’s consumer centric regulatory framework includes a customer satisfaction measure. Scoring well in this measure would indicate that many aspects of the LDC’s operations are running well i.e., power reliability, restoring outages quickly, professional customer care, etc.

Customer satisfaction is known as an effectiveness measure.

Thunder Bay Hydro SATISFACTION SCORES – Electricity customers’ satisfaction					
Top 2 Boxes: ‘very + fairly satisfied’	2015	2014	2013	2012	2011
PRE: Initial Satisfaction Scores	86%	-	-	91%	-
POST: End of Interview	89%	-	-	92%	-

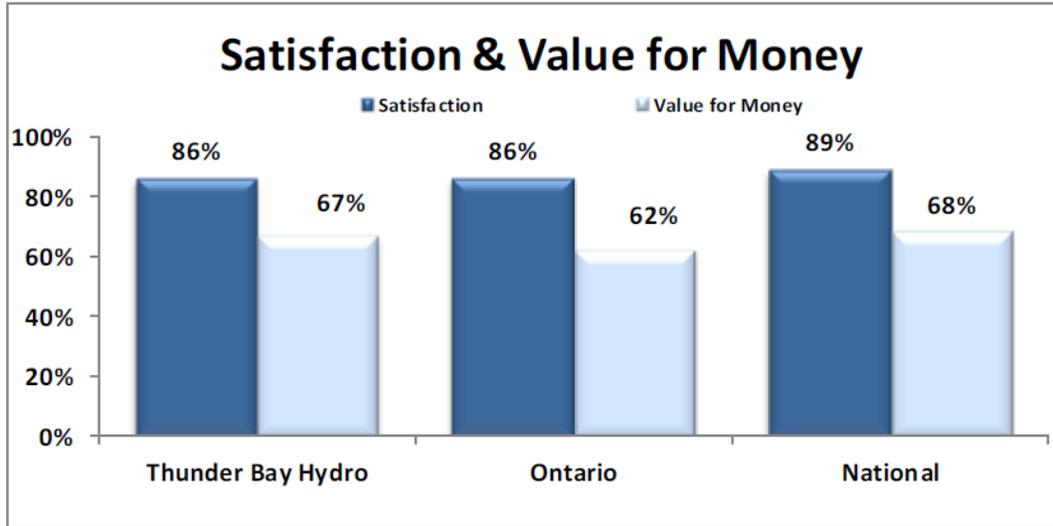
Base: total respondents / (-) not a participant of the survey year

➤ **Satisfaction** happens when utility core services meet or exceed customer’s needs, wants, or expectations.

➤ **Loyalty (Affinity)** occurs when a customer makes an emotional connection with their electric utility on a diverse range of expectations beyond core services.

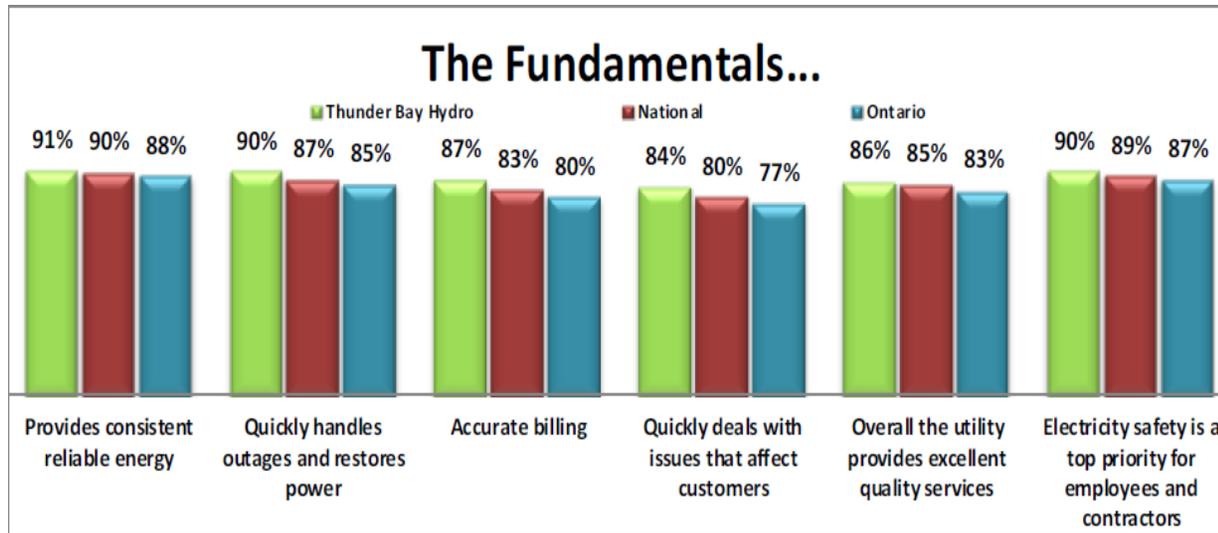
Customer satisfaction is a priority for LDCs. Rigorous measurement of this measure is an essential first step to ensuring services are delivered consistently at the expected time, money and quality levels customers desire. We remind readers that a satisfied customer is not necessarily a customer with a high affinity level i.e., emotional engagement. The satisfaction measure focuses attention on the product or service of the LDC. Customers have a more multi-faceted view about their LDC, something that is captured in the UtilityPULSE report card.





Base: total respondents

There is an inelastic relationship between ratings for 'Satisfaction' and 'Value for money'. For years, 'Value for money' has been rated much lower than 'Satisfaction' which implies that the current LDC 'Satisfaction' scores are the result of other things. Getting the **"fundamentals"** right is the first responsibility of the LDC.



Base: total respondents





### The Killer B's (Bills and Blackouts)

There will always be issues. To the customer the expectations from the physical world i.e., call-centre and the virtual world i.e., website, are the same: Solving the problem is the first priority. In terms of Billing Accuracy, Thunder Bay Hydro rating was 87%, the Ontario benchmark was 80%.

Percentage of Respondents indicating that they had a Billing problem in the last 12 months			
	Thunder Bay	National	Ontario
2015	12%	9%	15%
2014	-	16%	25%
2013	-	8%	10%
2012	9%	12%	13%
2011	-	10%	16%

Base: total respondents / (-) not a participant of the survey year

Customers understandably expect accurate bills and timely resolution of any billing issues. Billing is a frequent touch point with customers and presents an opportunity to create a positive experience and forge stronger relationships. Some the typical billing problems still encountered are:

- 79%: the amount owed was too high
- 2%: complaints about rates or charges
- 4%: the bill was difficult to understand
- 4%: the payment made was recorded incorrectly.



## Outage Management

The ice-storm of December 2013 put more emphasis on what LDCs should be doing to communicate with customers when there is an outage – both planned and unplanned. Since then much has been written about outage management thereby heightening customers' awareness about the issue. None-the-less every LDC has made changes and/or enhancements to their outage management practices.

Percentage of Respondents indicating that they had a Blackout or Outage problem in the last 12 months			
	Thunder Bay	National	Ontario
2015	44%	53%	53%
2014	-	47%	49%
2013	-	41%	35%
2012	45%	44%	46%
2011	-	43%	43%

Base: total respondents / (-) not a participant of the survey year

The perception of competency and value are certainly linked to the frequency and duration of power outages. 90% of respondents with an opinion agree (top 2 boxes) Thunder Bay Hydro “quickly handles outages and restores power.”

Customers have increased their expectations as it relates to getting information about outages. What makes the dissemination of information challenging for the LDC is the need to provide the information via multiple media channels and in a timely manner whilst trying to get the power restored.

Recognizing the importance of this topic to customers, a question about LDC reliability standards has been added to the core survey.

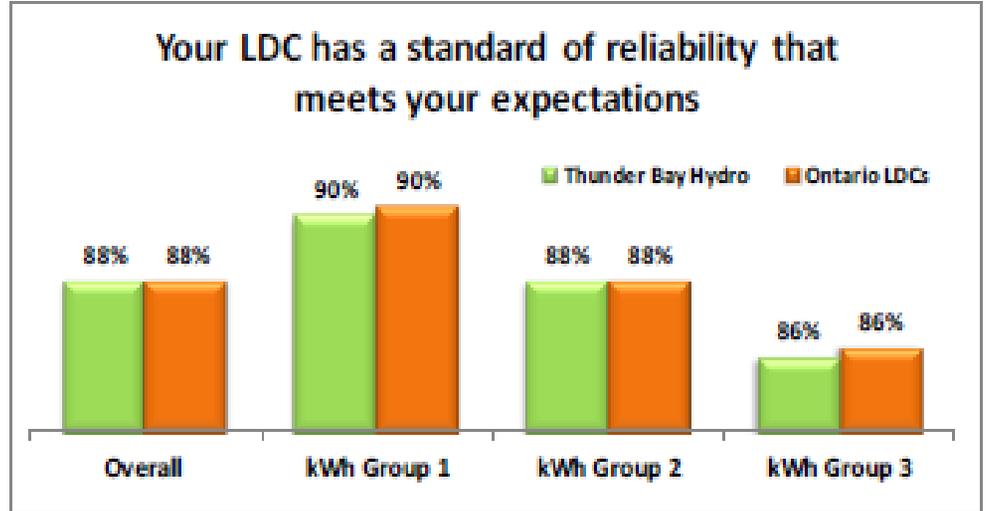




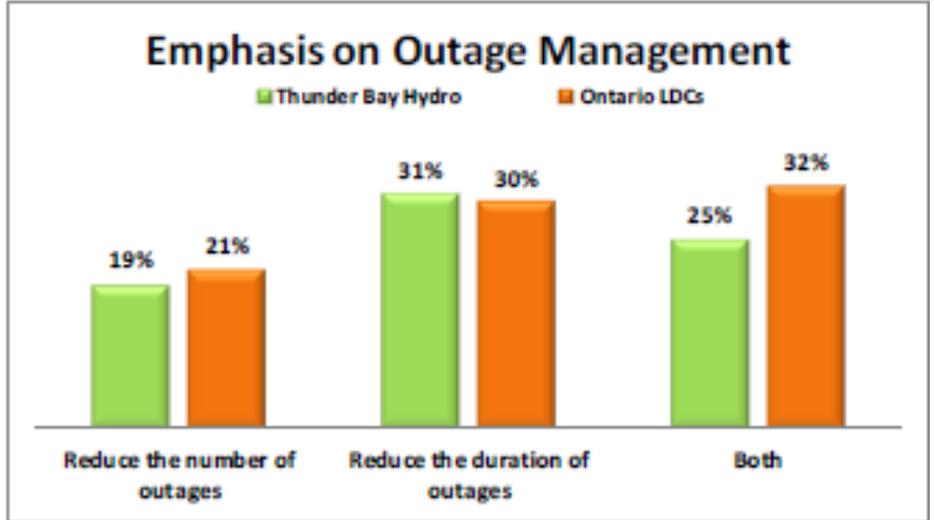
Customers who responded to the survey offer a paradox. On the one hand, when asked about “your LDC has a standard of reliability that meets your expectations”, scores are very high – no doubt somewhat comforting to the LDC. On the other hand, when asked “Should your LDC improve its reliability standards” the majority certainly said “yes”.

How many outages are acceptable over 12 months? Thunder Bay Hydro respondents who said “none” was 17%; “one” was 10%. Clearly expectations are very high.

Respondents were asked about emphasis on outage management: reduce the number; reduce the duration; or both with an understanding a rate increase would be required.



Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility



Base: An aggregate of respondents from the 2015 participating LDCs / total respondents from the local utility

<b>LDC effectiveness responding to outages</b>		
	<b>Ontario LDCs</b>	<b>Thunder Bay</b>
<b>Responding to the power outage</b>	85%	89%
<b>Restoring power quickly</b>	86%	93%
<b>Using media channels for updates</b>	54%	64%
<b>Providing information about the outage</b>	61%	68%

Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

<b>Preferred methods for LDC to contact you</b>		
	<b>Ontario LDCs</b>	<b>Thunder Bay</b>
<b>Recorded telephone message</b>	53%	48%
<b>Email notice</b>	29%	8%
<b>Posted on utility's website</b>	24%	1%
<b>Social media - such as Twitter, Facebook</b>	17%	3%
<b>Text message</b>	28%	7%
<b>Local radio</b>	31%	16%
<b>Local TV</b>	23%	9%
<b>Don't Know</b>	3%	4%

Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

Being effective during an outage situation from the point of view of a customer requires that:

- timely information on outages is provided
- utilities understand that even a short outage in duration is impactful
- in large scale events, utilities should proactively provide tips on how to prepare for extended outages
- being kept informed about what is going on during an outage makes customers feel valued and that they matter.



## Customer Focus – Customer Satisfaction – First Contact Resolution

### Satisfaction with the contact experience

While employees can't control everything, they can control the quality of the experience. How a problem is handled can validate or invalidate a customer's perception about the utility's competency in providing excellent quality services. Customers, who contacted your LDC, rated their one-on-one transaction as follows:

Satisfaction with Customer Service			
Top 2 Boxes: 'very + fairly satisfied'	Thunder Bay	National	Ontario
The time it took to contact someone	78%	76%	69%
The time it took someone to deal with your problem	82%	74%	64%
The helpfulness of the staff who dealt with you	75%	73%	67%
The knowledge of the staff who dealt with you	80%	73%	68%
The level of courtesy of the staff who dealt with you	83%	79%	79%
The quality of information provided by the staff who dealt with you	74%	72%	66%

Base: total respondents who contacted the utility

Given today's technology, many customers use more than one service channel. This gives the LDC a great opportunity to connect to both digital and physical service, providing customers a true omni-channel experience.

Overall satisfaction with most recent experience			
	Thunder Bay	National	Ontario
<b>Top 2 Boxes: 'very + fairly satisfied'</b>	82%	79%	67%

Base: total respondents who contacted the utility

### Problem solved rating

Respondents who said that they contacted the utility were also asked “Do you consider the problem solved or not solved?” 75% of your LDC’s respondents said the problem was solved. The Ontario benchmark rating is 69%.

### Customer Experience Performance rating (CEPr)

Some of the factors which contribute to the overall customer experience:

- Delivering accessible and consistent customer service (multi-channel)
- Understanding customer expectations
- Maintaining timely resolution timelines
- Providing effective communication(s) according to customer needs
- Demonstrating responsiveness
- Speeding up problem resolution
- Conducting problem analysis to prevent recurring issues
- Easy to do business with
- Seeking customer feedback and following through on recommendations



Customer Experience Performance rating (CEPr)			
	Thunder Bay	National	Ontario
<b>CEPr: all respondents</b>	86%	83%	81%

Base: total respondents

The CEPr rating suggests that a very large majority of customers have a belief that they will have a good to excellent experience dealing with Thunder Bay Hydro professionals.

### Operational Effectiveness

With the exception of the Public Safety measure, performance measures would typically take the form of a monitoring and measuring (quantitative) rating. The realities of hard numbers may not correlate to actual customer perception.

Management Operations			
Top 2 boxes, 'strongly + somewhat agree'	Thunder Bay	National	Ontario
<b>Provides consistent, reliable electricity</b>	91%	90%	88%
<b>Quickly handles outages and restores power</b>	90%	87%	85%
<b>Makes electricity safety a top priority for employees and contractors</b>	90%	89%	87%
<b>Operates a cost effective electricity distribution system</b>	71%	72%	63%
<b>Overall the utility provides excellent quality services</b>	86%	85%	83%

Base: total respondents with an opinion



## Customer Focus – Service Quality

Current measures in the LDC scorecard are: New Residential Services Connected on Time; Scheduled Appointments Met on Time; and, Telephone Calls Answered on Time. These are good examples of efficiency measures as all are time based. Showing up on time may not create satisfaction; not showing up on time will cause dissatisfaction. Other dimensions of Service Quality that customers value include:

Customer Service Quality			
Top 2 boxes, 'strongly + somewhat agree'	Thunder Bay	National	Ontario
Deals professionally with customers' problems	86%	82%	80%
Pro-active in communicating changes and issues affecting Customers	79%	74%	74%
Quickly deals with issues that affect customers	84%	80%	77%
Customer-focused and treats customers as if they're valued	80%	74%	72%
Is a company that is 'easy to do business with'	85%	81%	78%
Cost of electricity is reasonable when compared to other utilities	54%	63%	56%
Provides good value for money	67%	68%	62%
Delivers on its service commitments to customers	87%	84%	83%

Base: total respondents with an opinion



## Operating & Capital Expenses

Much has been written, and reported on, regarding the cost of electricity. A goal of customer engagement, in addition to understanding wants & needs, is to reduce the worry that customers have about the reliability and future costs of electricity. What readers may not know is, Thunder Bay Hydro has to focus on day-to-day operations while it builds, re-builds, re-furbishes and prepares the organization for a changed future. In addition, LDCs need to think in terms of decades, not just today, this week, this month, or this quarter. They need to do so in a regulated environment that is a 5 year planning environment. Respondents were asked to identify the items they were willing to pay more for and, they were asked “how much” they would be willing to pay.

Which of the following items are you willing to pay more for per month ...				
Ontario LDCs	Yes	No	Not sure	Don't know
<b>A proactive outage management system</b>	51%	39%	9%	1%
<b>Increased self-service options on the website</b>	34%	58%	7%	1%
<b>Extended office hours</b>	16%	79%	5%	1%
<b>Increased tree trimming to improve reliability</b>	58%	35%	6%	0%
<b>Better use of social media</b>	20%	53%	2%	1%
<b>Educating customers about energy conservation</b>	47%	48%	4%	0%
<b>Educating customers and the public about electricity safety</b>	43%	53%	5%	0%

Base: An aggregate of respondents from the 2015 participating LDCs



Not surprisingly lower income respondents identified lower amounts. For example, 13% of respondents <40K who were willing to pay for one operational item identified a number between .51 - 1.00, it was 23% for respondents 70K+. Ability to pay also has an impact on the numbers that respondents identified. When three or more operational items were involved, 32% of respondents who said that they did not worry about paying their bill identified a number of 25 cents or less. Respondents who said they worry often identified a number 25 cents or less, 59% of the time.

Secure customers identified higher numbers more frequently than At Risk customers. When three or more operational items were involved, At Risk customers pick a number less than 25 cents, 59% of the time; Secure customers was 35%. This proves that price increase receptivity is linked to customer affinity. However, average kWh usage per month showed very little difference between customers in the lower quartile of kWh versus customers in the highest quartile.

51% of respondents chose the statement “Pro-active replacement, even though it may cost more...” as the statement that best describes their view about replacing equipment.

The above charts can certainly fuel debate between industry professionals, regulators, interveners and customers. Could an LDC ignore investing in self-service options on their website? Do the raw scores from the survey represent what the LDC needs to do? If the LDC didn't invest in increased self-service options what might happen to operational costs? What might happen to the perceived brand of the LDC i.e., being seen as a modern enterprise?

For those who said they would pay more...



Willing to pay how much more per month for ...			
Ontario LDCs	1 item	2 items	3 or more items
<b>\$0.25 or less</b>	59%	47%	35%
<b>\$0.26 – \$0.50</b>	10%	13%	10%
<b>\$0.51 – \$1.00</b>	14%	15%	16%
<b>\$1.01 – \$2.00</b>	6%	8%	15%
<b>\$2.01 – \$3.00</b>	2%	3%	6%
<b>\$3.01 – \$5.00</b>	1%	4%	7%
<b>\$5.01+</b>	0%	3%	5%
<b>Don't know</b>	8%	8%	5%

Base: An aggregate of respondents from the 2015 participating LDCs

The amount customers are willing to pay for 1 item versus 3 items did not translate into a proportional increase. While customers recognize 3 items would necessitate more money than 1 item, fewer customers were willing to pay that much more for 3 items. They are more willing to pay for items that provide a direct benefit to themselves.

### Customer Affinity

Customers continue to be more sophisticated, educated and demanding and with less money available. They expect value and quality services – not either/or but and/also. Recognizing that customers have a meaningful perspective can help the LDC drive out waste, reduce complaints, embrace new processes and new technologies that lead to greater efficiency and effectiveness.

There are many reasons why LDCs should put a premium on satisfying customers. Such as: there is an obligation to satisfy people; it makes sense economically; the industry has to prove that it is



Respondents were not guided by the interviewer providing various ranges of rates.

Respondents were simply asked to give an amount of \$.

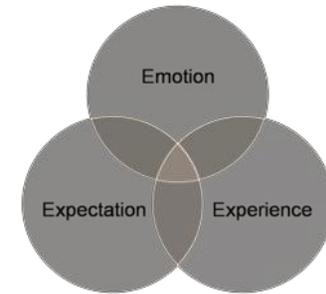
Their answers were categorized into one of the rate ranges shown in the table.



valuable to its customers and, increased customer satisfaction can influence employee morale and retention. A big reason is higher levels of customer affinity (Loyalty). Loyalty, for private industry, is a behavioural metric. Loyalty, for natural monopolies (like LDCs) is an attitudinal metric.

<i>Customer Loyalty Groups</i>				
	Secure	Favorable	Indifferent	At Risk
<b>Thunder Bay Hydro</b>				
<b>2015</b>	19%	7%	66%	7%
<b>2014</b>	-	-	-	-
<b>2013</b>	-	-	-	-
<b>2012</b>	32%	12%	50%	6%
<b>2011</b>	-	-	-	-

Base: total respondents / (-) not a participant of the survey year



**“Whether a customer is loyal and/or satisfied will be determined by an alignment of the emotion, experience and expectation of both the customer and the LDC.”**

### Credibility and Trust

Higher levels of trust are the hallmarks of Secure customers and utilities benefit from a trusted relationship with their empowered customers. When people interact, either face-to-face, by telephone or on-line, if there is a lack of trust, the interaction is not going to be efficient. Trust improves the speed at which the interaction can be accomplished. At Risk customers recall experiencing more



outages and more billing problems than Secure customers. What makes matters worse is, At Risk customers are about 2X more likely to contact the utility to deal with it.

The attributes which help an LDC to be seen as trusted and highly credible are: knowledge, integrity, involvement and trust. Trust is not a thing, it is a feeling. On demonstrating Credibility and Trust, Thunder Bay Hydro has done well.

<b>Credibility and Trust Index</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Knowledge</b>	87%	84%	82%
The LDC is seen as being knowledgeable about the services it provides, about what is happening in the industry, and how customers can reduce costs or manage consumption.			
<b>Integrity</b>	85%	82%	79%
The LDC is seen as an organization that will act in the best interests of its customers and can be counted on to provide services and resolve problems in a professional manner.			
<b>Involvement</b>	79%	75%	73%
The LDC is actively involved in the industry, in the community and in things that affect the customer.			
<b>Trust</b>	87%	92%	87%
The LDC is an organization that can be trusted and is worthy of respect.			
<b>Overall</b>	<b>85%</b>	<b>83%</b>	<b>80%</b>

Base: total respondents



## UtilityPULSE Report Card®

The purpose of the UtilityPULSE Report Card is to provide your utility with a snapshot of performance – it represents the sum total of respondents' ratings on 6 categories of attributes that research has shown are important to customers in influencing satisfaction and affinity levels with their utility.

### Thunder Bay Hydro's UtilityPULSE Report Card®

#### Performance

	CATEGORY	Thunder Bay	National	Ontario
1	<b>Customer Care</b>	B+	B+	B+
	Price and Value	B+	B+	B+
	Customer Service	A	B+	B+
2	<b>Company Image</b>	A	A	B+
	Company Leadership	A	B+	B+
	Corporate Stewardship	A	A	A
3	<b>Management Operations</b>	A	A	A
	Operational Effectiveness	A	A	B+
	Power Quality and Reliability	A+	A	A
<b>OVERALL</b>		<b>A</b>	<b>A</b>	<b>B+</b>

Base: total respondents

## Company Image

How customers think about their LDC has a direct influence on how customers act, react or engage with Thunder Bay Hydro. For example, customers with a positive impression put less strain on the operations. In 2006, 10 years ago, our industry research showed Company Image had an 18% weighting as it relates to shaping perception about their LDC. Today, Company Image weighting for Thunder Bay Hydro is 35%, Ontario is 33%, a significant change.

Attributes strongly linked to a hydro utility's image			
	Thunder Bay	National	Ontario
<b>Is a respected company in the community</b>	90%	82%	79%
<b>A leader in promoting energy conservation</b>	82%	78%	75%
<b>Keeps its promises to customers and the community</b>	84%	79%	77%
<b>Is a socially responsible company</b>	85%	81%	77%
<b>Is a trusted and trustworthy company</b>	88%	81%	77%
<b>Adapts well to changes in customer expectations</b>	75%	71%	67%
<b>Is 'easy to do business with'</b>	85%	81%	78%
<b>Provides good value for your money</b>	67%	68%	62%
<b>Overall the utility provides excellent quality services</b>	86%	85%	83%
<b>Operates a cost effective electricity distribution system</b>	71%	72%	63%

Base: total respondents with an opinion

Marketing communications should capitalize on the strong image scores to reduce the worry that customers have about reliability, future costs and other concerns that they have. Technically performing the expected job well is one thing, but the LDC also has to be “seen” as performing well.



### What do customers think about electricity costs?

For years electric utility customers have had a very real concern about high bills and the cost of electricity. We've constantly and consistently have told our clients "when a value proposition doesn't exist or is unclear, then people will focus on price." LDCs in Ontario certainly score low on "value for money." When a customer struggles to pay their electricity bill they also struggle to see the LDC providing good value for money.

The good news is, LDCs have been doing more to engage customers about the utilities' plans to spend money to improve operations and/or make capital investments. While this is seen as an important process, especially by the Ontario Energy Board, it doesn't deal with the basic issue at hand – the customer's own struggle to pay the bill. Our first year of research, 1999, showed us that there was a very high correlation between ability to pay and satisfaction – in 2015 the correlation is still high.

Is paying for electricity a worry or major problem ...			
	Thunder Bay	National	Ontario
Not really a worry	64%	70%	57%
Sometimes I worry	23%	20%	26%
Often it is a major problem	10%	7%	11%
Depends	1%	2%	2%

Base: total respondents



### Additional Insights

As it relates to SMART Grid knowledge, customers polled in the Ontario survey show 37% *“have heard the term SMART Grid but know very little about it”* and 32% claimed they *“have not heard the term”*. This suggests that customers will not automatically understand and accept SMART Grid technology.

The Ontario survey shows that interest in purchasing an electric vehicle remains at 34% - unchanged since 2012. 75% of those that are “interested in purchasing” claim they wouldn’t be acting on their interest in purchasing for 24 months or more. The adoption rate of EVs is still in its infancy.

UtilityPULSE asked 1,269 Residential customers, located throughout Ontario and who pay the electricity bill questions pertaining to the solicitation of customer feedback and opinions on different electricity industry matters. These questions were asked with the intent of gauging the customer’s perception of requesting feedback and the importance thereof. Percentage of respondents who said it was important to solicit feedback [Top 2 Boxes: ‘very + somewhat important’]:

- 89% on “overall satisfaction with the utility”
- 83% on “how much money is being spent on repairing equipment”
- 86% on “how much money is being spent on keeping the system reliable”
- 84% on “extending the system to help economic development in the community”.



The data on the importance of “feedback” tells us customers want their voice heard. We believe this is completely in sync with, what experts call, customer centricity. However asking for feedback, but not acting on that feedback or not using the feedback in a constructive way could have some adverse consequences for the LDC i.e., lower levels of trust, credibility and customer affinity.

Today’s consumers expect a ‘passion of service’ centered on quality and a proactive attitude toward the customer. LDCs are by no means excluded from this fundamental trend. Customers want respect, to feel they count, to be informed in case of power disruptions and to be reassured when unexpected large-scale outage events occur. To gain credibility as an LDC focused on the service it offers its customers, you need to empower staff at all levels of the organization with the tools and “know-how” so they will take initiative and responsibility in dealing with different situations as they arise.

We recommend having meaningful two-way dialogue with employees (and others) to leverage the results from your 2015 customer satisfaction survey derived from speaking with 417 Thunder Bay Hydro's customers [April 21 - April 28, 2015]. Ensuring customers are everyone’s priority in the LDC through words, behaviours, actions and interactions creates an improved organization that can better meet tomorrow’s challenges while keeping costs in check.



## UtilityPULSE

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June, 2015

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# Satisfaction (pre & post)

In Ontario, the Ontario Energy Board (OEB) has made it clear Customer Satisfaction measurement will be part of an Electricity Distributor's reporting. Of the many reasons why every LDC should place a premium on satisfying customers, here are some of the important ones:

- 1- Every enterprise has an obligation to satisfy its customers
- 2- Economically, high levels of satisfaction lead to less customer complaints and less scrutiny (hence less cost)
- 3- As an effectiveness measure it prompts discussion about policies, procedures, planning, use of technology, and more
- 4- When things go wrong (and they do), customers with high levels of satisfaction handle the problem far better than customer with very low levels of satisfaction
- 5- For employees there is a morale boost when working in an organization with a high level of customer satisfaction
- 6- Customers (as well as others) have growing levels of expectations which means the things that satisfy customers today may not tomorrow.

A focus on satisfaction prompts an organization to continue to evolve in ways that make sense to those that pay the bills. A focus on satisfaction is a focus on effectiveness in the delivery of service to the customer. Satisfied customers who trust their LDC may be more likely to seek advice i.e. energy efficiency methods, and may be more receptive to important messages i.e. safety, new capital projects, etc.

A word of caution to readers, please do not assume that great performance in an efficiency rating (such as answering the phone in 30 seconds) will lead to customer satisfaction. It will not. Answering the phone in 20 seconds but not solving the customer's problem is not going to ameliorate the customer's perception about the transaction.

Efficiency ratings won't lead to satisfaction but they can lead to dissatisfaction. Taking 90 seconds to answer the phone will create an agitated customer who, for the most part starts off being dissatisfied with the service – before you've even had a chance to deal with or solve their problem.

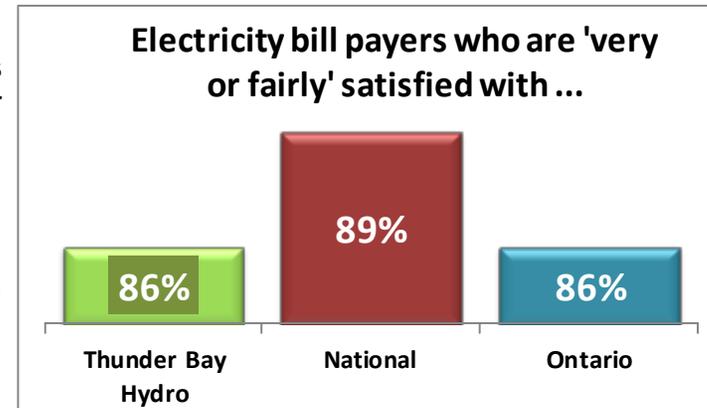
Customer expectations of their electricity LDC have evolved past the “provide electricity reliably, safely and billed both accurately with fair pricing”. They do expect their LDC to be ethical, forward-thinking, competent and trustworthy.

In a nutshell:

- Satisfaction is not a program, it is an outcome.
- **Efficiency** is about achieving objectives with the minimum amount of people, time, money and other resources.
- **Effectiveness ratings** are measures that keep the organization and its people more future focused than efficiency ratings
- Finding the right balance between efficiency and effectiveness measures is difficult.



- **Satisfaction** happens when utility core services meet or exceed customer's needs, wants, or expectations.
- **Loyalty** occurs when a customer makes an emotional connection with their electric utility on a diverse range of expectations beyond core services.



Base: total respondents

Satisfaction alone does not make a customer loyal; a willingness to commit and advocate for a company along with satisfaction identifies the three basic customer attitudes which underpin loyalty profiles. While satisfaction is an important component of loyalty, the loyalty definition needs to incorporate more attitudinal and emotive components.

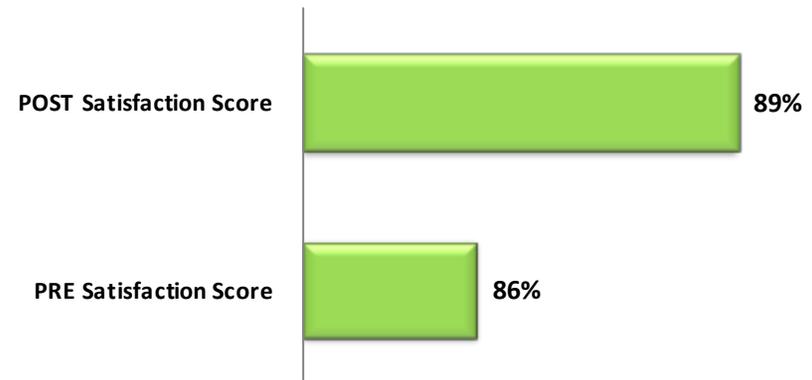
Electricity bill payers who are 'very or fairly' satisfied with...					
	2015	2014	2013	2012	2011
<b>Thunder Bay Hydro</b>	86%	-	-	91%	-
<b>National</b>	89%	89%	90%	88%	89%
<b>Ontario</b>	86%	83%	90%	86%	84%

Base: total respondents / (-) not a participant of the survey year

Every LDC we've worked with over the past 17 years conducting this survey can provide examples of employees who have certainly gone above and beyond the call of duty. Just listen to employees, at all levels, as they talk – with pride – about what their LDC is doing.

In the Simul/UtilityPULSE Customer Satisfaction survey, the overall satisfaction question is asked both at the beginning (PRE) and the end (POST). Asking the general satisfaction question at the start of the survey avoids bias and we obtain a spontaneous rating. This allows measurement of customers' overall impressions of the utility prior to prompting them to think of specific aspects of the relationship. After we have asked about specific aspects of the customer experience, we gain a more *considered* (or conditioned) response.

### Thunder Bay Hydro



Base: total respondents

Satisfied and engaged employees who work in an organizational culture that promotes service excellence is key for completing the job both efficiently and effectively. After-all employees do more than deliver customer service – they personalize the relationship between customer and the utility



SATISFACTION SCORES – Electricity customers' satisfaction			
Top 2 Boxes: 'very + fairly satisfied'	Thunder Bay	National	Ontario
PRE: Initial Satisfaction Scores	86%	89%	86%
POST: End of Interview	89%	88%	83%

Base: total respondents

SATISFACTION SCORES – Electricity customers' satisfaction					
Top 2 Boxes: 'very + fairly satisfied'	2015	2014	2013	2012	2011
PRE: Initial Satisfaction Scores	86%	-	-	91%	-
POST: End of Interview	89%	-	-	92%	-

Base: total respondents / (-) not a participant of the survey year

Customers, as human beings, are both rational and emotional. The rational side of the customer holds the LDC accountable for doing its job. The emotional side of the customer is about fulfilling expectations. Not meeting rational needs – creates dissatisfaction. Meeting emotional needs can move a customer from neutral to higher levels of satisfaction.

<b>Attributes strongly linked to a hydro utility's image</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>RATIONAL NEEDS</b>			
<b>Provides consistent, reliable electricity</b>	91%	90%	88%
<b>Quickly handles outages</b>	90%	87%	85%
<b>Accurate billing</b>	87%	83%	80%
<b>Provides good value for money</b>	67%	68%	62%
<b>Is 'easy to do business' with</b>	85%	81%	78%
<b>Operates a cost effective electricity distribution system</b>	71%	72%	63%
<b>EMOTIONAL NEEDS</b>			
<b>Deals professionally with customers' problems</b>	86%	82%	80%
<b>Provides information to help customers reduce electricity costs</b>	80%	76%	74%
<b>Pro-active in communicating changes</b>	79%	74%	74%
<b>Quickly deals with issues that affect customers</b>	84%	80%	77%
<b>Adapts well to changes in customer expectations</b>	75%	71%	67%
<b>Overall the utility provides excellent quality services</b>	86%	85%	83%

Base: total respondents with an opinion

# Customer Service

There is no way the quality of customer service can exceed the quality of the people delivering it. LDCs can have all the elements of customer service in place, but if customers are disappointed with the way their transaction was handled or its results, they will not be satisfied. There are lots of things the LDC and its people cannot control, but employees can control the quality of the experience.

Having well-trained employees is foundational. The key to good customer service is listening to understand with real empathy and then responding in a professional, knowledgeable, and timely manner. After-all it is the customer who decides whether the interaction was worthwhile and/or valued.

Respondents, who contacted their utility via the telephone or in-person about a problem, were asked about six aspects of their most recent experience with a representative from Thunder Bay Hydro.

- Information – quality of information provided
- Staff attitude – level of courtesy
- Professionalism – the knowledge of staff
- Delivery – helpfulness of staff
- Timeliness – the length of time it took to get what they needed
- Accessibility – how easy it was to contact someone

“What do our  
**customers**  
want?”

1. *Their problem solved quickly*
2. *To have personal interaction with a customer care representative*
3. *To speak with a knowledgeable and courteous customer care representative*

## Customer Service



Base: total respondents who contacted the utility

Satisfaction with Customer Service			
Top 2 Boxes: 'very + fairly satisfied'	Thunder Bay	National	Ontario
The time it took to contact someone	78%	76%	69%
The time it took someone to deal with your problem	82%	74%	64%
The helpfulness of the staff who dealt with you	75%	73%	67%
The knowledge of the staff who dealt with you	80%	73%	68%
The level of courtesy of the staff who dealt with you	83%	79%	79%
The quality of information provided by the staff who dealt with you	74%	72%	66%

Base: total respondents who contacted the utility

Respondents, who contacted their utility via an electronic means, e.g., email, website, social media, were asked about four aspects of their most recent experience with a representative.

<b>Satisfaction with Customer Service via electronic means</b>	
<b>Top 2 Boxes: 'very + fairly satisfied'</b>	<b>Overall</b>
<b>The timeliness of response</b>	60%
<b>The quality of information provided</b>	66%
<b>The helpfulness of the information</b>	66%
<b>The level of professionalism</b>	65%

Base: total respondents from the full 2015 database

<b>Overall satisfaction with most recent experience</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Top 2 Boxes: 'very + fairly satisfied'</b>	82%	79%	67%

Base: total respondents who contacted the utility

The difference between overall service quality and service encounter quality (most recent experience), viewing the service encounter as a discrete event occurring over a defined period/moment of time (such as a call about their “July billing”). Customers hold expectations of the quality of each service encounter, just as they hold expectations about the overall service quality of an LDC. When the expectations are about individual service encounters, they are likely to be more specific and concrete (such as the number of minutes one waited for a CSR) than the expectations about overall service quality (like prompt service).

Interestingly when customers do have a problem, contact their LDC, and get the problem solved their satisfaction ratings are very similar to the overall level of satisfaction that exists. It is important that LDCs have an obsession with “first call resolution” as it is very beneficial and is more than a “nice idea”.

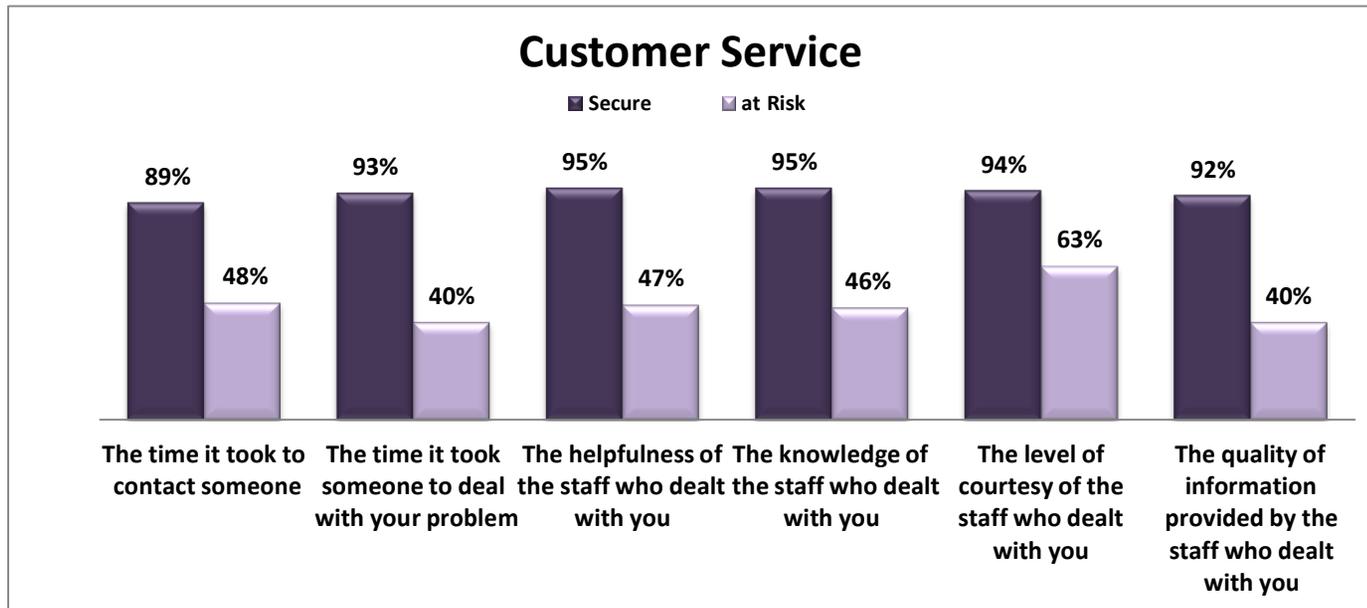
<b>SATISFACTION SCORES – Electricity customers’ satisfaction</b>			
	<b>Overall</b>	<b>Problems Solved</b>	<b>Problems Not Solved</b>
<b>Top 2 Boxes: ‘very + fairly satisfied’</b>	89%	88%	60%
<b>Bottom 2 Boxes: ‘fairly + very dissatisfied’</b>	7%	8%	37%

Base: total respondents from the full 2015 database

<b>Satisfaction with Customer Service</b>			
<b>Top 2 Boxes: ‘very + fairly satisfied’</b>	<b>Overall</b>	<b>Paying for electricity:</b>	
		<b>No worries</b>	<b>Often worry</b>
<b>The time it took to contact someone</b>	74%	75%	64%
<b>The time it took someone to deal with your problem</b>	71%	72%	58%
<b>The helpfulness of the staff who dealt with you</b>	75%	78%	59%
<b>The knowledge of the staff who dealt with you</b>	75%	76%	65%
<b>The level of courtesy of the staff who dealt with you</b>	83%	83%	73%
<b>The quality of information provided by the staff who dealt with you</b>	73%	75%	62%

Base: total respondents from the full 2015 database

While there is more information about customer loyalty in this report, the following chart shows the difference in customer service ratings given by customers who are “secure” versus customers who are “at risk”. In addition, “at risk” customers seem to have more problems than other customers and are much more likely to contact their LDC to do something about it.



Base: total respondents from the full 2015 database



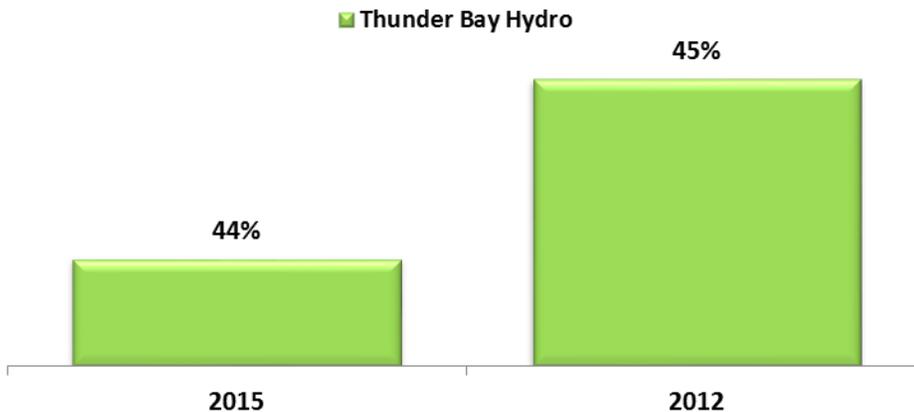
<b>Important attributes which shape perceptions about service quality</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Deals professionally with customers' problems</b>	86%	82%	80%
<b>Is pro-active in communicating changes and issues which may affect customers</b>	79%	74%	74%
<b>Quickly deals with issues that affect customers</b>	84%	80%	77%
<b>Customer-focused and treats customers as if they're valued</b>	80%	74%	72%
<b>Is a company that is 'easy to do business with'</b>	85%	81%	78%
<b>Cost of electricity is reasonable when compared to other utilities</b>	54%	63%	56%
<b>Provides good value for money</b>	67%	68%	62%
<b>Delivers on its service commitments to customers</b>	87%	84%	83%
<b>Trusted and trustworthy company</b>	88%	81%	77%
<b>Respected company in the community</b>	90%	82%	79%
<b>Provides information and tools to help manage electricity consumption</b>	79%	77%	75%
<b>Adapts well to changes in customer expectations</b>	75%	71%	67%

Base: total respondents with an opinion

# Bill payers' recent problems and problem resolution

Outages and billing problems, we call them the “Killer B’s”, the two issues that are most likely to cause grief to utility customers. Ensuring power reliability has and will continue to be the key operational priority for electric utilities.

## Blackout or Outage Problems in the last 12 months



The perception of competency and value are certainly linked to the frequency and duration of power outages. 90% of respondents with an opinion agree (top 2 boxes) Thunder Bay Hydro “quickly handles outages and restores power” and 88% agreed (top 2 boxes) that this LDC has a standard of reliability that meets expectations.

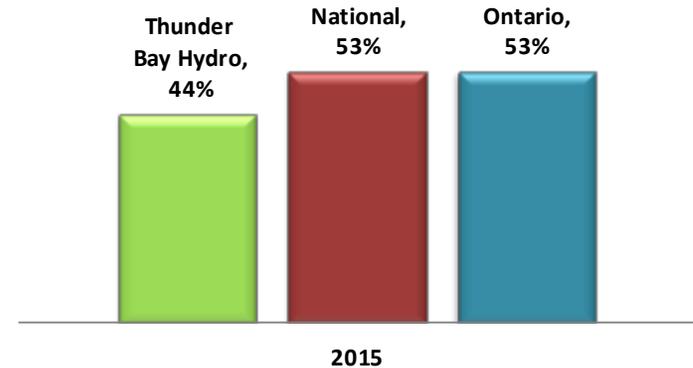
Base: total respondents

Like it or not, there will be times when the power goes off – and for reasons beyond the control of the LDC.

Percentage of Respondents indicating that they had a Blackout or Outage problem in the last 12 months			
	Thunder Bay	National	Ontario
2015	44%	53%	53%
2014	-	47%	49%
2013	-	41%	35%
2012	45%	44%	46%
2011	-	43%	43%

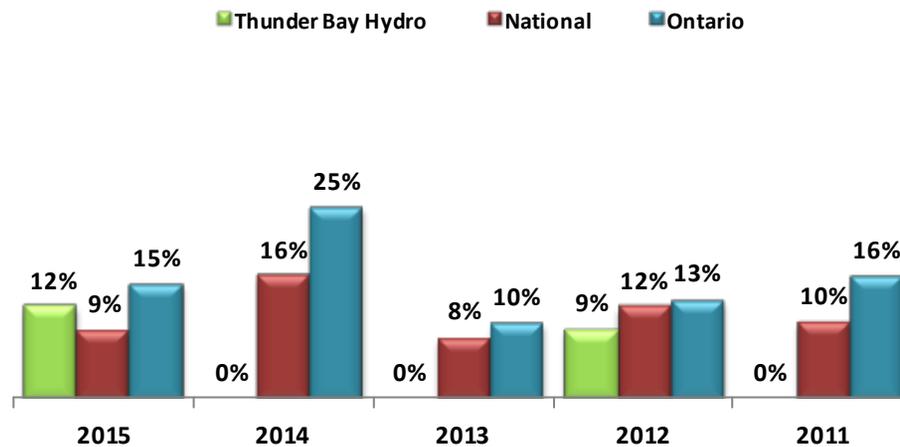
Base: total respondents / (-) not a participant of the survey year

## Blackout or Outage Problems in the last 12 months



Base: total respondents

## Billing Problems in the last 12 months



Base: total respondents / (0%) not a participant of the survey year

Percentage of Respondents indicating that they had a Billing problem in the last 12 months			
	Thunder Bay	National	Ontario
2015	12%	9%	15%
2014	-	16%	25%
2013	-	8%	10%
2012	9%	12%	13%
2011	-	10%	16%

Base: total respondents / (-) not a participant of the survey year

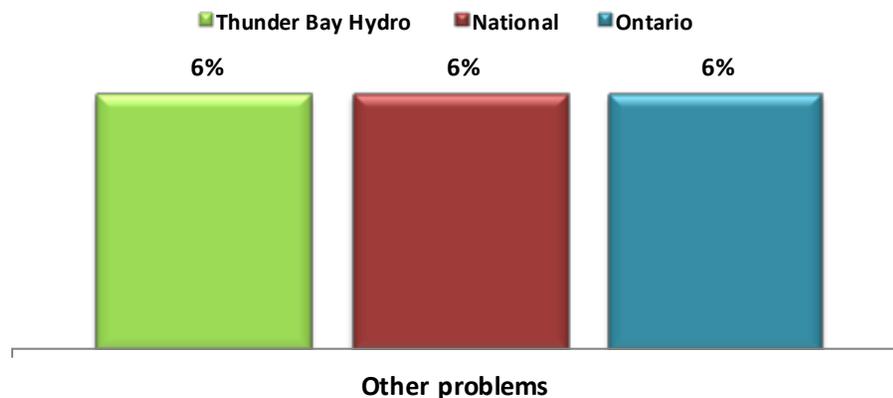


Types of Billing Problems	
	Thunder Bay
The amount owed was too high	79%
The bill arrived late	10%
The bill was difficult to understand	4%
Payment was recorded incorrectly	4%
Complaint about rates or charges	2%

Base: total respondents with billing problems

As it relates to problems, the Killer B's – Bills and Blackouts still occupy top ranking – while moving/setting up a new account, maintenance repairs, high bills, information on pricing, ways to save energy, incentives on energy conservation are issues which also **contribute to customer contact levels through a call-centre or electronic media.**

### Problems other than Outages and Billing



Base: total respondents

Survey respondents were asked about how they contacted their utility when there was a problem. For utilities, customers continue to favour the telephone.

*What method did you use to contact your electric utility when you had a problem?*



Base: total respondents from the full 2015 database

Problems aggravate customers. It could be said that some problems can actually anger customers. As a minimum, a problem is an inconvenience to the customer – and they want it solved/resolved. When the problem is solved with the first interaction (often called first call resolution) overall customer satisfaction improves. When customer satisfaction improves the utility benefits.

<b>Percentage of Respondents who contacted their utility and had their problem solved in the last 12 months</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Yes</b>	75%	81%	69%
<b>No</b>	19%	17%	26%

Base: total respondents

<b>Attributes describing operational effectiveness</b>			
	<b>Overall Score</b>	<b>Problem Solved</b>	<b>Problem Not Solved</b>
<b>Provides consistent, reliable electricity</b>	90%	88%	77%
<b>Delivers on its service commitments to customers</b>	86%	85%	68%
<b>Accurate billing</b>	86%	84%	64%
<b>Quickly handles outages and restores power</b>	87%	85%	73%
<b>Makes electricity safety a top priority</b>	88%	90%	79%
<b>Has a standard of reliability that meets expectations</b>	88%	87%	72%
<b>Is efficient at managing the electricity system</b>	82%	81%	63%
<b>Is a company that is 'easy to do business with'</b>	84%	82%	59%
<b>Overall the utility provides excellent quality services</b>	85%	84%	66%

Base: total respondents from the full 2015 database with an opinion

While an LDC is a natural monopoly i.e., customers can't go elsewhere and an LDC can't "fire" a customer, we recommend LDCs continue to build and strengthen their relationship with customers. UtilityPULSE categorizes respondents into 3 customer groups. Interestingly when the customer relationship is strong i.e., customers are Secure, they recall less outages and billing problems than customers who are At Risk.

<b>Bill payers recalling a power failure or outage</b>				
	<b>Secure</b>	<b>Favorable</b>	<b>Indifferent</b>	<b>At Risk</b>
<b>Yes</b>	31%	40%	46%	58%
<b>No</b>	68%	60%	53%	42%

Base: total respondents from the full 2015 database

<b>Bill payers recalling a billing problem</b>				
	<b>Secure</b>	<b>Favorable</b>	<b>Indifferent</b>	<b>At Risk</b>
<b>Yes</b>	3%	5%	10%	38%
<b>No</b>	97%	94%	89%	61%

Base: total respondents from the full 2015 database

<b>Bill payers who said their problem was solved</b>				
	<b>Secure</b>	<b>Favorable</b>	<b>Indifferent</b>	<b>At Risk</b>
<b>Yes</b>	94%	84%	73%	37%
<b>No</b>	5%	15%	23%	61%

Base: total respondents from the full 2015 database

# Customer Experience Performance rating (CEPr)

The CEPr score is an effectiveness rating and is affected by many dimensions of service. Every touch point with customers on the phone, website or in-person influences what customers think and feel about the organization. While an excellent transaction today creates a positive experience today, the perception created is that future transactions will be excellent too. Of course a negative transaction creates the perception that future transactions will be negative.

When the customer experience is strong, the opportunity to build loyalty is great. When the experience is a negative one, customers often conclude the organization doesn't care. When a customer believes the organization doesn't care, outrage and anger are a very real possibility.

Understanding your customer's expectations for service is the first step in providing an amazing customer experience. It is essential that customer care call centers develop a comprehensive understanding of

At the heart of the CEPr are 4 central questions:



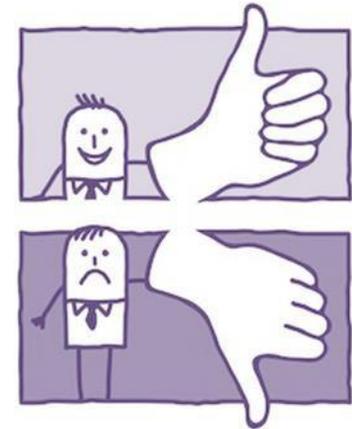
1. Are interactions with the organization professional and productive?
2. Is the organization 'easy to deal with'?
3. Does the organization effectively meet your needs?
4. Does the organization provide high quality services?



what customers expect from them, whether or not their needs are being met and how they can improve their service to meet their expectations.

Some of the factors which contribute to the overall customer experience:

- Delivering accessible and consistent customer service (multi-channel)
- Understanding customer expectations
- Maintaining timely resolution timelines
- Providing effective communication(s) according to customer needs
- Demonstrating responsiveness
- Speeding up problem resolution
- Conducting problem analysis to prevent recurring issues
- Easy to do business with
- Seeking customer feedback and following through on recommendations



Customer Experience Performance rating (CEPr)			
	Thunder Bay	National	Ontario
<b>CEPr: all respondents</b>	86%	83%	81%

Base: total respondents

The CEPr for Thunder Bay Hydro is 86%. This rating would suggest that a very large majority of customers have a belief that they will have a good to excellent experience dealing with Thunder Bay Hydro professionals.



**Engagement is how customers think, feel and act towards the organization.** As such, ensuring that customers respond in a positive way requires that they are rationally satisfied with the services provided AND emotionally connected to your LDC and its brand. The more frequently and consistently an organization’s products and services can connect with a customer, especially on an emotional level, the stronger and deeper the customer becomes engaged with the organization.

UtilityPULSE has identified the six key dimensions of what defines customer engagement. They are: empowered, valued, connected, inspired, future oriented and performance oriented.



Utility Customer Centric Engagement Index (CCEI)			
	Thunder Bay	National	Ontario
<b>CCEI</b>	84%	83%	80%

Base: total respondents

Customer centric engagement is a measure of “goodwill” towards the utility. Customers who are less engaged, as measured by the CCEI are more likely to let costs and/or price impact their perceptions of their LDC. Customers who are highly engaged are more inclined to look past costs and money issues and use a rational approach to make values-based decisions. Highly engaged customers have a stronger emotional connection to your utility. It’s this emotional connection that will drive commitment, loyalty and advocacy.

# UtilityPULSE Report Card<sup>®</sup>

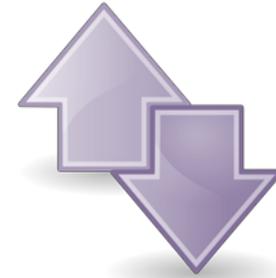
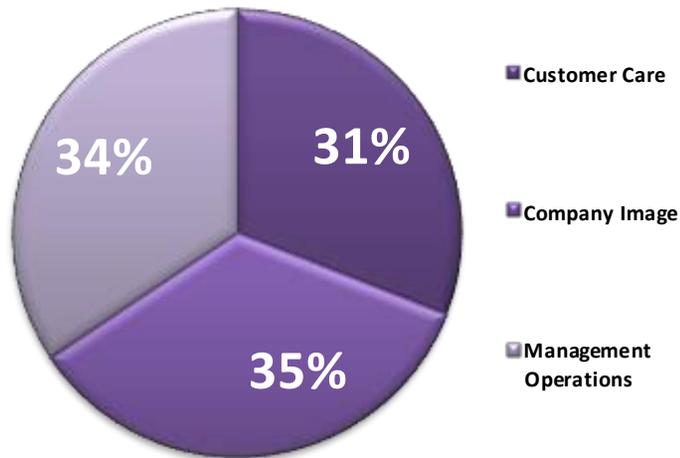
Simul's UtilityPULSE Report Card<sup>®</sup> is based on tens of thousands of customer interviews gathered over seventeen years. The purpose of the UtilityPULSE Report Card<sup>®</sup> is to provide electric utilities with a snapshot of performance – on the things that customers deem to be important. Research has identified over 20 attributes, sorted into six topic categories (we call these drivers), that customers have used to describe their utility when they have been satisfied or very satisfied with their utility. These attributes form the nucleus, or base, from which “scores” are assigned. Customer satisfaction and loyalty also play a major role in the calculations.

There are two main dimensions of the UtilityPULSE Report Card<sup>®</sup> the first is customer psyche and the other is customer perceptions about how the utility executes its business.

## **The Psyche of Customers**

Every utility has virtually the same responsibility – provide safe and reliable electricity – yet not all customers are the same. The following chart shows the weight or significance of each category to the customer when forming their overall impression of the utility. Three major themes, each with two major categories make up the UtilityPULSE Report Card<sup>®</sup>. In effect the Report Card provides feedback about your customers' perception on the importance of each category and driver – as it relates to the benchmark.

## UtilityPULSE Report Card® for Thunder Bay Hydro



*The UtilityPULSE Report Card is a zero sum game. As customer interest/concern in one area goes up, the others go down.*

Base: total respondents

The UtilityPULSE Report Card® also provides customer perceptions about how your utility executes or performs its responsibilities. This is different, very different, from what a customer might say about a major concern or worry that they have about electricity. As our survey has shown since its inception the primary suggestion for improvement is “reduce prices”, which is also a major concern which your customers have about municipal taxes, gas for the vehicle, and other utilities.

Readers of this report should note that the categories and drivers are interdependent. Which means that, for example, failure to provide high levels of power quality and reliability will have a negative impact on customer perceptions as it relates to customer service. Customer care, when it doesn't meet customer expectations has a negative impact on Company Image, etc.

Defining the categories and major drivers:

**Category: Customer Care**

**Drivers: Price and Value; Customer Service**

Just because everyone likes good customer care, that in and by itself, is not a reason to provide it – though it may be important to do so. In highly competitive industries good customer service may be a differentiating factor. The case for electric utilities is simple, high levels of customer care result in less work (hence cost) of responding to customer inquiries and higher levels of acceptance of the utility's actions.

***Price and Value:***

Customers have to purchase electricity because life and lifestyle depend on it. This driver measures customer perceptions as to whether the total costs of electricity represent good value and whether the utility is seen as working in the best interests of its customers as it relates to keeping costs affordable.

***Customer Service:***

Customers do have needs and every now and again have to interface with their utility. How the utility handles various customers' requests and concerns is what this driver is all about. Promptly answering inquiries, providing sound information, keeping customers informed and doing so in a professional manner are the major components of this driver.

## **Category: Company Image**

### **Drivers: Company Leadership; Corporate Stewardship**

Utilities have an image even if they do not undertake any activities to try to build it. A company's image is both a simple and complex concept. It is simple because companies do create images that are easily described and recognized by their target customers. It is complex because it takes many discrete elements to create an image which includes, but is not limited to: advertising, marketing communications, publicity, service offering and pricing.

An electric utility trying to manage its image has one more challenge to deal with, and that is the electric industry itself. There are so many players that residential customers (in particular) don't know who does what or who is responsible for what. So when there are political or regulatory announcements, the local utility is often swept up into the collective reaction of the population.

#### ***Company Leadership***

This driver is comprised of customer perceptions as it relates to industry leadership, keeping promises and being a respected company in the community.

#### ***Corporate Stewardship***

Customers rely on electricity and want to know that their utility is both a trusted and credible organization that is well managed, is accountable, is socially responsible and has its financial house in order.

## **Category: Management Operations**

### **Drivers: Operational Effectiveness; Power Quality and Reliability**

Electrical power is the primary product which utilities provide their customers and, they have very high expectations that the power will be there when they need it. Customers have little tolerance for outages. The reality is, every utility has to get this part right...no excuses. It is the utility's core business. This category and its drivers are clearly the most important for fulfilling the rational needs of a utility's customers.

#### ***Operational Effectiveness***

This driver measures customers' perceptions as they relate to ensuring that their utility runs smoothly. Attributes such as: accurate billing and meter reading, completing service work in a professional and timely manner and maintaining equipment in good repair are deemed as important to customers.

#### ***Power Quality and Reliability***

Power outages are a fact of life – and, customers know it. They expect their utility to provide consistent, reliable electricity, handle outages and restore power quickly and make using electricity safely an important priority.

## Thunder Bay Hydro's UtilityPULSE Report Card®

### Performance

	CATEGORY	Thunder Bay	National	Ontario
1	<b>Customer Care</b>	<b>B+</b>	<b>B+</b>	<b>B</b>
	Price and Value	B+	B+	B+
	Customer Service	A	B+	B+
2	<b>Company Image</b>	<b>A</b>	<b>A</b>	<b>B+</b>
	Company Leadership	A	B+	B+
	Corporate Stewardship	A	A	A
3	<b>Management Operations</b>	<b>A</b>	<b>A</b>	<b>A</b>
	Operational Effectiveness	A	A	A
	Power Quality and Reliability	A+	A	A
<b>OVERALL</b>		<b>A</b>	<b>A</b>	<b>B+</b>

Base: total respondents

As the UtilityPULSE Report Card<sup>®</sup> shows, the total customer experience with an electric utility is defined as more than “keeping the lights on”. Customers deal with your utility every day for a variety of reasons, most likely because they need someone to help them solve a problem, answer a question or take their order for service. All your employees, from customer service representatives to linemen, leave a lasting impression on the customers they interact with. In effect there are many moments of truth. Moments of truth are every customer touch point that a utility has with their customers. Therefore, managing these moments of truth creates higher levels of Secure customers while reducing the number of At Risk customers that exist.

It's the small things done consistently that matter: Things like greeting every customer, whether on the phone or in person, in a friendly and helpful manner. Things like listening to the customer's needs, providing solutions to their problems and showing appreciation to the customer for their business.

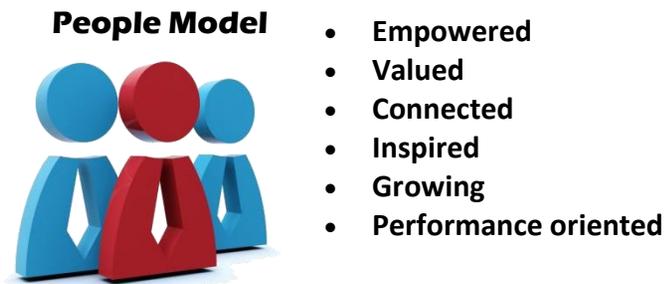
Utilities now recognize customer communications as a valuable aspect of their business. The better a utility communicates with customers in a manner that speaks to them, the more satisfied they are with their overall service. “Sending out information” is not the same as having a “conversation” with a customer. We believe that it is increasingly important to channel your communications to the various customer segments which exist.

Obviously employees – in every area – play a critical role in customer service success. Consequently how they feel about their job responsibilities and role in the company will be communicated indirectly through the level of

service which they actually provide customers with whom they interact. The reality is engaged employees are the key to excellent customer care.

Our survey work with employees shows that there are many elements of an organizational culture to support the people model needed to achieve high levels of engagement.

Our research has identified 6 main drivers that promote and support people giving their best:



There are 12 key processes from “attracting employees” to “saying goodbye to employees” that are part of your people model to get the best performance from every employee.

We believe that taking the time to understand the difference between employee satisfaction and organizational culture is worthwhile from a resourcing perspective and from a people development perspective. Every organization has a culture – we believe that it is a leadership imperative to install and maintain a culture that ensures that you attain the achievements and successes of your utility’s many investments in people, technology and equipment. It is true, organization culture affects everyone and everyone affects organization culture.

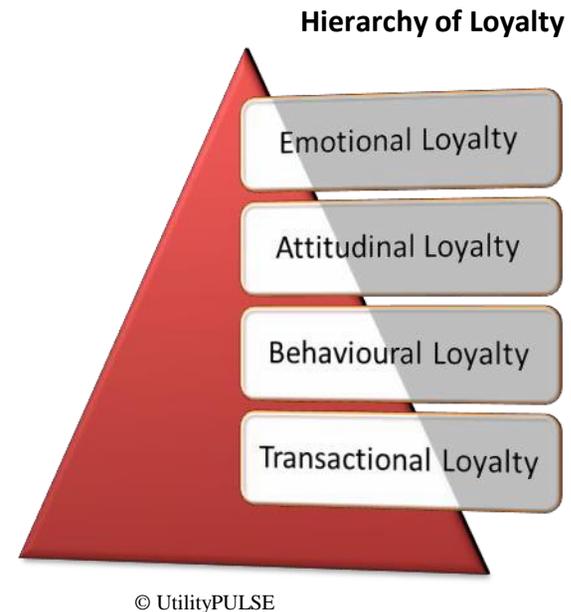
# The Loyalty Factor

If a customer is satisfied, it doesn't necessarily mean he or she is loyal. Satisfaction is about fulfilling promises/expectations; loyalty goes way beyond that by creating exceptional experiences and long-lasting relationships. There is a reason why marketing campaigns strive to build brand loyalty, not brand satisfaction. Measuring customer loyalty in an industry where many customers don't have a choice of providers doesn't make sense. Or does it?

The answer depends on how you define "customer loyalty."

Private industry often equates customer loyalty with basic customer retention. If a customer continues to do business with a company, that customer is, by definition, considered to be loyal. If this definition were applied to many companies in the utility industry, all customers would automatically be considered loyal. As such, measuring customer loyalty would appear to be unnecessary.

Natural monopolies (like LDCs) are not really different in what they should measure except that trying to determine which customers are "loyal" or "at risk" is not about their future behaviour but more about their "attitudinal" loyalty (are they advocates?).



Whether a customer is loyal and/or satisfied will be determined by an alignment of the emotion, experience and expectation of both the customer and the LDC.

Perhaps a better or more relevant way for utilities to approach the definition of customer loyalty is to further expand how they think about loyalty. Consider the following definition: Customer loyalty is an emotional disposition on the part of the customer that affects the way(s) in which the customer (consistently) interacts, responds or reacts towards the company – its products & services and its brand.

So what does it mean to respond favourably to a company? At a basic level, this can mean choosing to remain a customer. As previously mentioned however, this is essentially a non-issue for many utility companies. It then becomes necessary to think beyond just customer retention. One needs to consider other ways in which customers can respond favourably toward a company.

Other favourable responses or behaviours can be classified into one of three categories that reflect the concept of customer loyalty:

- Participation
- Compliance or Influence
- Advocacy



**Some Tips to build loyalty:**

- ✓ Solve problems quickly
- ✓ Treat customers right
- ✓ Listen to complaints
- ✓ Be personal; create a great experience
- ✓ Friendly customer service
- ✓ Accessible information or help
- ✓ Good reputation
- ✓ Demonstrate you care

Specific examples of potential participatory behaviour in the electric utility industry include:

- Signing up for programs that help the customer reduce or manage their energy consumption
- Using the utility as a consultant when selecting energy products and services from a third party
- Participating in pilot programs or research studies.

Specific examples of potential compliance or influence behaviours that utility customers might exhibit include:

- Seeking the utility's advice or expertise on an energy-related issue
- Voluntarily cutting back on electricity usage if the utility advised the customer to do so
- Accepting the utility's energy advice or referrals to energy contractors or equipment
- Being influenced by the utility's opinion regarding energy- management advice, equipment, or technologies
- Providing personal information that enables the utility to better serve the customer
- Paying bills online.

Creating customer advocates can be especially important for a company in a regulated industry. In the absence of customer advocates, or worse, in a situation where customers speak unfavourably about a company or actively work to support issues that are counter to those the company supports, companies can suffer a variety of negative consequences like increased business costs, lawsuits, fines and construction delays. For an electric utility, specific examples of potential advocacy behaviour include:

- Supporting the utility's positions or actions on energy-related public issues, including the environment
- Supporting the utility's position on the location and construction of facilities
- Providing testimonials about positive experiences with the utility.

In sum, loyal behaviour in the utility industry may not be as evident as it is in a more competitive environment. Measuring customer loyalty in a generally non-competitive industry requires one to think about loyalty in non-

traditional ways. Customer loyalty is an intangible asset that has positive consequences or outcomes associated with it no matter what the industry. Properly measuring loyalty among utility customers requires thoughtful probing to thoroughly identify the range of participation, compliance, and advocacy behaviours that will ultimately benefit the company in meaningful ways, and foster happier and more loyal customers.

The UtilityPULSE Customer Loyalty Performance Score segments customers into four groups: **Secure** – the most loyal - **Still Favorable**, **Indifferent**, and **At risk**.

**Secure** customers are “very satisfied” overall with their local electricity utility. They have a very high emotional connection with their utility and definitely would recommend their local utility.

**Still favorable** customers are “very satisfied” overall, “definitely” or “probably” would recommend their local utility and not switch if they could.

**Indifferent** customers are less satisfied overall than secure and still-favorable customers and less inclined to recommend their local utility or say they would not switch.

**At risk** customers, who are “very dissatisfied” with their electricity utility, “definitely” would switch and “definitely” would not recommend it.

**Loyalty is driven primarily by a company’s interaction with its customers and how well it delivers on their wants and needs.**

### Customer Loyalty Model

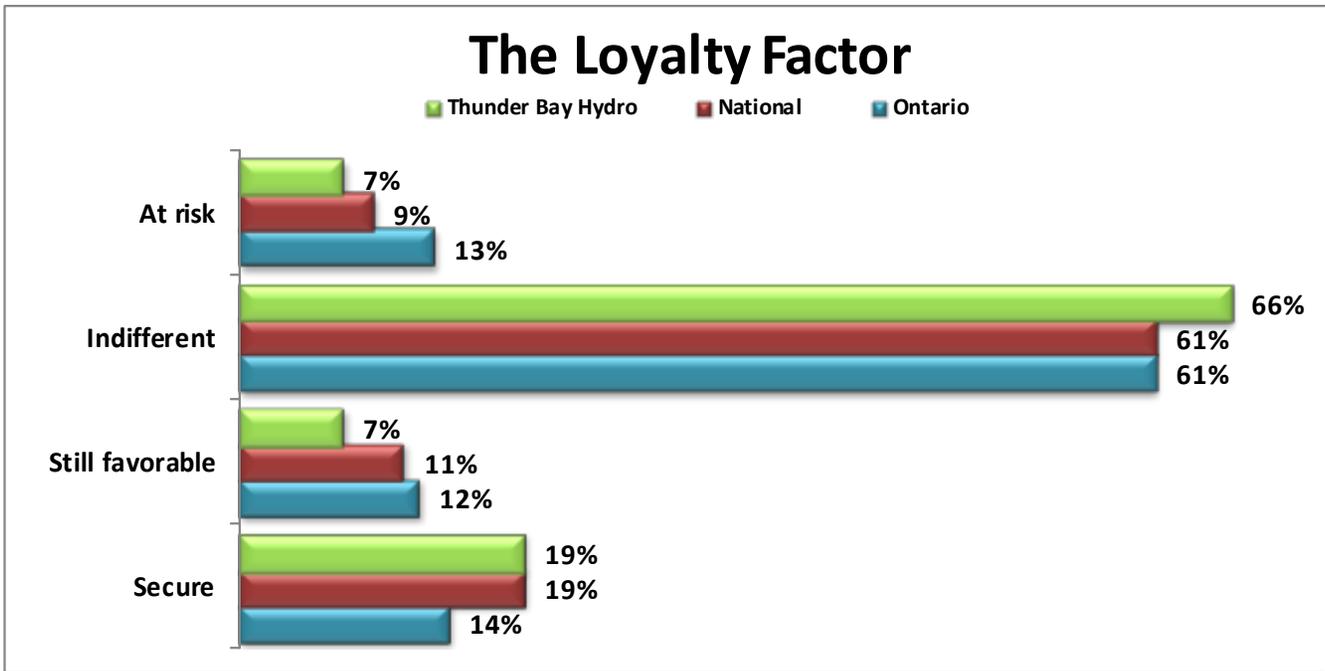


**Loyalty is based on likelihood to:**

- **Satisfaction: overall satisfaction**
- **Commitment: continue as a customer**
- **Advocacy: willingness to recommend**

<i>Customer Loyalty Groups</i>				
	Secure	Favorable	Indifferent	At Risk
<b>Thunder Bay Hydro</b>				
<b>2015</b>	19%	7%	66%	7%
<b>2012</b>	32%	12%	50%	6%

Base: total respondents

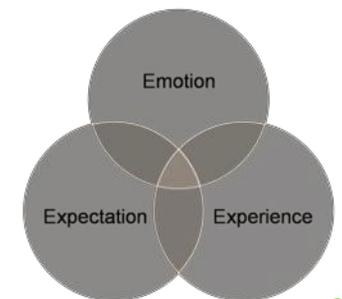


Base: total respondents

<i>Customer Loyalty Groups</i>				
	<b>Secure</b>	<b>Favorable</b>	<b>Indifferent</b>	<b>At Risk</b>
<b>Ontario</b>				
<b>2015</b>	14%	12%	61%	13%
<b>2014</b>	17%	10%	57%	17%
<b>2013</b>	24%	15%	51%	11%
<b>2012</b>	20%	13%	53%	14%
<b>2011</b>	17%	13%	54%	16%
<b>National</b>				
<b>2015</b>	19%	11%	61%	9%
<b>2014</b>	20%	11%	56%	13%
<b>2013</b>	26%	17%	47%	10%
<b>2012</b>	30%	13%	46%	11%
<b>2011</b>	28%	14%	46%	12%

Base: total respondents

“ Whether a customer is loyal and/or satisfied will be determined by an alignment of the emotion, experience and expectation of both the customer and the LDC. ”



Secure customers' experiences and perceptions are distinct from those of Indifferent customers. There is yet an even greater gap between those identified as Secure versus At Risk.

- Problems are experienced and remain unresolved far more often by the Indifferent or At Risk segments in comparison to others. This is not an unusual finding.
- Other areas of interaction also revealed considerable differences among the segments. Consistently, Secure customers' perceptions are most positive.

<b>Important attributes which shape perceptions about customer affinity</b>			
	<b>Overall</b>	<b>Secure</b>	<b>At Risk</b>
<b>Customer focused and treats customers as if they're valued</b>	79%	94%	49%
<b>Is pro-active in communicating changes and issues which may affect customers</b>	79%	92%	5%
<b>Deals professionally with customers' problems</b>	85%	96%	60%
<b>Provides information to help customers reduce their electricity costs</b>	78%	91%	53%
<b>Quickly deals with issues that affect customers</b>	82%	96%	56%
<b>Delivers on its service commitments to customers</b>	86%	98%	65%
<b>Provides information and tools to help manage electricity consumption</b>	79%	92%	53%
<b>Is 'easy to do business with'</b>	84%	97%	55%
<b>Adapts well to changes in customer expectations</b>	75%	90%	45%
<b>The cost of electricity is reasonable when compared to other utilities</b>	60%	79%	34%
<b>Provides good value for your money</b>	69%	88%	36%
<b>Provides consistent reliable electricity</b>	90%	99%	76%
<b>Operates a cost effective electricity distribution system</b>	72%	91%	40%
<b>Overall the utility provides excellent quality services</b>	85%	98%	61%

Base: data from the full 2015 database from those respondents with an opinion

# Customer commitment

## Customer Loyalty Model



Customer loyalty is a term that can be used to embrace a range of customer attitudes and behaviours. One of the metrics used to gauge loyalty is the measure of **retention**, or intention to buy again; this loyalty attitude is termed **commitment**. For LDCs commitment is not about behaviour it is about attitude i.e., do they want to remain your customer.

Customer commitment is a very important driver of customer loyalty in the electricity service industry. In a similar way to trust, commitment is considered an important ingredient in successful relationships. In simpler terms, commitment refers to the motivation to continue to do business with and maintain a relationship with a business partner i.e. the local utility.

For electric utilities, this measurement is about identifying the number of customers who feel that they “want to” vs “have to” do business with you. Potential benefits of commitment may include word of mouth communications - an important aspect of attitudinal loyalty. Committed customers have been known to demonstrate a number of beneficial behaviours, for example committed customers tend to:

- Come to you. One of the key benefits of establishing a good level of customer loyalty is that customers will come to you when they need a product or service

- Validate information received from 3<sup>rd</sup> parties with information and expertise that you have
- Try new products/initiatives
- Perhaps they will even trust you when recommendations are made
- Be more price tolerant
- More receptivity of utility viewpoints on various issues
- More tolerance of errors or issues that inevitably take a swipe at the utility
- Stronger levels of perception regarding how the utility is managed.

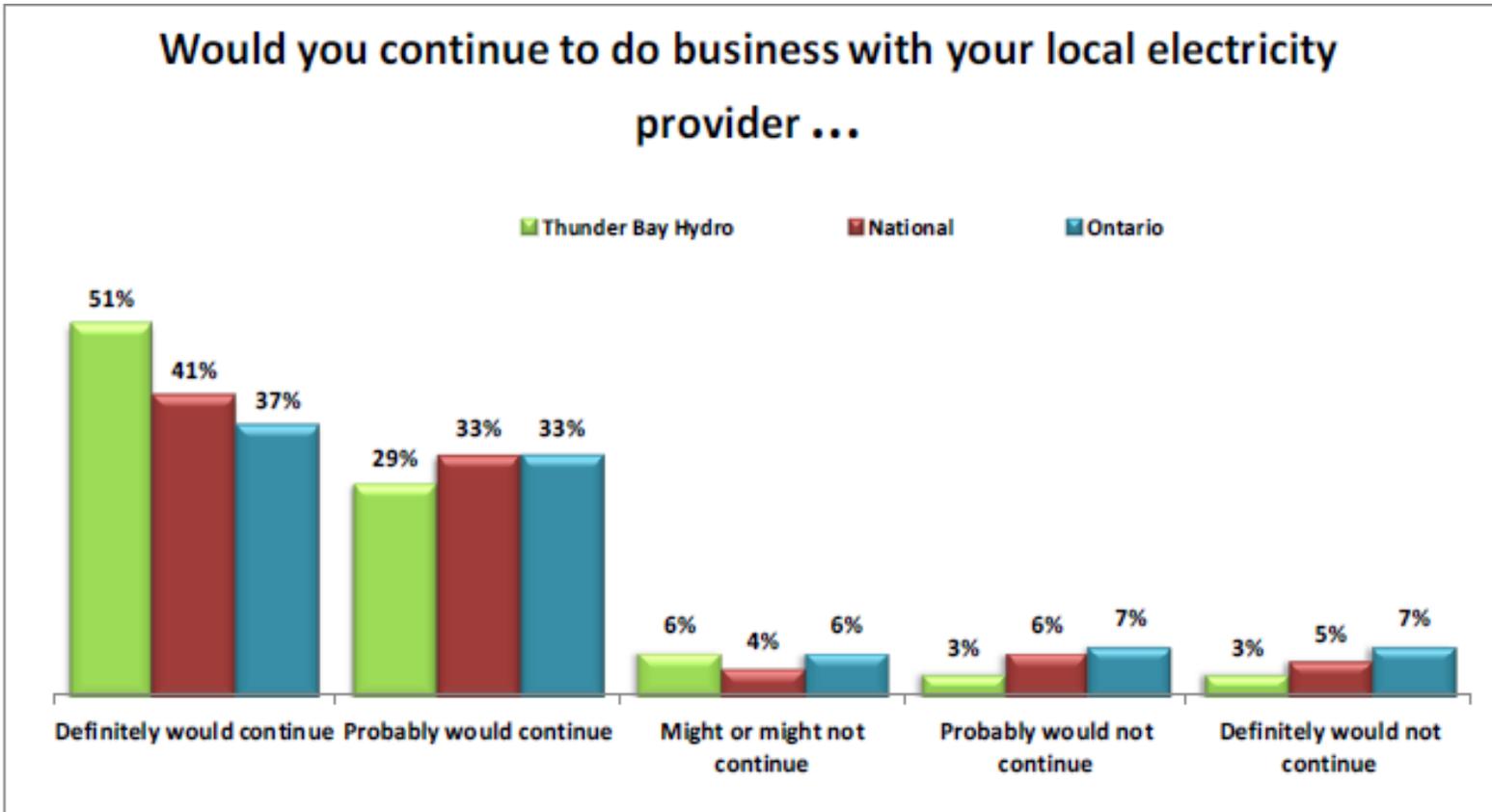
Though customers can not physically leave you, they can emotionally leave you and when they do, it becomes an extreme challenge to garner their participation or support for utility initiatives.

<b>Electricity customers' loyalty – ... Is a company that you would like to continue to do business with</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Top 2 Boxes: 'Definitely + Probably' would continue</b>	80%	74%	70%
<b>Definitely would continue</b>	51%	41%	37%
<b>Probably would continue</b>	29%	33%	33%
<b>Might or might not continue</b>	6%	4%	6%
<b>Probably would not continue</b>	3%	6%	7%
<b>Definitely would not continue</b>	3%	5%	7%

Base: total respondents

Electricity customers' loyalty – Is a company that you would like to continue to do business with					
Thunder Bay	2015	2014	2013	2012	2011
<b>Top 2 boxes: 'Definitely + Probably' would continue</b>	80%	-	-	85%	-

Base: total respondents / (-) not a participant of the survey year



Base: total respondents

# Word of mouth

## Customer Loyalty Model

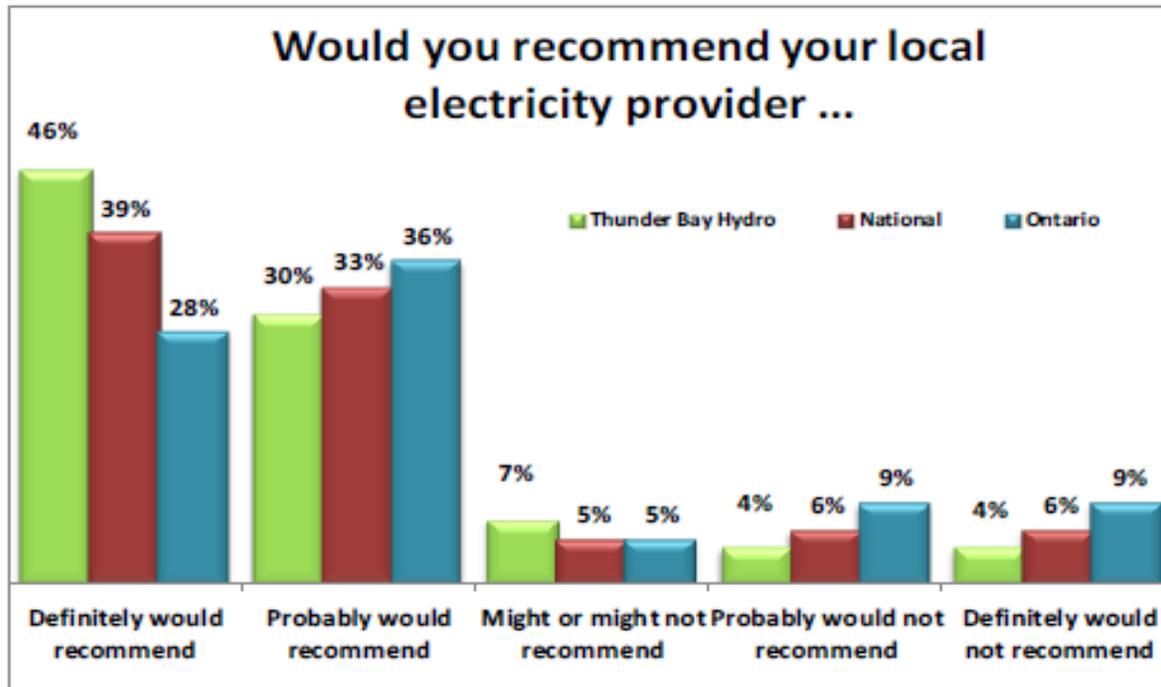


Advocacy is one of the metrics measured in determining customer loyalty. Essentially, companies believe that a loyal customer is one that is spreading the value of the business to others, leading new people to the business and helping the company grow. Customer referrals, endorsements and spreading the word are extremely important forms of customer behaviour. For LDCs this is about generating positive referants about the LDC as a relevant and valuable enterprise.

When customers are loyal to a company, product or service, they not only are more likely to purchase from that company again, but they are more likely to recommend it to others – to openly share their positive feelings and experiences with others. In today’s world, thanks to the Internet, they can tell and influence millions of people. That equates to new customers and revenue. The same holds true, if not more, when customers are disloyal. Disgruntled customers could share their negative experiences with an ever-widening audience, jeopardizing a company’s reputation and resulting in fewer engaged customers and/or customers who are Favourable or Secure. Secure customers, typically are advocates and they are deeply connected and brand-involved.



Would you tell me if you agree or disagree with the following statement? Thunder Bay Hydro is a company that you would recommend to a friend or colleague ...



Base: total respondents

Word of mouth communication is a very powerful form of communication and influence. When customers are speaking to other customers (or their peers) it is more credible, goes through less perceptual filters and can enhance the view of services or products better than marketing communication.

There are two forms of word of mouth which utilities need to understand. The first is Experience-based word of mouth which is the most common and most powerful form. It results from a customer's direct experience with the utility or the re-statement of a direct experience from a trusted source.

The second is Relay-based word of mouth. This is when customers pass along important messages to others based on what they have learned through the more traditional forms of communications. For example, if the utility was communicating an offer for "free LED lights" chances are high that the offer would be "relayed" to others through word of mouth

For an electric utility, specific examples of potential positive advocacy behaviour include:

- Recommending that other customers specifically locate in the geographic area that is served by that utility
- Supporting the utility's positions or actions on energy-related public issues, including the environment
- Supporting the utility's position on the location and construction of facilities
- Providing testimonials about positive experiences with the utility

Electricity customers' loyalty – ... is a company that you would recommend to a friend or colleague			
	Thunder Bay	National	Ontario
<b>Top 2 boxes: 'Definitely + Probably' would recommend</b>	76%	72%	64%
<b>Definitely would recommend</b>	46%	39%	28%
<b>Probably would recommend</b>	30%	33%	36%
<b>Might or might not recommend</b>	7%	5%	5%
<b>Probably would not recommend</b>	4%	6%	9%
<b>Definitely would not recommend</b>	4%	6%	9%

Base: total respondents

Electricity customers' loyalty – is a company that you would recommend to a friend or colleague					
Thunder Bay	2015	2014	2013	2012	2011
<b>Top 2 Boxes: 'Definitely + Probably' would recommend</b>	76%	-	-	83%	-

Base: total respondents / (-) not a participant of the survey year

Our survey research as well as theory backs up the fact that if your customers are willing to endorse you and put their reputation on the line to recommend you, they also trust you and are satisfied with the service you are providing.

# Corporate image

Twenty years ago many LDCs didn't put too much effort into managing their corporate brand/image. One could argue customers cared less about image and more about operational items such as reliability, restoring power quickly and billing accuracy. In fact, our research from 2006 shows Company Image represented about an 18% weight in affecting the customer's perception about their utility.

But times and customer expectations have changed a lot since then. Customers expect their utility to do the core job exceptionally well AND be much more to customers and the community. They expect that you'll be socially responsible, have information they can use to reduce energy costs, be available to answer questions about the industry, etc. In 2015, Company Image represents about a 33% weight in affecting the customer's perception.

In a world where most customers feel time pressed and bombarded with information, a utility should put some real energy behind communicating its brand. The brand of a company is really its reputation. Just like a personal reputation, a brand reputation is formed based on the behaviors and actions of the company (or person), and how those behaviors and actions are perceived. After-all a positive brand image supports a positive perception of the organization. There will always be a brand/image, an LDC should actively manage its reputation, image and brand in order to have the brand/image it desires.

*think  
Reputation  
instead of  
Brand*

Every LDC has a brand and a brand image, while that image can be affected by events in the industry beyond the control of the LDC, the reality is there is a cost benefit to improving the customer experience, generating higher levels of customer engagement and growing the numbers of Favourable and Secure customers. Customers expect that your utility will conduct its business professionally **AND** be a proactive enterprise. How would they know, if you don't communicate with them?

<b>Marketing – Communications</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Topics that require more pro-active communication</b>			
<b>Cost of electricity is reasonable when compared to other utilities</b>	54%	63%	56%
<b>Adapts well to changes in customer expectations</b>	75%	71%	67%
<b>Provides good value for money</b>	67%	68%	62%
<b>Spends money prudently to keep the system reliable and up-to-date</b>	79%	74%	69%
<b>Operates a cost effective electricity distribution system</b>	71%	72%	63%
<b>Topics that your utility scores very well on</b>			
<b>Is a respected company in the community</b>	90%	82%	79%
<b>A company to “continue to do business with”</b>	88%	82%	79%
<b>Overall the utility provides excellent quality services</b>	86%	85%	83%
<b>Standard of reliability delivering electricity that meets expectations</b>	88%	88%	86%
<b>Provides consistent, reliable energy</b>	91%	90%	88%

Base: total respondents with an opinion

# Corporate Credibility & Trust

So, you have taken the time to listen to your customers and stakeholders. What next? Everyone will be looking at you to follow through on this feedback. You need to start establishing your credibility. You have to demonstrate that you can be trusted to get the job done and deliver on your promises. And, you need to do this in a way that builds your credibility and improves trust.

Creating credibility is a process, which advances only through honest, continuous communication between the utility, its regulators, and the public at large. Pro-active and credible communications from an LDC should do three things for its customers: 1- demonstrate competency 2- build confidence and 3- show a future orientation.

<b>Attributes strongly linked to Credibility &amp; Trust</b>			
	<b>Thunder Bay</b>	<b>National</b>	<b>Ontario</b>
<b>Overall the utility provides excellent quality services</b>	86%	85%	83%
<b>Keeps its promises to customers and the community</b>	84%	79%	77%
<b>Customer-focused and treats customers as if they're valued</b>	80%	74%	72%
<b>Is a trusted and trustworthy company</b>	88%	81%	77%

Base: total respondents with an opinion

Trust and credibility are indicators of the degree of confidence stakeholders have in your organization's ability to deliver on its commitments. Trust and credibility are outcomes based on what your utility actually does, not what it might be doing.

**Knowledge** is captured by the utility's ability to demonstrate that it is actively aware of industry, regulatory and economic changes within the industry and how these might impact the lives of customers.

**Trust** — Trust is achieved through a track record of consistent and reliable performance, delivering on commitments and demonstrated accountability.

**Integrity** is established by demonstrating adherence to a code of conduct. It requires consistently acting in accordance with the values and goals that have been communicated to customers.



*Simul/UtilityPULSE research shows the under-pinning components which lead customers to believe an organization has credibility and can be trusted are: Knowledge, Integrity, Involvement and Trust.*

**Involvement** — Corporate Involvement is increasingly important to Canadian communities as it is an opportunity for their local utility to use their resources and man-power to benefit people at the community level. This helps to build credibility as customers see that the organization is acting and delivering on its commitments. This helps customers regard the utility with esteem and respect.

**Credibility and Trust Index**

**Thunder Bay Hydro 85%**

Ontario 80%

National 83%

# How can service to customers be improved?

Every business, even natural monopolies, need to keep a focus on its customers, its standards of operations and in being responsive to problems. Insights into what isn't working or what can be done to improve often come from customers. Continuous improvement is the new normal.

Customers are more informed, more aware, more conscious of what's going on around them and in this age of internet and social media, they are better equipped to influence service quality and outcomes. They have learned to compare products and services, to document and monitor customer service and satisfaction, and to request or demand higher quality. And, when things go wrong, customers also know that they are "one click" away from the world knowing about it.

As a further way to identify pressure points and areas of concern, respondents were asked to give their top one or two priorities for improvement to their local utility's service.

For 2015 there is heightened awareness for the need to maintain equipment, keep things up to date, improve reliability, and communicate effectively, but true to historical form the number one suggestion remains "better prices/lower rates".

*And we are interested in knowing what you think are the one or two most important things Thunder Bay Hydro could do to improve service to their customers?*

<b>One or two most important things 'your local utility' could do to improve service</b>	
<b>Thunder Bay</b>	<b>% of all suggestions</b>
<b>Better prices/lower rates</b>	54%
<b>Eliminate SMART meters</b>	14%
<b>Better maintenance</b>	11%
<b>Improve reliability of power</b>	9%
<b>Be more efficient</b>	9%
<b>Better communication with customers</b>	6%
<b>Information &amp; incentives on energy conservation</b>	5%
<b>Remove hidden costs on bills</b>	4%
<b>Better online presence</b>	4%
<b>Improve/simplify/clarify billing</b>	3%
<b>Extend service hours/availability of hydro representative</b>	2%
<b>Staff related concerns</b>	2%

Base: total respondents with suggestions

# What do customers think about electricity costs?

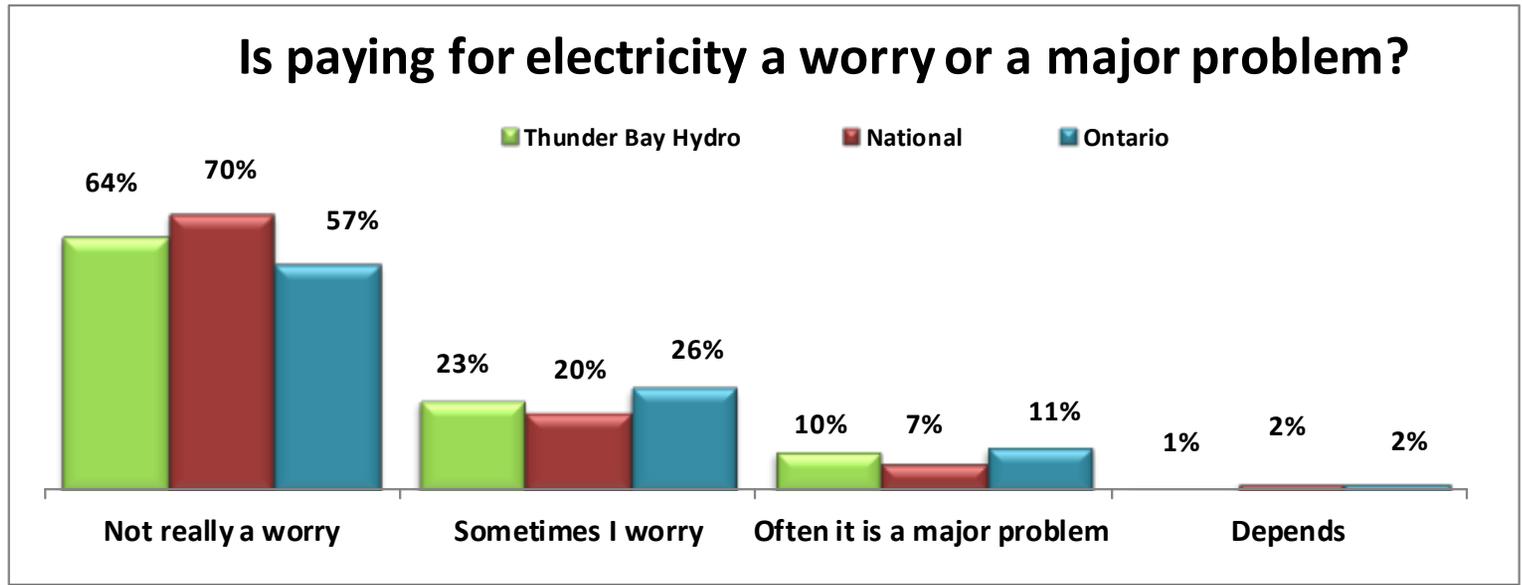
For years electric utility customers have had a very real concern about high bills and the cost of electricity. We've constantly and consistently have told our clients "when a value proposition doesn't exist or is unclear, then people will focus on price". LDCs in Ontario certainly score low on "value for money". The reality is, when a customer struggles to pay their electricity bill they struggle to see the LDC providing good value for money.

The good news is LDCs have been doing more to engage customers about the utilities' plans to spend money to improve operations and/or make capital investments. While this is seen as an important process, especially by the Ontario Energy Board, it doesn't deal with the basic issue at hand – the customer's own struggle to pay the bill. Our first year of research, 1999, showed us that there was a very high correlation between ability to pay and satisfaction – in 2015 the correlation is still very high.

*Next I am going to read a number of statements people might use about paying for their electricity. Which one comes closest to your own feelings, even if none is exactly right? Paying for electricity is not really a worry, Sometimes I worry about finding the money to pay for electricity, or Paying for electricity is often a major problem?*

Is paying for electricity a worry or a major problem?				
	Not a worry	Sometimes	Often	Depends
<b>Thunder Bay Hydro</b>				
<b>2015</b>	64%	23%	10%	1%
<b>2012</b>	69%	21%	7%	1%

Base: total respondents



Base: total respondents

Is paying for electricity a worry or a major problem?				
	Not a worry	Sometimes	Often	Depends
<b>Thunder Bay Hydro</b>				
<b>&lt;\$40,000</b>	52%	24%	17%	2%
<b>\$40&lt;\$70,000</b>	55%	36%	8%	1%
<b>\$70,000+</b>	76%	15%	8%	0%

Base: total respondents

For 2015, UtilityPULSE segmented respondents into 3 “average kWh groups”. Group 1 represents 25% of the customer base derived from segmenting the customer data file into the first quartile of kWh usage. Group 2 represents the middle 50% of the customer base; and Group 3 represents the top quartile of kWh customers. Group 1 uses the least amount of electricity on average, while Group 3 uses the most.

Is paying for electricity a worry or a major problem?			
	kWh Group 1	kWh Group 2	kWh Group 3
<b>Not really a worry</b>	70%	64%	57%
<b>Sometimes I worry</b>	19%	24%	26%
<b>Often it is a major problem</b>	7%	9%	16%
<b>Depends</b>	2%	1%	1%

Base: total respondents

<b>Is paying for electricity a worry or a major problem?</b>				
	<b>Not a worry</b>	<b>Sometimes</b>	<b>Often</b>	<b>Depends</b>
<b>Ontario</b>				
<b>2015</b>	57%	26%	11%	2%
<b>2014</b>	59%	26%	11%	2%
<b>2013</b>	66%	21%	11%	1%
<b>2012</b>	59%	27%	11%	2%
<b>2011</b>	52%	31%	13%	3%
<b>National</b>				
<b>2015</b>	70%	20%	7%	2%
<b>2014</b>	69%	20%	7%	3%
<b>2013</b>	70%	18%	8%	2%
<b>2012</b>	67%	22%	8%	2%
<b>2011</b>	63%	25%	8%	2%

Base: 2015 Ontario and National benchmark surveys

# What do small commercial customers think?

Small commercial customers represent a significant amount of any LDC's customer base yet the amount of customer intelligence that a LDC has on this customer segment is extremely low. Beyond having a contact telephone number, name of company and address there often isn't much more information.

In a time when "targeted" communication is important, knowing the type of category of small commercial account would assist LDCs in delivering meaning messages in an effective way. This could be particularly important in the area of energy conservation i.e., pulling together messages and programs for specific types of businesses. After all, a small restaurant is different from a small accounting office.

Small commercial customers have, in many ways, very similar concerns with Residential customers but there are some differences. For example, small business customers are 1.5X more likely to contact their LDC when there is an outage or billing issue.

## **Small Commercial Customer (General Service < 50kW Demand)**

A small commercial customer is defined by the OEB as a non-residential customer in a less than 50 kW demand rate class. These customers are similar to the residential customer in that their bill does not have a demand component to it and their charges are based upon KWH of consumption. Most of these customers would occupy small storefront locations or offices



Deposit requirements, monthly energy bills (and, therefore, energy usage), power quality, and reliability all directly impact a small business's financial situation. Unlike residential customers who tend to describe the cost of power interruptions in terms of a "inconvenience", commercial (and industrial) customers associate power interruptions with the cost of lost business, i.e., a loss in production is a loss in profits.

Likewise, based on the requirement of electricity to sustain business operations, there exists a difference in actual levels of demand response. For instance, small business and commercial users are unlikely to choose to decrease their electricity consumption if it is incompatible with efficient management of their business processes or threatens contracted deliveries to their primary product markets. In some cases, electricity consumption is a relatively small proportion of total input and operating costs, which substantially reduces the financial incentive for shutting down production during off peak pricing.

The tables associated with this report will contain Ontario LDC specific information as it relates to residential and commercial customers. Recognizing that smaller data samples are susceptible to greater data swings, for most LDCs there would be 60 or 90 responses from small commercial customers. We have compiled the following based on a group composite of all of our 2015 discussions with small commercial and residential customers.

<b>Satisfaction: Pre &amp; Post</b>		
<b>Satisfaction (Top 2 Boxes: 'very + somewhat satisfied')</b>	<b>Residential</b>	<b>Commercial</b>
<b>Initially</b>	89%	90%
<b>End of Interview</b>	89%	90%

Base: total respondents from the full 2015 database

As it relates to the six attributes associated with customer service:

<b>Very or fairly satisfied with...</b>	<b>Residential</b>	<b>Commercial</b>
<b>The time it took to contact someone</b>	73%	78%
<b>The time it took someone to deal with your problem</b>	70%	75%
<b>The helpfulness of the staff who dealt with your problem</b>	74%	80%
<b>The knowledge of the staff who dealt with your problem</b>	73%	82%
<b>The level of courtesy of the staff who dealt with your problem</b>	81%	88%
<b>The quality of information provided by the staff member</b>	72%	76%

Base: total respondents from the full 2015 database



Residential respondents had lower satisfaction levels with customer service versus Commercial respondents.

Overall satisfaction with most recent experience		
	Residential	Commercial
<b>Top 2 Boxes: 'very + somewhat satisfied'</b>	72%	77%
<b>Bottom 2 Boxes: 'somewhat + very dissatisfied'</b>	26%	22%

Base: total respondents from the full 2015 database

Comparisons between Residential and Commercial		
Loyalty Groups	Residential	Commercial
<b>Secure</b>	23%	25%
<b>Still Favourable</b>	10%	10%
<b>Indifferent</b>	59%	57%
<b>At risk</b>	8%	8%

Base: total respondents from the full 2015 database

Loyalty Model Factors	Residential	Commercial
<b>Very/somewhat satisfied</b>	89%	90%
<b>Definitely/probably would continue</b>	81%	81%
<b>Definitely/probably would recommend</b>	75%	78%

Base: total respondents from the full 2015 database

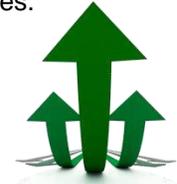
<b>Outages &amp; Bill problems</b>	<b>Residential</b>	<b>Commercial</b>
<b>Respondents with outage problems</b>	44%	37%
<b>Respondents with billing problems</b>	10%	12%

Base: total respondents from the full 2015 database

<b>Attempts to contact local utility...</b>	<b>Residential</b>	<b>Commercial</b>
<b>Respondents with outage problems</b>	19%	30%
<b>Respondents with billing problems</b>	39%	63%

Base: total respondents from the full 2015 database

Residential respondents reported a considerably higher incidence of outages.



Commercial respondents were more likely to call in about billing and outage problems.

<b>Important attributes which describe operational effectiveness</b>		
	<b>Residential</b>	<b>Commercial</b>
<b>Provides consistent, reliable electricity</b>	90%	90%
<b>Delivers on its service commitments to customers</b>	86%	87%
<b>Accurate billing</b>	86%	85%
<b>Quickly handles outages and restores power</b>	87%	87%
<b>Makes electrical safety a top priority</b>	88%	90%
<b>Uses responsible environmental practices when completing work</b>	88%	89%
<b>Is efficient at managing the electricity distribution system</b>	82%	82%
<b>Is a company that is 'easy to do business with'</b>	84%	84%
<b>Operates a cost effective electricity distribution system</b>	72%	72%

Base: total respondents with an opinion from the full 2015 database

<b>Important attributes which shape perceptions about corporate image</b>		
	<b>Residential</b>	<b>Commercial</b>
<b>Is a respected company in the community</b>	85%	86%
<b>A leader in promoting energy conservation</b>	80%	81%
<b>Keeps its promises to customers and the community</b>	82%	83%
<b>Is a socially responsible company</b>	83%	84%
<b>Is a trusted and trustworthy company</b>	84%	85%
<b>Adapts well to changes in customer expectations</b>	74%	76%
<b>Overall the utility provides excellent quality services</b>	85%	86%

Base: total respondents with an opinion from the full 2015 database

<b>Important attributes which shape perceptions about service quality and value</b>		
	<b>Residential</b>	<b>Commercial</b>
<b>Is pro-active in communicating changes and issues which may affect customers</b>	79%	80%
<b>Provides good value for money</b>	68%	69%
<b>Customer-focused and treats customers as if they're valued</b>	79%	80%
<b>Deals professionally with customers' problems</b>	84%	87%
<b>Spends money prudently</b>	77%	77%
<b>Quickly deals with issues that affect customers</b>	82%	82%
<b>Provides information and tools to help manage electricity consumption</b>	79%	77%
<b>Provides information to help customers reduce their electricity costs</b>	78%	77%
<b>The cost of electricity is reasonable when compared to other utilities</b>	60%	59%

Base: total respondents with an opinion from the full 2015 database

Is paying for electricity a worry or a major problem?		
	Residential	Commercial
<b>Not really a worry</b>	63%	91%
<b>Sometimes I worry</b>	24%	27%
<b>Often it is a major problem</b>	8%	9%
<b>Depends</b>	3%	1%

Base: total respondents from the full 2015 database

When there is an outage, which of the following methods would you want your utility to use to give you information about the outage?

Preferred methods to give you information about the outage from your utility...		
	Residential	Commercial
<b>Recorded telephone message</b>	60%	58%
<b>E-mail</b>	32%	40%
<b>Post on utility's website</b>	25%	28%
<b>Social media - Twitter</b>	19%	20%
<b>Text message</b>	32%	35%
<b>Local radio</b>	41%	43%
<b>Local TV</b>	30%	30%

Base: total respondents from the full 2015 database

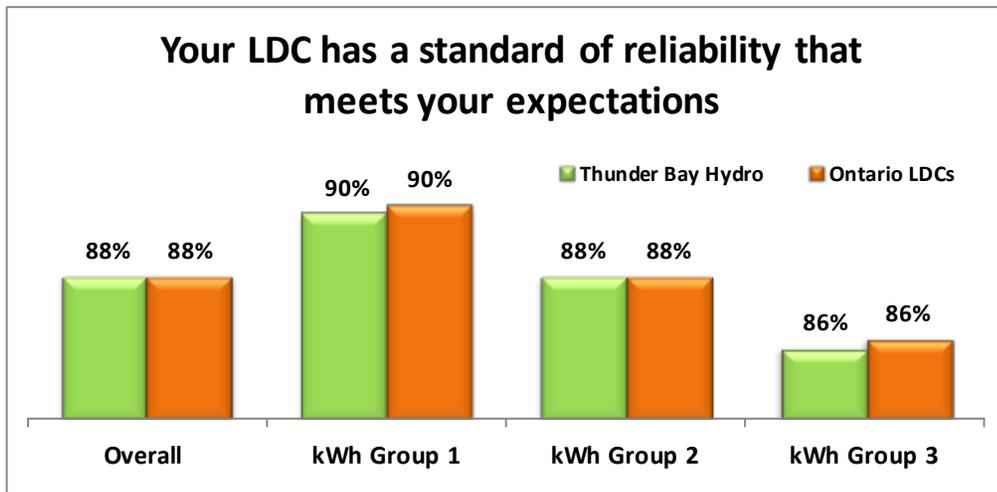
# SUPPLEMENTAL QUESTIONS



# Outage Management

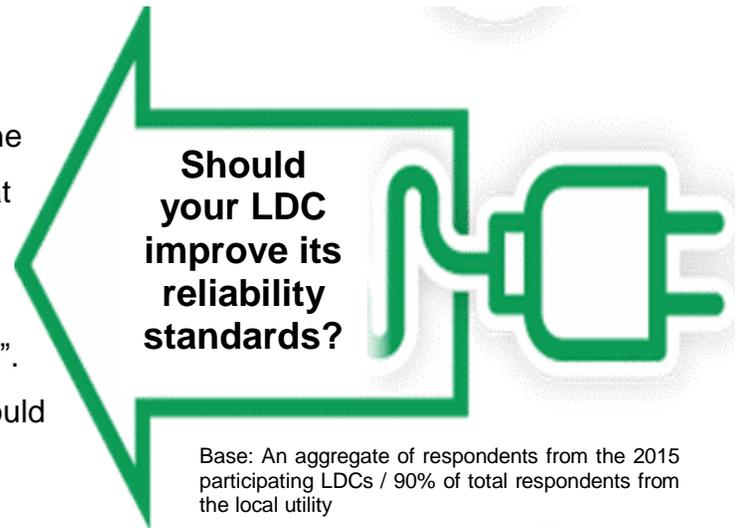
The ice-storm of December 2013 put more emphasis on how LDCs should be communicating with customers when there is an outage – both planned and unplanned outages. Since then much has been written about outage management thereby heightening customers' awareness about the issue. None-the-less every LDC has made changes and/or enhancements to their outage management practices.

Recognizing the importance of this topic to customers, a question about LDC reliability standards has been added to the core survey.



Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

Customers who responded to the survey offer a paradox. On the one hand, when asked about “your LDC has a standard of reliability that meets your expectations”, scores are very high – no doubt somewhat comforting to the LDC. On the other hand, when asked “Should your LDC improve its reliability standards” the majority certainly said “yes”. What we didn’t do is tell the customer how much more money they would have to pay per month for higher standards.



Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

	Yes	No	Depends
<b>Ontario LDCs</b>	57%	35%	8%
<b>Thunder Bay Hydro</b>	51%	36%	13%

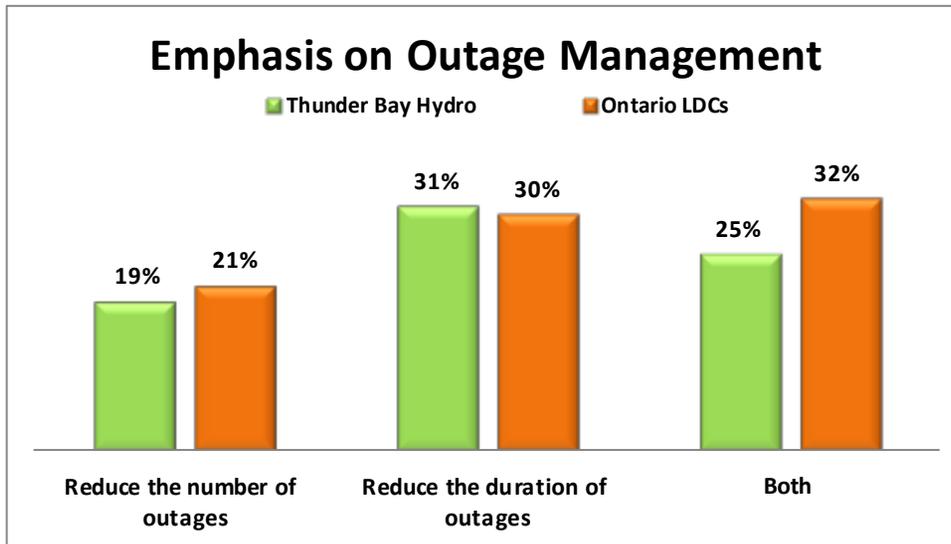
An outage management system helps LDC employees to discover, locate and resolve power outages in a more informed, orderly, efficient and timely manner.

<b>How many outages are acceptable over 12 months?</b>		
	Ontario LDCs	Thunder Bay
<b>None</b>	23%	17%
<b>One</b>	15%	10%
<b>Two</b>	26%	26%
<b>Three</b>	13%	15%
<b>Four</b>	5%	10%
<b>Five or more</b>	7%	7%
<b>Don't Know</b>	9%	15%

<b>Reasonable amount of time for an unplanned outage?</b>		
	Ontario LDCs	Thunder Bay
<b>Less than 15 minutes</b>	14%	14%
<b>16-30 minutes</b>	15%	19%
<b>31-60 minutes</b>	13%	13%
<b>1 to 2 hours</b>	29%	27%
<b>3 to 5 hours</b>	13%	13%
<b>6 to 12 hours</b>	5%	3%
<b>More than 12</b>	3%	1%
<b>Don't Know</b>	8%	10%

Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

If the utility were to improve reliability should they put more emphasis on reducing the number of unplanned outages or reducing the duration of the unplanned outage? Or both which requires an increase.



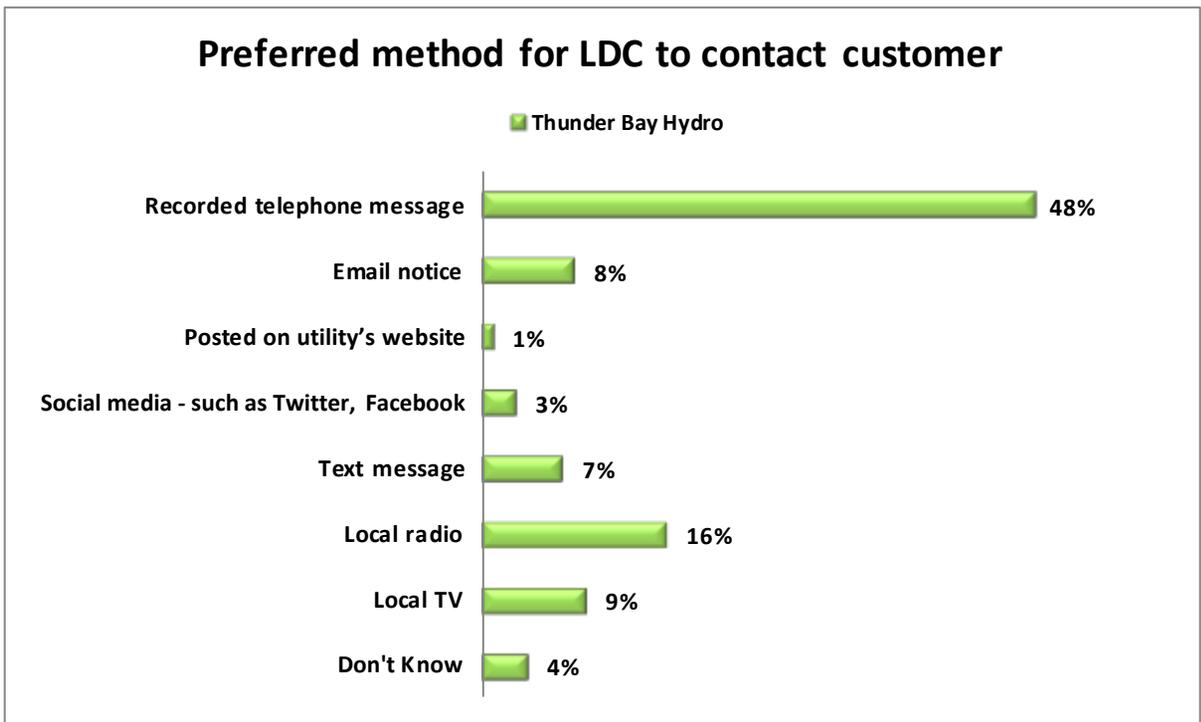
Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

Which communication channel do customers prefer to use? The telephone is the most used and preferred method to contact the LDC to communicate with customer care representatives.

	Telephone	Email	Utility Website	Social Media	Mail	In Person
Ontario LDCs	84%	5%	2%	1%	0%	0%
Thunder Bay Hydro	89%	2%	0%	1%	0%	0%

Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

While the telephone is still the communication channel most would prefer to use to communicate with or to be communicated to, customers do have an expectation for the LDC to use varied methods to contact them. Communication channels other than the telephone received higher preference scores when asked about the utility contacting the customer versus the customer's use of such channels to contact the utility. This indicates that the onus is on the utility to find a way to contact a customer when necessary and that should use various means to ensure the message is communicated. Proactive communication channels which include recorded calls, emails and SMS (text messaging) are increasingly being used by utilities to reach customers affected by outages.



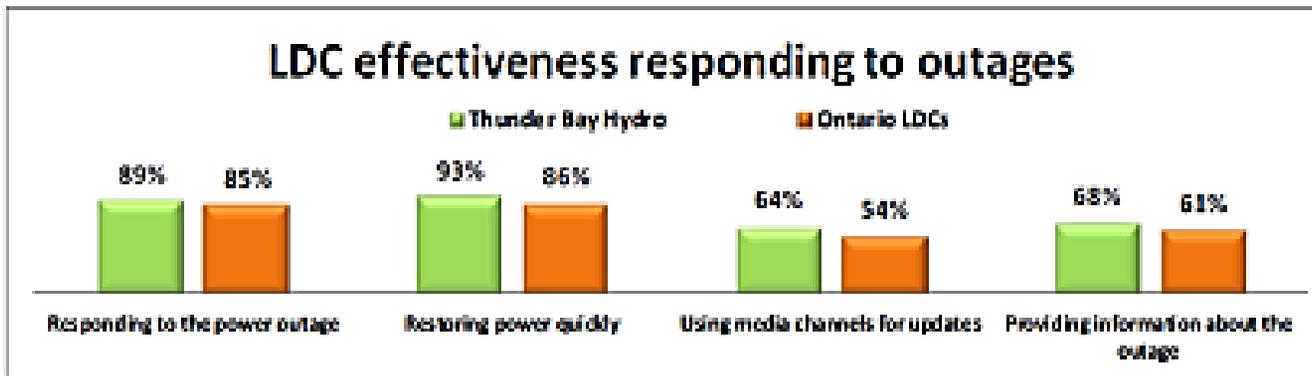
Base: 90% of total respondents from the local utility

Responding to outages and making sure power is restored quickly is a priority item with customers as well as communications during outage events. Being effective during an outage situation from the point of view of a customer requires that:

- timely information on outages is provided
- utilities understand that even a short outage in duration is impactful
- in large scale events, utilities should proactively provide tips on how to prepare for extended outages
- being kept informed about what is going on during an outage makes customers feel valued.

LDC effectiveness responding to outages		
	Ontario LDCs	Thunder Bay
Responding to the power outage	85%	89%
Restoring power quickly	86%	93%
Using media channels for updates	54%	64%
Providing information about the outage	61%	68%

Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility



Base: An aggregate of respondents from the 2015 participating LDCs / 90% of total respondents from the local utility

The types of information that customers require during an outage include:

- When will their power be restored?
- What areas are affected?
- How many customers are impacted?
- Have work crews been dispatched to the affected area and is the utility working to restore power?
- What was the cause of the power outage?
- What can customers do to cope during the outage?

# Operating & Capital Expenses

Much has been written, and reported on, regarding the cost of electricity. On the one hand many customers “want” lower prices, but they “need” reliability and responsiveness. UtilityPULSE has been conducting research in the LDC industry in Ontario for 17 years. However, members of UtilityPULSE have been doing customer research for much longer. It is true, customers (but not all) can tell you what they want, but they have a very difficult time telling you what they need. Hence it is up to the professionals in the LDC to use their experience and judgment to determine what needs to be done and when it should be done. No easy task.

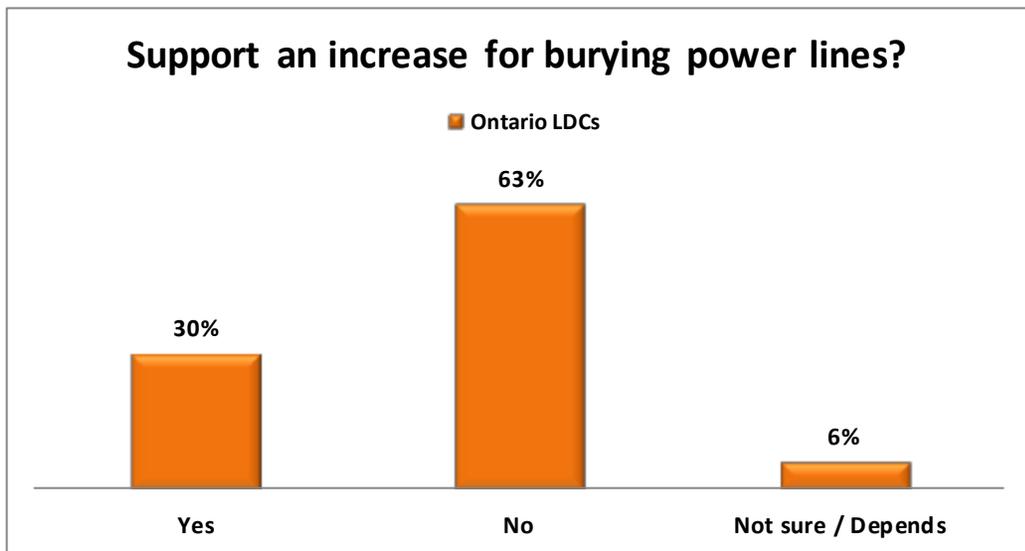
UtilityPULSE asked customers: *“As it relates to replacing equipment electric utilities typically follow 2 main practices which are: let equipment run-to-failure OR pro-actively replace equipment. Which of the following best represents your view on equipment replacement?”*:

Strategy for replacing equipment	
	Ontario LDCs
Run to failure when there are limited customers affected ensures full-value is received from the equipment	27%
Pro-active replacement, even though it may cost more, should ensure reliable power	65%
Don't Know	8%

Base: An aggregate of respondents from the 2015 participating LDCs

Understanding customer expectations, concerns, worries, and desires does help an LDC to build their plan to take the LDC forward while ensuring that it remains relevant, viable, and valuable to customers, employees and other stakeholders.

To bury or not to bury is a debated topic by many. Survey respondents were asked: *“Buried power lines look better and are less affected by weather. However, they are more expensive to install and maintain, and it often takes longer to restore power when there is an outage. Would you support an increase in your bill for new programs to bury power lines?”*

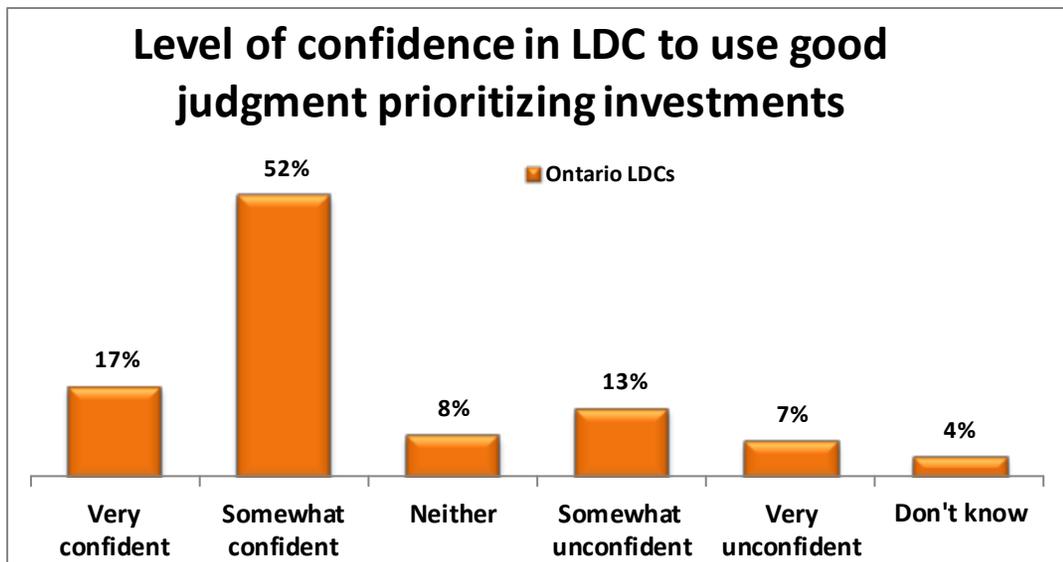


Base: An aggregate of respondents from the 2015 participating LDCs

For respondents that said they support new programs for burying power lines, they were asked whether the priority for new programs should be applied to residential streets, major streets or both.

Programs to bury power lines	
Ontario LDCs	
Residential only	14%
Major streets only	12%
Both	73%

Base: An aggregate of respondents from the 2015 participating LDCs



Responding customers really don't know how much things cost or even what it takes to complete various operational tasks or capital projects.

We have heard customers tell us "we expect those that are being paid will make good decisions."

Base: An aggregate of respondents from the 2015 participating LDCs

Which of the following items are you willing to pay more for per month ...				
Ontario LDCs	Yes	No	Not sure	Depends
<b>A proactive outage management system</b>	51%	39%	9%	1%
<b>Increased self-service options on the website</b>	34%	58%	7%	1%
<b>Extended office hours</b>	16%	79%	5%	1%
<b>Increased tree trimming to improve reliability</b>	58%	35%	6%	0%
<b>Better use of social media</b>	20%	53%	2%	1%
<b>Educating customers about energy conservation</b>	47%	48%	4%	0%
<b>Educating customers and the public about electricity safety</b>	43%	53%	5%	0%

Base: An aggregate of respondents from the 2015 participating LDCs

Not surprisingly lower income respondents identified lower amounts. For example, 13% of respondents <40K who were willing to pay for one operational item identified a number between .51 -1.00, it was 23% for respondents 70K+. Ability to pay also has an impact on the numbers that respondents identified. When three or more operational items were involved, 32% of respondents who said that they did not worry about paying their bill identified a number of 25 cents or less. Respondents who said they worry often, identified a number 25 cents or less, 59% of the time.

Secure customers identified higher numbers more frequently than At Risk customers. When three or more operational items were involved, At Risk customers pick a number less than 25 cents, 59% of the time; Secure customers was 35%. This proves that price increase receptivity is linked to customer affinity. However, average kWh usage per month showed very little difference between customers in the lower quartile of kWh versus customers in the highest quartile.

The above chart can certainly fuel debate between industry professionals, regulators, interveners and customers. Could an LDC ignore investing in self-service options on their website? Do the raw scores from the survey represent what the LDC needs to do? If the LDC didn't invest in increased self-service options what might happen to operational costs? What might happen to the perceived brand of the LDC i.e., being seen as a modern enterprise? For those that said they would pay more...

Willing to pay how much more per month for ...			
Ontario LDCs	1 item	2 items	3 or more items
<b>\$0.25 or less</b>	59%	47%	35%
<b>\$0.26 – \$0.50</b>	10%	13%	10%
<b>\$0.51 – \$1.00</b>	14%	15%	16%
<b>\$1.01 – \$2.00</b>	6%	8%	15%
<b>\$2.01 – \$3.00</b>	2%	3%	6%
<b>\$3.01 – \$5.00</b>	1%	4%	7%
<b>\$5.01+</b>	0%	3%	5%
<b>Don't know</b>	8%	8%	5%

Base: An aggregate of respondents from the 2015 participating LDCs



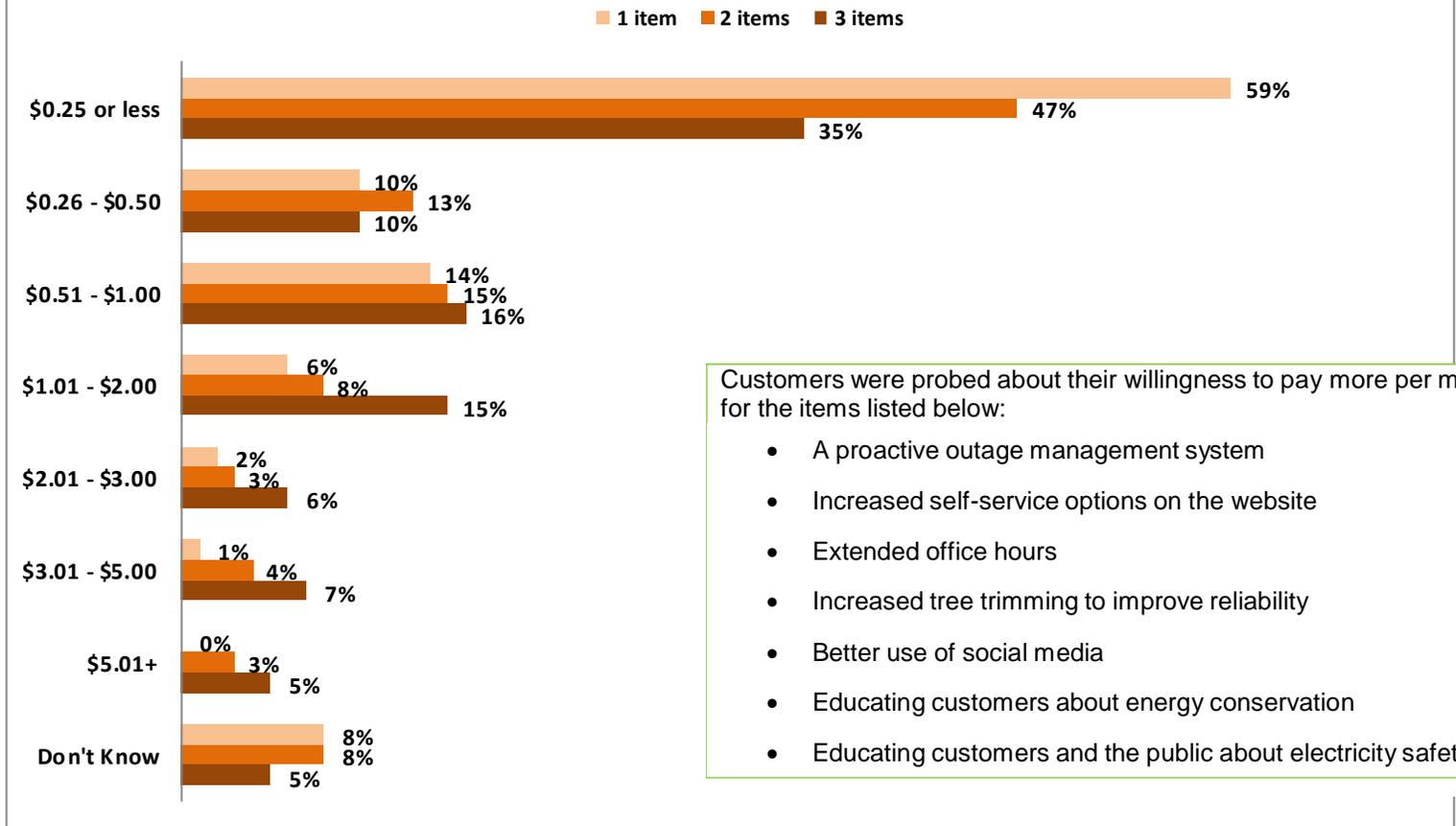
Respondents were not guided by the interviewer providing various ranges of rates.

Respondents were simply asked to give an amount of \$.

Their answers were categorized into one of the rate ranges shown in the table.

From the data we can see that some customers are willing to pay more when they have a personal interest in certain capital projects i.e., projects that have a direct impact. The amount customers are willing to pay for 1 item versus 3 items did not translate into a proportional increase. While customers recognize 3 items would necessitate more money than 1 item, fewer customers were willing to pay that much more for 3 items. It is evident that \$2.00 was a threshold amount as fewer than 10% would be willing to pay over \$2.00 for 1, 2 or 3 items.

## Willing to pay how much more per month for ...

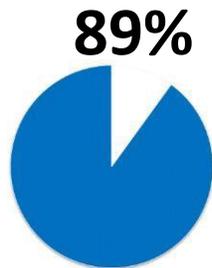


Base: An aggregate of respondents from the 2015 participating LDCs

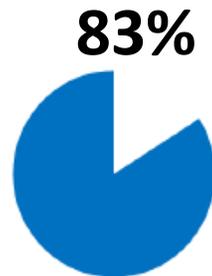
# Soliciting Feedback

The Ontario Energy Board, in its publication: “EB-2010-0379 Report of the Board Performance Measurement for Electricity Distributors: A Scorecard approach”, referenced staff recommendations that distributors would be required to survey customer satisfaction among other items in an effort to continually seek ways in which to improve performance and productivity while better understanding and engaging with their customers.

UtilityPULSE asked 1,269 Residential customers, located throughout Ontario and who pay the electricity bill questions pertaining to the solicitation of customer feedback and opinions on different electricity industry matters. These questions were asked with intent of gauging the customer’s perception of requesting feedback and the importance thereof.



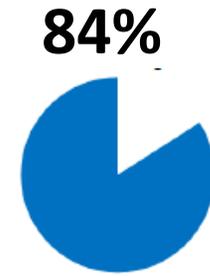
89% of Ontario respondents feel it is 'very + somewhat' important for their LDC to solicit customer feedback on customers' overall satisfaction with the utility.



83% of Ontario respondents feel it is 'very + somewhat' important for their LDC to solicit customer feedback on how much money is being spent on repairing equipment.



86% of Ontario respondents feel it is 'very + somewhat' important for their LDC to solicit customer feedback on how much money is being spent on keeping the system reliable.



84% of Ontario respondents feel it is 'very + somewhat' important for their LDC to solicit customer feedback on the utility's plans to spend money on extending the system to help economic development in the community.

<b>Importance of soliciting customer opinions and feedback on ....</b>				
	<b>Top 2 boxes: 'very + somewhat' important</b>	<b>Bottom 2 boxes: 'somewhat + very' unimportant</b>	<b>Neither</b>	<b>Don't know</b>
<b>...customers' overall satisfaction with the utility ...</b>	89%	8%	1%	3%
<b>...how much money is being spent on repairing equipment ...</b>	83%	9%	1%	6%
<b>... how much money is being spent on keeping the system reliable ...</b>	86%	6%	2%	6%
<b>...the utility's plans to spend money on extending the system to help economic development in the community ...</b>	84%	10%	2%	4%

Base: 1,269 Residential respondents from the 2015 Ontario Benchmark survey

The data reveals that customers do believe the LDC should be seeking their opinions on certain operational matters as well as their overall satisfaction. It could be the customer's view that by having their input counted especially where spending is concerned, they might play a part in controlling costs and stop any unnecessary spending.

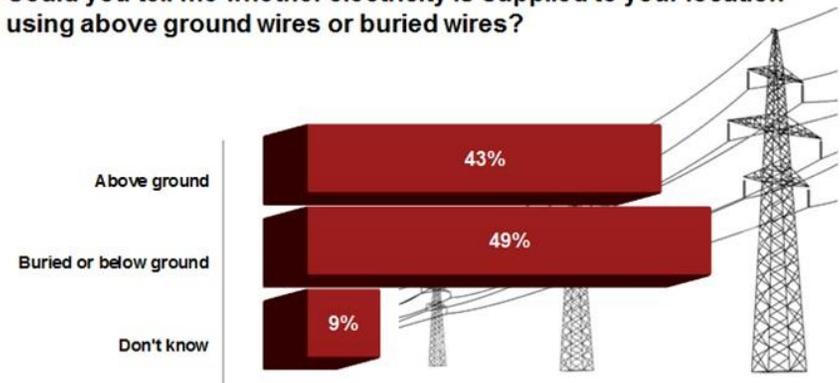
# Public Electrical Safety Measure

The Ontario Energy Board when establishing the LDC Scorecard, included a safety measure. The Electrical Safety Authority took the lead and produced a document describing various facets of the consultative process. Due to the timing of the 2015 UtilityPULSE Ontario benchmark survey, we decided to use the questions from the public document: [http://www.esasafe.com/assets/files/esasafe/pdf/Public\\_Consultation/Public-Electrical-Safety-Measure\\_LDC-Scorecard-Consultation-Document.pdf](http://www.esasafe.com/assets/files/esasafe/pdf/Public_Consultation/Public-Electrical-Safety-Measure_LDC-Scorecard-Consultation-Document.pdf). The questions were early drafts and will (no doubt) undergo some refinement.

UtilityPULSE asked 400 Residential customers, who pay the electricity bill and located throughout Ontario, the questions which appeared in the document.

UtilityPULSE or any of its employees are not commenting on the purpose of the questions, question design or sequence. We believed we had the opportunity to “test” the questions and have done so as a “give back” to our clients and to industry decision makers. We believe the findings may be helpful for various stakeholders involved in determining the public safety measure(s) to be used in an LDC’s report-card.

Could you tell me whether electricity is supplied to your location using above ground wires or buried wires?



Base: 400 respondents from the 2015 Ontario Benchmark survey

How dangerous is it to touch (with your body or any object) an overhead powerline?

Very dangerous	Somewhat dangerous	Not very dangerous	Not at all dangerous	Don't know
70%	8%	5%	10%	7%



Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer=very

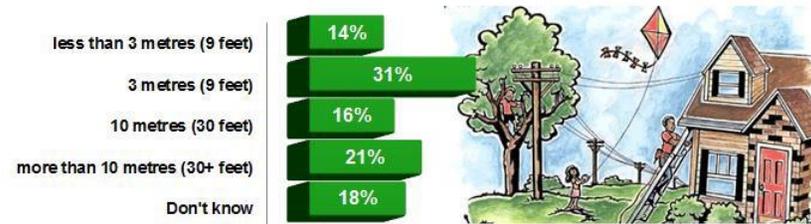
Some electrical utility equipment is located on the ground such as locked steel cabinets that contain transformers or substation sites – which are clusters of electrical equipment typically behind a high fence.

How dangerous is it to try to damage, open, remove contents or otherwise interfere with this equipment?	
79%	Very dangerous
5%	Somewhat dangerous
3%	Not very dangerous
6%	Not at all dangerous
7%	Don't know



Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer=very

How close can you safely come (such as when standing on a ladder, cleaning windows or eaves, climbing or trimming trees, etc.) to an overhead powerline that runs down the street or that connects a home or business to the line on the street?



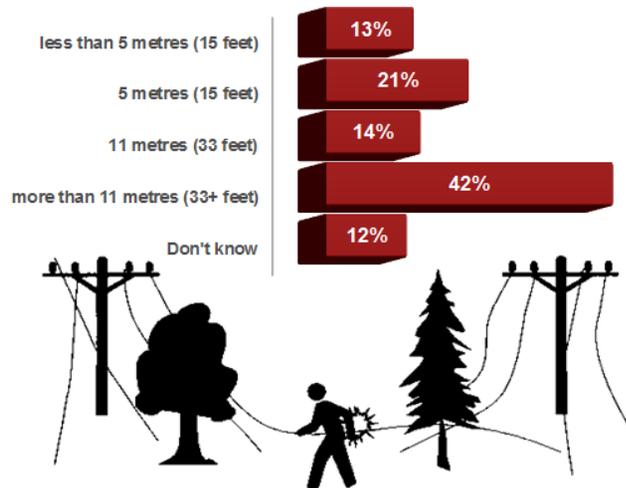
Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer=3 metres

How likely are you to 'call before you dig' to locate electrical and other underground lines when undertaking work or home projects that involve digging?



Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer=very

How close can you safely come to a downed overhead powerline, such as caused by a storm or accident?



Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer=11 metres

If you were in a vehicle (e.g. car, bus, truck) and an overhead powerline came down on top of it such as during a storm or accident which is generally safer?



Base: 400 respondents from the 2015 Ontario Benchmark survey: Answer= stay in

Do you work or undertake activities that regularly cause you to come close to energized powerlines such as construction work, roofing, window washing, tree trimming?



Base: 400 respondents from the 2015 Ontario Benchmark survey

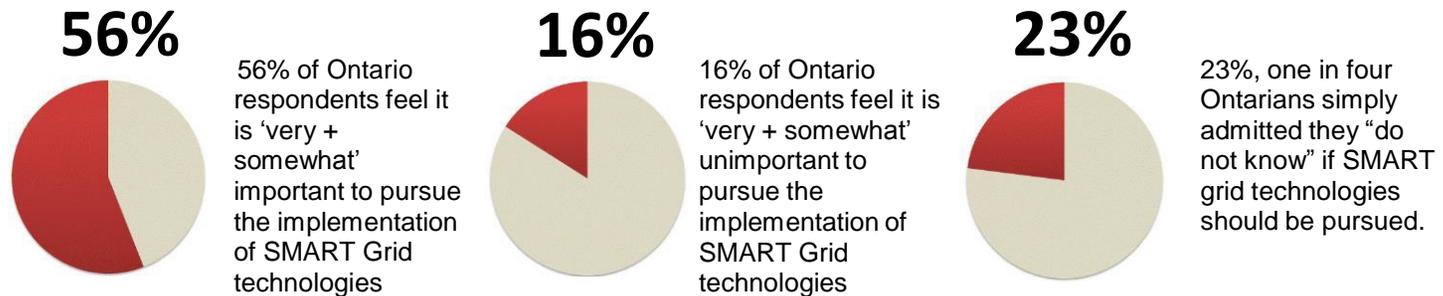
# SMART Grid

A number of functions will be available to electricity system stakeholders due to the advance of SMART Grid technologies. Providing tools to address peak demand, to improve system reliability, to manage distribution and energy storage are tools available to LDCs and system operators, SMART Grid technologies offer consumers possibilities as well. For the electricity customer, SMART grid technologies can provide the opportunity to manage electricity use, to control bills, and to sell power back the grid. How much of this is the average consumer aware of or “in the know”? While many industry insiders talk about the SMART Grid, i.e., its benefits and its challenges, the reality is, the average person is not very knowledgeable about it.

Level of knowledge about the SMART Grid		
	Ontario 2015	Ontario 2014
I have a fairly good understanding of what it is and how it might benefit homes and businesses	9%	9%
I have a basic understanding of what it is and how it might work	21%	25%
I've heard of the term, but don't know much about it	37%	36%
I have not heard of the term	32%	29%
Don't know	1%	1%

Base: total respondents from the 2015/2014 Ontario Benchmark survey

Once again, this year's survey probed around the concept of SMART Grid. While another year has passed, it is evident that the SMART Grid is still not a much talked about concept, only 30% [34%;2014] have a basic or good understanding of what it is, 69% have either not heard of the term or if they did, do not know much about it.



Base: total respondents from the 2015 Ontario Benchmark survey

Support towards working with neighbouring utilities on SMART Grid initiatives		
	Ontario 2015	Ontario 2014
Very supportive	40%	41%
Somewhat supportive	39%	37%
Neither supportive or unsupportive	2%	4%
Somewhat unsupportive	5%	4%
Unsupportive	6%	4%
Don't know	8%	10%

Base: total respondents from the 2015/2014 Ontario Benchmark survey

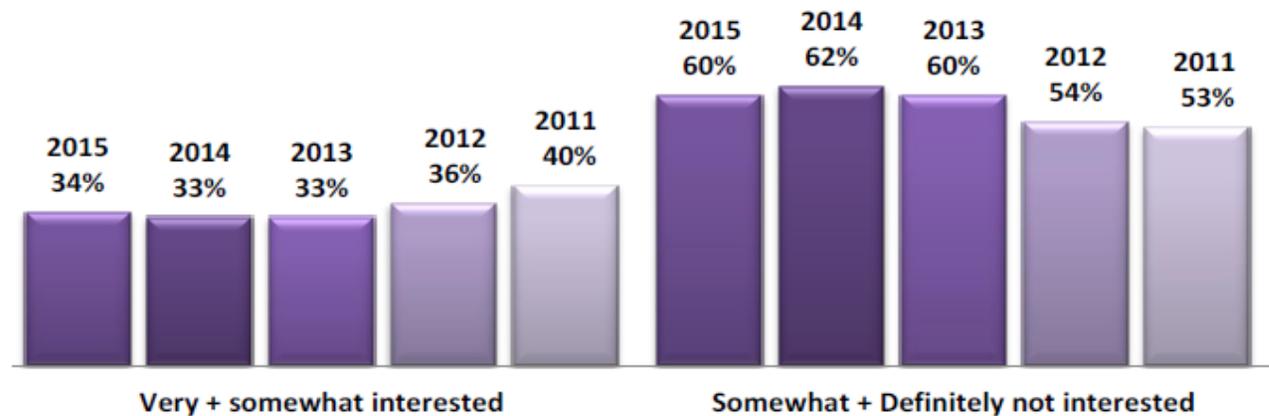
*With inconsistencies between Ontario LDCs' about the definition of SMART Grid coupled with different levels of technical maturity --- collaboration amongst LDCs is very difficult.*

# Purchasing an Electric Vehicle

For 5 years UtilityPULSE has been collecting information and tracking electricity customers interest in purchasing an electric vehicle. In fact, we've asked the same questions in the same way for 5 years.

## Interest in purchasing a fully electric vehicle

While the actual raw numbers are interesting e.g., 34% are very + somewhat interested purchasing an electric vehicle, the 5 year trend is also interesting. Other than the first year when various manufacturers hit the airwaves about their



Base: total respondents from the 2015 Ontario Benchmark survey

EVs the interest level has remained in the 34 % area. We can conclude that “interest” in purchasing doesn’t actually translate to a customer acting on that interest and buying an electric vehicle. Perhaps it is because the EV industry has not done a good job in allaying fears about distances that can be travelled between charges, or time to charge from empty, or the higher depreciation costs associated with most EVs.

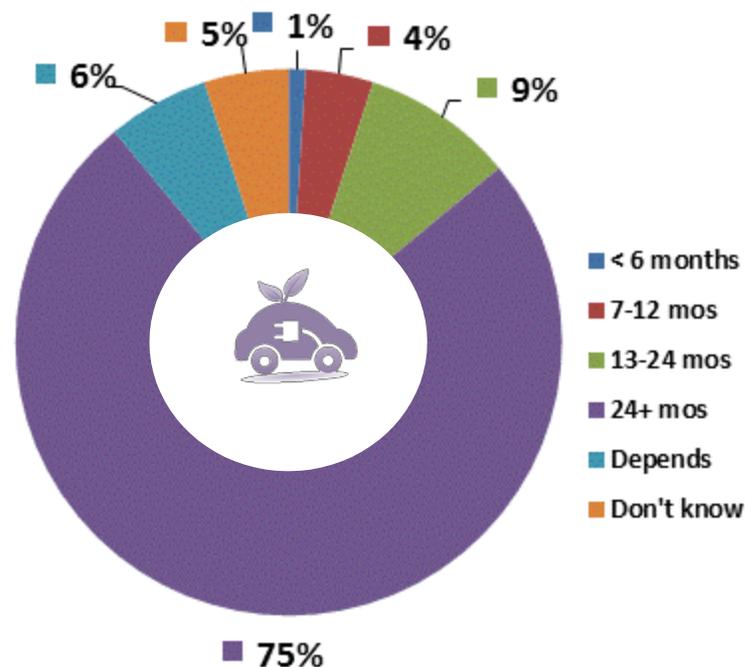
From a demographics perspective respondents in the 35-54 age group had the highest level of interest at 45% (39% in 2014). Data from the survey also tells us that there is very little variance in interest to purchase based on the respondents ability to pay for their electricity bills. Customers who said they have “No worries” or said they “Often worry” about paying their electricity bills were statistically equal in their level of interest.

Interest in purchasing a fully electric vehicle						
	Income <\$40K	Income \$40K<\$70K	Income \$70K +	Age 18-34	Age 35-54	Age 55+
<b>Top 2 Boxes: 2015</b> <b>'very + somewhat interested'</b>	30%	28%	41%	29%	45%	29%
<b>Top 2 Boxes: 2014</b> <b>'very + somewhat interested'</b>	30%	28%	42%	27%	39%	28%

Base: total respondents from the 2015 Ontario Benchmark survey

Length of time before purchasing a fully electric vehicle		
	Ontario 2015	Ontario 2014
<b>Immediately to next 6 months</b>	6%	2%
<b>7 to 12 months</b>	4%	2%
<b>13 to 24 months</b>	9%	9%
<b>Over 24 months</b>	75%	79%
<b>Depends</b>	6%	5%
<b>Don't know</b>	5%	3%

Base: total respondents from the 2015/2014 Ontario Benchmark survey



## Method

The findings in this report are based on telephone interviews conducted for Simul Corp. / UtilityPULSE by Greenwich Associates between April 21 - April 28, 2015, with 417 respondents who pay or look after the electricity bills from a list of residential and small and medium-sized business customers supplied by Thunder Bay Hydro.

The sample of phone numbers chosen was drawn randomly to insure that each business or residential phone number on the list had an equal chance of being included in the poll.

The sample was stratified so that 85% of the interviews were conducted with residential customers and 15% with commercial customers.

In sampling theory, in 19 cases out of 20 (95% of polls in other words), the results based on a random sample of 417 residential and commercial customers will differ by no more than  $\pm 4.80$  percentage points where opinion is evenly split.

This means you can be 95% certain that the survey results do not vary by more than 4.80 percentage points in either direction from results that would have been obtained by interviewing all Thunder Bay Hydro residential and small and

medium-sized commercial customers if the ratio of residential to commercial customers is 85%:15%.

The margin of error for the sub samples is larger. To see the error margin for subgroups use the calculator at <http://www.surveysystem.com/sscalc.htm>.

Interviewers reached 1,143 households and businesses from the customer list supplied by Thunder Bay Hydro. The 417 who completed the interview represent a 36% response rate.

The findings for the Simul/UtilityPULSE National Benchmark of Electric Utility Customers are based on telephone interviews conducted February 20 through February 27, 2015, with adults throughout the country who are responsible for paying electric utility bills. The ratio of 85% residential customers and 15% small and medium-sized business customers in the National study reflects the ratios used in the local community surveys. The margin of error in the National poll is  $\pm 2.7$  percentage points at the 95% confidence level.

For the National study, the sample of phone numbers chosen was drawn by recognized probability sampling

methods to insure that each region of the country was represented in proportion to its population and by a method that gave all residential telephone numbers, both listed and unlisted, an equal chance of being included in the poll.

The data were weighted in each region of the country to match the regional shares of the population.

The margin of error refers only to sampling error; other non-random forms of error may be present. Even in true random samples, precision can be compromised by other factors, such as the wording of questions or the order in which questions were asked.

Random samples of any size have some degree of precision. A larger sample is not always better than a smaller sample. The important rule in sampling is not how many respondents are selected but how they are selected. A reliable sample selects poll respondents randomly or in a manner that insures that everyone in the population being surveyed has an equal chance of being selected.

How can a sample of only several hundred truly reflect the opinions of thousands or millions of electricity customers within a few percentage points?

Measures of sample reliability are derived from the science of statistics. At the root of statistical reliability is probability,

the odds of obtaining a particular outcome by chance alone. For example, the chances of having a coin come up heads in a single toss are 50%. A head is one of only two possible outcomes.

The chance of getting two heads in two coin tosses is less because two heads are only one of four possible outcomes: a head/head, head/tail, tail/head and tail/tail.

But as the number of coin tosses increases, it becomes increasingly more likely to get outcomes that are either close to or exactly half heads and half tails because there are more ways to get such outcomes. Sample survey reliability works the same way but on a much larger scale.

As in coin tosses, the most likely sample outcome is the true percentage of whatever we are measuring across the total customer base or population surveyed. Next most likely are outcomes very close to this true percentage. A statement of potential margin of error or sample precision reflects this.

Some pages in the computer tables also show the standard deviation (S.D.) and the standard error of the estimate (S.E.) for the findings. The standard deviation embraces the range where 68% (or approximately two-thirds) of the respondents would fall if the distribution of

answers were a normal bell shaped curve. The spread of responses is a way of showing how much the result deviates from the "standard mean" or average. In the Thunder Bay Hydro data on corporate image, Simul converted the answers to a point scale with 4 meaning agree strongly, 3 meaning agree somewhat and so on (see in the computer tables).

For example, the mean score is 3.62 for providing consistent, reliable electricity. The average is 3.18 for providing information to help customers reduce their energy costs.

For reliable electricity the standard deviation is 0.63. For affordable energy the S.D. is 0.89. These findings mean there is a wider range of opinion – meaning less consensus – about whether Thunder Bay Hydro provides information to help customers to reduce their energy costs than about whether Thunder Bay Hydro energy supplies are reliable.

Beneath the S.D. in the tables is the standard error of the estimate. The S.E. is a measure of confidence or reliability, roughly equivalent to the error margin cited for sample sizes. The S.E. measures how far off the sample's results are from the standard deviation. The smaller the S.E., the greater the reliability of the data.

In other words a low S.E indicates that the answers given by respondents in a certain group (such as residential bill payers or women) do not differ much from the probable spread of the answers "predicted" in sampling and probability theory.

Certain questions pertaining to conservation and conservation efforts used an aggregate data approach whereby similar data sets were accumulated to form a larger sample size establishing a higher confidence interval, forecasting value and modeling data.

In these instances, all of the sub-datasets from the entire UtilityPULSE database for 2015 were concatenated in order to use the average of all the control samples for comparison. The cumulated population base for these questions was in excess of 8,000.

At a 95% confidence level the margin of error is  $\pm 1.1$  and at a 99% confidence level the margin of error would be  $\pm 1.44$ . So the aggregate strategy has given a very good population sample size which better, or more accurately, reflects the true feelings and beliefs of the population as a whole.

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Good things happen when work places work. You'll receive both strategic and pragmatic guidance about how to improve Customer satisfaction & Employee engagement with leaders that lead and a front-line that is inspired. We provide: training, consulting, surveys, diagnostic tools and keynotes. The electric utility industry is a market segment that we specialize in. Both large and small utilities have received actionable insights. For seventeen years we have been talking to 1000's of utility customers in Ontario and across Canada and we have expertise that is beneficial to every utility.

<b>Culture, Leadership &amp; Performance – Organizational Development</b>	<b>Focus Groups, Surveys, Polls, Diagnostics</b>	<b>Customer Service Excellence</b>
Leadership development	Diagnostics ie. Change Readiness, Leadership Effectiveness, Managerial Competencies	Service Excellence Leadership
Strategic Planning	Surveys & Polls	Telephone Skills
Teambuilding	Customer Satisfaction and Loyalty Benchmarking Surveys	Customer Care
Organizational Culture Transformation	Organization Culture Surveys	Dealing with Difficult Customers

Benefit from our expertise in Customer Satisfaction, Leadership development, Strategy development or review, and Front-line & Top-line driven-change. We're experts in helping you assess and then transform your organization's culture to one where achieving goals while creating higher levels of customer satisfaction is important. Anyone can present data, or design programs – we believe having an understanding of the industry before doing so is crucial. Call us when creating an organization where more employees satisfy more customers more often, is important.

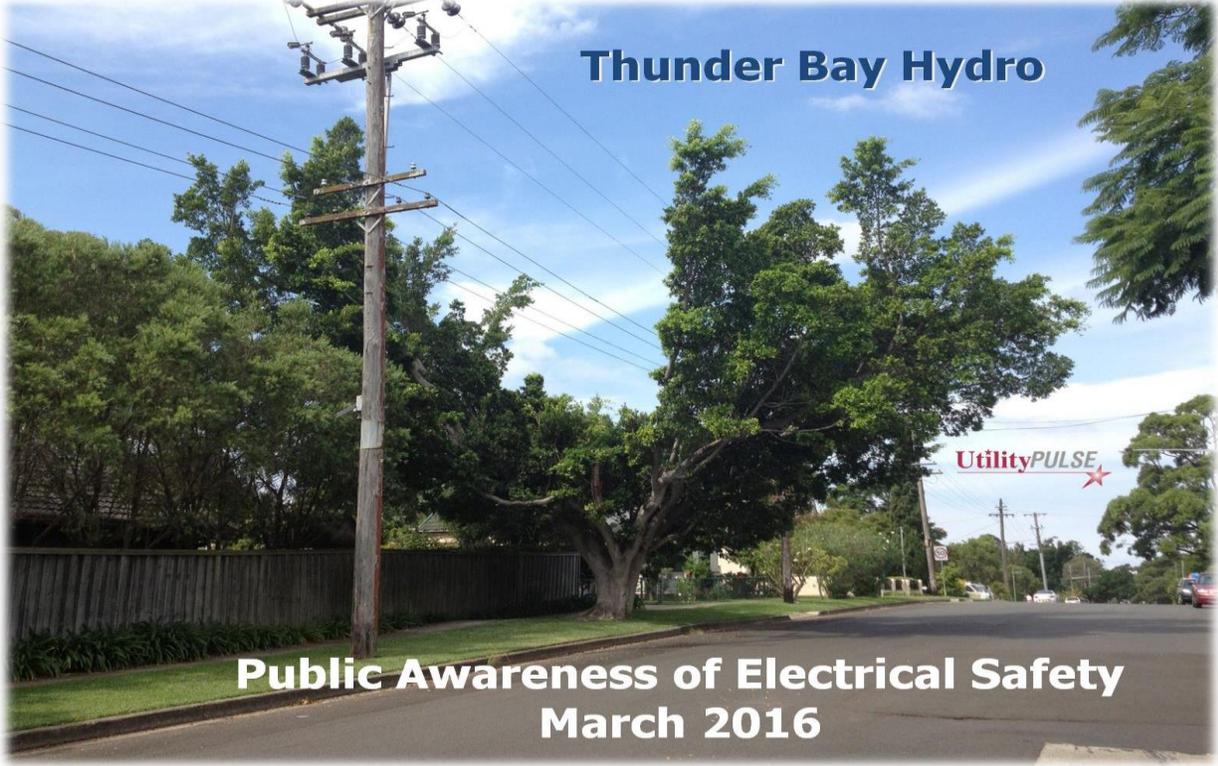
**Your personal contact is:**

**Sid Ridgley, CSP**

**Phone: (905) 895-7900 Fax: (905) 895-7970 E-mail: [sidridgley@utilitypulse.com](mailto:sidridgley@utilitypulse.com) or [sridgley@simulcorp.com](mailto:sridgley@simulcorp.com)**

# **ATTACHMENT 1 – H**

Public Awareness of Electrical Safety Survey

A photograph of a residential street scene. On the left, a tall wooden utility pole stands with several power lines extending across the sky. The street is lined with lush green trees and a wooden fence. In the distance, a banner with the text 'UtilityPULSE' and a red star logo is visible. The sky is blue with some light clouds.

**Thunder Bay Hydro**

**Public Awareness of Electrical Safety  
March 2016**

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## UtilityPULSE Public Awareness of Electrical Safety Report

This is privileged and confidential material and no part may be used other than the intended purpose of providing a score for the Ontario Energy Board Scorecard.

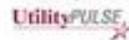
Results are based on a telephone survey (Random Digit Dialing) among 400 Members of the General Public, 18 years of age or older, residing within the LDC's geographic service territory. The data has been statistically weighted according to Canadian census figures (2011) for age, gender and region.

Scores in this report follow Appendix A: Scorecard Methodology and Implementation Guide published by the Ontario Energy Board November 25, 2015.

The questions used in the survey follow Appendix B: Biannual Standardized Scorecard Public Awareness of Electrical Safety Telephone Questionnaire published by the Ontario Energy Board November 25, 2015.

All comments and questions should be addressed to:

UtilityPULSE  
Toll free: 1-888-291-7892 or Local: 905-895-7900  
Project lead: Sid Ridgley  
Email: [sidridgley@utilitypulse.com](mailto:sidridgley@utilitypulse.com)  
March, 2016





Public Awareness of Electrical Safety - March 2016

## UtilityPULSE Public Awareness of Electrical Safety Report Executive Summary

Thunder Bay Hydro's Public Safety Awareness Index Score is 82 %.

This is the first year for compiling data to measure the level of awareness of key electrical safety precautions among the public within the electricity distributor's service territory. Results are based on a telephone survey (Random Digit Dialing) among 400 Members of the General Public, 18 years of age or older, within the LDC's geographic service territory. The data has been statistically weighted according to Canadian census figures (2011) for age, gender and region.

The six core measurement questions correspond to the six most frequent incidents involving utility equipment in Ontario over the last decade. When looking at the distribution of responses for the six core measurement questions here are some of the key observations and recommendations going forward:

**Question B5: Likelihood to "call before you dig" [46.3% scored 1.00 pts]**

46.3% would 'definitely' and 24.2% were 'very likely' to call to locate electrical or other underground lines. While these figures indicate that many of your service territory's population would 'call before they dig', the remainder did not see this as a 'must do'. Even of those respondents who did reply they would definitely or very likely make the call, it is not clear if they would call because they were exerting due diligence for their property and household project OR if they were knowledgeable in the fact that this is the law that is in place.

Any education put forth on this core measurement must emphasize that it is the law that one must 'call before you dig'.



Public Awareness of Electrical Safety - March 2016

## UtilityPULSE Public Awareness of Electrical Safety Report Executive Summary (continued)

**Question B6: Impact of touching a power line [92.4% scored 1.00 pts]**

92.4% knew that it is 'very dangerous' and 5.5% believed it is 'somewhat dangerous' to touch an overhead power line with their body or any object.

Any education put forth on this core measurement must continue to emphasize & re-emphasize the perils associated with touching a power line. The key message that needs to continue to be driven to the public on this measurement is clear and simple: It is very dangerous to touch an overhead power line with your body or any object.

**Question B7: Proximity to overhead power line [18.7% scored 1.00 pts]**

This was one of two questions that contained a concept of measurement of distance from a power line constituting safe proximity. 18.7% indicated that they believed that there needed to be a distance of 3 metres to less than 6 metres and 50.9% indicated a distance of 6 metres or more to safely come close to an overhead power line with their body or an object. While this indicates there is knowledge that there needs to be a "certain" proximity maintained from an overhead power line, the exact measurement is not quite readily known. It is also indicative that while most people believed a "certain" distance was required, it is not clear how many chose the higher distance because of a prevailing thought that "the further away the safer you are".

While being further away i.e. 6 metres or more is not technically incorrect, the point of this question is to educate the public that there is a reasonable distance that needs to be maintained. Any education put forth on this core measurement must clearly emphasize that a person can be as close as 3 metres to safely come close to an overhead power line while undertaking outdoor activities. This message whether in print or graphically depicted has to be clear and identifiable as not to confuse with the second question concerning distance from a 'downed' powerline (QB9). A catchy phrase or tag line to help the public remember is worthwhile.

*For example, the tag line "On a ladder or climbing trees, 3 to 6 metres you need to be" or "On a ladder or climbing trees, at least 3 metres you need to be"; either tag line noted next to an image of a person on a ladder in proximity of an overhead power line helps instill the message. Remember, you are trying to get the public at large to learn & remember the minimum distance is 3 metres to an overhead power line.*



Public Awareness of Electrical Safety - March 2016

## UtilityPULSE Public Awareness of Electrical Safety Report Executive Summary (continued)

### **Question B8: Danger of tampering with electrical equipment [90.3% scored 1.00 pts]**

90.3% knew that is 'very dangerous' to tamper with electrical equipment, while 6.4% believed it was 'somewhat dangerous'.

Any education put forth on this core measurement must continue to emphasize & re-emphasize the perils associated with touching or tampering with electrical equipment. This is a no play zone for children and/or pets and in general all persons need to leave the electrical equipment alone.

### **Question B9: Proximity to downed power line [79.6% scored 1.00 pts]**

This is the second question containing a concept of measurement of distance, this time from a downed power line constituting safe proximity. 79.6% indicated that a distance of 10 metres or more needed to be maintained from a downed power line. As in QB7, while this indicates there is knowledge that there needs to be a "certain" proximity maintained from a downed power line, it is not clear how many chose the higher distance because of a prevailing thought that 'the further away the safer you are'. In this instance however, choosing the furthest distance is the correct answer.

The point of this question is to educate the public that there is a reasonable distance that needs to be maintained from a downed power line and this distance is at least 10 metres. This message whether emphasized in print or graphically depicted has to be clear and identifiable as not to confuse with the question concerning distance of 3 metres from an 'overhead' powerline (QB7). Again, a catchy phrase or tag line to help the public remember is worthwhile.

*For example, the tag line "Downed line on the floor, stay away 10 metres or more" or "Downed line on the ground, back 10 metres if standing around"; either tag line noted next to an image of a person on a ladder in proximity of an overhead power line helps instill the message.*

Remember, you are trying to get the public at large to learn & remember the minimum distance from a downed line is 10 metres.



Public Awareness of Electrical Safety - March 2016

## UtilityPULSE Public Awareness of Electrical Safety Report Executive Summary (continued)

### **Question B10: Actions taken in vehicle in contact with wires [92.3% scored 1.00 pts]**

92.3% responded the safer action in this case would be to 'stay in the vehicle until power was disconnected from the line'.

Any education put forth on this core measurement must continue to emphasize & re-emphasize the harm associated with stepping out of a vehicle that is in contact with a downed power line. While some people instinctually feel that getting out and seeking help would be the proper thing to do, they need to be educated that staying in the vehicle is their best and safest option until the power is disconnected.

#### **Conclusion:**

This first year of surveying the public in your service territory about electrical safety shows that many do have good knowledge or have received some information pertaining to the 6 core measurement questions. Thunder Bay Hydro's Public Safety Awareness Index Score is 82%.

The OEB has indicated that the performance target for public awareness of electrical safety will be established once three years of data is gathered. In the meantime, your LDC will be expected to demonstrate the impact of your public education efforts through biannual surveying of adults residing in your service territory.

As you begin or continue to develop safety awareness campaigns, we recommend that you look through this report along with your data report to see where, among the population, awareness levels are lower and where outreach can be targeted. Focus on the messages that you need to drive home to help the public learn and remember. We also recommend that you share your results with your employees, especially those who may be in contact with outside workers, as they too can help spread the safety message.

Sid Ridgley  
UtilityPULSE

# Thunder Bay Hydro Public Safety Awareness Index Score



This **Index score** is calculated using the following formulas:

**Step 1:** Add each individual respondent's key measurement questions using the provided response values.

- 85
- + 86
- + 87
- + 88
- + 89
- + 90
- + Individual respondent's cumulative score

**Step 2:**  
Individual respondent's cumulative score / # of sections   
= Respondent Standardized Score

**Step 3:**  
Summation of all "Respondent Standardized Scores" / n-size (i.e. total sample size)  
= Raw Index Score

**Step 4:**  
Raw Index Score x 100 = Index Score (bound between 0-100%)

Responses will be **indexed** to create a single comparable Public Safety Awareness Score



In some cases, a respondent will have no intention of undertaking a project that requires digging. In this case, the index is based on only the 5 relevant sections of scorecard. This question (88) will be removed from the calculation.



# Thunder Bay Hydro Public Safety Awareness Index Score



## B5. Likelihood to "call before you dig"

If you were to undertake a household project that required digging – such as planting a tree or building a deck – how likely are you to call to locate electrical or other underground lines?

Response	Score	% of respondents
Definitely	1.00 pts	46.3%
Very likely	0.75 pts	24.2%
Somewhat likely	0.50 pts	10.1%
Not very likely	0.00 pts	7.9%
Not at all likely	0.00 pts	7.4%
I would not undertake a project that required digging	omitted <sup>2</sup>	3.3%
Don't know	0.00 pts	0.9%

\*Note: In some cases, a respondent will have no intention of undertaking a project that requires digging. In this case, the index is based on only the five relevant sections of the scorecard. This question will be removed from the calculation of the Individual Respondent's cumulative score.



Correct: Any response which scored above 0 pts  
Incorrect: Any response which scored 0 pts including Don't know



Planting a tree, building a deck or a fence? Contact **ON1Call** first to get a locate so you can dig safely.





## B5. Likelihood to "call before you dig"

If you were to undertake a household project that required digging – such as planting a tree or building a deck – how likely are you to call to locate electrical or other underground lines?

Response	Gender Male	Gender Female	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Definitely	46.4%	46.2%	20.0%	44.6%	52.1%	49.4%	54.2%	48.9%
Very likely	19.7%	28.3%	25.1%	33.3%	30.2%	19.6%	23.8%	16.2%
Somewhat likely	5.9%	13.9%	30.0%	11.1%	7.9%	6.5%	6.6%	5.3%
Not very likely	12.9%	3.2%	20.0%	5.5%	0.0%	10.0%	6.7%	7.5%
Not at all likely	11.3%	3.8%	5.0%	5.5%	9.8%	10.0%	4.7%	8.9%
I would not undertake a project that required digging!	2.9%	3.6%	0.0%	0.0%	0.0%	3.3%	2.0%	11.3%
Don't know	0.7%	1.0%	0.0%	0.0%	0.0%	1.1%	1.8%	1.7%

*Note: In some cases, a respondent will have no intention of undertaking a project that requires digging. In this case, the index is based on only the five relevant sections of the scorecard. This question will be removed from the calculation of the Individual Respondent's cumulative score.*



Planting a tree, building a deck or a fence? Contact ON1Call first to get a locate so you can dig safely.



## B6. Impact of touching a power line

How dangerous do you believe it is to touch – with your body or any object – an overhead power line?

Response	Score	% of respondents
Very dangerous	1.00 pts	92.4%
Somewhat dangerous	0.50 pts	5.5%
Not very dangerous	0.00 pts	1.3%
Not at all dangerous	0.00 pts	0.2%
Don't know	0.00 pts	0.5%



Correct: Any response which scored above 0 pts  
Incorrect: Any response which scored 0 pts including Don't know





## B6. Impact of touching a power line

How dangerous do you believe it is to touch – with your body or any object – an overhead power line?

Response	Gender Male	Gender Female	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Very dangerous	92.9%	92.0%	100.0%	83.3%	89.0%	90.1%	99.0%	94.2%
Somewhat dangerous	4.7%	6.3%	0.0%	16.7%	7.3%	4.4%	0.0%	4.2%
Not very dangerous	1.3%	1.3%	0.0%	0.0%	3.7%	4.4%	0.0%	0.0%
Not at all dangerous	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Don't know	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%	1.0%	0.8%



## B7. Proximity to overhead power line

When undertaking outdoor activities – such as, standing on a ladder, cleaning windows or eaves, climbing or trimming trees – how close do you believe you can safely come to an overhead power line with your body or an object? Would you say ...

Response	Score	% of respondents
You can safely touch an overhead power line	0.00 pts	0.4%
Less than 1 metre (i.e. less than 3 feet)	0.00 pts	2.3%
1 to less than 3 metres (i.e. 3 to less than 10 feet)	0.00 pts	21.1%
3 metres to less than 6 metres (i.e. 10 feet to less than 20 feet)	1.00 pts	18.7%
You should maintain a distance of 6 metres or more (i.e. 20 feet or more)	0.75 pts	50.9%
Don't know	0.00 pts	6.6%



Correct: Any response which scored above 0 pts  
Incorrect: Any response which scored 0 pts including Don't know





## B7. Proximity to overhead power line

When undertaking outdoor activities – such as, standing on a ladder, cleaning windows or eaves, climbing or trimming trees – how close do you believe you can safely come to an overhead power line with your body or an object? Would you say ...

Response	Gender Male	Gender Female	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
You can safely touch an overhead power line	0.4%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	0.9%
Less than 1 metre (i.e. less than 3 feet)	2.9%	1.8%	0.0%	0.0%	3.1%	6.6%	1.0%	2.6%
1 to less than 3 metres (i.e. 3 to less than 10 feet)	20.8%	21.4%	60.1%	22.1%	15.6%	19.7%	13.6%	9.7%
3 metres to less than 6 metres (i.e. 10 feet to less than 20 feet)	24.8%	13.0%	15.0%	22.1%	27.1%	17.7%	17.3%	14.0%
You should maintain a distance of 6 metres or more (i.e. 20 feet or more)	48.2%	53.5%	24.9%	50.2%	52.1%	50.5%	59.5%	58.4%
Don't know	3.0%	9.9%	0.0%	5.6%	2.1%	4.4%	8.7%	14.3%



## B8. Danger of tampering with electrical equipment

Some electrical utility equipment is located on the ground, such as locked steel cabinets that contain transformers.

How dangerous do you believe it is to try to open, remove contents, or touch the equipment inside? Would you say ...

Response	Score	% of respondents
Very dangerous	1.00 pts	90.3%
Somewhat dangerous	0.50 pts	6.4%
Not very dangerous	0.00 pts	1.3%
Not dangerous at all	0.00 pts	0.5%
Don't know	0.00 pts	1.4%



Correct: Any response which scored above 0 pts  
Incorrect: Any response which scored 0 pts including Don't know





## B8. Danger of tampering with electrical equipment

Some electrical utility equipment is located on the ground, such as locked steel cabinets that contain transformers.

How dangerous do you believe it is to try to open, remove contents, or touch the equipment inside? Would you say ...

Response	Gender Male	Gender Female	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Very dangerous	88.7%	91.8%	95.0%	94.5%	88.1%	87.9%	91.5%	86.5%
Somewhat dangerous	7.5%	5.4%	5.0%	0.0%	11.9%	8.7%	5.6%	7.4%
Not very dangerous	2.7%	0.0%	0.0%	5.5%	0.0%	1.1%	1.0%	0.0%
Not dangerous at all	0.7%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	1.7%
Don't know	0.3%	2.5%	0.0%	0.0%	0.0%	1.1%	1.8%	4.4%





## B9. Proximity to downed power line

How close do you believe you can safely come to a downed overhead power line, such as a downed line caused by a storm or accident? Would you say ...

Response	Score	% of respondents
You can safely touch a downed overhead power line	0.00 pts	0.2%
Less than 1 metre (i.e. less than 3 feet)	0.00 pts	0.9%
1 to less than 5 metres (i.e. 3 to less than 16 feet)	0.00 pts	4.5%
5 metres to less than 10 metres (i.e. 16 feet to less than 33 feet)	0.00 pts	12.9%
You should maintain a distance of 10 metres or more (i.e. 33 feet or more)	1.00 pts	79.6%
Don't know	0.00 pts	1.9%



Correct: Any response which scored above 0 pts  
Incorrect: Any response which scored 0 pts including Don't know



## B9. Proximity to downed power line

How close do you believe you can safely come to a downed overhead power line, such as a downed line caused by a storm or accident? Would you say ...

Response	Gender		Age					
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+
You can safely touch a downed overhead power line	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Less than 1 metre (i.e. less than 3 feet)	1.1%	0.7%	0.0%	0.0%	1.5%	1.1%	0.0%	2.5%
1 to less than 5 metres (i.e. 3 to less than 16 feet)	4.6%	4.4%	0.0%	5.5%	4.3%	4.4%	4.8%	6.1%
5 metres to less than 10 metres (i.e. 16 feet to less than 33 feet)	14.5%	11.5%	30.0%	11.0%	13.4%	12.1%	7.6%	9.9%
You should maintain a distance of 10 metres or more (i.e. 33 feet or more)	78.7%	80.5%	70.0%	83.5%	80.8%	80.2%	86.5%	74.4%
Don't know	1.1%	2.5%	0.0%	0.0%	0.0%	2.2%	1.0%	6.3%





## B10. Actions taken in vehicle in contact with wires

If you were in a vehicle – such as a car, bus, or truck – and an overhead power line came down on top of it, which of the following options do you believe is generally safer?

Response	Score	% of respondents
Get out quickly and seek help	0.00 pts	6.9%
Stay in the vehicle until power has been disconnected from the line	1.00 pts	92.3%
Don't know	0.00 pts	0.9%



Correct: Any response which scored above 0 pts  
 Incorrect: Any response which scored 0 pts including Don't know



## B10. Actions taken in vehicle in contact with wires

If you were in a vehicle – such as a car, bus, or truck – and an overhead power line came down on top of it, which of the following options do you believe is generally safer?

Response	Gender		Age		Age		Age		Age	
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+		
Get out quickly and seek help	4.3%	9.3%	5.0%	11.1%	6.4%	6.5%	4.6%	7.2%		
Stay in the vehicle until power has been disconnected from the line	95.1%	89.7%	95.0%	88.9%	93.6%	93.5%	94.5%	89.5%		
Don't know	0.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.9%	3.4%		





## Thunder Bay Hydro Public Awareness of Electrical Safety Report Demographics

In what age category do you fall into?

Response	% of respondents Based on Census data
18 to 24	11.8%
25 to 34	16.9%
35 to 44	14.5%
45 to 54	17.7%
55 to 64	18.6%
65 or older	20.5%



Gender

Response	% of respondents Based on Census data
Male	48.1%
Female	51.9%



## Thunder Bay Hydro Public Awareness of Electrical Safety Report Demographics



Does your job regularly cause you to come close to energized power lines?

Response	% of respondents
Yes	10.6%
No	88.2%
Don't know	1.2%



Proceed to the following question only if Respondent answers 'Yes' ...



Do you work in any of the following fields?

Response	% of respondents
Transportation	25.1%
General labour	10.6%
Construction or outdoor trades	23.8%
Electrician	11.9%
Other	24.9%
Don't know/Prefer not to say	3.7%

## Thunder Bay Hydro Public Awareness of Electrical Safety Report Demographics

How would you describe your primary residence? Would you say...

Response	% of respondents
A fully-detached home	77.1%
A semi-detached home	7.0%
A townhome or row house	3.7%
An apartment or condo building less than 5 storeys	7.0%
An apartment or condo building 5 storeys or higher	2.9%
A farm	0.3%
Other	1.9%



Does your primary residence receive electricity through overhead wires or underground cables?

Response	% of respondents
Overhead wires	63.1%
Underground cables	32.4%
Don't know	4.5%





UtilityPULSE, through polls and surveys, provides executives and managers with feedback that assists in making both strategic and operational decisions. You know lots of companies that can gather data and provide a report. We believe that by specializing in the utility sector with our polls and surveys, you get stronger analysis of data and answers to key questions that help you formulate key strategies to assist your leaders in creating a better place to work and a better place to do business with.

UtilityPULSE is uniquely positioned to help your utility get feedback from Customers, through its Annual Electric Utility Customer Satisfaction Survey or customized research designed for you. In addition, we understand what it takes to create an organization where employees are engaged and enthusiastic about customers and the work that they do. Knowing what is going on with your customers and employees is one thing, doing something about it is another. We get paid for, and earn our clients' loyalty by, delivering objective insights with actionable recommendations; accomplished when every step of the process is completed with professionalism and pride. Our mission is to help you and your leadership team move from knowing to doing while improving performance and creating value to your customers, employees, stakeholders and the public at large.

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# **ATTACHMENT 1 – I**

2015 Employee Satisfaction  
& Engagement Survey

**Employee Satisfaction & Engagement Survey - Overall Results Trend (%)**

QUESTIONS	Strongly Disagree					Disagree					Undecided					Agree					Strongly Agree					
	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	
	1	I know how my work contributes to the achievement of my division's/department's goals.	0%	0%	0%	1%	0%	5%	3%	3%	1%	0%	10%	10%	8%	9%	9%	56%	66%	58%	63%	68%	30%	21%	31%	26%
2	I have opportunities to provide meaningful input into decisions that affect my work.	0%	1%	1%	3%	1%	16%	8%	6%	16%	7%	10%	18%	14%	17%	21%	51%	55%	54%	49%	54%	21%	18%	25%	17%	18%
3	I know what is expected of me at work.	2%	0%	0%	1%	0%	2%	5%	1%	1%	1%	16%	4%	8%	6%	10%	61%	69%	57%	67%	65%	20%	22%	34%	25%	24%
4	I have positive working relationships with my co-workers.	0%	0%	0%	1%	0%	2%	1%	1%	1%	0%	13%	3%	3%	4%	7%	57%	55%	55%	54%	55%	28%	42%	41%	40%	38%
5	I have a good friend at work.	7%	0%	0%	1%	1%	51%	8%	5%	4%	5%	20%	21%	18%	18%	14%	15%	52%	55%	49%	63%	8%	15%	21%	28%	16%
6	I have confidence in the senior leadership at Thunder Bay Hydro.	3%	1%	1%	3%	9%	20%	10%	8%	13%	5%	21%	27%	19%	22%	25%	51%	47%	55%	52%	49%	5%	14%	16%	10%	11%
7	My immediate supervisor is an effective leader.	5%	1%	2%	3%	5%	10%	7%	9%	8%	3%	23%	25%	19%	16%	25%	44%	47%	45%	57%	47%	18%	21%	24%	17%	19%
8	I have a positive working relationship with my supervisor.	0%	1%	1%	0%	2%	8%	3%	4%	4%	2%	7%	14%	11%	17%	14%	61%	60%	55%	50%	56%	25%	22%	29%	29%	25%
9	My supervisor cares about me as a person.	0%	1%	1%	3%	3%	5%	6%	4%	4%	9%	16%	15%	18%	19%	15%	62%	57%	55%	54%	54%	16%	22%	21%	20%	19%
10	I receive useful feedback from my supervisor.	7%	1%	1%	0%	4%	8%	4%	10%	7%	5%	23%	24%	12%	21%	21%	48%	57%	58%	59%	57%	15%	15%	18%	13%	12%
11	My job is a good fit with my skills and interests.	2%	0%	0%	1%	1%	5%	1%	3%	7%	2%	8%	10%	9%	10%	2%	59%	64%	51%	57%	67%	25%	25%	36%	26%	28%
12	Thunder Bay Hydro supports my work-related learning and development.	2%	1%	0%	5%	1%	11%	3%	3%	9%	10%	18%	17%	17%	27%	20%	52%	59%	55%	47%	52%	16%	20%	25%	12%	17%
13	I receive adequate training to perform my job.	5%	0%	1%	2%	0%	10%	7%	6%	8%	11%	16%	16%	12%	19%	16%	57%	64%	56%	57%	58%	11%	13%	24%	14%	14%
14	I received meaningful recognition for work well done.	8%	4%	2%	3%	2%	21%	11%	10%	16%	13%	23%	30%	23%	30%	35%	43%	46%	55%	44%	41%	5%	8%	10%	7%	9%
15	I have support at work to provide a high level of service.	2%	2%	0%	1%	1%	13%	8%	6%	6%	7%	20%	24%	17%	23%	24%	57%	50%	61%	63%	61%	8%	17%	15%	7%	8%

**Employee Satisfaction & Engagement Survey - Overall Results Trend (%)**

	QUESTIONS	Strongly Disagree					Disagree					Undecided					Agree					Strongly Agree				
		2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015	2007	2008	2011	2013	2015
16	I am satisfied with my job.	3%	1%	2%	1%	3%	8%	3%	3%	5%	4%	21%	15%	12%	18%	15%	56%	58%	58%	58%	60%	11%	23%	24%	17%	16%
17	I enjoy working at Thunder Bay Hydro.	0%	0%	0%	0%	3%	5%	6%	1%	0%	2%	15%	10%	10%	14%	14%	59%	58%	56%	65%	62%	21%	30%	32%	21%	19%
18	My opinions are listened to and acknowledged.	3%	1%	0%	1%	3%	13%	9%	8%	15%	11%	36%	27%	24%	27%	31%	44%	56%	55%	52%	48%	3%	7%	13%	5%	7%
19	I am proud to tell people that I work for Thunder Bay Hydro.	0%	0%	0%	1%	1%	5%	2%	1%	3%	3%	20%	17%	12%	15%	13%	54%	59%	62%	61%	59%	21%	23%	25%	20%	23%
20	I would recommend Thunder Bay Hydro as a great place to work.	0%	2%	1%	0%	1%	7%	2%	0%	3%	5%	25%	21%	15%	23%	31%	49%	56%	61%	53%	45%	20%	22%	23%	22%	18%
21	Safety is the #1 priority at Thunder Bay Hydro.	0%	0%	0%	0%	0%	2%	2%	0%	3%	5%	5%	5%	7%	8%	12%	54%	47%	39%	42%	49%	39%	46%	55%	47%	34%
22	Thunder Bay Hydro cares about my well-being.	2%	1%	0%	1%	4%	11%	8%	5%	4%	4%	25%	20%	15%	27%	23%	56%	54%	58%	53%	53%	7%	18%	22%	15%	15%
23	My workload is reasonable.	5%	2%	2%	2%	2%	21%	10%	7%	8%	13%	16%	21%	11%	14%	13%	54%	58%	64%	67%	63%	3%	8%	15%	10%	9%
24	I have the equipment and materials I need to do my work effectively.	3%	4%	1%	1%	1%	18%	9%	8%	10%	4%	10%	15%	10%	17%	13%	64%	65%	63%	57%	68%	5%	8%	13%	16%	13%
25	My morale is strong.	20%	4%	1%	4%	5%	26%	9%	7%	11%	10%	38%	21%	11%	22%	18%	16%	51%	63%	52%	54%	0%	15%	18%	12%	13%
26	Thunder Bay Hydro promotes and encourages staff involvement.	3%	2%	0%	0%	0%	11%	6%	4%	9%	4%	21%	19%	9%	21%	13%	61%	65%	67%	60%	68%	3%	14%	19%	11%	14%
27	Senior Management communicates well with the rest of the organization.	7%	1%	3%	2%	2%	30%	10%	5%	12%	16%	18%	31%	20%	25%	24%	44%	47%	58%	54%	50%	2%	9%	14%	7%	8%
28	Teamwork is encouraged and practiced in my workplace.	3%	0%	0%	0%	2%	16%	7%	7%	7%	7%	15%	14%	7%	12%	14%	61%	60%	66%	69%	63%	5%	18%	20%	11%	14%
29	I feel that I am paid well for the work I perform.	2%	8%	3%	4%	4%	13%	17%	13%	17%	14%	20%	20%	23%	23%	21%	56%	43%	50%	45%	46%	10%	11%	10%	10%	14%
30	Thunder Bay Hydro provides an excellent employee benefit plan.	2%	7%	3%	5%	3%	16%	12%	13%	14%	10%	18%	13%	19%	28%	26%	56%	55%	50%	43%	44%	8%	14%	15%	10%	16%
31	Thunder Bay Hydro is one of the top employers in Thunder Bay.	2%	1%	0%	3%	3%	7%	4%	6%	9%	9%	33%	23%	33%	29%	26%	49%	58%	45%	49%	46%	10%	15%	16%	11%	15%
32	Overall, staff at Thunder Bay Hydro are inspired to give their very best.	0%	1%	0%	1%	1%	28%	5%	3%	10%	11%	25%	36%	24%	33%	26%	46%	9017%	65%	48%	48%	2%	8%	8%	8%	13%
33	Overall, staff at Thunder Bay Hydro strive to improve the company's results.	2%	6%	0%	0%	0%	7%	4%	3%	5%	6%	28%	26%	18%	28%	24%	62%	59%	70%	58%	60%	2%	9%	8%	9%	10%
34	Commitment to quality is a high priority in this organization.	2%	1%	0%	0%	1%	10%	5%	5%	7%	3%	25%	20%	16%	17%	27%	57%	64%	67%	68%	54%	7%	11%	12%	8%	14%
35	I feel that Thunder Bay Hydro promotes an inclusive atmosphere where staff are treated equally.	13%	10%	3%	10%	11%	21%	18%	15%	20%	15%	25%	23%	26%	23%	21%	41%	43%	45%	41%	41%	0%	7%	11%	7%	12%

# **ATTACHMENT 1 – J**

## Customer Engagement Activities

Board Appendix 2-AC

**Appendix 2-AC  
 Customer Engagement Activities Summary**

Provide a list of customer engagement activities	Provide a list of customer needs and preferences identified through each engagement activity	Actions taken to respond to identified needs and preferences. If no action was taken, explain why.
Child safety and awareness regarding electricity.	Public Safety Initiative as per OEB Mandated Scorecard Metrics	<p>Thunder Bay Hydro is a silver sponsor for St. John Ambulance's educational programs for Grades 3 and 6 students and has provided take home material for 7500 students over the last three years.</p> <p>The Hi-Line Hazard Electrical Safety &amp; Energy Conservation Awareness Program was delivered to roughly 3110 elementary students in the last three years. The presentation focused on electrical safety.</p> <p>Electrical Safety information shared with children and parents at local Teddy Bear's Picnic.</p>
Dig up prevention campaigns (public and contractors)	Public Safety Initiative as per OEB Mandated Scorecard Metrics	<p>Annual Damage Prevention Presentation and Breakfast: Staff from the Asset Management and Engineering Department has participated in an event with other local utilities over the last few years. The event focuses on contractor safety and excavation procedures when working in the vicinity of construction sites.</p> <p>Call Before You Dig promotion. Information distributed to customers and contractors through media, social media, at area hardware suppliers and through presence at local trade shows. Web page promotion with links to further related information.</p> <p>Annual messages on bills or bill inserts include information and a reminder for customers to call for locates prior to digging in the ground.</p>
Participation in Powerline Safety Campaign	Identified by the ESA for workers and homeowners to promote safe work practices around powerlines.	Powerline Safety Week promotion. Television, radio and newspaper ads with direct messages regarding powerline safety. Links to the ESA website for more information.
Enhanced Contractor Safety Management at Thunder Bay Hydro and have shared resources with other organizations in the City with significant buying power.	Need to assist companies hiring contractors on best practices from a H&S perspective.	<p>Contractor Compliance Website was adopted as our method of prequalifying contractors and we lead a community initiative to educate other organizations with significant purchasing power to do the same. With consistent standards and a simplified method for potential contractors to prequalify for work, work is done safer and over time, more contractors are eligible to bid on work, thus reducing prices.</p> <p>Thunder Bay Hydro has also had representatives speak at the local Partners In Prevention conference on the topic of Contractor Safety Management.</p>
Enhanced & consistent campaign province wide for safer drivers.	Public Safety Initiative as per OEB Mandated Scorecard Metrics	Assisted in the facilitation of a provincial Stay Focused Drive Safe Campaign which was an off shoot of our Hit the Breaks Campaign

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Enhanced & consistent campaign province wide for safer drivers.	Public Safety Initiative as per OEB Mandated Scorecard Metrics	Assisted in the facilitation of a provincial Stay Focused Drive Safe Campaign which was an off shoot of our Hit the Breaks Campaign
Partnerships with external agencies to promote health and safety in the community	Public Safety Initiative as per OEB Mandated Scorecard Metrics	<p>Partnership with Active Transportation Thunder Bay in their Be Safe Be Seen Campaign to raise awareness about the dangers of walking and biking at night.</p> <p>Partnership with Northern Ontario Medical School to host a group of first year medical students to learn about the various types of workplace hazards and potential severity and types of injuries that could occur at an electrical utility.</p> <p>Partnership with the Canadian Red Cross, St John's Ambulance, Lakehead Social Planning Council/211, Thunder Bay Fire and Rescue, EMS and the City of Thunder Bay in the STORM Ready campaign. The campaign was designed to remind residents that they need to be prepared to take care of themselves and their family for 72 hours in the event of an emergency.</p> <p>Annual sponsor at the Health &amp; Safety Ontario Health and Safety Conference (Forum North). Thunder Bay Hydro regularly provides speakers for this conference on topics such as contractor safety, ergonomics and best practices in safety management systems.</p>
Presentations & Radio Messaging Campaigns	Public Safety Initiative as per OEB Mandated Scorecard Metrics	<p>Regular campaigns take place on local radio promoting safety messaging such as extension cord safety, indoor and outdoor lighting at Christmas time.</p> <p>Presentations to community groups and local employers. A recent example includes a presentation to 60 local school bus drivers regarding safety and what to do if they encounter downed power lines.</p>
Take Your Kids to Work Day	Public Safety Initiative as per OEB Mandated Scorecard Metrics	Annually the utility hosts the Take Your Kids to Work Day. While this was designed to educate grade nine students about possible jobs at Thunder Bay Hydro, the program has evolved to include several topics including safety, health and wellness.

# **ATTACHMENT 1 – K**

Distribution System Plan

Customer Consultation

# Thunder Bay Hydro Research-Based Customer DSP Consultation

Web Survey Research – Final Report

# Contents

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- **Research Background**
  - » Research Purpose
  - » Research Opportunity
  - » Overview of Research Steps, and Sample
  - » Web Survey Overview
- **Bottom Line Up Front**
  - » Bottom Line Research Findings
- **Detailed Research Findings**
  - » Customer Priorities
  - » Perceptions of the Thunder Bay Hydro DSP
    - System Renewal
    - System Service and System Access
    - General Plant Investments
    - Appropriateness of Overall Investment
  - » Confidence in Thunder Bay Hydro

# Research Background

# Research Purpose

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- **In October 2015, Thunder Bay Hydro (TBH) asked Decision Partners to conduct broad, professional and scientific research in support of TBH's Customer Consultation on its Distribution System Plan (DSP).**
- **The Ontario Energy Board requires proof that TBH's DSP – to be filed as part of the company's rate application – demonstrates that distribution services are provided in a manner responsive to customer preferences.**
- **The project goal is to seek customer input and demonstrate, with sophisticated and compelling evidence, how TBH has considered that input and, as necessary, revised its DSP in a way that confirms the company's commitment and obligation to educate and be responsive to its customers.**

# Research Opportunity

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*The opportunity is to design and implement a comprehensive Customer Consultation initiative that applies state-of-the-science Mental Modeling Technology™ to gain in-depth insight into customers' values, interests and priorities regarding Thunder Bay Hydro's proposed Distribution System Plan (DSP). The results will be used to develop detailed and compelling evidence that demonstrates Thunder Bay Hydro's commitment and obligation to engage, inform and to seek customer input on the design of its DSP submission. A summary of this research-based consultation initiative will be submitted to OEB in 2016.*

# Overview of Research Steps

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- **Developed Research Opportunity Statement: October 7, 2015**
- **Developed the Expert Model: Base Expert Model of Influences on Customers' Judgments of the Acceptability of the Thunder Bay Hydro Distribution Plan (DSP)**
  - » Comprehensive review of critical documents and discussions with the TBH Team.
  - » Expert Model Review Webinar – October 7, 2015: Provided an opportunity for the Team to review and provide input on the draft Expert Models.
  - » Final revisions based on inputs from the TBH Team.
- **Developed, Conducted, Coded, Analyzed and Reported on the mental models research: October 28, 2015 – February 2, 2016**
- **Developed follow-on Web Survey, finalized February 26, 2016**
- **Invitation to participate sent to TBH customers on TBH email lists sent February 26 (to approximately 2400 customers) and February 29, 2016 (to approximately 6300 customers). No follow-up emails were sent.**
- **Draft Final Report sent to TBH Team March 30, 2016.**
- **Final Report sent to TBH Team May 24, 2016.**

# Research Sample

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- **Approximately 8700 TBH Customers were invited to participate (those for whom TBH has email addresses), including:**
  - » 97 Low Income customers (out of 1100 total Low Income Customers)
  - » 965 Small Commercial Customers (out of a total of about 5000 Small Commercial Customers)
  - » 7748 Residential Customers (out of a total of about 49,500 Residential Customers)
- **Approximately 2050 individual Customers responded to the invitation.**
- **The actual number of respondents to any individual question varied as some Customers dropped off as the survey progressed. The number of respondents for each particular question is shown on each chart.**
- **Approximately 1180 Customers completed the survey entirely.**
- **All the responses are confidential, with only aggregate results reported and no responses attributed to any specific customer.**

# Incentive to Participate

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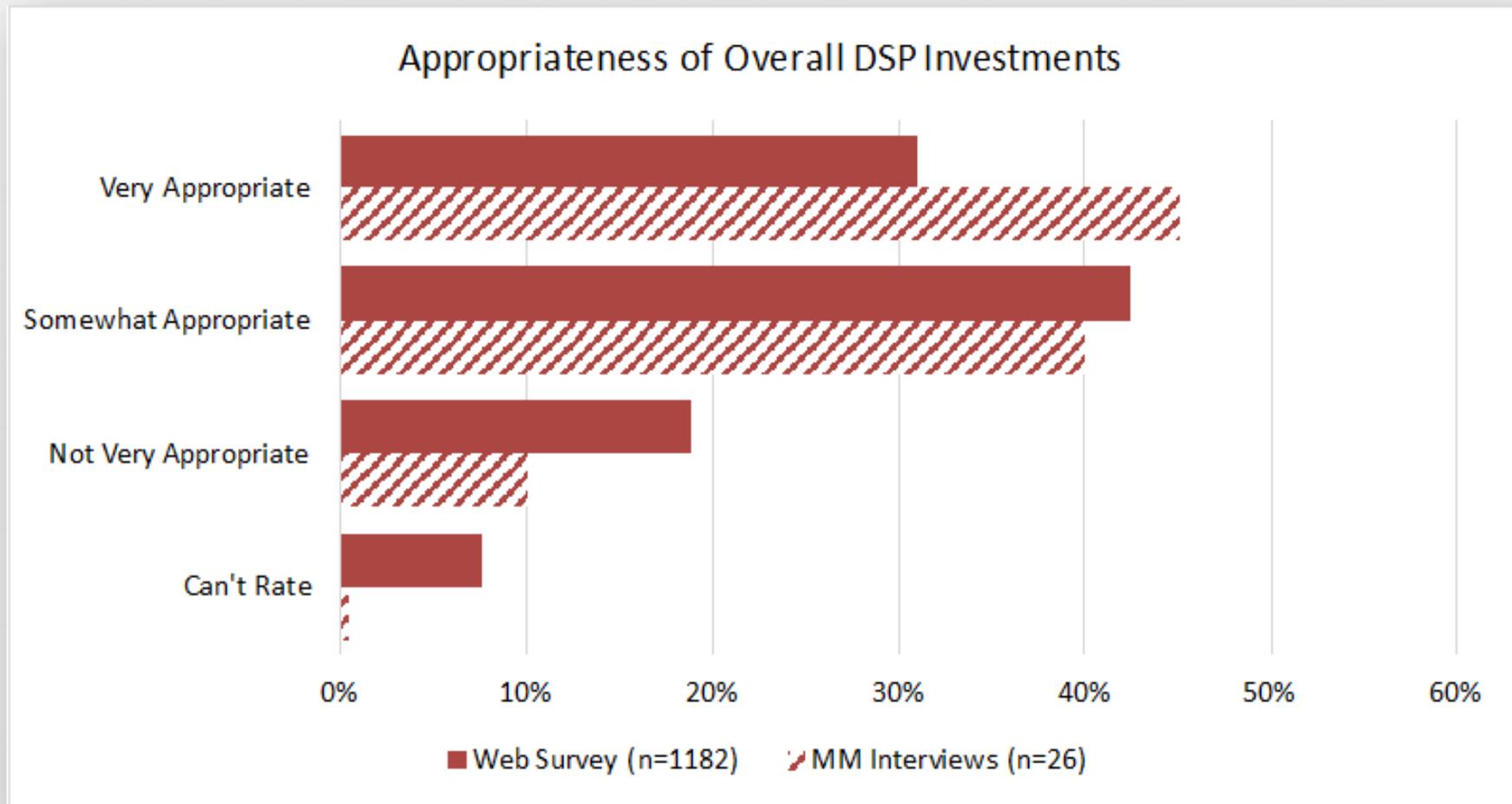
- **As an incentive to participate, Customers who completed the survey and provided contact information, were entered into a draw for one of two Apple iPads.**
- **Winner Selection Process:**
  1. Respondents who completed the survey and provided contact information were separated from those who did not complete the survey or provide contact information.
  2. Each eligible respondent was assigned an index number from 1 to 1066 – the total number of eligible respondents who provided contact information.
  3. Six unique random numbers between 1 and 1066 (2 winners and 4 alternates) were generated from the website [www.randomizer.org](http://www.randomizer.org)
  4. Respondents whose assigned index number matched the random numbers were provided to TBH.
  5. TBH verified that the respondents were customers and contacted the winners.

# Web Survey Overview

- **The Web Survey was designed to follow-up on the results of the Mental Models research interviews and touched on the following topics:**
  - » Customer priorities for Distribution System Planning
  - » Components of the Distribution System Plan
    - System Renewal
    - System Service and System Access
    - General Plant Investments
  - » Impact on Customer Electricity Bills
  - » Appropriateness of Overall Increase in Investment in the DSP
  - » Confidence in TBH to provide safe, reliable, cost-effective electricity through implementation of the DSP
- **Survey Respondents were given the opportunity to elaborate on their ratings with open-ended responses. These responses have been summarized to characterize respondents reasoning for responses but these open-ended responses have not been assessed quantitatively.**

# Bottom Line Up Front

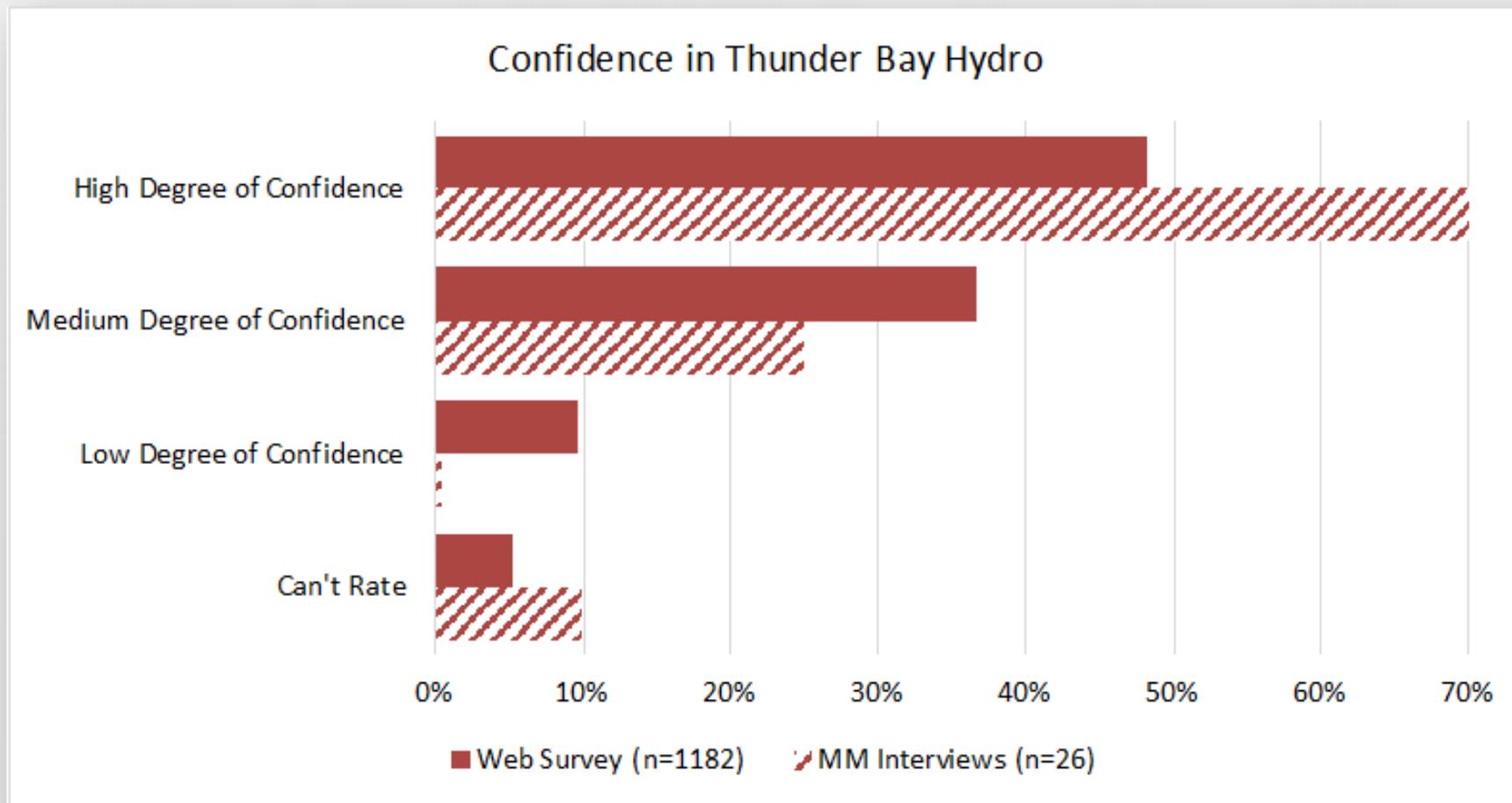
- Results of the Web Survey and Mental Models research indicate a high level of support for the DSP with most rating the overall level of investment as “Very” or “Somewhat” Appropriate:



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Bottom Line Up Front

- **Results of the Web Survey and Mental Models research indicate strong customer confidence in TBH to implement the DSP while maintaining reliability and containing cost:**



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Bottom Line Up Front

- In general, the results of the Web Survey reiterate and reinforce the results of the Mental Models research:

edly highlighted as priorities the service while keeping distribution costs and

s of Criticality and Appropriateness of DSP e of the Mental Models Interview ts rating investments as “Very” or “Somewhat” Appropriate.

Interviews generally tended to view the durably with more “Very” responses ndents

Interviews generally tended to express a to successfully implement the DSP

» Web Survey Respondents repeat importance of ensuring reliable s resulting electricity rates low.

» Web Survey Respondents ratings Investments were similar to those Participants with most responder “Somewhat” Critical and “Very” or

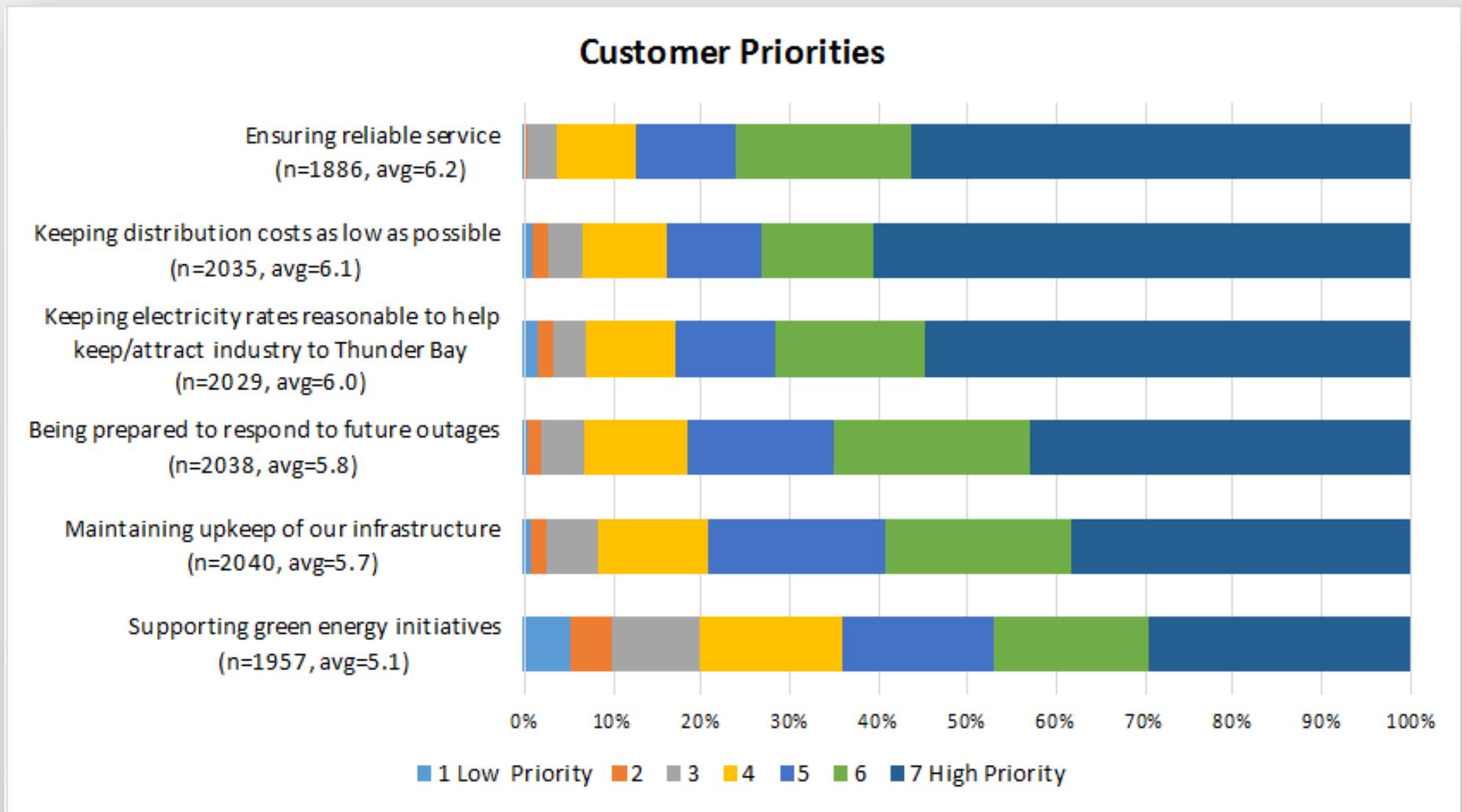
» Participants in the Mental Models investments somewhat more favor compared to Web Survey Respon

» Participants in the Mental Models higher level of confidence in TBH

# Customer Web Survey Research Findings

# Customer Priorities

- The survey began by asking customers to rate the priority of factors that had been previously identified in the mental models research. Consistent with the mental models results, Customers highest priorities were for ensuring reliability and keeping distribution costs low and electricity rates reasonable.



# Other Priorities

- **When given the opportunity to suggest other priorities Customers typically reiterated known priorities.**
- **The cost of electricity is of top mind for Customers who cited the high and rising cost of electricity, the need to reduce rates and the need to change peak hours:**
  - » *“Power rates in Northwestern Ontario are extremely expensive especially when compared to Manitoba rates. Thunder Bay Hydro along with other groups within Ontario have done an extremely poor job at controlling costs.”*
  - » *“Keeping electricity rates reasonable to keep/allow residents to stay in their homes.”*
  - » *“Time of high rates should be adjusted away from early morning when people are getting ready for work and during supper time when people have to cook. They should not be penalized for this time slot.”*
- **Alternative forms of energy and “green,” energy was mentioned as a priority for Customers who hoped these initiatives would reduce the rates they pay for electricity:**
  - » *“Ease of access and opportunity to connect customer owned alternate energy generators (solar panels / wind generators) to the grid to offset consumption cost and to ease the strain of higher future demands on the current infrastructure.”*
  - » *“Develop a feasibility study to build a natural gas electrical plant for Thunder Bay. Bring the costs home without the Ontario Hydro albatross around our neck. Eliminate subsidies on high cost so called alternative energy technologies. The sun doesn't always shine and the wind doesn't always blow BUT the coal and gas always burn.”*

# Other Priorities

- **Maintenance and upgrades to technology and equipment, especially replacement of poles with underground power lines, was also mentioned as a priority:**
  - » *“Utilize European/USA models and place service below grade. This requires more initial cost, but substantially reduces maintenance and infrastructure expenditures over the long term. (Avoiding ice, wind, fallen tree liability.) Simply replacing lines/poles and keeping them above grade is short-sighted.”*
  - » *“Replacing infrastructure with low maintenance and longer life infrastructure. Be future ready.”*
- **Some customers expressed frustration regarding management policies related to employees’ salaries though it is not always clear that they are speaking of TBH specifically:**
  - » *“Stop the stupid buyouts for millions of dollars for managers who cannot do their job.”*
  - » *“Hydro executives/employees should take at least a 10% pay cut. 20% would be even a little more reasonable.”*
- **Other priorities mentioned included:**
  - » Billing practices: “Easier automated billing and online information”; revising date of direct deposit payment withdrawals.
  - » Frustration with smart meters and concerns about their safety
  - » Customers service
  - » The quality of Thunder Bay Hydro’s communications with customers

# TBH DSP

- **Customers were then introduced to the DSP with the following description:**

*To inform the development of our Distribution System Plan (DSP), we conduct annual in-field assessments of the condition and potential risks of our infrastructure – such as overhead and underground lines, poles and transformers. We review the field results against our legal and operational requirements to develop a prioritized list of needs, which form the base of our Capital Plan. The activities described in the DSP summarize the required investments over the next five years.*

*The DSP covers four different types of investments:*

**System Renewal**, which includes replacing or refurbishing existing components in the electricity distribution system.

**System Service and System Access**, For the purposes of this survey, we combine these two areas, which include investments related to the overall health of the System and the connection to our customers. Both are needed to maintain and repair the existing system and to connect new customers and to meet additional power needs of its existing customers

**General Plant Investments**, includes any investments by TBHEDI that are not physical components of the distribution system, and include things such as land, buildings, tools and equipment used to support day-to-day business and operations activities.

*Each of these elements of the Plan was explained in more detail in the following section of this survey.*

# System Renewal

- **Customers were then presented with the following description of the System Renewal Component of the DSP:**

*“**System Renewal**” includes replacing or refurbishing existing components in the distribution system to allow TBHEDI to continue to provide safe and reliable power to its customers. A primary element of the System Renewal plan is TBHEDI’s Infrastructure Investment Program. In 2015 the average age of the TBHEDI’s hydro poles was 30 years. The lifespan of a pole is expected to be 50 years. To bring increased reliability to customers, it is necessary to reduce the average pole age to 25 years, which TBHEDI plans to do by 2024.*

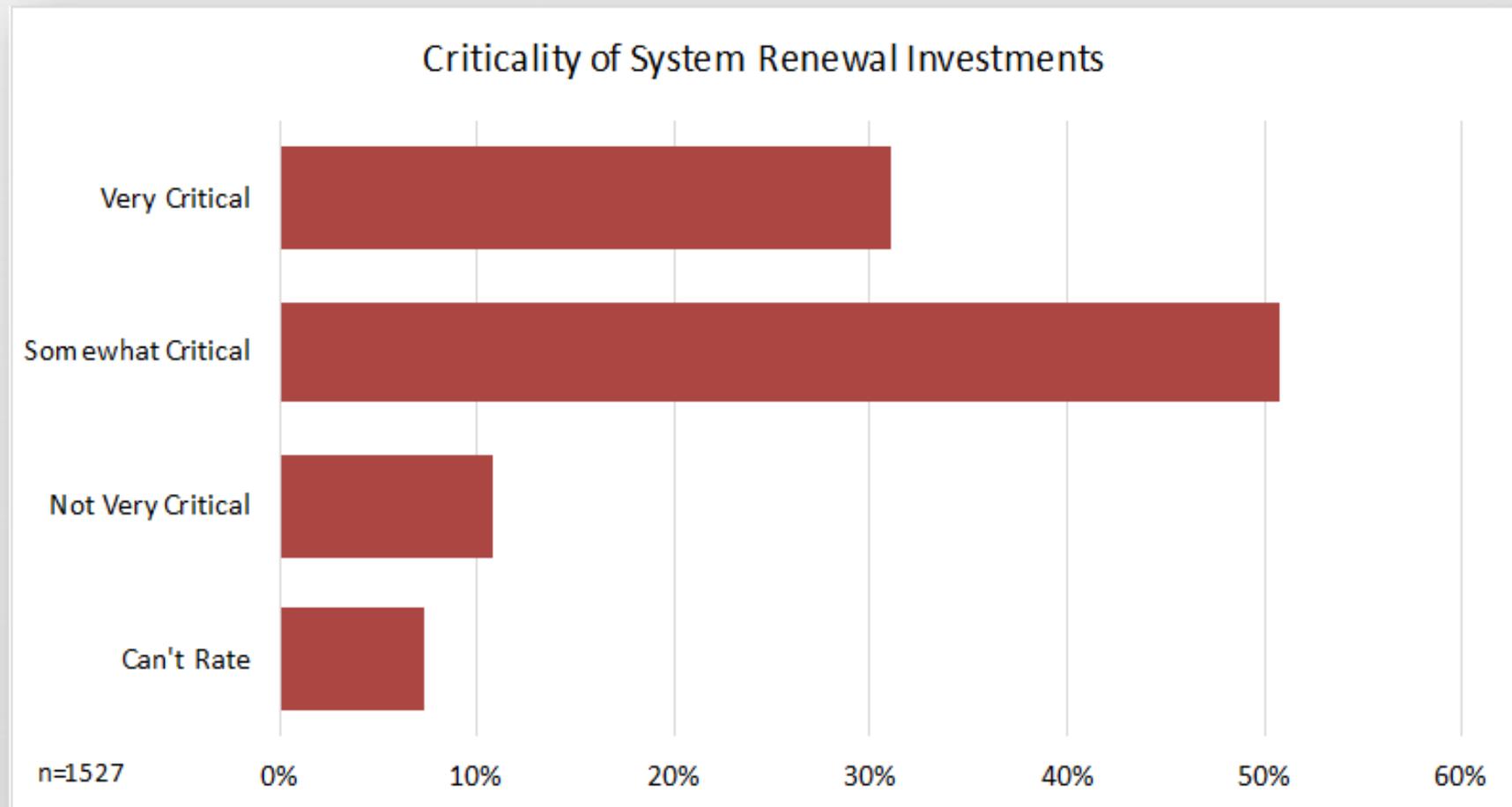
*These pole replacements are being done in conjunction with system rebuilds. As the power lines within the City are being replaced, TBHEDI is choosing the most economical option by upgrading the operating voltage from 4 kV to 25 kV which will allow TBHEDI to decommission many older sub-stations and reduce system losses to create a more efficient distribution system. TBHEDI is also replacing underground cables which are at end of their life.*

# System Renewal

- **When asked about their thoughts in response to the System Renewal description, Customers were generally supportive recognizing the need for renewal to ensure reliability and efficiencies, several emphasizing the need to control costs:**
  - » *“It is important to keep up with and maintain infrastructure and delivery of service systems in the most economical, innovative and environmentally friendly way. I am hopeful that Thunder Bay Hydro will look at professional research and assessments to determine how to move forward with system renewal.”*
  - » *“Investment into replacing an aging infrastructure earlier than expected demonstrates a vision of optimizing efficiency as early as possible during a planning phase that will eventually be inevitable. It may also contribute to avoiding potential system failures related to aging infrastructures.”*
  - » *“Makes sense. Regardless of the plan, priority must be given to sustainable upgrade/renewal of the necessary infrastructure with a focus on innovation, economies of scale to provide reliable power without increasing costs/taxes. Costs must be contained.”*
  - » *“Keeping it up to date is required, however if its going to constantly increase my bill, you need to look else where for savings - such as exurbanite salaries.”*

# Criticality of System Renewal

- When asked to rate how critical investments in the System Renewal area were to them, nearly all rated them as either “Very” or “Somewhat” Critical.



# Criticality of System Renewal

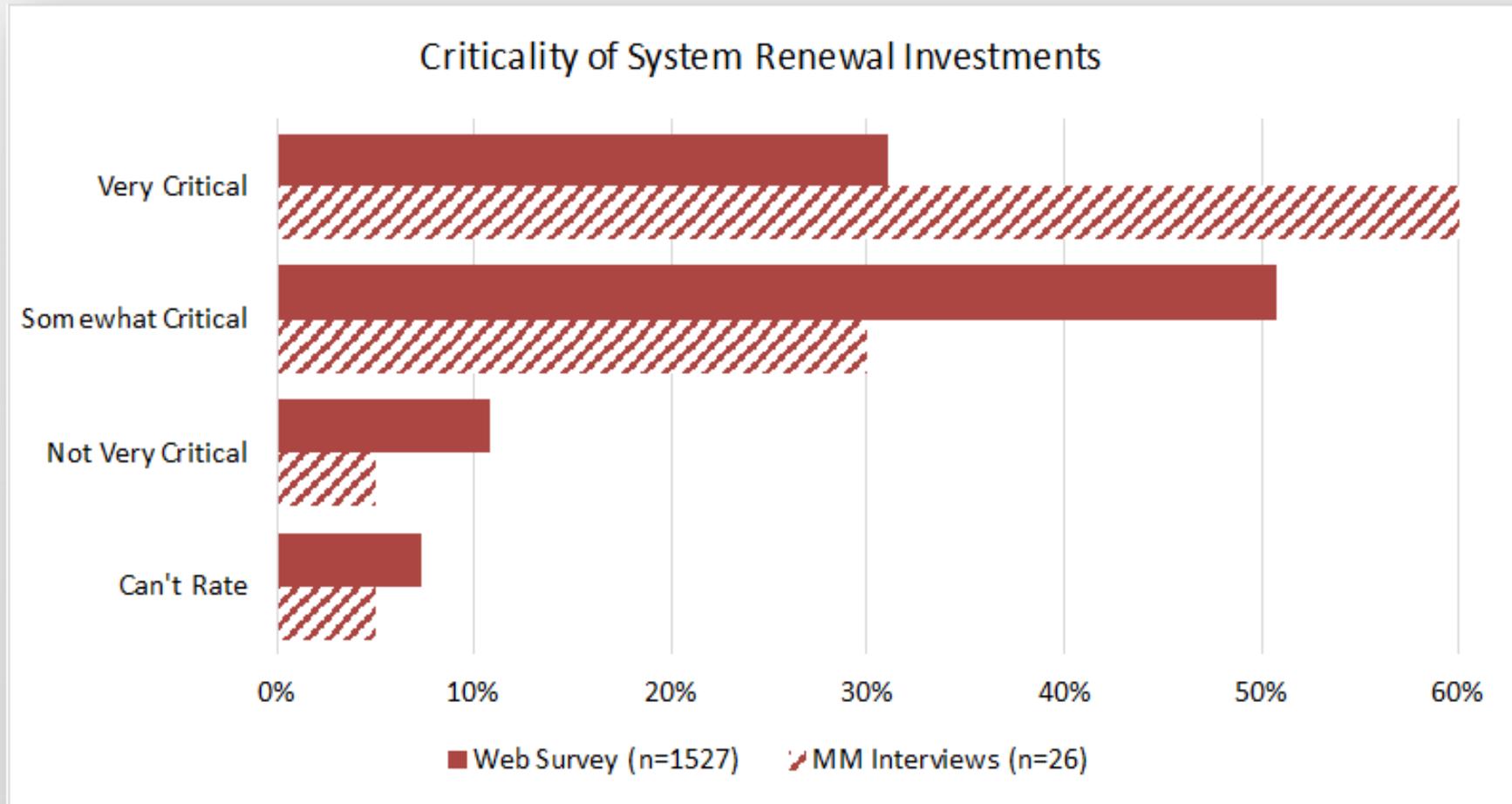
- **Customers who rated the criticality of System Renewal as “Very” or “Somewhat” Critical emphasized the need to ensure reliability and efficiency by maintaining and upgrading the System. Several added that System Renewal would help control costs to customers in the future:**
  - » *“This is the main element in keeping the system reliable, keep maintenance costs at their lowest and keep costs to customers at their lowest while maximizing profitability to TBHEDI.”*
  - » *“Ongoing investment required to spread out maintenance and replacement costs and avoid high costs of responding to emergency repair situations.”*
  - » *“Renewal ensures that future costs don't balloon.”*
  - » *“Some attention (and money) needs to be focused on graduated system renewal to avoid heavy one-time expenditures that may not have been planned. The dilemma is trying to keep costs down given the current economic climate.”*
- **One Customer who rated the criticality of System Renewal as “Somewhat Critical” stressed the safety aspect of System Renewal:**
  - » *“I would rather see an old post being replaced than falling on someone's house. I can go without electricity for a while, can't go without a home for very long.”*

# Criticality of System Renewal

- **Customers who rated the criticality of System Renewal as “Not Very Critical”** generally commented that System Renewal was unnecessary and/or expressed concerns about cost:
  - » *“The poles still have 20 years left.”*
  - » *“I find our service to be very reliable. Is renewal really necessary?”*
  - » *“If it ain't broke, don't fix it!”*
  - » *“Cost for hydro electricity is far too high now and any plans to increase price through false critical updates are not supported.”*
- **Customers who were unable to rate the criticality of the System Renewal (“Can’t Rate”)** typically said they lacked knowledge **“about electricity generally”** and/or needed more information, specifically relating to:
  - » *“Data on what percentage of system components are near end of life.”*
  - » *“Reliability numbers”.*
  - » *“Data about the average age or lifespan of other grid components: sub-station, lines, transformer, switch, towers” and “alternative schedules” for System Renewal.”*

# Criticality of System Renewal

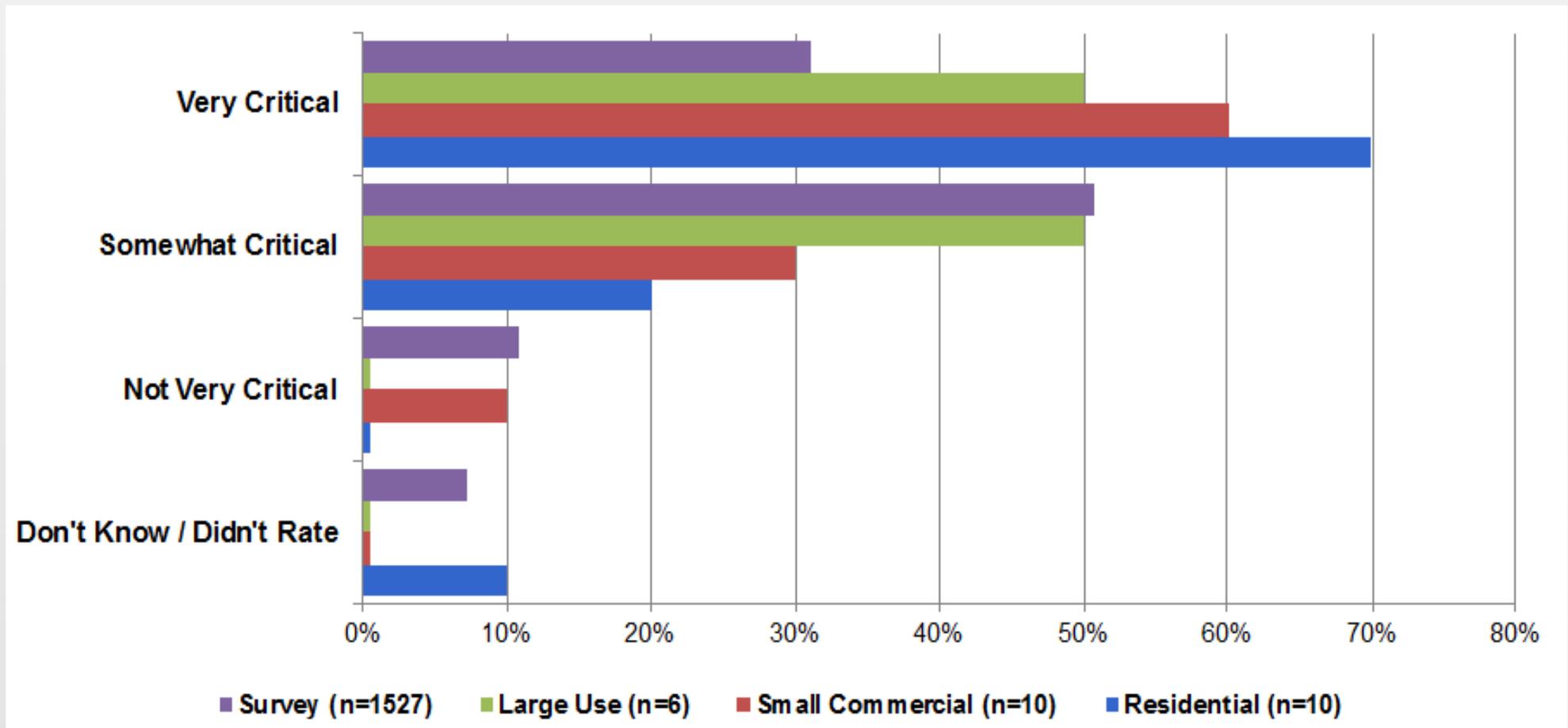
- Ratings of Web Survey Respondents were somewhat less favourable than those of the Mental Models Interview Participants.



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# Criticality of System Renewal

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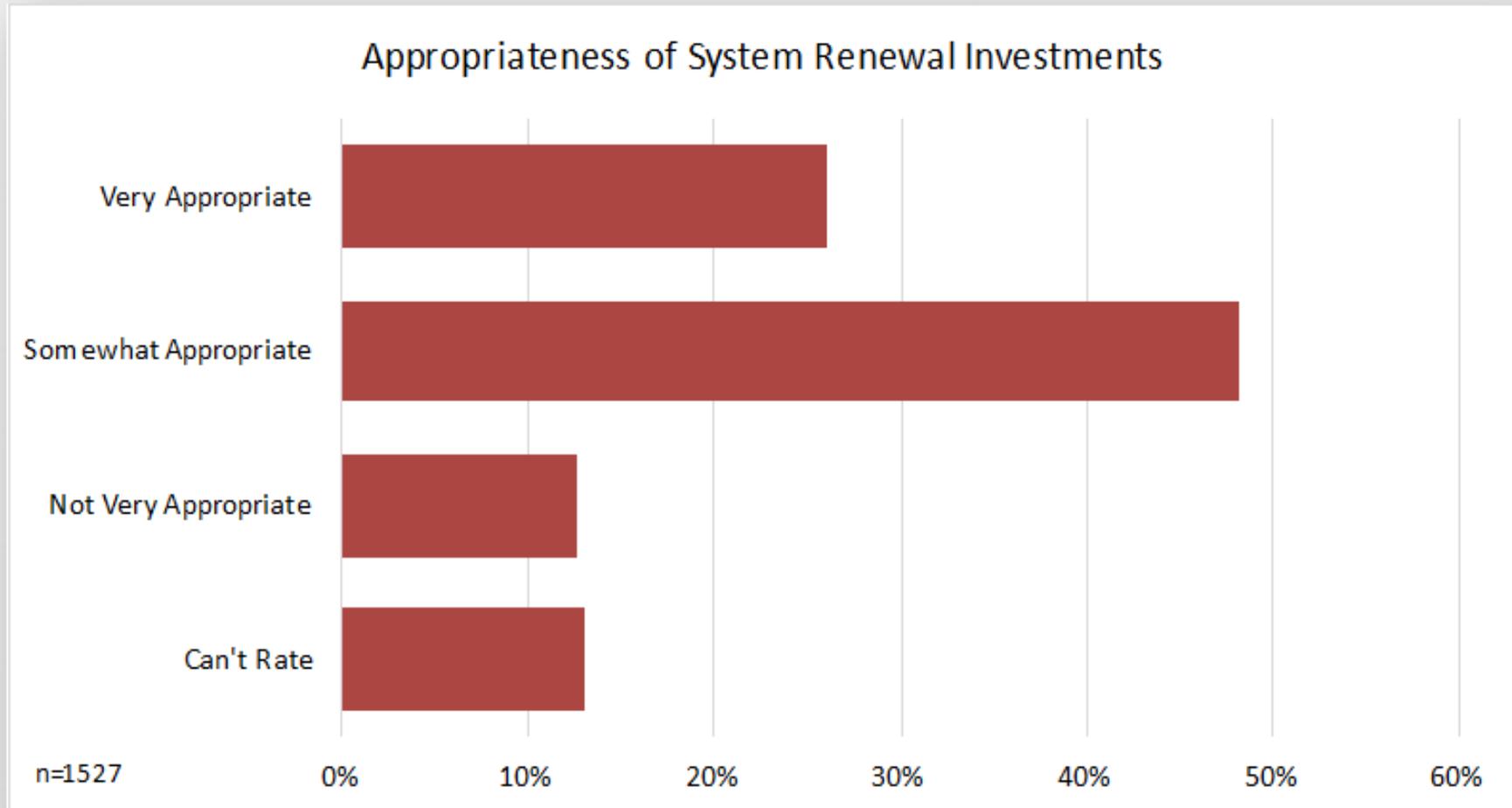


\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Appropriateness of System Renewal Investments

- Customers were then presented with the following description of the proposed increase in System Renewal and asked to rate its appropriateness.

» Expenditures for all of these System Renewal initiatives are expected to increase by about 3.5% year-over-year in the next five years, making up about half of Thunder Bay Hydro Electricity Distribution Inc.'s total capital budget over that time. This portion of the budget is comparable to the past five years.



# Appropriateness of System Renewal Investments

- **Customers who rated the appropriateness of investment in System Renewal as “Very” or “Somewhat” Critical recognized the cost as a necessary and anticipated that increases were required to ensure reliability and efficiency of the System.**
  - » *“Given the economic climate, costs of doing business , 3.5% is about what should be expected. Actually a very good target if it is accomplished.”*
  - » *“It is not going to get cheaper and also we seem to be experiencing more extreme weather and a distribution system that is robust is important.”*
  - » *“Just like all other expenditures they go up annually.”*
  - » *“We all hate to see our rates go up, but it is necessary with inflation and improvement costs.”*
  - » *“We rely on hydro for heating our home. We need reliable equipment. I would rather pay 3.5 percent increase today than 10% or 15% down the road.”*
- **Several who rated the appropriateness of investment in System Renewal as “Very” or “Somewhat” Critical, however, also emphasized the need to control the costs:**
  - » *“No matter how much people in this City complain, cost is cost, and cost is almost always passed onto the consumer. As long as the cost isn't gouging everyone to make it happen. The hope is that we don't have to see a continuous increase beyond the projected plan.”*
  - » *“I would like to see it done as conservatively as possible.”*
  - » *“Would like to see all improvements done as economically as possible.”*

# Appropriateness of System Renewal Investments

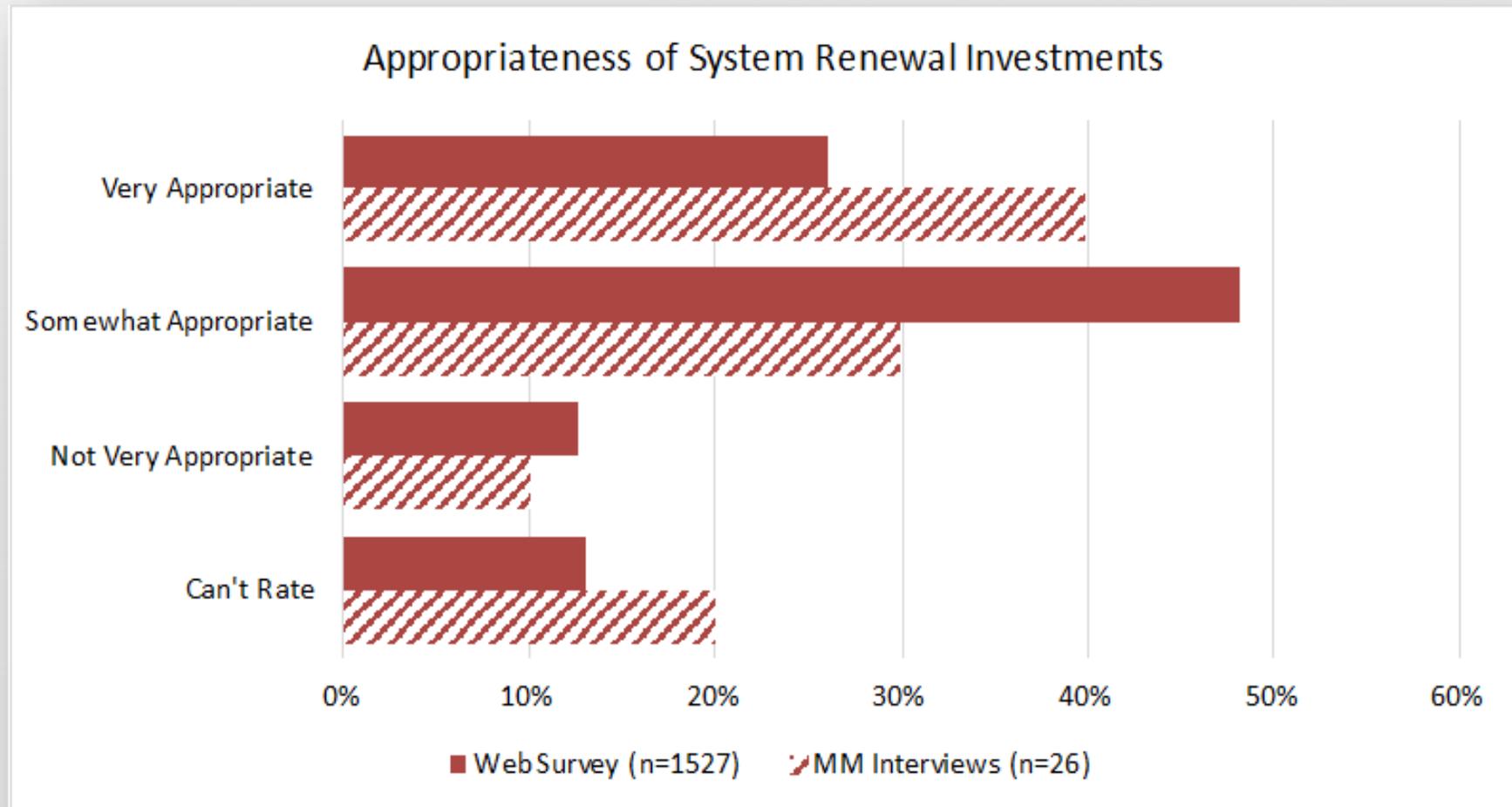
- **Customers who rated the appropriateness of System Renewal Investment “Not Very Appropriate” emphasized the need to control costs, several highlighting the impact that rate increases would have on the elderly and low income citizens in Thunder Bay:**
  - » *“This seems excessive since as a retiree I can say without doubt that my income will not have kept pace with such increases.”*
  - » *“We can't keep increasing rates beyond what the average person makes in a year. Every utility wants more and more. I'm on disability for the last 8 years and it hasn't gone up to match all the increases.”*
- **Others who rated the appropriateness “Not Very Appropriate” were critical of management practices, specifically relating to salaries:**
  - » *“TBAY Hydro must move toward holding the line on increases. In the private sector we are fortunate to see any kind of salary increase every 5-7 years. Cost increases to support annual unionized worker cola and benefit increases are not sustainable nor reasonable for the average rate payer.”*
  - » *“We are helpless. We have grown to depend on energy you provide and keep paying the increases you demand or be without energy. Management, in all big money businesses keep getting higher pays, but the system that is required to be maintained at a certain level with the revenues you've received from the working poor, isn't applied and managed properly, and every year you come back for more. The rich keep getting richer ... we pay you and every other utility 3.5%, but we get 0% pay increase.”*

# Appropriateness of System Renewal Investments

- **Customers who rated the appropriateness of System Renewal Investment “Can’t Rate” typically commented that they “don’t know” or that they need more information about “financial and technical details”:**
  - » *“I would need more info to make a decision on this rate. The general public should be fully educated on the reasons behind the increase. Please make your background research and reasons behind the increase visible and transparent for the general public. If your numbers are accurate and not inflated then there is nothing to hide.”*
  - » *“You haven't provided information on how much work is being done for how much cost so I can't say if it's appropriate but basically over the last five years the renewal budget has increased by almost 20% and over the next five it will climb to over 40% of what it was five years ago which represents about a 20% increase, over ten years, to TBHEDI's total capital budget.”*
  - » *“I do not have the knowledge base to make an informed decision. Future planning takes several items into consideration not just need. Need is the driver but just because I need a car doesn't mean I will get one. Planning should consider all the options, repair, replacement, review of other like entities' solutions, affordability and execution, timeframe, etc.”*
- **One Customer who rated the appropriateness “Can’t Rate” commented:**
  - » *“This could mean I do not eat, or I lose my home. Very hard to rate that.”*

# Appropriateness of System Renewal Investments

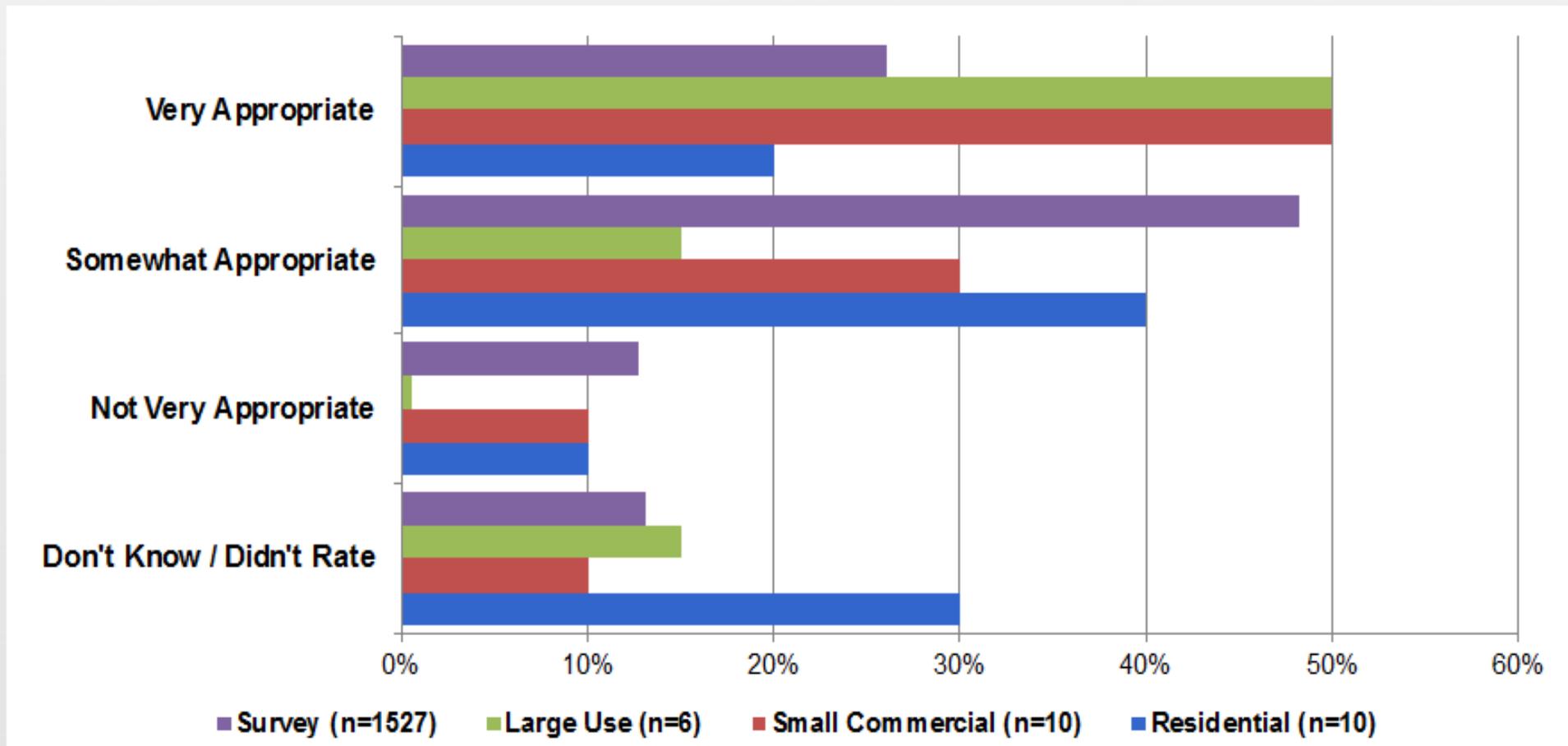
- Ratings of Web Survey Respondents were somewhat less favourable than those of the Mental Models Interview Participants.



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Appropriateness of System Renewal Investments

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# System Service and System Access

- **Customers were then presented with the following description of the System Service and System Access Component of the DSP:**

*“**System Service**” and “**System Access**”, both of these investments are customer-driven and relate to the overall health of the System and the connection to our customers.*

*“**System Service**” investments include expansions or upgrades to existing systems. These investments are needed to support increased demand from existing customers or improve operational efficiencies and flexibilities. TBHEDI does not expect that there will be significant changes in load that will constrain the ability of the system to provide consistent service delivery. Expenditures to meet system operational objectives of safety and reliability will be addressed as part of projects in the System Renewal and General Plant plans, and as such, minimal expenditure will be seen in the System Service category.*

*“**System Access**” investments involve modifications to existing systems that will allow TBHEDI to provide future and existing customers access to its electricity services. These investments are most often initiated by customer or third party requests and projects are completed to fulfill TBHEDI’s service obligations. Examples of these investments in the past five years include: new customer connections, line relocations to accommodate City of Thunder Bay road widening projects, and new subdivision developments.*

# System Service and System Access

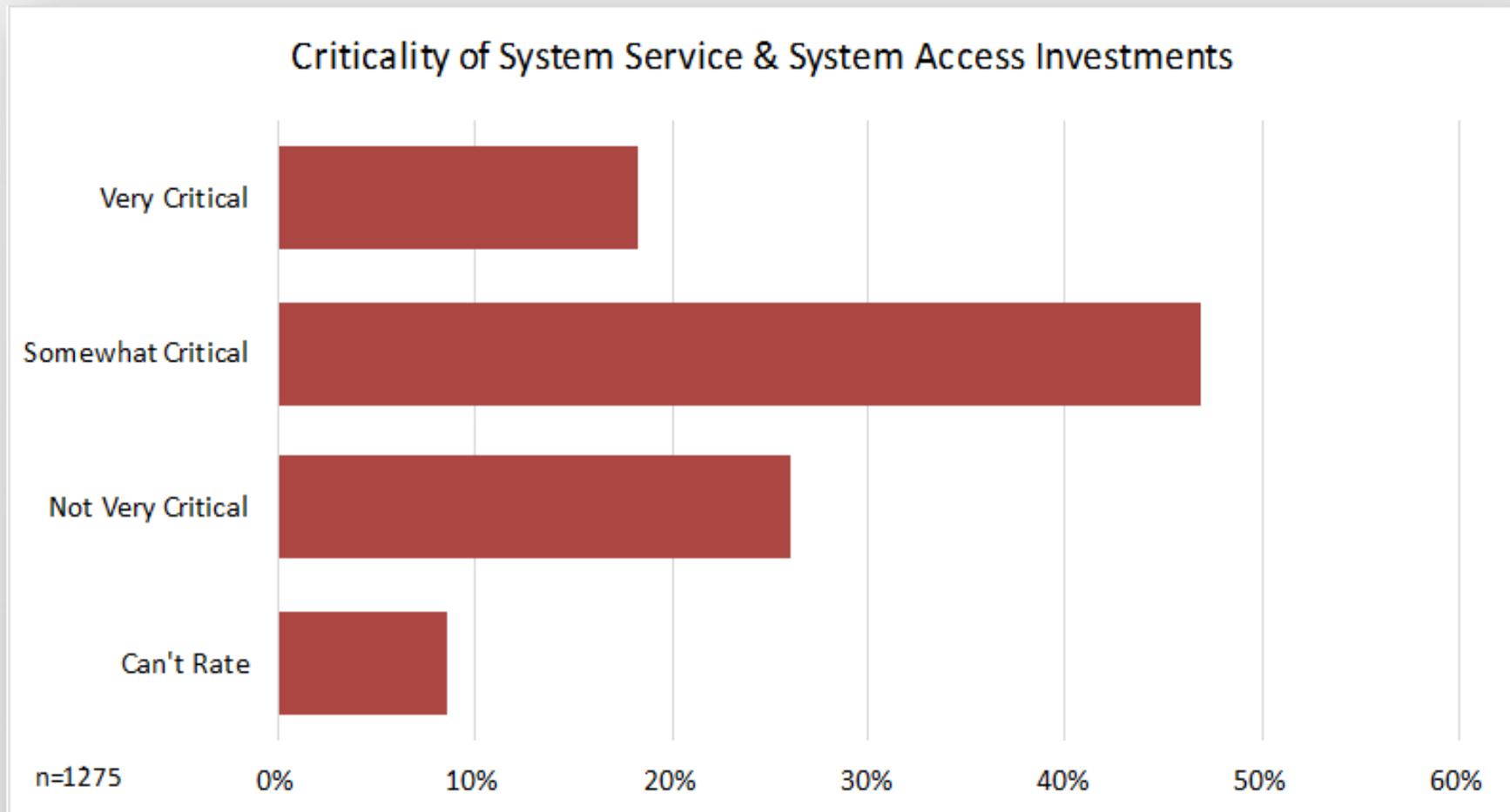
- **Customers were largely supportive of System Service and System Access recognizing the need for investment generally and, some specified, in order to ensure reliability and efficiency, and to allow for expansion and increasing and future demand:**
  - » *“Can’t have the electricity flowin’ half assed.”*
  - » *“The plans are important to support increased demand from existing customers or improve operational efficiencies and flexibilities.”*
  - » *“TBH must be ready to meet the needs of our City when it expands both in terms of residential and commercial / industrial. Forecasting through close consultation and communication with the City and businesses seems fundamental to planning and a metered response.”*
  - » *“It sounds logical to ensure the City’s demands for hydro are being met now and in the future.”*
- **Others, however, commented that there was no need for investment in System Service and System Access because “growth does not appear to be a big factor”, some suggesting the focus should be on existing older areas of the City:**
  - » *“There should not be significant changes as the City population is stagnant. Housing starts are flat.”*
  - » *“Nothing makes me more frustrated then hearing that we are paying more to have roads widened for vehicles....so disappointing. Also Thunder Bay doesn’t not need anymore subdivisions.”*
  - » *“Upgrading systems in existing commercial locations may draw new business to the older core buildings and rejuvenate core north and south side areas. Instead of new service to new undeveloped areas. Make it more expensive to put in new than to renovate old. I think we will recoup in the long run if we can rebuild our 2 main cores.”*

# System Service and System Access

- **Similar to the previous responses, Customers again emphasized the need to control costs, some suggesting that the costs should be covered by those who will directly benefit from improvements in this area:**
  - » *“Rate increases need to be kept under control. Many residents in Thunder Bay are already finding it hard to fully pay utilities bills. Our City is faced with around a 7% unemployment rate.”*
  - » *“Effective planning by all City Departments with an eye to innovation in project delivery and cost containment is assumed. There has to be a mentality of continual improvement in order to provide required services at the lowest cost.”*
  - » *“New customers and developers should pay for 100% of new services. It is unfair to charge all users who will not benefit.”*
  - » *“New services such as a new power line beyond the existing system to serve a new home are paid by the customer requesting it. Relocating power lines to accommodate road widening should be part of the City's project costs which is what is done by MTO for their road expansion projects. This should reduce system access costs.”*
- **A few expressed frustration over the lack of information provided:**
  - » *“This description is very vague and general. I would need more specific details to fully understand.”*
  - » *“These are not within my scope of knowledge. All this corporate jargon may mean something to you but it is making me angrier as I proceed. I will attempt to finish this survey as I grit my teeth. You should stick to questions like the first few in this survey and not simply make me feel frustrated at what you think I could possibly have an informed opinion upon.”*

# Criticality of System Service & System Access

- When asked to rate how critical investments in the System Service and System Access areas were to them, most rated them as either *“Very”* or *“Somewhat”* Critical.



# Criticality of System Service & System Access

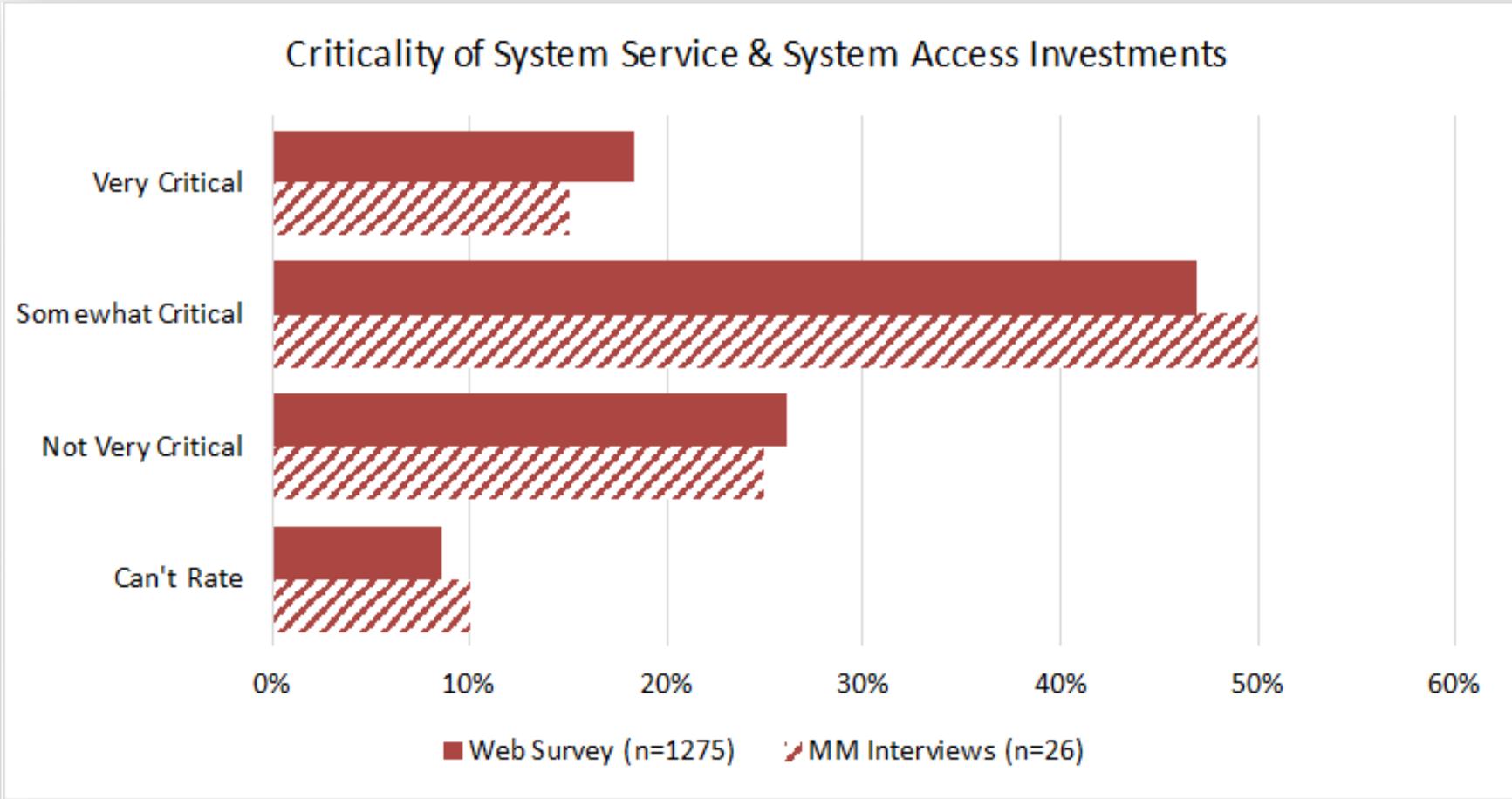
- **Customers who rated the criticality of System Service & System Access as “Very” or “Somewhat” Critical emphasized the need to meet increasing and future demand:**
  - » *“What good is a new subdivision without electricity? How can we encourage economic growth in our community if we are unable to provide electrical needs, especially in industry?”*
  - » *“Missed opportunities to expand service has consequences on corporate revenue generation, and community economic development.”*
  - » *“If this isn’t pursued fairly rigorously, the result is going to be a multi-tiered hydro service where recently developed areas of the City have state-of-the-art components, and other areas are serviced by a 2nd or 3rd tier network. This has implications for new development, and it creates an inequity in terms of the level of service citizens are paying for.”*
- **Others who rated the criticality of this component “Very” or “Somewhat” Critical commented that investment in this area was necessary to ensure reliability and efficiency of the system:**
  - » *“We need electricity or we’ll be left in the dark.”*
  - » *“The 80’s and 90’s had many brown-outs, which would be very annoying in our technological age. Computers and routers need power.”*
- **Concerns about cost did not appear to be a significant factor for those who rated the criticality of these investments as “Very Critical”. Customers who rated the criticality of investment in this area as “Somewhat Critical”, however, again mentioned the need to control costs, several suggesting those benefitting should pay for the investment in this area:**
  - » *“Again expansion is needed but the cost should be accessed. If a customer off the grid demands a distant link where Hydro is not set up, that customer may have to pay additional connections fees to be fair to all customers.”*

# Criticality of System Service & System Access

- **Customers who rated the criticality of System Service & System Access as “Not Very Critical” again expressed concerns about the cost to customers and/or suggested the cost should be “taken care of by the customers asking for the service”:**
  - » *“I have hydro and not willing to pay for others.”*
- **Others who rated the criticality of investment in this area as “Not Very Critical” commented that this area of investment was not important and/or didn’t affect them:**
  - » *“Nothing is changing for me. I’m staying where I am and I don’t expect to need more electricity.”*
- **Customers also said this investment was “Not Very Critical” commenting that it was not needed because there was little to no expansion or growth taking place in Thunder Bay:**
  - » *“Thunder Bay isn’t expanding rapidly. Better to maintain the existing system and be sufficiently robust to accept new connections than to expand arbitrarily.”*
- **Customers who were unable to rate the criticality of this component of the DSP (“Can’t Rate”) typically said they needed more information. Others expressed similar concerns raised about keeping costs low and charging customers for services they request.**

# Criticality of System Service & System Access

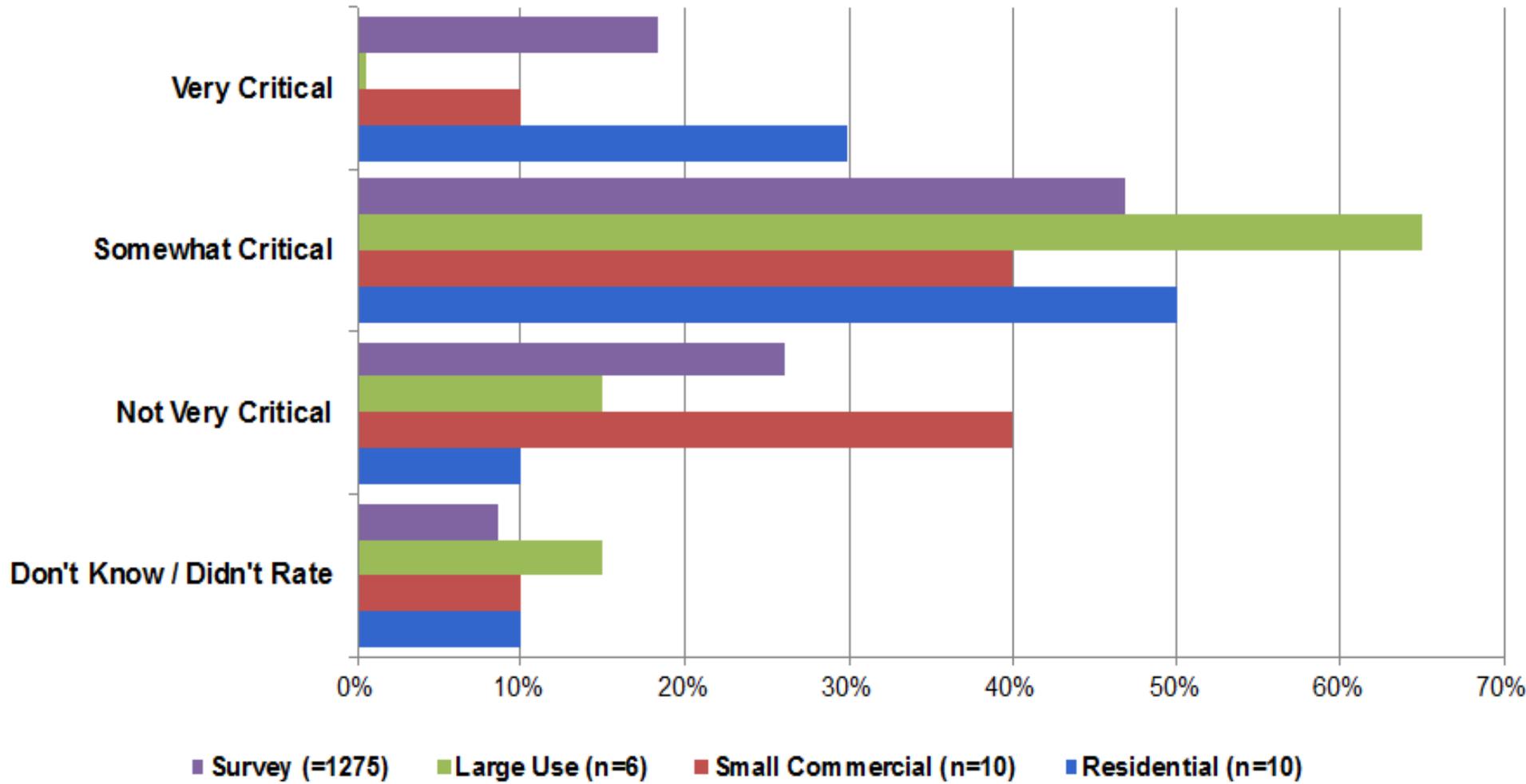
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# Criticality of System Service & System Access

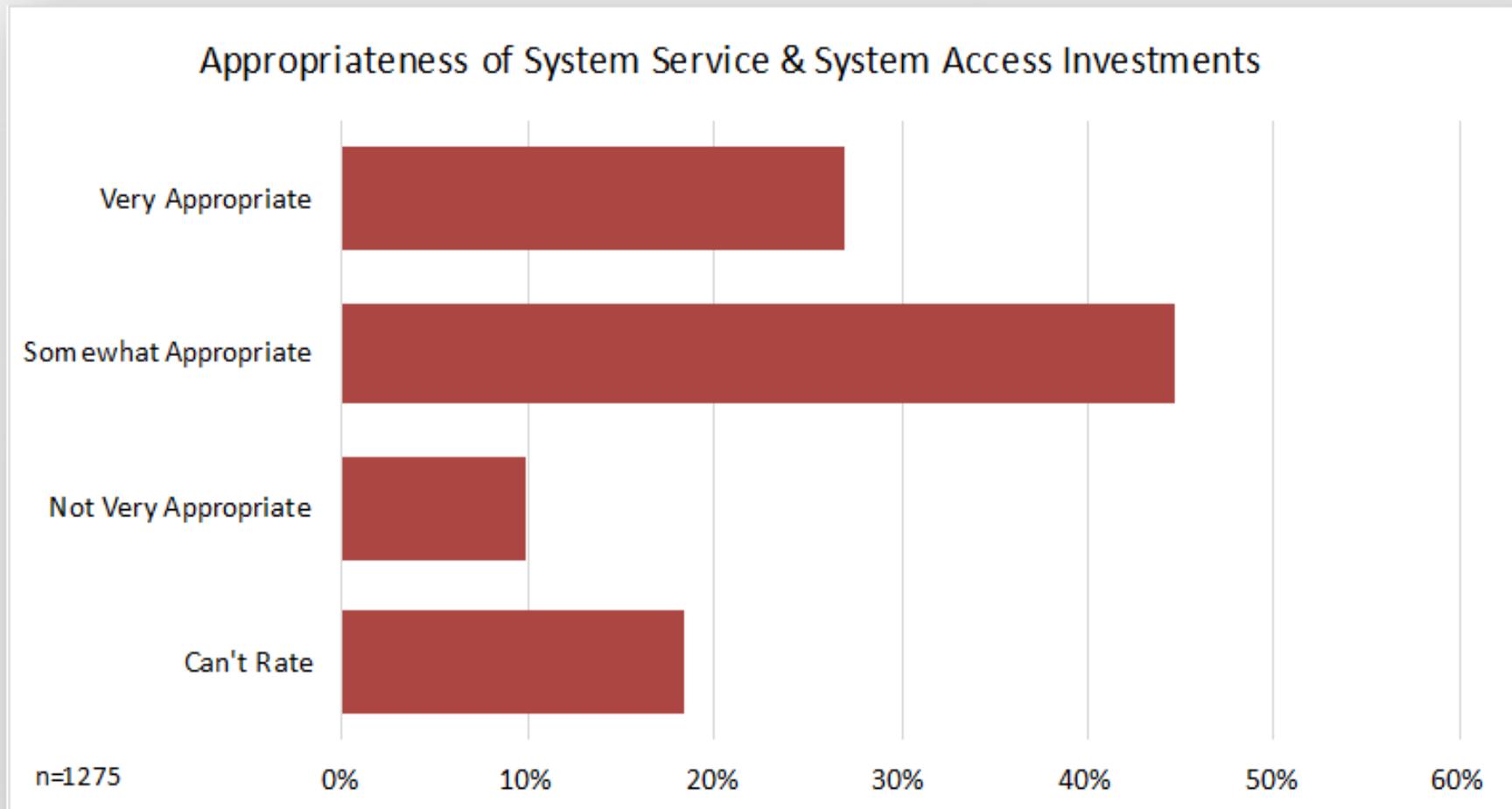
- Ratings of Web Survey Respondents were very similar to those of the Mental Models Interview Participants.



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# Appropriateness of System Service & System Access Investment

- Customers were then presented with the follow description of the proposed increase in System Service and System Access and asked to rate its appropriateness.
  - » *TBHEDI expects minimal investment in the System Service category. Expenditures in the System Access category are expected to remain around 30% of total expenditures for the next five years.*



# Appropriateness of System Service & System Access Investment

- Similar to the responses to the previous question, Customers who rated the appropriateness of System Service and System Access as *“Very Appropriate”*, while recognizing the current *“minimal growth”*, emphasized the importance of meeting the needs of new customers and supporting future growth, and providing all customers with reliable and efficient service.
- Several Customers who rated investment in this component *“Very Appropriate”* were happy about the fact that there was no increase in cost. Others reiterated their earlier comments that costs need to be controlled:
  - » *“A zero raise in costs is always appropriate.”*
  - » *“Sounds reasonable especially it being a minimal investment along with keeping the total expenditures the same for the next 5 years.”*
- Others who rated investment in this component *“Very Appropriate”* expressed confidence in TBH:
  - » *“TBHEDI has the expertise to know how the budget is distributed. With an investment of 30% for the next 5 years and this number is consistent with past investments, I feel confident that this minimal investment is accurate.”*
  - » *“I really have to believe in what they are telling us. I have no second thoughts on the transparency of their system.”*

# Appropriateness of System Service & System Access Investment

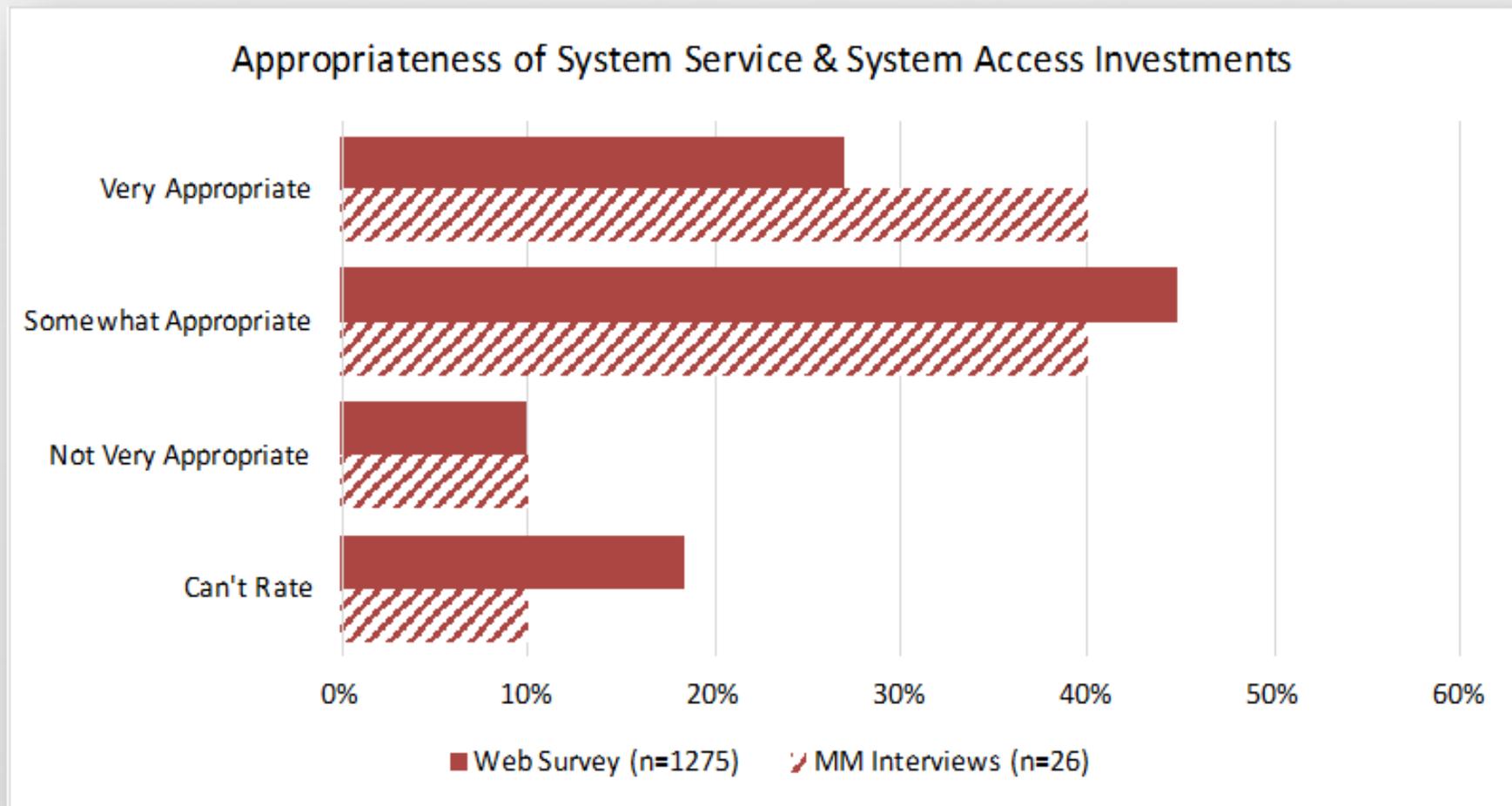
- **Customers who rated investment in this component “Somewhat Appropriate” commented on the costs, several noting their rates would not increase and/or the importance of controlling costs, while others restated their belief that those requesting and benefitting should pay:**
  - » *“As long as builders, subdivision developers and COTB cover the cost of their required service, then I am okay with keeping investment constant.”*
  - » *“Push developers to pay for the new infrastructure development as well as 20 year depreciation costs to supporting the new subdivision but at the same time support for limited costs replacement or new connections in established areas. Encourage developers to upgrade our existing city housing stock thus using our existing infrastructure.”*
- **Similar to the responses to the previous question, Customers who rated the appropriateness of System Service and System Access as “Somewhat Appropriate”, while recognizing the importance of supporting future growth, emphasized the “stagnant market”:**
  - » *“While maintenance is necessary ... THAT’S LIFE ALL LIFE 90 percent maintenance yes fine but NOT CHANGE FOR THE SAKE OF CHANGE OR GROWTH FOR THE SAKE OF GROWTH ....TO WHAT END!!! AND DID I MENTION NO NUKES WHAT WILL BE DONE WITH THE WASTE !!! AND THERE IS NUCLEAR WASTE LOTS OF IT ..IT NEVER ENDS.”*
- **While several who rated investment in this component “Somewhat Appropriate” expressed confidence and “trust” in TBH’s planning, others expressed criticism of TBH:**
  - » *“You would know better than Joe Public as to whether this is an adequate expenditure amount.”*
  - » *“It’s all important, and should be part of, and continuously ongoing, and still, phrasing things this way does not change how important electricity is to me, nor will it change how I feel about the abusive nature of monopoly on an essential utility in Thunder Bay.”*
- **Others said they either didn’t know, didn’t have enough information or were not affected by investment in this component.**

# Appropriateness of System Service & System Access Investment

- **Customers who rated the appropriateness of System Service & System Access as “Not Very Critical”** again expressed concerns about the cost and emphasized the cost should be covered by the City, developers or new customers:
  - » *“These services are requested by specific customers and should be paid for by them, not by all the customers who are not requesting this specific service. I should not be paying for a service over and above the delivery of hydro to my home.”*
  - » *“30% is about 20% too much. We do not need these upgrades and if they are necessary due to new developments or road widening, the City or the contractors or developers should foot the bill.”*
- **Customers who rated the appropriateness of System Service and System Access Investment as “Can’t Rate”,** as in previous responses, said they did not have the knowledge required or sufficient information regarding TBH budget to rate the appropriateness. A few said that they had confidence in TBH to determine the appropriate level of investment:
  - » *“I am not an expert in this field, so do not wish to comment on the specifics. I assume the professionals are doing what is best for the City, the company and the citizens.”*
- **One Customer who rated investment in this DSP component “Can’t Rate”** emphasized his support of investment in alternative energy sources and offered advice to TBH:
  - » *“As a homeowner and taxpayer in Ontario, I would like to have faith that this survey will really matter. I want to point out that alternative energy sources are the major investment needed now and into the future. For example, Tree Shaped Wind Turbines are being installed in France. The Company is called New Wind. Check it out. New innovative technology exists now. Green is the way to go.”*

# Appropriateness of System Service & System Access Investment

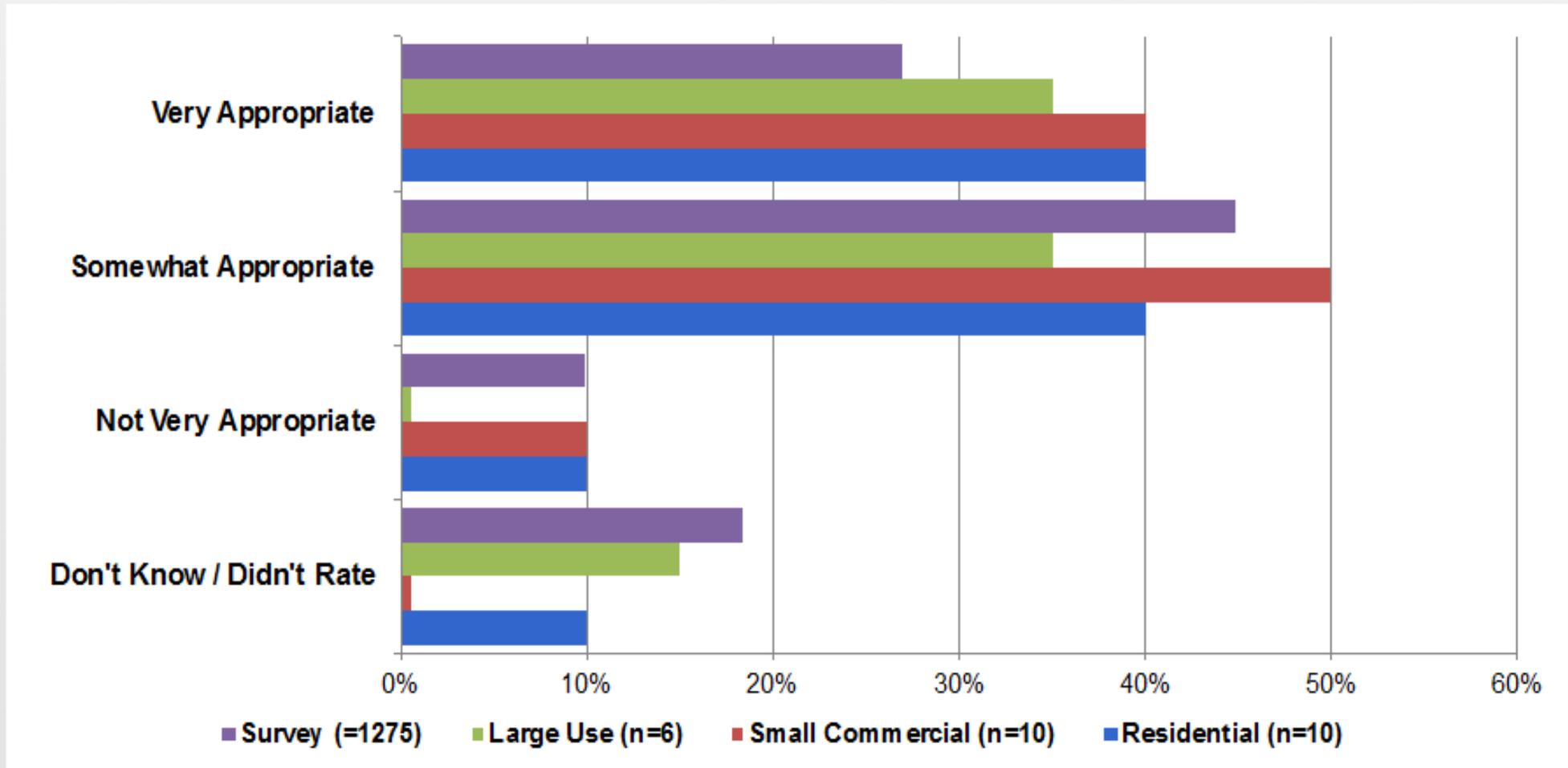
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# Appropriateness of System Service & System Access Investment

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# General Plant Investments

- **Customers were then presented with the following description of the General Plant Investments Component of the DSP:**

*“General Plant Investments” include any investments made by TBHEDI that are not physical components of the distribution system – such as land, buildings, and the tools and equipment used to support day-to-day business and operations activities. To ensure staff is able to complete their jobs effectively and in the most efficient manner, we expect to continue to invest in tools and equipment at the same rate as we have historically. Examples of these investments are: fleet trucks, ERP Software (support business functions such as billing and finance), and SCADA Systems (used to operate, control and report the flow of electricity within TBHEDI’s electrical distribution system).*

- **They were then presented with the following description of the Investments in this area:**

*Expenditures in this area are expected to remain consistent at approximately 20% of total expenditures for the next five years.*

# General Plant Investment

- **The majority of Customers thought the proposed expenses as laid out in the General Plant Plan were appropriate:**
  - » *“Given the current economic climate and the rates of interest projected by the Federal Government and the Bank of Canada for the next few years, it sounds reasonable.”*
  - » *“I feel the plan is appropriate the minimal increases over the next 5 years are very reasonable.”*
  - » *“Sounds more than reasonable for operational costs.”*
- **Customers pointed to the importance of ongoing maintenance, saying it can prevent higher expenditures in the future if the system were to fall into disrepair:**
  - » *“I agree that maintaining the tools and equipment is important.”*
  - » *“You can better plan for these types of investments, spread it out over time and thereby keep the overall costs and impacts down.”*
- **Customers stressed the importance of reliable service and accept the fact that investments are needed to provide it:**
  - » *“These are all necessary evils of providing reliable and safe electricity to customers. Outdated technology should be replaced at most reasonable cost.”*
  - » *“My thoughts on the general plant investments are that I believe they are important as they are the base of the projects. Without proper tools and equipment, projects may not follow through as planned.”*

# General Plant Investment

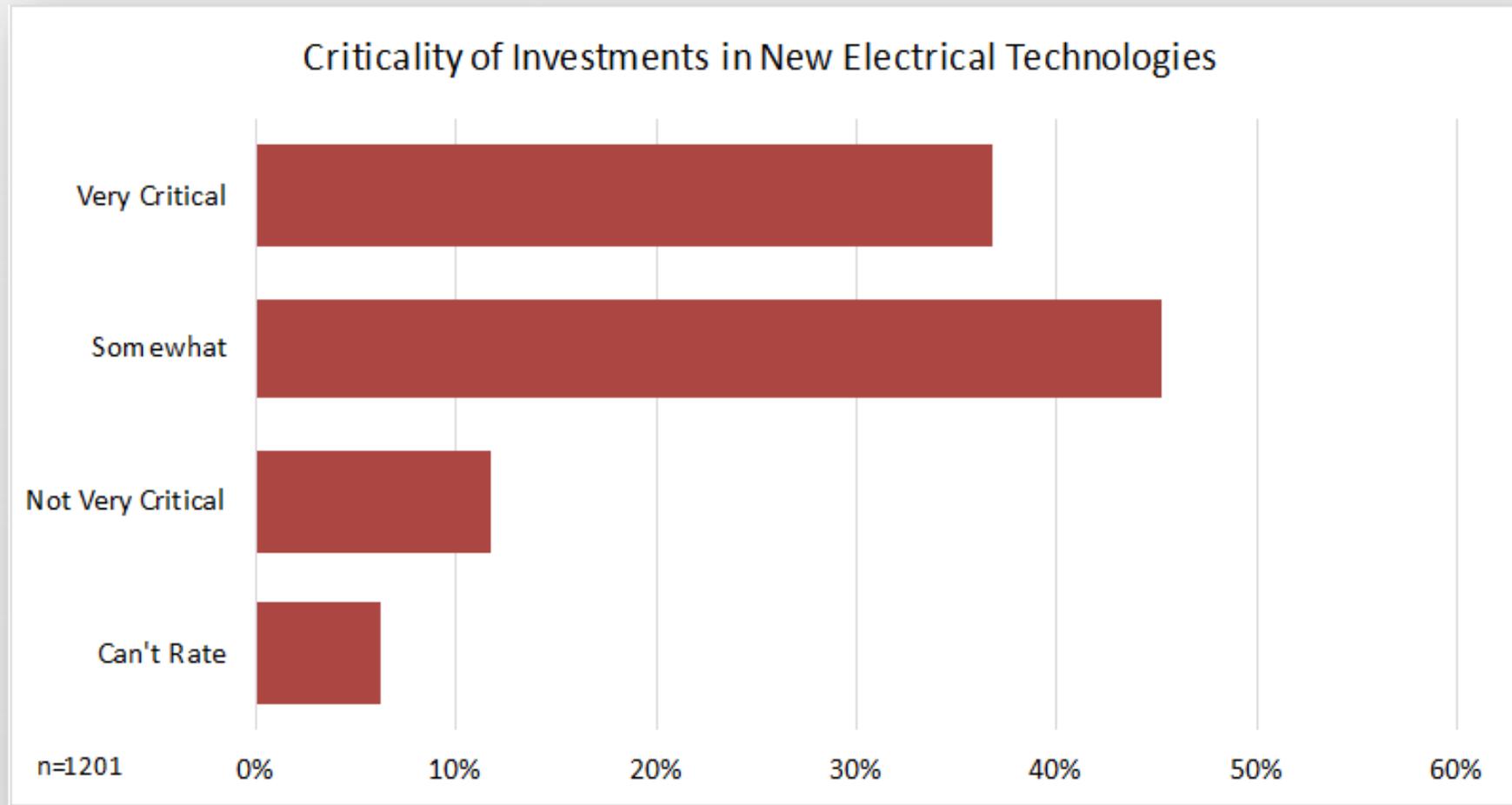
- **Customers often said they lacked expertise and information to judge whether the proposed expenses were adequate:**
  - » *“So long as appropriate bidding process is in place and the purchasing managers are trained to make the appropriate decisions, then this is just a part of operating any company of course will need to be replaced. As to the percentage, I have no idea where the numbers come from, so I really can't comment. As long as they are reasonable when compared to industry peers.”*
  - » *“I am not familiar with the tools, equipment and infrastructure required to maintain the system. I feel that TBHEDI employees would be better informed as to what is needed to accomplish their tasks to a high standard.”*
- **A common concern among Customers was about rising cost for electricity. Many see any increase as negative and several commented that it was vital to explore all potential cost saving measures before new investments are being considered:**
  - » *“20% total expenditures seems high. Fleet costs should be scrutinized closely and proper accounting controls need to be in place to reduce costs and prevent fraud.”*
  - » *“Try and use the fleet to it's full extent, stop having a half dozen trucks settling around one job when there's only 1 or 2 guys working.”*
  - » *“As long as these expenses don't increase our taxes or hydro bills... Everything seems to cost the tax payers money these days.”*

# General Plant Investment

- **Some Customers mentioned the importance of high quality, up-to-date equipment to the safety of TBH employees:**
  - » *“Without proper equipment, technicians cannot complete the jobs quickly and of course safely.”*
- **Some Customers hoped that investments in equipment would lead to an improved efficiency of the system:**
  - » *“I believe the proper up to date resources should be available to provide the most effective services.”*
  - » *“Equipment replacement and upgrades are essential for efficiency.”*
- **A few Customers suggested investments should not only focus on equipment and facilities but also on the workforce, through improved training and hiring additional staff:**
  - » *Important to hire a smart, educated, diverse workforce. Make an investment in training. Training for women, indigenous workers, as a new wave of workers is needed in Ontario.”*
  - » *“We need more workers: the 18 hour power outages last fall could have been handled better with more men and equipment.”*

# Criticality of New Electrical Technologies

- When asked to rate how critical investments in new electrical technologies to help ensure reliability were, nearly all rated them as either “*Very*” or “*Somewhat*” Critical.



# Criticality of New Electrical Technologies

- **Most Customers who rated the criticality of new electrical technologies as “Very” or “Somewhat” Critical said it was important to keep up with current technologies, often arguing that up-to-date equipment can lower cost through increased efficiency:**
  - » *“Times change. It is imperative to stay up to date and modern as you are providing an essential service.”*
  - » *“I feel that it is important to keep up with modern technology. In the long run, I think that it saves money.”*
- **Customers who rated the criticality of this component “Very Critical” typically commented that investment in this area was necessary to ensure reliability, efficiency, and safety:**
  - » *“Because I enjoy reliable service and knowing the Hydro personnel are working in a safe environment with up to date equipment.”*
  - » *“New technologies can increase the efficiency of the grid, while also streamlining management and maintenance. This all leads to cost savings.”*

# Criticality of New Electrical Technologies

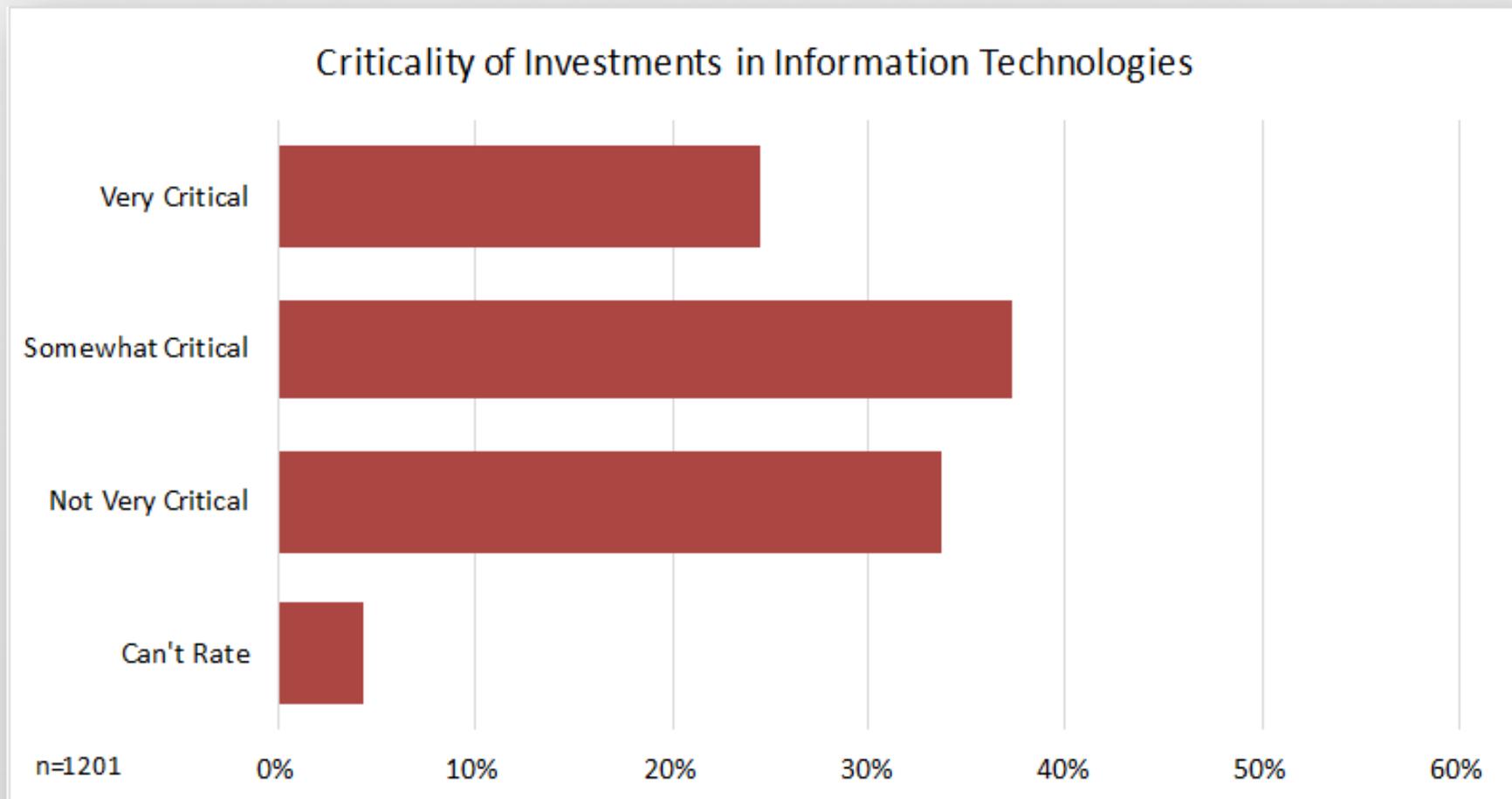
- **Customers who rated investment in this DSP component “Somewhat Critical” again talked about reliability, efficiency, and safety, but overall fewer of them commented on potential benefits of investments.**
- **Many Customers who rated the investment in new electrical technologies “Somewhat Critical” stressed the importance of carefully analyzing and weighing costs and benefits of potential investments before making a decision:**
  - » *“Investing in new technology to improve reliability must be based on a value engineering assessment. Some new technologies are overly complicated and require specialist skills which may be in short supply.”*
  - » *“It’s a good idea to keep current, but make sure of the benefit before investing. Smart Meters are a warning example, since they didn’t accomplish much for the high cost.”*

# Criticality of New Electrical Technologies

- **Customers who rated investment in new electrical technologies as “Not Very Critical” often argued that the current system is working adequately and therefore saw no need for upgrading technology:**
  - » *“This doesn't seem like a super critical improvement, given that current systems appear to be working just fine.”*
- **Other Customers who rated the criticality of this investment as “Not Very Critical” again expressed concerns about the cost to customers and/or suggested that investments should only be made after a cost-benefit analysis:**
  - » *“Spend only what you can afford without increasing costs to the consumer.”*
  - » *“Unless the new technologies provide greater efficiency with an acceptable ROI in terms of reduced power distribution costs, they should not be considered”*
- **Customers who said they could not rate the criticality of investment often felt they were not provided enough information, including what type of technologies were being considered and how their costs stack up against their benefits:**
  - » *“What is the cost benefit analysis? Change for the sake of change is expensive and stupid.”*

# Criticality of Information Technologies

- When asked to rate how critical investments in information technologies to increase engagement with customers by providing an enhanced customer portal that would enable access new account features like billing alerts, Customers were relatively evenly split across the categories of criticality.



# Criticality of Information Technologies

- As in previous questions, some Customers who rated the criticality of investment in information technologies as “*Very*” or “*Somewhat*” Critical identified a general need to keep up with technological developments.
- Some Customers who rated investment in information technologies “*Very Critical*” said that they value good communication between companies and their clients:
  - » *“It’s the age of information. Easy access to important information would allow better transparency and customer service.”*
  - » *“Customer engagement, empowerment, and responsibility should be key areas of focus.”*
- Others who rated criticality of investment in this area “*Very Critical*” expected cost savings in connection to investments into information technologies:
  - » *“Information technology is a vital part of any organization and should be updated accordingly, especially if it can reduce over head and personnel cost.”*

# Criticality of Information Technologies

- **Some Customers who rated investments as “Somewhat Critical” also mentioned the importance of good communication and availability of information:**
  - » *“This is important as most people monitor their utilities via the internet. I feel TB HYDRO needs a better website. Right now it does not compare to other utility sites.”*
- **Several, however, who rated investment in information technologies as “Somewhat Critical” noted that they were satisfied with the functionality and content of the current web portal and therefore saw investments in new information technology as less critical.**
  - » *“I don't have any issues with current methods of billing or access to account information.”*
  - » *“I think the current customer portal is sufficient, and spending a lot in new information technologies may not be the best use of limited resources. It will depend on the overall cost.”*

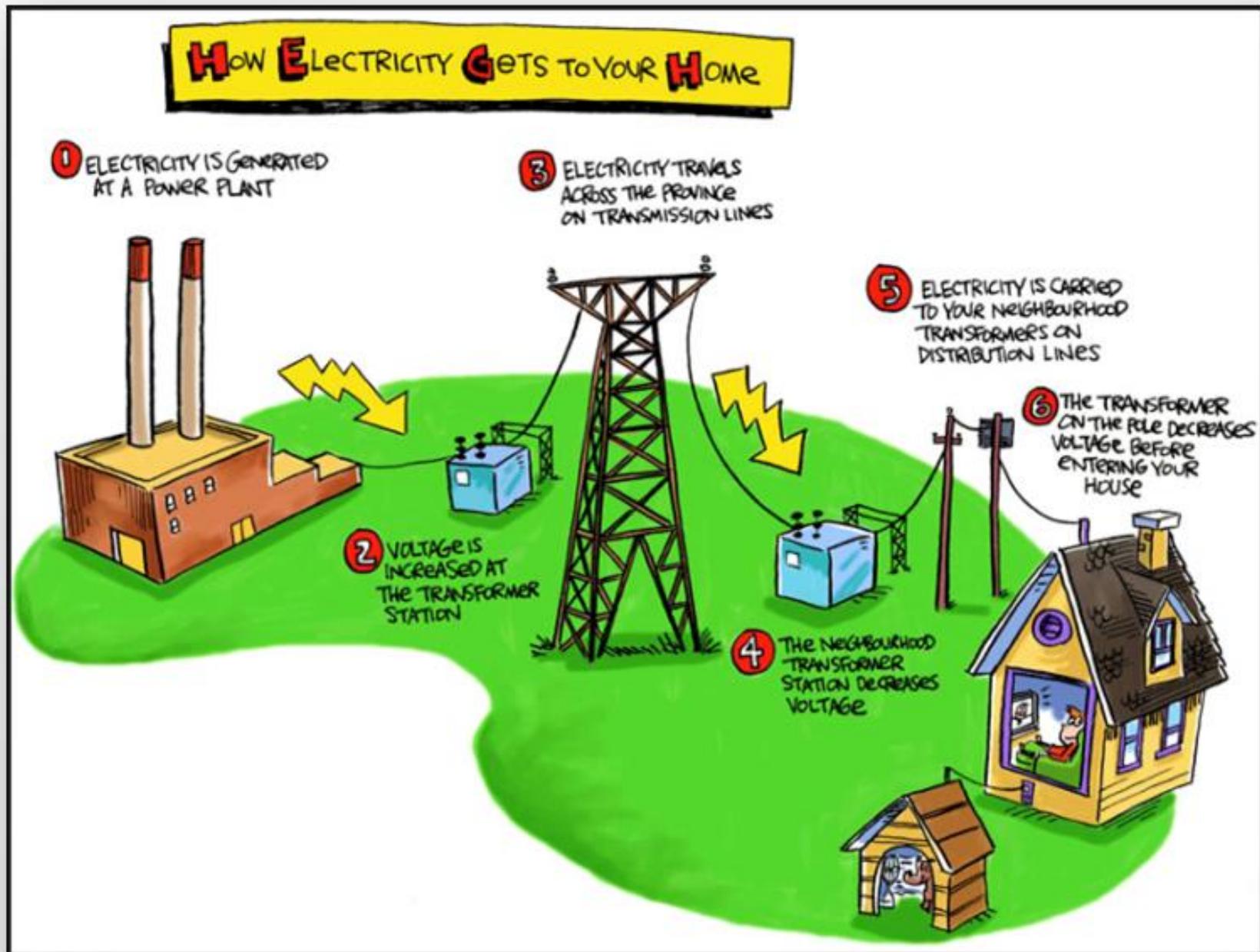
# Criticality of Information Technologies

- **Many Customers who rated investments as “Not Very Critical” argued that the current system is adequate and therefore priorities should lie somewhere else:**
  - » *“As a paying customer, I am decently satisfied with the current system in place. Therefore we should allocate this money elsewhere.”*
  - » *“What kind of billing alerts would I need that would require you investing money in? I am aware that I need to pay for your service and am aware when I need to pay. Enhancements to my billing process does not keep the lights on nor keep me warm.”*
- **Those who said they could not rate (“Can’t Rate”) again argued that they did not have enough information about the proposed changes to form an opinion:**
  - » *“Without knowing the cost and savings I can't rate this. I am not, however, willing to pay for a billing alert if it is cheaper for me to receive the bill in the mail and I can put in an alert in my own calendar. I assume that there is more to an information system than this but I'm not convinced that it leads to improved customer service or cost savings.”*

# How this Affects Your Electricity Bill

- **Customers were then presented with the follow description and graphic of the electricity system as a means of describing the impact of the DSP on their electricity bill:**
  - » *Controlling costs and its impact on customers' bills is a critical part of our proposed Plan because we know that most people are keeping a close eye on their electricity bills. To describe how these improvements are going to affect your bill, let us first break down the parts of your electricity bill. You may have noticed that your electricity bill has separate charges for three different parts of the electricity system. One charge is for electricity generation: the power plants, wind turbines and solar energy that produce electricity. One charge is for electricity transmission, getting the electricity from generators and transporting it over high voltage power lines to local distribution companies, like Thunder Bay Hydro. The third charge on your bill is from Thunder Bay Hydro, charging for connecting customers like you to the electricity system and delivering power through the network of lower voltage power lines and transformers that are in your community and neighbourhood. The following graphic illustrates how electricity gets to your home.*

# Graphic of Electricity System



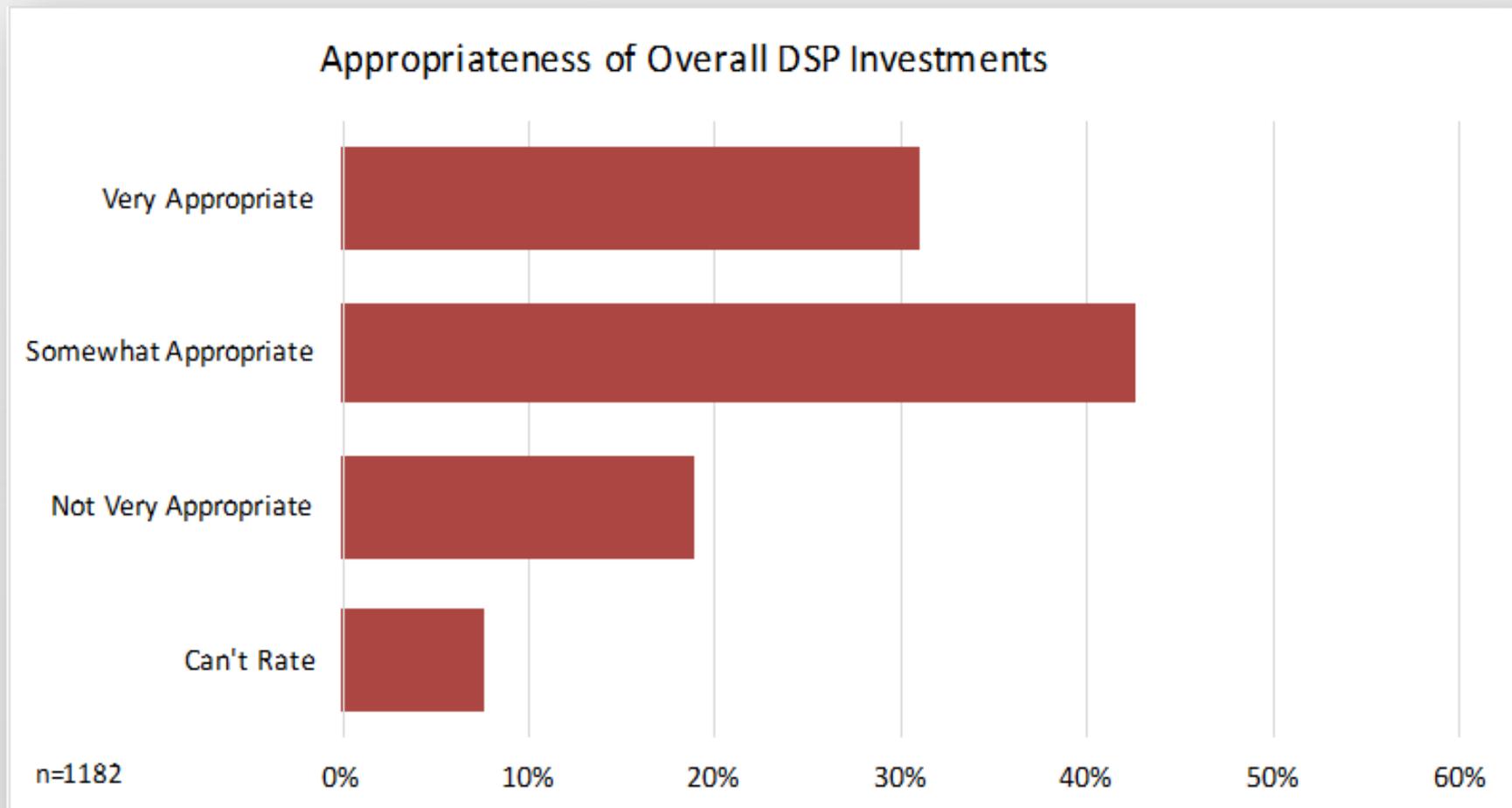
# How this Affects Your Bill

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- **Customers were then presented with the follow description of the impact on their bill of the overall proposed increase:**
  - » *For a residential customer, our charges for distribution are approximately 18% of your total bill. As a part of our Distribution System Plan, including the combined investments mentioned earlier, TBHEDI is asking the Ontario Energy Board to approve an overall increase of expenditures over the next five years by about 2% year-over-year than the previous five years. This increase only applies to the part of your bill affecting distribution. For the typical residential customer who consumes 800 kWh of electricity per month, this change will represent approximately \$0.46 on their monthly bill.*

# Appropriateness of Overall Investment

- When asked to rate the overall appropriateness of the increase of investment, most Customers rated it as *“Very”* or *“Somewhat”* Appropriate:



# Appropriateness of Overall Investment

- **Customers who rated the overall increase in investments as “Very” or “Somewhat” Appropriate saw small rate increases as unavoidable:**
  - » *“Material and labour costs increase every year so it increases the cost of doing business. In turn rates have to go up accordingly.”*
  - » *“If you need money for upgrading, there is only one way to get it and that is through the customer.”*
- **Several Customers who rated the overall increase “Very Appropriate” commented that the increase was small enough to not be of concern to them:**
  - » *“It doesn't seem like a high increase and the explanation above was very clear with the diagram. Thank you for that.”*
  - » *“The increase would be barely noticeable on my bill and yet it would go a long way to ensure continued excellent service.”*

# Appropriateness of Overall Investment

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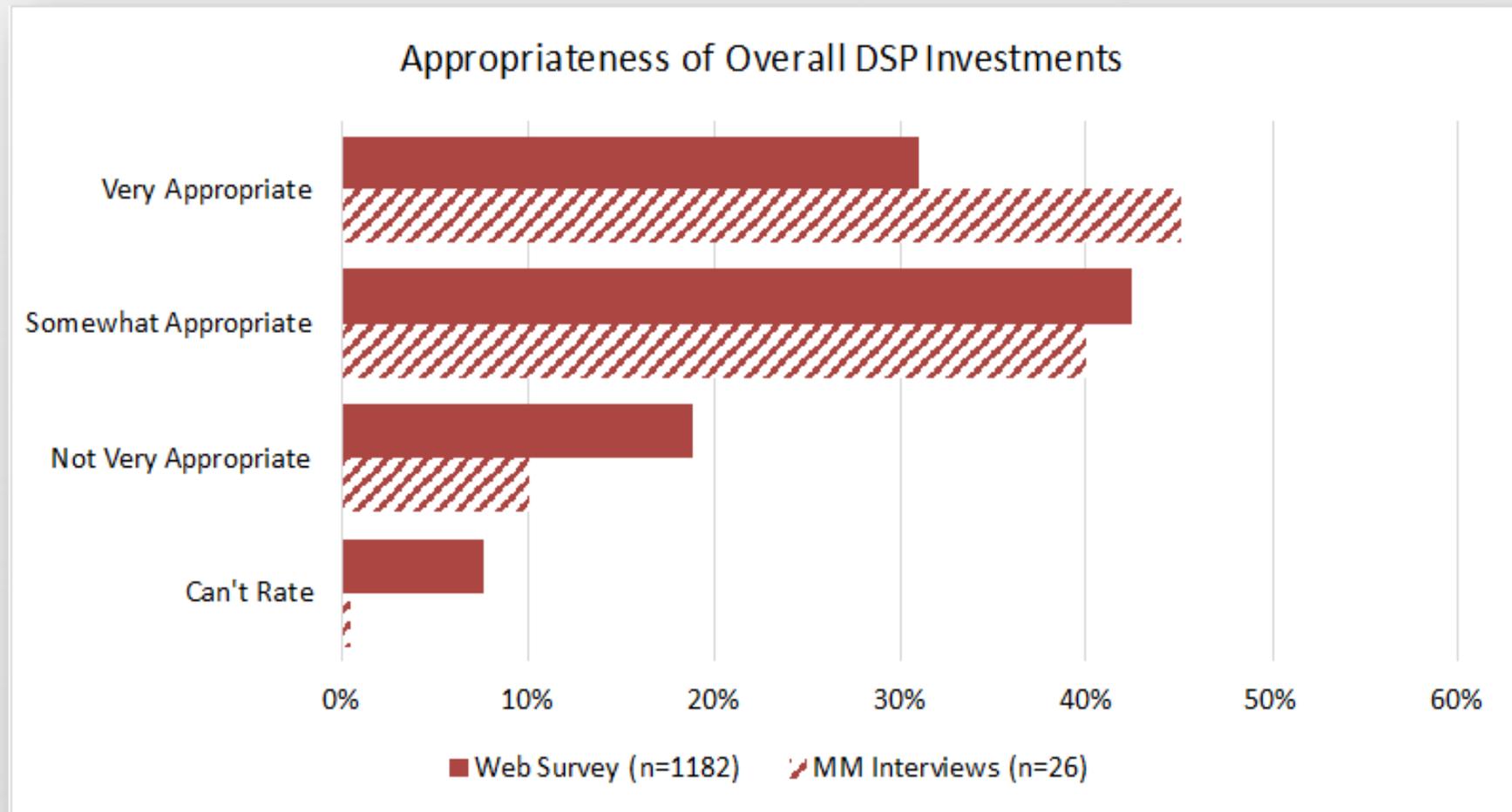
- **Some Customers who rated the overall investment “Somewhat Appropriate” agreed with the proposed increase but voiced concern that further increases to the cost of electricity would follow:**
  - » *“If you are charging \$0.46 only then it perfectly makes sense but I'm sure there is more to it than what you have said.”*
  - » *“I assume my bill may also increase because of generation and transmission as well as your increase to distribution. Without knowing what those increases will be, I very cautiously say that is a reasonable increase considering that at the end of 5 years that will be over 10% increase to the distribution portion of my Hydro bill.”*

# Appropriateness of Overall Investment

- **Customers who rated the proposed increase as “Not Very Appropriate” often rejected any further rate increases because they felt current costs are already too high. Some challenged TBH to find ways to reduce costs before asking for additional money for investments:**
  - » *“Any further increase is not appropriate or necessary. You should be looking at ways to reduce costs same as everyone else.”*
  - » *“Are you sure that you are looking at all potential cost savings? Staffing is one of the major expenses and I am concerned the TBH is not always capitalizing on saving opportunities.”*
- **Customers who rated the appropriateness of the overall investment as “Can’t Rate”, as in previous responses, said they needed additional information to comment or were confused by the numbers:**
  - » *“I don't have access to the expected expenses, revenues and previous budget information so I can't comment.”*
  - » *“Not sure if the \$0.46 is in the first year only or if that is the total increase after 5 years.”*
  - » *“Explain what 2% year-over-year means. Does it mean 2% increase every year for five years? \$0.46 per monthly bill for the entire five years? You need to be clearer on what you are saying.”*

# Appropriateness of Overall Investment

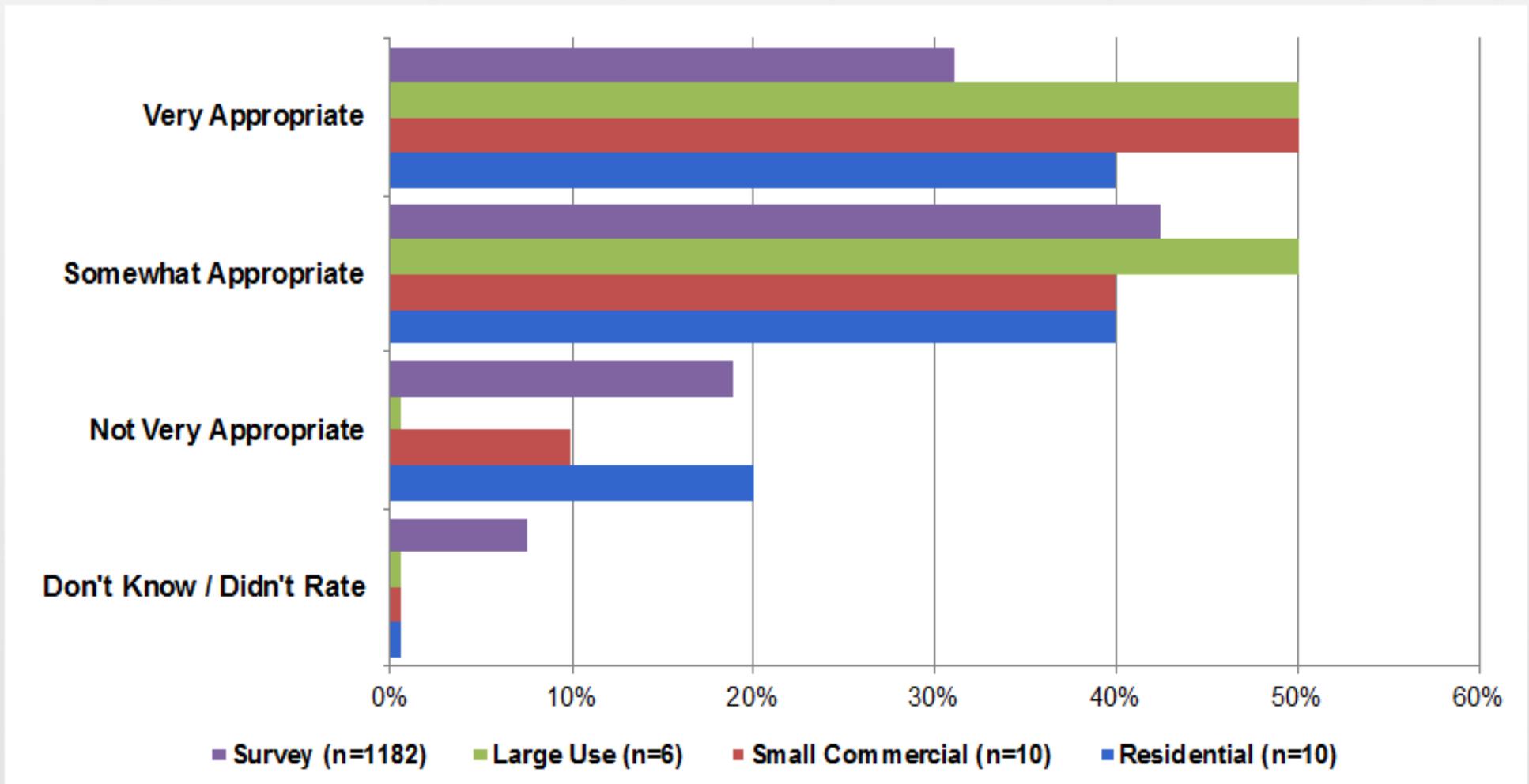
- Ratings of Web Survey Respondents were very similar to those of the Mental Models Interview Participants.



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Appropriateness of Overall Investment

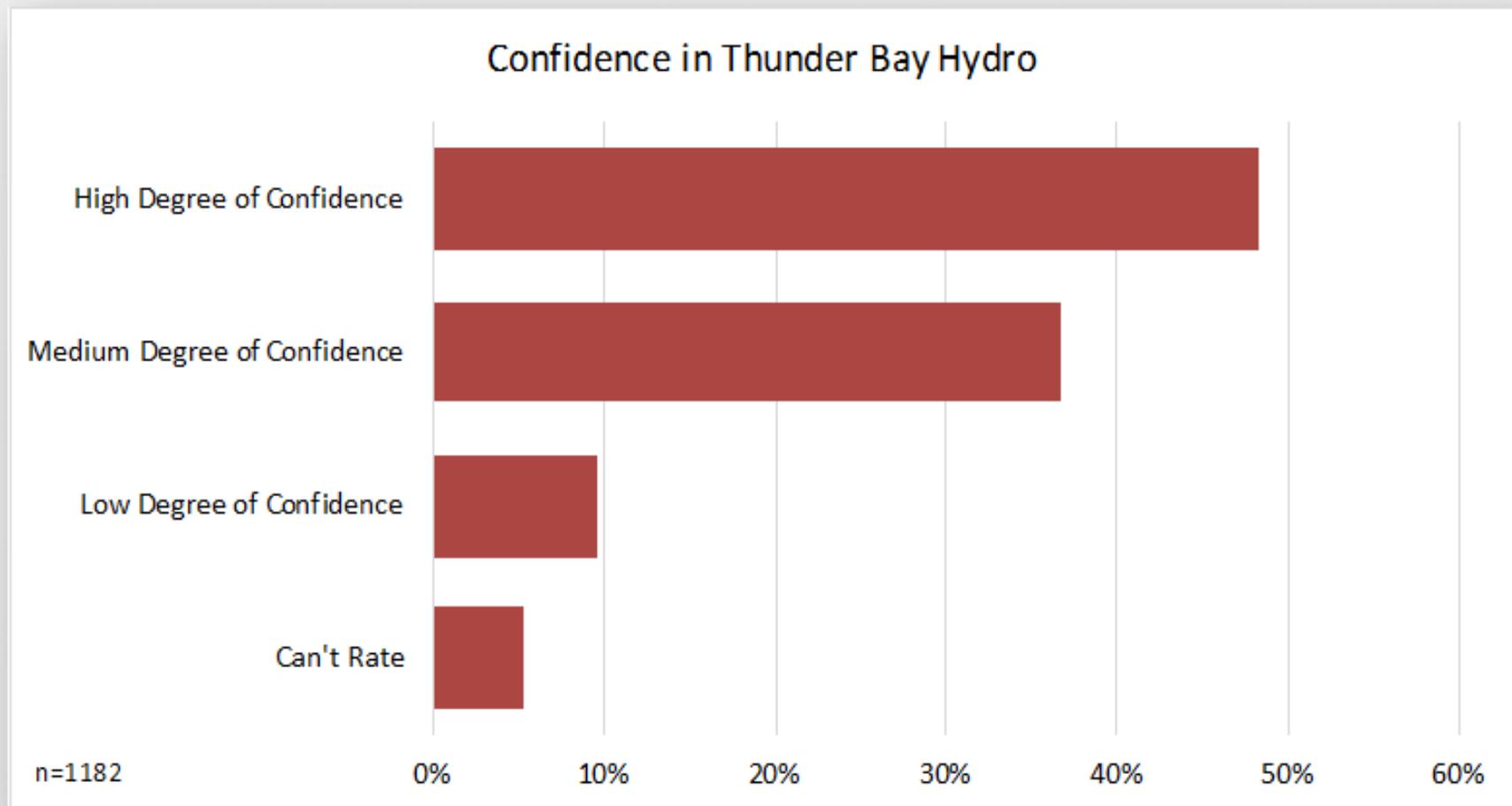
- Ratings of Web Survey Respondents were very similar to those of the Mental Models Interview Participants.



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

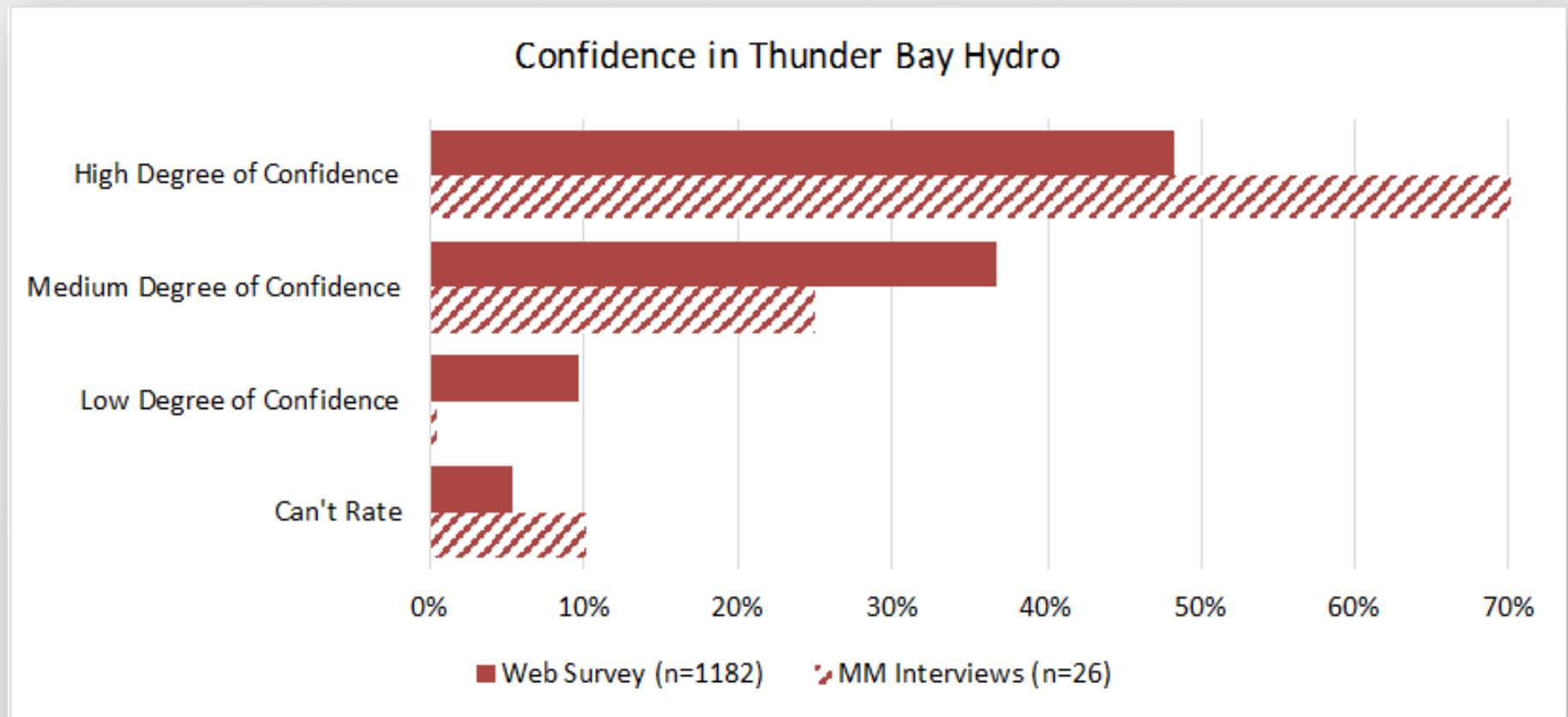
# Confidence in TBH

- At the close of the survey, Customers were asked to think about everything that was presented about the DSP and to rate their confidence in the team at Thunder Bay Hydro to continue to do a good job of providing safe, reliable, cost effective electricity by implementing the investments associated with the DSP?



# Confidence in TBH

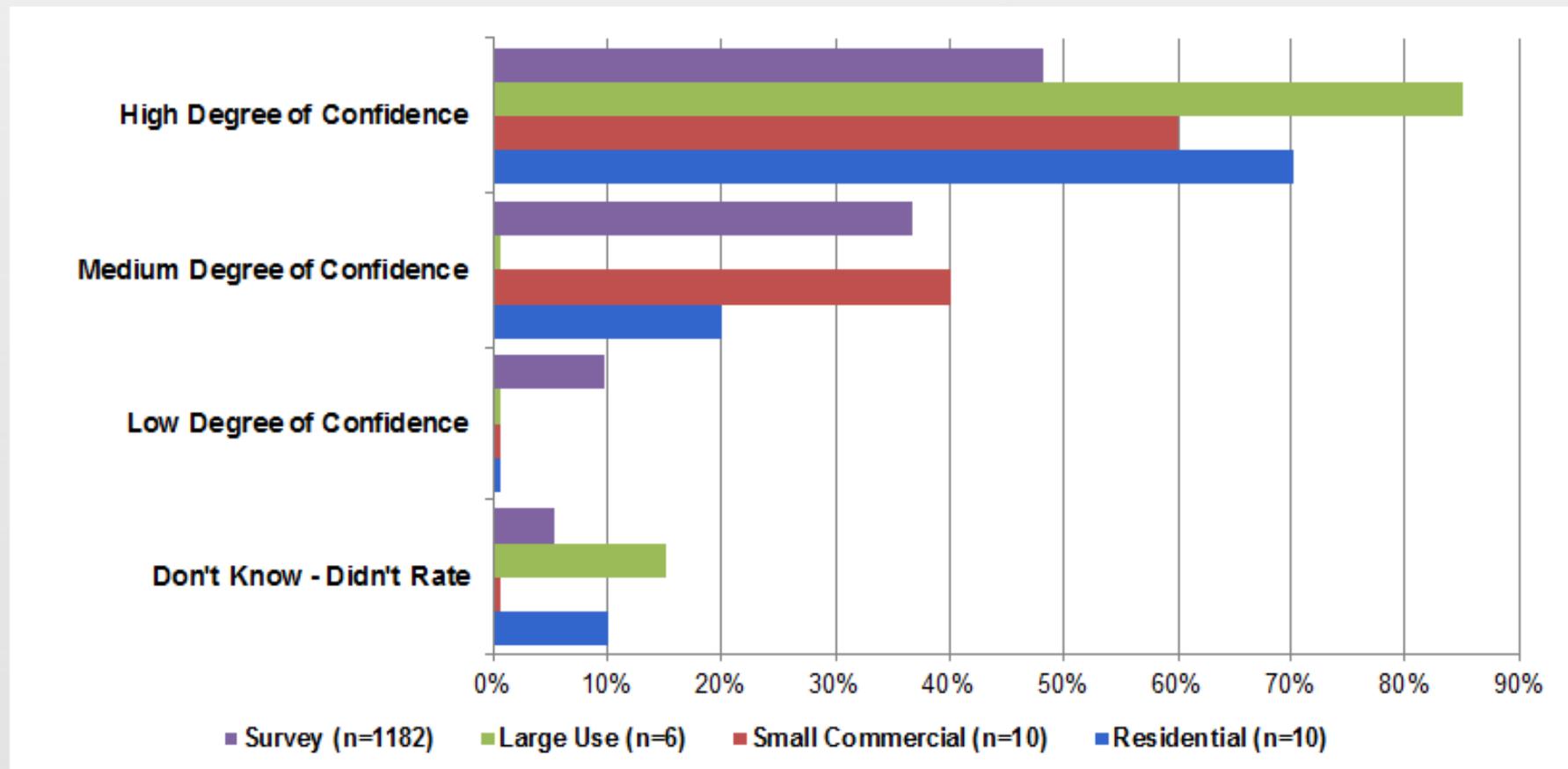
- **Web Survey Respondents' ratings of level of confidence in the team at Thunder Bay Hydro to continue to do a good job of providing safe, reliable, cost effective electricity by implementing the investments associated with the DSP were somewhat less favourable than those of the Mental Models Interview Participants.**



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Confidence in TBH

- **Web Survey Respondents' ratings of level of confidence in the team at Thunder Bay Hydro to continue to do a good job of providing safe, reliable, cost effective electricity by implementing the investments associated with the DSP were somewhat less favourable than those of the Mental Models Interview Participants.**



\* Note: Responses from Mental Models Interviews rounded to nearest 5% to reflect the qualitative nature of the research.

# Confidence in TBH

- **Customers who said they had a “High” or “Medium” Degree of confidence in TBH typically referenced a history of good service received:**
  - » *“I haven't had any problems with service, and it seems that the company is remaining proactive.”*
  - » *“I see problems world wide with electricity out for days and weeks at critical times of year. I have never been in a outage of more than a few hours in town here. I find the service is highly reliable and please keep doing what it is you do as you seem to do it well.”*
- **Some who said they had a “High Degree” of confidence in TBH commented favourably on the quality of the plan:**
  - » *“The plans seem to be in order for not only short term but long term goals as well.”*
  - » *“This looks like a well thought out plan delivered by competent team that should have positive outcomes.”*
- **A few who said they had a “High Degree” of confidence reiterated the importance of receiving reliable electricity service:**
  - » *“They are a reliable, local company employing local people, keep it up!”*

# Confidence in TBH

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- **Some Customers** who said they had a *“Medium Degree”* of confidence in TBH said that they did not have all of the information needed to comment, or that evaluation would have to wait until the end of the 5 year period.
- **Others** who said they had a *“Medium Degree”* of confidence in TBH said the proposed rate increase is too high:
  - » *“I hope they see that overall the system needs improvements but at the lowest increase. These proposed increases are not responsible to me.”*
- **A few** who said they had a *“Medium Degree”* of confidence in TBH referenced bad customer service experiences or a lack of trust in TBH management’s business decisions:
  - » *“Have not had a lot of good experience with the company. Repeated missed invoices and not a lot of communication when changes occur.”*
  - » *“You've made a decent case for each area. However, there was already an increase last year and I still don't entirely trust that you'll be making the absolutely best decisions to keep costs down. It would be nice to have a year where costs stayed the same.”*

# Confidence in TBH

- **Some Customers said they had a “Low Degree” of confidence in TBH and accused TBH of not trying enough to cut cost:**
  - » *“Hydro rates have done nothing but increase. Your company will do as it wishes and not give a second thought to wage reduction, benefit reduction, travel expenses, etc.”*
  - » *“Look at upper management salaries and perks, then ask that question. Canadians are hurting these days! Job losses are higher now than 25 years ago and our taxes and utilities are only going up. You need to focus on cutting costs not raising rates.”*
- **A few Customers who said they had a “Low Degree” of confidence in TBH criticised the information provided in the survey.**
  - » *“The cost effective piece is not sufficiently explained and no mission or vision of how to make the electricity services cost efficient is provided.”*
  - » *“In your picture above you only gave us a partial story of how much electrical costs are going to go up this year.”*

# Confidence in TBH

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- **One Customer who said they were unable to rate (“Can’t Rate”) their confidence in TBH commented negatively on the survey:**
  - » “This survey is composed of a) questions so phrased that the answer is obvious, and thus meaningless, and b) questions based on your own simplified explanations and diagrams, but on topics where accounting and/or economics and scientific expertise is required to give an informed response. You could have saved the money for this survey and used it to replace a Hydro pole. It will no doubt generate the required responses, given that you composed it to rubber-stamp your plans.”

# Judgment . Decision Making . Behaviour

An international team of scientists and management professionals, Decision Partners is a global expert centre for applied research in judgment, decision making and behaviour, and behavioural communication science.

Decision Partners is the creator of Mental Modeling Technology™, a unique, science-informed management process for developing programs – policies, strategies and communications – for belief and behaviour change. And we are the hub of a large, global and rapidly growing community of clients and users of Mental Modeling Technology™ applying proven, scientifically sound methods to help better understand and shape their environment.

For more information about Decision Partners, contact:

Gordon Butte and Sarah Thorne, 1-877-588-9106

[gbutte@decisionpartners.com](mailto:gbutte@decisionpartners.com); [sthorne@decisionpartners.com](mailto:sthorne@decisionpartners.com)

# **ATTACHMENT 1 – L**

Thunder Bay Hydro

Audited Financial Statements

2013, 2014, 2015

# Financial Statements

Thunder Bay Hydro Electricity Distribution Inc.

December 31, 2013

# Thunder Bay Hydro Electricity Distribution Inc.

## Contents

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Statement of Cash Flows	7
Notes to the Financial Statements	8-34
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## Independent Auditor's Report

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### To the Shareholder of Thunder Bay Hydro Electricity Distribution Inc.

We have audited the accompanying financial statements of Thunder Bay Hydro Electricity Distribution Inc., which comprise the balance sheet as at December 31, 2013, and the statements of operations and retained earnings and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Thunder Bay Hydro Electricity Distribution Inc. as at December 31, 2013, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

*BDO Canada LLP*

Chartered Accountants, Licensed Public Accountants  
Thunder Bay, Ontario

April 24, 2014

# Thunder Bay Hydro Electricity Distribution Inc.

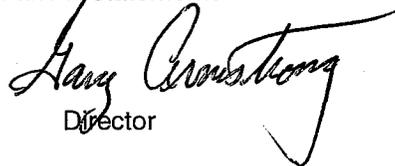
## Balance Sheet

As at December 31	2013	2012
	\$	\$
<b>ASSETS</b>		
<b>Current</b>		
Cash	2,601,731	4,867,500
Investments	32,025	32,025
Accounts receivable <i>[note 17]</i>	10,106,300	9,714,110
Unbilled revenue <i>[note 17]</i>	14,985,516	12,173,603
Payments in lieu of corporate income taxes receivable	263,460	693,888
Due from related parties <i>[note 15]</i>	73,445	46,334
Stores inventory	1,449,805	1,471,412
Prepaid expenses	324,859	354,079
Current portion of regulatory assets <i>[note 3]</i>	448,130	1,119,961
Current portion of future income tax assets <i>[note 4]</i>	65,997	232,874
<b>Total current assets</b>	<b>30,351,268</b>	<b>30,705,786</b>
<b>Other</b>		
Intangible assets <i>[note 2]</i>	1,189,942	1,323,844
Regulatory assets <i>[note 3]</i>	283,472	932,315
Future income tax assets <i>[note 4]</i>	4,668,208	5,008,093
Long term accounts receivable	345,313	
<b>Total other assets</b>	<b>6,486,935</b>	<b>7,264,252</b>
<b>Property, plant and equipment, at cost</b>		
Property, plant and equipment, net <i>[note 5[a]]</i>	98,941,038	86,146,945
Capital contributions, net <i>[note 5[b]]</i>	(14,435,768)	(13,065,469)
Construction-in-progress	2,147,194	4,154,029
<b>Property, plant and equipment, net</b>	<b>86,652,464</b>	<b>77,235,505</b>
	<b>123,490,667</b>	<b>115,205,543</b>

The accompanying notes are an integral part of these financial statements.

On behalf of the Board:

  
Director

  
Director

# Thunder Bay Hydro Electricity Distribution Inc.

## Balance Sheet

As at December 31	2013	2012
	\$	\$
<b>LIABILITIES AND SHAREHOLDER'S EQUITY</b>		
<b>Current</b>		
Accounts payable and accrued liabilities	17,448,225	13,134,726
Debt retirement charges payable	522,229	509,013
Deferred revenue	346,450	873,810
Due to related party <i>[note 15]</i>		74,013
Customer deposits and deferred contributions	2,387,411	2,473,276
Current portion of regulatory liabilities <i>[note 3]</i>	1,962,762	3,109,460
Current portion of long-term debt <i>[note 6]</i>	557,848	430,516
Current portion of future income tax liabilities <i>[note 4]</i>	118,755	
<b>Total current liabilities</b>	<b>23,343,680</b>	<b>20,604,814</b>
<b>Long-term</b>		
Regulatory liabilities <i>[note 3]</i>	433,862	2,715,353
Employee future benefits liability <i>[note 8]</i>	2,887,002	3,032,450
Note payable to The Corporation of the City of Thunder Bay <i>[note 9]</i>	26,490,500	33,490,500
Asset retirement obligation <i>[note 10]</i>	175,082	205,833
Long-term debt <i>[note 6]</i>	11,452,007	6,260,359
Future income tax liabilities <i>[note 4]</i>	800,803	72,205
<b>Total long-term liabilities</b>	<b>42,239,256</b>	<b>45,776,700</b>
<b>Shareholder's equity</b>		
Share capital		
Authorized		
Unlimited common shares		
Unlimited class a common shares		
Issued		
1,000 common shares	34,931,625	34,931,625
7,000,000 class a common shares <i>[note 9]</i>	7,000,000	
	<b>41,931,625</b>	<b>34,931,625</b>
Retained earnings	15,976,106	13,892,404
<b>Total shareholder's equity</b>	<b>57,907,731</b>	<b>48,824,029</b>
	<b>123,490,667</b>	<b>115,205,543</b>

## Thunder Bay Hydro Electricity Distribution Inc. Statement of Operations and Retained Earnings

Year ended December 31	2013	2012
	\$	\$
<b>REVENUES AND FLOW-THROUGH CHARGES</b>		
Flow-through charges plus distribution revenues	117,949,521	106,428,148
Flow-through costs of energy	(99,075,247)	(88,327,924)
Distribution revenue	18,874,274	18,100,224
Other operating revenue <i>[note 11]</i>	4,242,011	2,962,849
	<b>23,116,285</b>	<b>21,063,073</b>
<b>EXPENSES</b>		
Administration <i>[schedule]</i>	6,499,285	6,232,631
Amortization <i>[note 12]</i>	2,966,590	5,271,633
Operations and maintenance <i>[schedule]</i>	7,565,895	6,877,078
OPA programs	2,018,985	1,017,801
Loss on disposal of property, plant and equipment and write off of inventory	48,361	
	<b>19,099,116</b>	<b>19,399,143</b>
<b>Earnings before the following</b>	<b>4,017,169</b>	<b>1,663,930</b>
Interest on long-term debt	462,937	361,558
Carrying charges on regulatory assets/liabilities, net	41,415	385,445
<b>Earnings before provision for taxes</b>	<b>3,512,817</b>	<b>916,927</b>
<b>Payments in lieu of corporate income taxes <i>[note 4]</i></b>		
Current	75,000	33,080
Future	1,354,115	(560,262)
	<b>1,429,115</b>	<b>(527,182)</b>
<b>Earnings for year</b>	<b>2,083,702</b>	<b>1,444,109</b>
Retained earnings, beginning of year	13,892,404	12,448,295
<b>Retained earnings, end of year</b>	<b>15,976,106</b>	<b>13,892,404</b>

The accompanying notes are an integral part of these financial statements.

## Thunder Bay Hydro Electricity Distribution Inc.

### Statement of Cash Flows

Year ended December 31	2013	2012
	\$	\$
<b>OPERATING ACTIVITIES</b>		
Earnings for year	2,083,702	1,444,109
Add charges (deduct credits) to operations not involving a current payment (receipt) of cash		
Accretion (recovery) expense related to asset retirement obligation	8,813	8,589
Amortization of capital contributions <i>[note 12]</i>	(422,210)	(635,490)
Amortization of property, plant and equipment <i>[note 12]</i>	3,767,072	6,139,074
Amortization of intangible assets <i>[note 12]</i>	136,344	144,246
(Decrease) increase in employee future benefits	(145,448)	240,291
Loss on disposal of property, plant and equipment	48,361	12,332
Future income taxes	1,354,115	(560,262)
	<b>6,830,749</b>	<b>6,792,889</b>
Net change in non-cash working capital balances related to operations <i>[note 14[a]]</i>	889,518	505,374
<b>Cash provided by operating activities</b>	<b>7,720,267</b>	<b>7,298,263</b>
<b>INVESTMENT ACTIVITIES</b>		
Proceeds on disposal of property, plant and equipment	142,267	10,434
Additions to intangible assets	(2,442)	(39,225)
Additions to property, plant and equipment, net <i>[note 14[b]J]</i>	(7,166,704)	(9,658,880)
<b>Cash used in investment activities</b>	<b>(7,026,879)</b>	<b>(9,687,671)</b>
<b>FINANCING ACTIVITIES</b>		
Decrease (increase) in regulatory assets	1,320,674	(486,840)
(Decrease) increase in regulatory liabilities	(3,428,189)	733,368
Increase in long term receivables	(345,313)	
Repayments of bank loan	(481,020)	(409,445)
ARO liabilities settled during the year	(25,309)	(31,802)
<b>Cash used in financing activities</b>	<b>(2,959,157)</b>	<b>(194,719)</b>
<b>Decrease in cash during year</b>	<b>(2,265,769)</b>	<b>(2,584,127)</b>
Cash, beginning of year	4,867,500	7,451,627
<b>Cash , end of year</b>	<b>2,601,731</b>	<b>4,867,500</b>

The accompanying notes are an integral part of these financial statements.

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# **Thunder Bay Hydro Electricity Distribution Inc.**

## **Notes to the Financial Statements**

December 31, 2013

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### **GENERAL**

Thunder Bay Hydro Electricity Distribution Inc. ("the Corporation") is a wholly-owned subsidiary company of Thunder Bay Hydro Corporation, providing electrical distribution services to the inhabitants of The Corporation of the City of Thunder Bay and the Fort William First Nation Reserve, as regulated by the Ontario Energy Board ("OEB").

### **1. SIGNIFICANT ACCOUNTING POLICIES**

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles ("GAAP") and reflect the significant accounting policies summarized below.

#### **International Financial Reporting Standards**

The Corporation did not adopt IFRS for the year ended December 31, 2013 as the mandatory adoption for entities with activities subject to rate regulation was deferred to fiscal years beginning on or after January 1, 2015. The Corporation is anticipating adopting IFRS in 2015.

#### **Rate setting and regulation**

The rates of the Corporation's electricity distribution are subject to regulation by the OEB. The cost of power and all costs other than distribution related to the operations of the electricity grid including transmission, connection and administration costs are flowed through to the consumer.

The distribution revenue is designed to recover the costs incurred by the Corporation in delivering electricity to customers. Distribution rates are regulated by the OEB and typically comprise a monthly service charge and a volumetric charge.

#### **Cash and cash equivalents**

Cash and cash equivalents consist of cash on hand and bank balances with maturity of three months or less.

#### **Stores inventory**

Stores inventory consists principally of maintenance and construction materials and is valued at the lower of cost and net realizable value. Cost is determined using the average cost method.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### Property, plant and equipment

In anticipation of the requirement to adopt IFRS, the OEB has directed the Corporation to amend its capitalization and amortization estimates to be more in line with IFRS effective January 1, 2013. As a result all amortization periods were reviewed and modified to reflect the expected future benefit of all asset components. In addition, only overheads directly attributable to property, plant and equipment have been capitalized. As a result the amortization period has been increased for most assets and therefore current year amortization has decreased in comparison to prior years. The effect in future periods has not been disclosed because estimating it is impracticable.

Property, plant and equipment are stated at cost less accumulated amortization. Gains or losses on retirement or disposition of asset credited or charged to (gain) loss on dispositions. Amortization is provided on a straight-line basis for property, plant and equipment over their estimated service lives at the following annual rates:

	2013	2012
Buildings	2%	2%
Distribution and transformation equipment	1% to 6%	3% to 4%
Other assets	3.3% to 5%	10% to 20%
Rolling stock	5% to 8%	12.5% to 20%

### Spare Transformers and Meters

Spare transformers and meters are held to back up plant in service and are expected to substitute for original distribution plant transformers and meters when these original plant assets are being repaired. According to the criteria prescribed by the OEB in the Accounting Procedures Handbook the spare transformers and meters are treated as property, plant and equipment but are not depreciable until installed.

### Intangible assets

Intangible assets represent computer applications software and capital contributions. These assets are carried at cost net of accumulated amortization.

Amortization is provided on a straight-line basis for intangible assets over their estimated useful lives at the following rates:

	2013	2012
Computer software	14% to 50%	20%
Capital contributions	4%	4%

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### Regulated Assets and Liabilities

The company has adopted the CICA's Accounting Guideline 19 "Disclosures by Entities Subject to Rate Regulation". Based on OEB regulations, certain costs and variance account balances are recorded as regulatory liabilities and are reflected in the balance sheet until the OEB determines the manner and timing of their disposition.

Regulatory assets represent future revenues associated with certain costs, incurred in the current period or in prior period(s), that are expected to be recovered from consumers in future periods through the rate-setting process. Regulatory liabilities represent future expenses associated with the collection of certain revenues, earned in the current period or in prior period(s), that are expected to be returned to consumers in future periods through the rate-setting process. Regulatory assets and liabilities can arise from differences in amounts collected from customers (based on regulated rates) and the corresponding costs of non-competitive electricity service incurred by the Corporation in the wholesale market administered by the Independent Electricity System Operator (the "IESO") after May 1, 2002.

These amounts have been accumulated pursuant to regulation underlying the Electricity Act (the "EA") and deferred in anticipation of their future recovery or expense in electricity distribution service charges. In the absence of rate regulation, these rate regulated assets and liabilities would be recognized in income in the period to which they relate. See Note 3 for further details.

### Pension plan

The Corporation provides a pension plan for its employees through the Ontario Municipal Employees Retirement System ("OMERS"). OMERS is a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund (the "Fund"), and provides pensions for employees of Ontario municipalities, local boards, public utilities and school boards. The Fund is a contributory defined benefit pension plan which is financed by equal contributions from participating employers and employees, and by the investment earnings of the Fund [note 13]. The Corporation recognizes the expense related to this plan as contributions are made.

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# **Thunder Bay Hydro Electricity Distribution Inc.**

## **Notes to the Financial Statements**

December 31, 2013

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### **Other post-employment benefits**

Employee future benefits provided by the Corporation include medical and life insurance benefits and accumulated sick leave credits. These plans provide benefits to certain employees when they are no longer providing active service. Employee future benefit expense is recognized in the period in which the employees render the services. Employee future benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefit method pro-rated on service and based on assumptions that reflect management's best estimate. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in the period. Past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of employees active at the date of amendment. Actuarial gains (losses) are amortized into expense on a straight-line basis over the average remaining service period of active employees to full eligibility. The effects of a curtailment gain or loss are recognized in earnings in the year of the event giving rise to the curtailment. The effects of a settlement gain or loss are recognized in earnings for the period in which a settlement occurs.

### **Revenue recognition**

Distribution revenue is recognized on the basis of regular meter readings. Estimates of customer usage since the last meter reading date, to the end of the year are recorded as unbilled revenue.

Pole line revenue is recognized based on annual contracted rates and agreed-upon pole counts.

The Corporation has entered into Conservation Demand Management ("COM") agreements with the Ontario Power Authority ("OPA") for the period from 2011 to 2015. Performance, management and incentive fees are recognized according to the applicable OPA service agreements.

Revenues from Lost Revenue Adjustment Mechanism and Shared Savings Mechanism approved in rates are recognized on an accrual basis.

Other revenue is recognized when the requirements as to performance for transactions involving the sale of goods or services are met and ultimate collection is reasonably assured at the time of performance.

### **Construction-in-progress**

Construction-in-progress is comprised of the costs of assets not yet placed into service, assets under construction, and pre-construction activities related to projects expected to be completed. These amounts are not amortized. Upon energization of assets the amounts are transferred to property, plant and equipment and are amortized on a straight-line basis over the expected service life of the asset.

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# **Thunder Bay Hydro Electricity Distribution Inc.**

## **Notes to the Financial Statements**

December 31, 2013

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### **Contributions in aid of construction**

Capital contributions are required contributions received from outside sources, used to finance additions to property, plant and equipment. Capital contributions are credited against property, plant and equipment. The amount is subsequently amortized by a charge to accumulated amortization and a credit to amortization expense, at an equivalent rate to that used for the amortization of the related property, plant and equipment.

### **Customer deposits**

Customers' advance deposits are cash collections from customers or Energy Retailers to guarantee the payment of energy-related bills. The deposits bear interest at prime less 2% and is paid annually to customers.

Customer deposits also include collections from renewable generation customers for connection cost and capacity allocation deposits, as dictated by the OPA and contributions in aid of construction on construction projects which have not been completed or capitalized during the year. Interest may be payable on the capacity allocation deposit upon connection of the renewable generation facility. Interest is not payable on contributions in aid of construction.

### **Use of estimates and measurement uncertainty**

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes as well as the disclosure of contingent assets and liabilities at the financial statement date.

Accounts receivable, unbilled service revenue, regulatory assets, regulatory liabilities and employee future benefits are reported based on amounts expected to be recovered or incurred and reflect an appropriate allowance for unrecoverable amounts based on management's estimates. Amounts recorded for amortization of property, plant and equipment are based on estimates of useful service life.

Due to inherent uncertainty involved in making such estimates, actual results could differ from those estimates, including changes as a result of future decisions made by the OEB or the Minister of Energy or the Minister of Finance. The financial statements have, in management's opinion, been properly prepared using careful judgement within reasonable limits of materiality and within the framework of the accounting policies.

### **Corporate income taxes**

The current tax-exempt status of the Corporation's parent company under the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario) reflects the fact that the Corporation's parent company is wholly-owned by a municipality. This tax-exempt status might be lost in a number of circumstances, including if the municipality ceases to own 90% or more of the shares or capital of the Corporation's parent company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently,

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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to acquire more than 10% of the shares of the Corporation's parent company.

Under the Electricity Act, 1998, the Corporation is required to make payments in lieu of corporate taxes to the Ontario Electricity Financial Corporation ("OEFC"). These payments are calculated in accordance with the rules for computing income taxes and taxable capital and other relevant amounts contained in the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario) as modified by the Electricity Act, 1998, and related regulations.

### *Current income taxes*

The provision for current taxes and the assets and liabilities recognized for the current and prior periods are measured at amounts receivable or payable from/to the OEFC.

### *Future income taxes*

Future income taxes are provided for using the liability method and are recognized on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Future income tax liabilities are generally recognized on all taxable temporary differences and future tax assets are recognized to the extent that it is more likely than not that they will be realized from taxable profits available against which deductible temporary differences can be utilized.

Future income taxes are calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realized, based on the tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date.

The carrying amount of future income tax assets is reviewed at each balance sheet date and reduced to the extent that all or part of the future income tax assets have not met the "more likely than not" criterion. Previously unrecognized future income tax assets are reassessed at each balance sheet date and are recognized to the extent that it has become more likely than not of being recovered from future taxable profits.

### **Asset retirement obligation**

The Corporation recognizes a liability for the future removal and handling cost for contamination in distribution equipment and units in storage. Initially, the liability is measured at present value and the amount of the liability is added to the carrying amount of the related asset. In subsequent periods, the asset is amortized and the liability is adjusted annually for the discount applied upon initial recognition of the liability ("accretion expense") and for changes in the underlying assumptions. The liability is recognized when the asset retirement obligation ("ARO") is incurred and when the fair value is determined.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### Financial instruments

On initial recognition, all financial instruments which meet the definition of a financial asset or financial liability are to be recorded at fair value, unless fair value cannot be reliably determined. Depending on the nature of the financial instrument, revenues, expenses, gains and losses would be reported in either net income or other comprehensive income. Subsequent measurement of each financial instrument will depend on the balance sheet classification elected by the Corporation. The fair value of a financial instrument is the amount of consideration that would be agreed upon in an arm's-length transaction between willing parties.

The Corporation classifies its financial instruments as follows and uses the following methods and assumptions to estimate the fair value of each class of financial instruments for which carrying amounts are included in the Balance Sheet:

- Cash is classified as "Held-for-Trading" and is measured at fair value.
- Investments comprising short-term investments are classified as "Held-for-Trading" and are measured at fair value.
- Accounts receivable and long term accounts receivable are classified as "Loans and Receivables" and are measured at amortized cost, which, upon initial recognition, is considered equivalent to fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Due to/from related parties are classified as "Loans and Receivables" and are measured at amortized cost, which, upon initial recognition, is considered equivalent to fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Accounts payable and accrued liabilities are classified as "Other Financial Liabilities" and are initially measured at their fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Customer deposits and deferred contributions are classified as "Other Financial Liabilities" and are initially measured at their fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method. The carrying amounts approximate fair value because of the short maturity.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

- Note payable to The Corporation of the City of Thunder Bay is classified as "Other Financial Liabilities" and are initially measured at cost. The fair value and future expected repayment schedule for the note payable to the City of Thunder Bay have not been disclosed due to the fact that cash flow streams are not determinable.
- Long-term debt is classified as "Other Financial Liabilities" and was initially measured at cost. Subsequent measurements are recorded at amortized cost using the effective interest method.

### 2. INTANGIBLE ASSETS

Details of year-end intangible asset balances are as follows:

	2013		2012	
	Cost \$	Accumulated amortization \$	Cost \$	Accumulated amortization \$
Computer software	1,177,699	1,072,159	1,175,257	986,708
Capital contributions to Hydro				
One for wholesale meters	1,272,321	187,919	1,272,321	137,026
	<b>2,450,020</b>	<b>1,260,078</b>	<b>2,447,578</b>	<b>1,123,734</b>
<b>Intangible assets, net</b>		<b>1,189,942</b>		<b>1,323,844</b>

See note 12 for details of amortization for the year.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 3. REGULATORY ASSETS (LIABILITIES)

	2013	2012
	\$	\$
<b>Regulatory Assets</b>		
Deferral for cash pension contributions	-	474
Deferral for OEB annual cost assessment	-	121
Deferral for IFRS implementation costs	<b>114,473</b>	94,983
Retailer Cost Variance	<b>168,999</b>	388,607
Smart Meter deferral - stranded assets	<b>448,130</b>	1,568,091
	<b>731,602</b>	2,052,276
Less current portion of regulatory liabilities	<b>448,130</b>	1,119,961
<b>Long Term Regulatory Assets</b>	<b>283,472</b>	932,315
<b>Regulatory Liabilities</b>		
Lost revenue adjustment mechanism variance account	<b>(65,597)</b>	-
Recovery/repayment of regulatory balances	<b>(632,440)</b>	(1,017,840)
Smart Meter deferral - disposition rider	<b>(249,044)</b>	(878,769)
Retail settlement variance	<b>(1,449,543)</b>	(3,928,204)
	<b>(2,396,624)</b>	(5,824,813)
Less current portion of regulatory liabilities	<b>(1,962,762)</b>	(3,109,460)
<b>Long Term Regulatory Liabilities</b>	<b>(433,862)</b>	(2,715,353)

In the absence of rate regulation, carrying charges on regulatory assets and liabilities in 2013 would have decreased by \$41,415 [2012 - decreased by \$385,445] (see Statement of Operations and Retained Earnings).

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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The regulatory asset and liability balances attract carrying charges at OEB prescribed rates and are defined as follows:

[a] Recovery/Repayment of regulatory balances

2013 OEB Approved

OEB approved balances of regulatory accounts as at December 31, 2011, including carrying charges on such balances to April 30, 2013, were transferred to this account for disposition. The net liability entry closing the asset and liability accounts amounted to (\$2,274,819) compared to a net liability of (\$2,097,477) exclusive of the Special Purpose Charge and PIL's decision in 2012 OEB approved balance. Distribution rate rider amounts are credited/debited to this account as are OEB prescribed carrying charges.

[b] Retail settlement variance accounts

These balances represent the variances between the flow-through amounts charged by the Corporation to customers (based on regulated rates) and the corresponding cost of non-competitive electricity service incurred since January 1, 2012.

The Independent Electrical System Operator ("IESO") was designated as the Smart Metering Entity ("SME") per Ontario Regulation 393/07 made under the Electricity Act, 1998. The IESO was approved by the OEB to levy a SME charge to LDCs, who in turn were ordered to pass along the charge to the LDC's Residential and General Service <50 kW customers. The SME charge is effective from May 1, 2013 to October 31, 2018. A new SME Retail Settlement Variance Account was approved in 2013 to track the variances between the payment and collection of this charge.

The OEB reviews Retail Settlement Variances quarterly for commodity and annually for non-commodity, for dispositions.

[c] Retail cost variance accounts

As per the criteria in the Accounting Procedures Handbook, the Corporation defers the net costs of services relating to the supply of competitive electricity to retailer customers since January 1, 2012, as balances to December 31, 2011 were closed to Recovery/Repayment of regulatory balance accounts.

In the absence of rate regulation, expenses in 2013 would have been \$64,000 higher [2012 - \$102,673].

[d] Smart Meter deferrals

Thunder Bay Hydro filed a Smart Meter Disposition and Cost Recovery Application as at December 31, 2011 with the OEB for which a Decision and Order was issued on June 21, 2012. Effective January 1, 2012, smart meter capital expenditures were effectively rolled into Property, Plant and Equipment and operating and maintenance costs were no longer deferred.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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The OEB's decision on the Corporation's Smart Meter Disposition and Cost Recovery Application resulted in the following:

- Smart Meter Disposition Rider (SMDR) representing the difference between the deferred incremental revenue requirement over the Smart Meter Funding Adder ("SMFA") revenues collected from 2006 to April 30, 2012. The resulting SMDR liability was \$1,135,137. The liability as at December 31, 2013 is \$249,044 [2012 - \$878,769].
- Smart Meter Incremental Revenue Requirement ("SMIRR") is included in the Distribution Revenue.

The Decision also resulted in a one-time \$901,581 increase to Distribution Revenue in 2012 in recognition of previously expensed interest on debt net of associated PILs.

The Corporation has deferred the loss on disposition for the applicable residential and small business meters which have been removed and replaced with Smart Meters. The stranded asset cost and distribution revenue have been reduced by the amount of funding in current rates for depreciation on these assets in the amount of \$70,221 [2012 - \$210,663]. In 2013, the OEB approved a rate rider effective May 1, 2013 to collect and dispose of the stranded asset from its Residential and General Service < 50kW customers until April 30, 2014. The total net stranded assets is \$448,130 [2012 - \$1,568,091].

### [e] Deferral of International Financial Reporting Standards ("IFRS") Implementation Costs

The OEB has approved a deferral account to record one-time administrative incremental IFRS transition costs, which are not already recovered in distribution rates.

In the absence of rate regulation, expenses would have been \$19,490 higher [2012 - \$50,607].

### [f] Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA")

The OEB has authorized the establishment of a LRAMVA to capture, at the customer rate class level, the variance between the results of actual verified impacts of authorized Conservation and Demand Management ("CDM") activities undertaken by the Corporation and the level of CDM program activities that were included in the load forecast as part of the Corporation's last Cost of Service proceeding.

The variance calculated results in a liability of (\$65,597) to the Corporation's customers as at December 31, 2013. Distributors must apply for disposition of the LRAMVA balance at their next Cost of Service Application and may apply for disposition of the balance on an annual basis if the balance is deemed significant by the distributor as part of the annual Incentive Regulation Mechanism ("IRM") rate application.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 4. CORPORATE INCOME TAXES

The provision for payments in lieu of corporate income and capital taxes differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate.

The impact of differences between the Corporation's reported income tax expense on operating income and the expense that would otherwise result from the application of statutory rates is as follows:

	2013	2012
	\$	\$
Earnings before provision for taxes	3,512,817	916,927
Statutory Canadian federal and provincial income tax rate (%)	26.50	26.50
Expected provision	930,897	242,986
Apprenticeship tax credit	(64,701)	(84,707)
Ontario small business deduction	(32,181)	(35,000)
Amortization and capital cost allowance	(182)	(85,818)
Reassessment refund	-	(85,420)
Employee future benefits	(224)	(20,454)
Asset retirement obligation	1,441	(37,096)
Smart meter deferral	129,211	88,276
Regulatory assets	388,602	(272,491)
Corporate minimum tax	74,158	-
Permanent differences	2,094	41,932
Impact of changes in the tax rates of deferred income taxes	-	(279,390)
<b>Tax provision</b>	<b>1,429,115</b>	<b>(527,182)</b>
<b>Effective tax rate (%)</b>	<b>40.68</b>	<b>(57.49)</b>

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## Thunder Bay Hydro Electricity Distribution Inc.

### Notes to the Financial Statements

December 31, 2013

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Significant components of the Corporation's future income tax assets and liabilities are as follows:

	2013	2012
	\$	\$
Property, plant and equipment and intangible assets	<b>3,113,690</b>	4,077,744
Post-employment benefits liability	<b>765,056</b>	803,599
Asset retirement obligation	<b>46,396</b>	54,545
Regulatory accounts	<b>(110,495)</b>	232,874
	<b>3,814,647</b>	5,168,762

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Presented on the balance sheet as follows:

	2013	2012
	\$	\$
Future income tax assets, current	<b>65,997</b>	232,874
Future income tax assets, long-term	<b>4,668,208</b>	5,008,093
Future income tax liabilities, current	<b>(118,755)</b>	-
Future income tax liabilities, long-term	<b>(800,803)</b>	(72,205)

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 5. PROPERTY, PLANT AND EQUIPMENT

[a] Details of year-end property, plant and equipment balances are as follows:

	2013		2012	
	Cost \$	Accumulated amortization \$	Cost \$	Accumulated amortization \$
Buildings	7,273,181	1,970,931	3,996,110	1,867,685
Distribution equipment	162,838,669	78,512,024	155,734,561	77,339,502
General office equipment	4,529,505	4,030,114	4,435,776	3,893,827
Land	133,038	-	133,038	-
Other equipment	3,395,768	2,827,189	3,287,341	2,710,881
Rolling stock	7,254,571	4,690,155	6,540,014	4,554,808
Transformation equipment	8,639,193	6,666,690	8,639,193	6,252,385
Renewable solar	3,679,113	104,897	-	-
	<b>197,743,038</b>	<b>98,802,000</b>	182,766,033	96,619,088
<b>Property, plant and equipment, net</b>		<b>98,941,038</b>		86,146,945

See note 12 for details of the amortization for the year.

[b] Details of year-end capital contributions balances are as follows:

	2013		2012	
	Capital contributions \$	Accumulated amortization \$	Capital contributions \$	Accumulated amortization \$
Distribution equipment	18,542,289	4,106,521	16,749,780	3,684,311
<b>Capital contributions, net</b>	<b>14,435,768</b>		13,065,469	

See note 12 for details of the amortization for the year.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 6. LONG-TERM DEBT

Long-term debt consists of the following:

	<b>2013</b>	<b>2012</b>
	\$	\$
Bank term loan payable in monthly instalments of \$64,400 including interest at 5.27%, maturing July, 2024.	<b>6,260,358</b>	6,690,875
Promissory note payable in semi annually instalments of \$167,663 including interest at 4.04%, maturing June, 2043	<b>5,749,497</b>	
	<b>12,009,855</b>	6,690,875
Less amounts included in current liabilities	<b>557,848</b>	430,516
<b>Long-term portion</b>	<b>11,452,007</b>	6,260,359

Principal repayments required over the next five years and thereafter are as follows:

	\$
2014	557,848
2015	586,607
2016	616,857
2017	648,683
2018	682,166
Thereafter	8,917,694
	12,009,855

As collateral for the above loans, the Corporation has provided a general security agreement representing a first charge on all assets and undertaking, excluding solar assets.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 7. BANK CREDITS

[a] The Corporation has an operating loan available in the amount of \$6,395,495 [2012 - \$6,395,495] by way of prime rate based loans or bankers' acceptances. At year-end, \$nil [2012 - \$nil] was utilized. The prime rate based loans bear interest at bank prime. Prime at December 31, 2013 was 3.0% [2012 - 3.0%]. The bankers' acceptances bear a stamping fee at 0.5% per annum.

The operating loan is secured by:

- [i] Guarantee of Advance, unlimited, as executed by Thunder Bay Hydro Corporation; and
- [ii] Subordination Agreement with respect to the \$26,490,550 promissory note given to the City of Thunder Bay, with said Subordination Agreement providing for no acceleration rights, as approved by the Bank's legal department.

[b] The Corporation has a letter of credit or stand-by letters of guarantee available in the amount of \$9,708,637 [2012 - \$9,708,637] of which \$9,708,637 [2012 - \$9,708,637] was issued at December 31, 2013. This credit will be used by the Corporation to assist in meeting its prudential obligations to the Independent Electricity System Operator ("IESO"). The credit bears interest at bank prime. Prime at December 31, 2013 was 3.0% [2012 - 3.0%]. Amounts payable to the IESO are recorded in current liabilities on the balance sheet.

### 8. EMPLOYEE FUTURE BENEFITS

The Corporation has a number of unfunded benefit plans providing retirement and post-employment benefits (excluding pension) to most of its employees.

Information about the Corporation's defined benefit plans is as follows:

	2013	2012
	\$	\$
Accrued benefit obligation at January 1	3,126,667	2,831,712
Actuarial (gains)losses	(865,639)	128,961
Current service costs	95,565	135,209
Interest cost	85,592	120,827
Benefits paid in the year or moved to current liability	(148,275)	(90,042)
<b>Accrued benefit obligation, end of year</b>	<b>2,293,910</b>	<b>3,126,667</b>
Projected accrued benefit obligation at December 31, using a 4.60% [2012 - 3.75%] discount rate	2,293,910	3,126,667
Unamortized actuarial gain(loss)	593,092	(94,217)
<b>Accrued benefit liability</b>	<b>2,887,002</b>	<b>3,032,450</b>

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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The main actuarial assumptions employed for the valuations are as follows:

**[a] General inflation**

Future general inflation levels, as measured by changes in the Consumer Price Index ("CPI"), were assumed at 2.0% [2012 - 2.0%].

**[b] Interest (discount) rate**

The obligation as at December 31, 2013, of the present value of future liabilities and the expense for the year, were determined using an annual discount rate of 4.60% [2012 - 3.75%].

**[c] Salary levels**

Future general salary and wage levels were assumed to increase at 2.9% per annum [2012 - 3.3%].

**[d] Medical costs**

Medical costs were assumed to increase at a rate of 7.00% in 2013 graded-down by .30% per annum leveling off at 4.60% in 2021 and thereafter [2012- 7.25% graded-down by .37% per annum leveling off at 5% in 2018].

### 9. NOTE PAYABLE TO THE CORPORATION OF THE CITY OF THUNDER BAY

The note is a non-interest bearing, unsecured note payable to The Corporation of the City of Thunder Bay (sole shareholder of Thunder Bay Hydro Corporation, the Corporation's parent company) and not due within one year.

During the year the City of Thunder Bay converted \$7,000,000 of the note payable and subscribed for 7,000,000 of Class A Common Shares.

	2013	2012
	\$	\$
Note payable to The Corporation of the City of Thunder Bay	<b>26,490,500</b>	33,490,500

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### 10. ASSET RETIREMENT OBLIGATION

A reconciliation between the opening and closing ARO liability balances is as follows:

	2013	2012
	\$	\$
<b>Balance, beginning of year</b>	<b>205,833</b>	91,160
Adjustment for change in estimates	<b>(14,255)</b>	137,886
ARO liabilities settled in the year	<b>(25,309)</b>	(31,802)
Accretion expense	<b>8,813</b>	8,589
<b>Balance, end of year</b>	<b>175,082</b>	205,833

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At December 31, 2013 the Corporation estimates the undiscounted amount of cash flows required over the seven years [2012 - eight years] to settle the ARO is \$220,954 [2012 - \$265,448]. A discount rate of 4.60% [2012- 3.75%] was used to calculate the carrying value of the ARO liabilities. No assets have been restricted for settlement of the liability.

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 11. OTHER OPERATING REVENUE

	2013 \$	2012 \$
Pole line rentals	479,421	467,093
Competitive market revenues	178,910	183,290
Interest earned	194,985	134,685
Income from affiliates	351,792	287,065
Reconnection and change in occupancy charges	250,990	232,118
Late payment charges	287,463	285,249
FIT Revenue	263,301	
OPA sundry income	2,018,985	1,017,801
Sundry	216,164	355,548
	<b>4,242,011</b>	<b>2,962,849</b>

### 12. AMORTIZATION

	2013 \$	2012 \$
Amortization of general plant	3,265,344	5,774,453
Amortization of capital contributions	(422,210)	(635,490)
Amortization of wholesale meters	50,893	50,893
Amortization of unallocated office and data processing equipment	72,563	81,777
	<b>2,966,590</b>	<b>5,271,633</b>
Amortization of other property, plant and equipment included in relevant expense categories in the Statement of Operations and Retained Earnings	586,647	741,081
	<b>3,553,237</b>	<b>6,012,714</b>
Amortization included in capitalized expenditures	72,031	364,884
Amortization of property, plant and equipment	3,767,072	6,139,074
Amortization of intangible assets	136,344	144,246
Amortization of capital contributions	(422,210)	(635,490)
	<b>3,553,237</b>	<b>6,012,714</b>

### 13. PENSION PLAN

The Corporation's current service pension costs for the year ended December 31, 2013 were \$1,021,349 [2012 - \$925,674].

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

### 14. STATEMENT OF CASH FLOWS

[a] The net change in non-cash working capital balances related to operations consists of the following:

	2013 \$	2012 \$
<b>Decrease (increase) in current assets</b>		
Accounts receivable	(392,190)	(442,612)
Unbilled revenue	(2,811,913)	408,021
Payments in lieu of corporate income taxes receivable	430,428	(660,423)
Due from related parties	(27,111)	27,636
Stores inventory	21,607	(160,600)
Prepaid expenses	29,220	(63,092)
	<b>(2,749,959)</b>	<b>(891,070)</b>
<b>Increase (decrease) in current liabilities</b>		
Accounts payable and accrued liabilities	4,313,499	964,950
Debt retirement charges payable	13,216	4,778
Deferred revenue	(527,360)	253,458
Due to related party	(74,013)	(38,160)
Customer deposits and deferred contributions	(85,865)	211,418
	<b>3,639,477</b>	<b>1,396,444</b>
	<b>889,518</b>	<b>505,374</b>

[b] During the year, property, plant and equipment were acquired at an aggregate cost of \$14,816,989 [2012 - \$11,679,026], of which \$1,412,808 [2012 - \$1,196,094] was funded by cash contributions, \$379,701 [2012- \$321,282] was funded by contributions in-kind, \$72,031 [2012 - \$364,884 was funded by capitalized amortization, \$(14,255) [2012- \$137,886] was funded by a non-cash (decrease) increase to an asset retirement obligation, \$5,800,000 [2012 - \$nil] was funded by loan proceeds and \$7,166,704 [2012 - \$9,658,880] was funded by cash.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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[c] Cash outflows (inflows) during the year for interest and income taxes were as follows:

	2013	2012
	\$	\$
Interest paid (received)		(4,982)
Income taxes(received) paid	<b>(355,428)</b>	1,072,400

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### 15. RELATED PARTY TRANSACTIONS

#### The Corporation of the City of Thunder Bay

The Corporation provides certain services to The Corporation of the City of Thunder Bay (the Corporation's parent's shareholder) in the normal course of business at commercial rates.

For the year ended December 31, 2013, pole rental revenue from The Corporation of the City of Thunder Bay in the amount of \$312,900 [2012 - \$312,185] and other sundry revenues in the amount of \$60,964 [2012 - \$78,687] were recorded. The Corporation of the City of Thunder Bay also contributed towards capital construction during the year in the amount of \$117,639 [2012- \$311,255]. Included in "Accounts receivable" is \$85,747 [2012 - \$50,662] receivable from The Corporation of the City of Thunder Bay related to these other activities. Included in "Customer deposits" is \$49,941 [2012 - \$nil] held as deposit from The Corporation of the City of Thunder Bay related to capital work to be completed.

For the year ended December 31, 2013, the Corporation billed electricity revenues in the amount of \$8,330,042 [2012 - \$8,205,307] to The Corporation of the City of Thunder Bay. At December 31, 2013, included in "Accounts receivable" is \$705,755 [2012- \$655,585] receivable from The Corporation of the City of Thunder Bay, related to this electricity revenue.

The Corporation purchases certain services from The Corporation of the City of Thunder Bay in the normal course of business at commercial rates. For the year ended December 31, 2013, the Corporation was charged rent of \$318,051 [2012 - \$310,900], telecommunication capital and operating costs of \$309,228 [2012 - \$309,977], water billings of \$7,919 [2012 - \$8,801], property taxes of \$135,498 [2012 - \$133,408], Solar lease fees of \$8,144 [2012 - \$nil], Ontario Power Association incentives of \$21,289 [2012 - \$19,215] and various sundry amounts of \$36,766 [2012-\$87,102].

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## Thunder Bay Hydro Electricity Distribution Inc.

### Notes to the Financial Statements

December 31, 2013

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#### Companies under Common Control

The Corporation provides services to Thunder Bay Hydro Utility Services Inc. ("TBHUSI") at cost plus the higher of bank prime and the Corporation's approved rate of return of 7.00%, effective May 1, 2013 [3.75% previously]. During 2013, the Corporation charged TBHUSI \$248,235 [2012- \$198,984] for direct costs and administration fees.

The Corporation provides services to Thunder Bay Hydro Renewable Power Incorporated ("TBHRPI") for cost plus an annual administrative charge of \$7,500 [2012 - \$7,500]. During 2013, the Corporation charged TBHRPI \$93,481 [2012 - \$83,151] for direct costs and administration fees.

The Corporation also charged interest at bank prime on outstanding advances from TBHRPI. Interest charged during 2013 was \$3,430 [2012 - \$3,430].

The Corporation is reimbursed by Thunder Bay Hydro Corporation ("TBHC"), the parent company, for costs associated with the compensation for TBHC Board of Director fees at cost. During 2013, the Corporation charged TBHC \$6,646 [2012 - \$1,500] for direct costs and administration fees.

	<b>2013</b>	2012
<b>Amounts owed:</b>	\$	\$
Owing from (to) TBHRPI	<b>2,887</b>	(74,013)
Owing from TBHUSI	<b>69,176</b>	44,879
Owing from TBHC	<b>1,382</b>	1,455
	<b>73,445</b>	(27,679)

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The balance due to TBHRPI is unsecured and due on demand. Balances outstanding in excess of 30 days bear interest at prime.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### 16. DETERMINATION OF FAIR MARKET VALUE

Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

The Corporation's cash and cash equivalents, investments, accounts receivable, accounts payable and accrued liabilities, and customer deposits carrying values approximate fair value due to the short maturity of these balances. All financial instruments are reported at amortized cost on the balance sheet, which approximates fair value due to their short-term nature except long-term debt. The fair value of long-term debt based on management's estimate to renegotiate debt with similar terms at the year-end is approximately \$13,054,960.

The fair value of amounts due to/from related parties and the note payable cannot be determined as there is no readily available comparative market.

#### **Fair value hierarchy:**

Financial instruments that are measured subsequent to initial recognition at fair value are grouped into Levels 1 to 3, based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities; and
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

There were no transfers between the levels in the period. The fair values of financial assets and liabilities carried at amortized cost are approximated by their carrying values.

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# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

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### 17. FINANCIAL INSTRUMENTS

The following is a discussion of risks and related mitigation strategies that have been identified by the Corporation for financial instruments. This is not an exhaustive list of all risks, nor will the mitigation strategies eliminate all risks listed.

The Corporation's activities provide for a variety of financial risks, particularly credit risk, interest rate risk and liquidity risk.

#### Credit risk

Financial instruments are exposed to credit risk as a result of the risk of the counterparty defaulting on its obligations. The Corporation monitors and limits its exposure to credit risk on a continuous basis. The Corporation provides reserves for credit risks based on the financial condition and short and long-term exposures to counter-parties.

The Corporation's credit risk associated with accounts receivable is primarily related to payments from the Corporation's customers. The Corporation has approximately 50,100 customers, the majority of which are residential. The Corporation collects security deposits from customers in accordance with directions provided by the OEB. As at December 31, 2013, the Corporation held security deposits in the amount of \$1,208,717 [2012- \$1,337,411].

The carrying amount of accounts receivable is reduced through the use of an allowance for doubtful accounts and the amount of the related impairment loss is recognized in the Statement of Operations and Retained Earnings. Subsequent recoveries of receivables previously provisioned are credited to the Statement of Operations and Retained Earnings.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2013

Credit risk associated with accounts receivable is as follows:

	2013 \$	2012 \$
Total accounts receivable	<b>10,529,279</b>	10,133,536
Less: Allowance for doubtful accounts	<b>(422,979)</b>	(419,426)
<b>Total accounts receivable, net</b>	<b>10,106,300</b>	9,714,110
Of which		
Outstanding for less than 19 days	<b>8,589,205</b>	8,097,255
Outstanding for more than 20 days but not more than 180 days	<b>1,342,956</b>	1,490,500
Outstanding for more than 181 days	<b>406,465</b>	445,312
Amounts unbilled	<b>190,653</b>	100,469
Less: Allowance for doubtful accounts	<b>(422,979)</b>	(419,426)
<b>Total accounts receivable, net</b>	<b>10,106,300</b>	9,714,110

Unbilled revenue represents amounts to which the Corporation has a contractual right to receive cash through future billings but are unbilled at year-end. As at December 31, 2013, total unbilled revenue is \$14,985,516 [2012 - \$12,173,603]. Unbilled revenue outstanding is considered current.

At December 31, 2013, there were no significant concentrations of credit risk with respect to any class of financial assets or counterparties. The Corporation's maximum exposure to credit risk is equal to the carrying value of its financial assets.

### Interest rate risk

The Corporation is exposed to interest rate risk in holding certain financial instruments. The Corporation's objective is to minimize net interest expense. Under the Corporation's Revolving Credit Facility, the Corporation may obtain short-term borrowings for working capital purposes. These borrowings expose the Corporation to fluctuations in short-term interest rate [borrowings in the form of prime rate loans in Canadian dollars and bankers' acceptances and letters of credit]. The fee payable for bankers' acceptances and letters of credit is based on 0.5% fee per annum plus stamping fee when applicable.

Cash balances that are not required to meet day-to-day obligations of the Corporation are periodically invested in short-term Canadian money market instruments, exposing the Corporation to fluctuations in short-term interest rates. These fluctuations could impact the level of interest income earned by the Corporation.

### Liquidity risk

The Corporation monitors and manages its liquidity risk to ensure access to sufficient funds to meet operational and investing requirements. The Corporation's objective is to ensure that sufficient liquidity is on hand to meet obligations as they fall due while

# Thunder Bay Hydro Electricity Distribution Inc.

## Notes to the Financial Statements

December 31, 2013

minimizing interest expense. The Corporation has access to credit facilities and monitors cash balances regularly to ensure that sufficient levels of liquidity are on hand to meet financial commitments as they come due. Liquidity risks associated with financial commitments are as follows:

	<b>December 31, 2013</b>		
	<b>Due within 1 year \$</b>	<b>Due between 1 year and 5 years \$</b>	<b>Due after 5 years \$</b>
<b>Financial liabilities</b>			
Accounts payable and accrued liabilities	<b>17,448,225</b>		
Debt retirement charges payable	<b>522,229</b>		
Customer deposits and deferred contributions	<b>2,387,411</b>		
Note payable to The Corporation of the City of Thunder Bay			<b>26,490,500</b>
Long-term debt	<b>557,848</b>	<b>2,534,313</b>	<b>8,917,694</b>

### Foreign exchange risk

As at December 31, 2013, the Corporation has limited exposure to the changing values of foreign currencies. While the Corporation purchases goods and services which are payable in U.S. dollars, and purchases U.S. currency to meet the related payables commitments when required, the impact of these transactions is not material to the financial statements.

## 18. LIABILITY INSURANCE

The Corporation belongs to the Municipal Electrical Reciprocal Insurance Exchange ("MEARIE"). MEARIE is a self-insurance plan that pools the risks of all of its members. Any losses experienced by MEARIE are shared amongst its members. As at December 31, 2013, the Corporation has not been made aware of any assessments for losses.

## 19. CAPITAL DISCLOSURES

The Corporation's main objectives when managing capital are to:

- ensure ongoing access to funding in order to maintain and improve the electricity distribution system of the Corporation;
- ensure compliance with covenants related to its credit facilities and the note payable to The Corporation of the City of Thunder Bay ("City Note");
- begin to align its capital structure for regulated activities of the Corporation with the debt to equity structure recommended by the OEB.

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

December 31, 2013

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As of December 31, 2013, the Corporation's definition of capital includes shareholder's equity and long-term debt and has remained unchanged from December 31, 2012. As of December 31, 2013, shareholder's equity amounts to \$57,907,731 [2012- \$48,824,029] and long-term debt amounts to \$38,500,355 [2012 - \$40,181,375]. The Corporation's long-term capital structure at December 31, 2013 is 40% debt and 60% equity [2012 - 58% debt and 42% equity]. There have been no changes in the Corporation's approach to capital management during the year.

As at December 31, 2013, the Corporation is subject to debt agreements that contain various covenants. The Corporation is governed by the Shareholder Declaration which limits future borrowings, liens, and provisions of security without prior written consent. The Corporation is also subject to a Subordination Agreement with respect to the \$26,490,550 promissory note given to The Corporation of the City of Thunder Bay, with said Subordination Agreement providing for no acceleration rights, as approved by the Bank's legal department.

The Corporation's revolving credit facility limits the debt to capitalization ratio to a maximum of 60% [2012- 60%] and a debt service coverage ratio of not less than 1.20:1 [2012 - 1.20:1]. As at December 31, 2013, the debt to capitalization ratio was 18% [2012 - 17%] and debt service coverage was 2.84:1 [2012 - 3.92:1]. The Corporation's long-term debt agreements also include positive and negative covenants such as limitations on funded indebtedness, capital expenditures restrictions on mergers, amalgamations or consolidations, and limitations on providing security or guarantees to any third party. As at December 31, 2013, the Corporation was in compliance with the financial covenants included in its long-term debt agreements, City Note and short-term revolving credit facility.

#### **20 SUBSEQUENT EVENT**

Subsequent to year end, the Corporation received \$5,500,000 loan advance from Ontario Infrastructure as part of the total approved 2014 capital loan of \$6,150,000.

#### **21. COMPARATIVE FINANCIAL STATEMENTS**

The comparative financial statements have been reclassified from statements previously presented to conform to the presentation of the 2013 financial statements.

## Thunder Bay Hydro Electricity Distribution Inc.

### Schedule- Expenses

Year ended December 31	2013	2012
	\$	\$
<b>OPERATIONS AND MAINTENANCE</b>		
Customer premises/meters and devices	251,387	308,754
Distribution	4,163,691	3,702,296
Safety and training	437,226	463,636
System control/station maintenance	1,742,275	1,707,758
Transformer	971,316	694,634
<b>Total operations and maintenance expenses</b>	<b>7,565,895</b>	<b>6,877,078</b>
<b>ADMINISTRATION</b>		
Bad debts	120,074	182,305
Billing and collecting	984,121	984,287
Customer information service	956,301	1,042,401
Information services	803,349	774,016
Meter reading	359,030	378,583
<b>Total customer- related administration expenses</b>	<b>3,222,875</b>	<b>3,361,592</b>
<b>General</b>		
Corporate	640,871	553,133
Directors' expenses	101,625	108,329
Finance	906,340	955,023
Human resources	354,662	343,125
President's office	396,250	386,778
Power systems administration	277,777	280,746
Renewable generation administration	126,706	194,239
Solar pv generation direct costs	240,489	37
Purchasing	231,690	49,629
<b>Total general administration expenses</b>	<b>3,276,410</b>	<b>2,871,039</b>
<b>Total administration expenses</b>	<b>6,499,285</b>	<b>6,232,631</b>

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Financial Statements

Thunder Bay Hydro Electricity Distribution Inc.

December 31, 2014

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# Thunder Bay Hydro Electricity Distribution Inc.

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BDO Canada LLP  
1095 Barton Street  
Thunder Bay ON P7B 5N3 Canada

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## Independent Auditor's Report

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**To the Shareholder of  
Thunder Bay Hydro Electricity Distribution Inc.**

We have audited the accompanying financial statements of Thunder Bay Hydro Electricity Distribution Inc., which comprise the balance sheet as at December 31, 2014, and the statements of operations and retained earnings and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

**Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the financial statements present fairly, in all material respects, the financial position of Thunder Bay Hydro Electricity Distribution Inc. as at December 31, 2014, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

*BDO Canada LLP*

Chartered Professional Accountants, Licensed Public Accountants

Thunder Bay, Ontario  
April 23, 2015

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Balance Sheet**

As at December 31	2014	2013
	\$	\$
		<i>[restated - note 22]</i>
<b>ASSETS</b>		
<b>Current</b>		
Cash	3,230,996	2,601,731
Investments	32,025	32,025
Accounts receivable <i>[note 18]</i>	11,968,477	9,780,189
Unbilled revenue <i>[note 18]</i>	13,666,371	14,985,516
Payments in lieu of corporate income taxes receivable	616,745	263,460
Due from related parties <i>[note 16]</i>	46,965	73,445
Stores inventory	1,686,009	1,449,805
Prepaid expenses	373,668	324,859
Current portion of regulatory assets <i>[note 3]</i>	-	448,130
Current portion of future income tax assets <i>[note 4]</i>	-	65,997
<b>Total current assets</b>	<b>31,621,256</b>	<b>30,025,157</b>
<b>Other</b>		
Intangible assets <i>[note 2]</i>	1,129,229	1,189,942
Regulatory assets <i>[note 3]</i>	372,435	283,472
Future income tax assets <i>[note 4]</i>	5,070,639	4,668,208
Long term accounts receivable	326,875	345,313
<b>Total other assets</b>	<b>6,899,178</b>	<b>6,486,935</b>
<b>Property, plant and equipment, at cost</b>		
Property, plant and equipment, net <i>[note 5(a)]</i>	104,278,048	98,941,038
Capital contributions, net <i>[note 5(b)]</i>	(16,113,860)	(14,435,768)
Construction-in-progress	2,888,739	2,147,194
<b>Property, plant and equipment, net</b>	<b>91,052,927</b>	<b>86,652,464</b>
	<b>129,573,361</b>	<b>123,164,556</b>

The accompanying notes are an integral part of these financial statements.

On behalf of the Board:

  
 Director

  
 Director

## Thunder Bay Hydro Electricity Distribution Inc. Balance Sheet

As at December 31	2014	2013
	\$	\$
		<i>[restated - note 22]</i>
<b>LIABILITIES AND SHAREHOLDER'S EQUITY</b>		
<b>Current</b>		
Accounts payable and accrued liabilities	13,182,833	14,192,273
Debt retirement charges payable	589,615	522,229
Deferred revenue	341,137	346,450
Customer deposits and deferred contributions	2,207,563	2,387,411
Current portion of regulatory liabilities <i>[note 3]</i>	2,300,480	1,962,762
Current portion of long-term debt <i>[note 6]</i>	696,277	557,848
Current portion of future income tax liabilities <i>[note 4]</i>	-	118,755
<b>Total current liabilities</b>	<b>19,317,905</b>	<b>20,087,728</b>
<b>Long-term</b>		
Regulatory liabilities <i>[note 3]</i>	445,362	3,258,236
Employee future benefits liability <i>[note 8]</i>	2,767,678	2,887,002
Note payable to The Corporation of the City of Thunder Bay <i>[note 9]</i>	26,490,500	26,490,500
Other long term liabilities	105,467	105,467
Asset retirement obligation <i>[note 10]</i>	89,636	175,082
Long-term debt <i>[note 6]</i>	16,905,724	11,452,007
Future income tax liabilities <i>[note 4]</i>	2,318,271	800,803
<b>Total long-term liabilities</b>	<b>49,122,638</b>	<b>45,169,097</b>
<b>Shareholder's equity</b>		
Share capital		
Authorized		
Unlimited common shares		
Unlimited class a common shares		
Issued		
951,000 ( 1,000 - 2013) common shares <i>[note 11]</i>	35,881,625	34,931,625
7,000,000 class a common shares	7,000,000	7,000,000
	<b>42,881,625</b>	<b>41,931,625</b>
Retained earnings	18,251,193	15,976,106
<b>Total shareholder's equity</b>	<b>61,132,818</b>	<b>57,907,731</b>
	<b>129,573,361</b>	<b>123,164,556</b>

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Operations and Retained Earnings**

Year ended December 31	2014	2013
	\$	\$
		<i>[restated - note 22]</i>
<b>REVENUES AND FLOW-THROUGH CHARGES</b>		
Flow-through charges plus distribution revenues	122,408,125	117,533,030
Flow-through costs of energy	(103,108,692)	(98,658,756)
Distribution revenue	19,299,433	18,874,274
Other operating revenue <i>[note 12]</i>	4,995,173	4,728,434
	<b>24,294,606</b>	<b>23,602,708</b>
<b>EXPENSES</b>		
Administration <i>[schedule]</i>	6,939,101	6,985,708
Amortization <i>[note 13]</i>	2,958,955	2,966,590
Operations and maintenance <i>[schedule]</i>	8,180,822	7,565,895
OPA programs	2,105,896	2,018,985
Loss on disposal of property, plant and equipment and write off of inventory	168,777	48,361
	<b>20,353,551</b>	<b>19,585,539</b>
<b>Earnings before the following</b>	<b>3,941,055</b>	<b>4,017,169</b>
Interest on long-term debt	669,144	462,937
Carrying charges on regulatory accounts	78,888	41,415
<b>Earnings before provision for taxes</b>	<b>3,193,023</b>	<b>3,512,817</b>
<b>Payments in lieu of corporate income taxes <i>[note 4]</i></b>		
Current (recovery)	(144,343)	75,000
Future	1,062,279	1,354,115
	<b>917,936</b>	<b>1,429,115</b>
<b>Earnings for year</b>	<b>2,275,087</b>	<b>2,083,702</b>
Retained earnings, beginning of year	15,976,106	13,892,404
<b>Retained earnings, end of year</b>	<b>18,251,193</b>	<b>15,976,106</b>

The accompanying notes are an integral part of these financial statements.

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Cash Flows**

Year ended December 31	2014	2013
	\$	\$
		<i>[restated - note 22]</i>
<b>OPERATING ACTIVITIES</b>		
Earnings for year	2,275,087	2,083,702
Add charges (deduct credits) to operations not involving a current payment (receipt) of cash		
Accretion expense related to asset retirement obligation <i>[note 10]</i>	5,813	8,813
Amortization of capital contributions <i>[note 13]</i>	(458,950)	(422,210)
Amortization of property, plant and equipment <i>[note 13]</i>	4,052,970	3,767,072
Amortization of intangible assets <i>[note 13]</i>	123,134	136,344
Decrease in employee future benefits	(119,324)	(145,448)
Loss on disposal of property, plant and equipment	168,777	48,361
Future income taxes	1,062,279	1,354,115
	<u>7,109,786</u>	<u>6,830,749</u>
Net change in non-cash working capital balances related to operations <i>[note 15[a]]</i>	(2,608,176)	(1,949,944)
<b>Cash provided by operating activities</b>	<b>4,501,610</b>	<b>4,880,805</b>
<b>INVESTMENT ACTIVITIES</b>		
Proceeds on disposal of property, plant and equipment	212,494	142,267
Additions to intangible assets	(62,420)	(2,442)
Additions to property, plant and equipment, net <i>[note 15[b]]</i>	(2,274,472)	(7,166,704)
<b>Cash used in investment activities</b>	<b>(2,124,398)</b>	<b>(7,026,879)</b>
<b>FINANCING ACTIVITIES</b>		
Decrease in regulatory assets	359,167	1,320,674
Decrease in regulatory liabilities	(2,475,156)	(694,194)
Decrease (Increase) in long term receivables	18,438	(345,313)
Repayments of bank loan	(557,854)	(481,020)
Equity investment by Thunder Bay Hydro Corporation	950,000	-
ARO liabilities settled during the year	(42,542)	(25,309)
Increase in other long term liabilities	-	105,467
<b>Cash used in financing activities</b>	<b>(1,747,947)</b>	<b>(119,695)</b>
<b>Increase (decrease) in cash during year</b>	<b>629,265</b>	<b>(2,265,769)</b>
Cash, beginning of year	2,601,731	4,867,500
<b>Cash, end of year</b>	<b>3,230,996</b>	<b>2,601,731</b>

The accompanying notes are an integral part of these financial statements.

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

December 31, 2014

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#### **GENERAL**

Thunder Bay Hydro Electricity Distribution Inc. ("the Corporation") is a wholly-owned subsidiary company of Thunder Bay Hydro Corporation, providing electrical distribution services to the inhabitants of The Corporation of the City of Thunder Bay and the Fort William First Nation Reserve, as regulated by the Ontario Energy Board ("OEB").

#### **1. SIGNIFICANT ACCOUNTING POLICIES**

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles ("GAAP") and reflect the significant accounting policies summarized below.

##### **International financial reporting standards**

The Corporation did not adopt IFRS for the year ended December 31, 2014 as the mandatory adoption for entities with activities subject to rate regulation was deferred to fiscal years beginning on or after January 1, 2015. The Corporation will be adopting IFRS on January 1, 2015.

##### **Rate setting and regulation**

The rates of the Corporation's electricity distribution are subject to regulation by the OEB. The cost of power and all costs other than distribution related to the operations of the electricity grid including transmission, connection and administration costs are flowed through to the consumer.

The distribution revenue is designed to recover the costs incurred by the Corporation in delivering electricity to customers. Distribution rates are regulated by the OEB and typically comprise a monthly service charge and a volumetric charge.

##### **Cash and cash equivalents**

Cash and cash equivalents consist of cash on hand and bank balances with maturity of three months or less.

##### **Stores inventory**

Stores inventory consists principally of maintenance and construction materials and is valued at the lower of cost and net realizable value. Cost is determined using the average cost method.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated amortization. Gains or losses on retirement or disposition of asset are credited or charged to (gain) loss on dispositions. Amortization is provided on a straight-line basis for property, plant and equipment over their estimated service lives at the following annual rates:

Buildings	2%
Distribution and transformation equipment	1% to 6%
Other assets	3.3% to 5%
Rolling stock	5% to 8%

### Spare transformers and meters

Spare transformers and meters are held to back up plant in service and are expected to substitute for original distribution plant transformers and meters when these original plant assets are being repaired. According to the criteria prescribed by the OEB in the Accounting Procedures Handbook the spare transformers and meters are treated as property, plant and equipment but are not depreciable until installed.

### Intangible assets

Intangible assets represent computer applications software and capital contributions. These assets are carried at cost net of accumulated amortization.

Amortization is provided on a straight-line basis for intangible assets over their estimated useful lives at the following rates:

Computer software	14% to 50%
Capital contributions	4%

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### Regulated assets and liabilities

The company has adopted the CICA's Accounting Guideline 19 "Disclosures by Entities Subject to Rate Regulation". Based on OEB regulations, certain costs and variance account balances are recorded as regulatory liabilities and are reflected in the balance sheet until the OEB determines the manner and timing of their disposition.

Regulatory assets represent future revenues associated with certain costs, incurred in the current period or in prior period(s), that are expected to be recovered from consumers in future periods through the rate-setting process. Regulatory liabilities represent future expenses associated with the collection of certain revenues, earned in the current period or in prior period(s), that are expected to be returned to consumers in future periods through the rate-setting process. Regulatory assets and liabilities can arise from differences in amounts collected from customers (based on regulated rates) and the corresponding costs of non-competitive electricity service incurred by the Corporation in the wholesale market administered by the Independent Electricity System Operator (the "IESO") after May 1, 2002.

These amounts have been accumulated pursuant to regulation underlying the Electricity Act (the "EA") and deferred in anticipation of their future recovery or expense in electricity distribution service charges. In the absence of rate regulation, these rate regulated assets and liabilities would be recognized in income in the period to which they relate. See Note 3 for further details.

### Pension plan

The Corporation provides a pension plan for its employees through the Ontario Municipal Employees Retirement System ("OMERS"). OMERS is a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund (the "Fund"), and provides pensions for employees of Ontario municipalities, local boards, public utilities and school boards. The Fund is a contributory defined benefit pension plan which is financed by equal contributions from participating employers and employees, and by the investment earnings of the Fund [note 14]. The Corporation recognizes the expense related to this plan as contributions are made.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**  
December 31, 2014

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**Other post-employment benefits**

Employee future benefits provided by the Corporation include medical and life insurance benefits and accumulated sick leave credits. These plans provide benefits to certain employees when they are no longer providing active service. Employee future benefit expense is recognized in the period in which the employees render the services. Employee future benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefit method pro-rated on service and based on assumptions that reflect management's best estimate. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in the period. Past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of employees active at the date of amendment. Actuarial gains (losses) are amortized into expense on a straight-line basis over the average remaining service period of active employees to full eligibility. The effects of a curtailment gain or loss are recognized in earnings in the year of the event giving rise to the curtailment. The effects of a settlement gain or loss are recognized in earnings for the period in which a settlement occurs.

**Revenue recognition**

Distribution revenue is recognized on the basis of regular meter readings. Estimates of customer usage since the last meter reading date, to the end of the year are recorded as unbilled revenue.

Pole line revenue is recognized based on annual contracted rates and agreed-upon pole counts.

The Corporation has entered into Conservation Demand Management ("CDM") agreements with the Ontario Power Authority ("OPA") for the period from 2011 to 2015. Performance, management and incentive fees are recognized according to the applicable OPA service agreements.

Revenues from Lost Revenue Adjustment Mechanism and Shared Savings Mechanism approved in rates are recognized on an accrual basis.

Other revenue is recognized when the requirements as to performance for transactions involving the sale of goods or services are met and ultimate collection is reasonably assured at the time of performance.

**Construction-in-progress**

Construction-in-progress is comprised of the costs of assets not yet placed into service, assets under construction, and pre-construction activities related to projects expected to be completed. These amounts are not amortized. Upon energization of assets the amounts are transferred to property, plant and equipment and are amortized on a straight-line basis over the expected service life of the asset.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**  
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**Contributions in aid of construction**

Capital contributions are required contributions received from outside sources, used to finance additions to property, plant and equipment. Capital contributions are credited against property, plant and equipment. The amount is subsequently amortized by a charge to accumulated amortization and a credit to amortization expense, at an equivalent rate to that used for the amortization of the related property, plant and equipment.

**Customer deposits**

Customers' advance deposits are cash collections from customers or Energy Retailers to guarantee the payment of energy-related bills. The deposits bear interest at prime less 2% and is paid annually to customers.

Customer deposits also include collections from renewable generation customers for connection cost and capacity allocation deposits, as dictated by the OPA and contributions in aid of construction on construction projects which have not been completed or capitalized during the year. Interest may be payable on the capacity allocation deposit upon connection of the renewable generation facility. Interest is not payable on contributions in aid of construction.

**Use of estimates and measurement uncertainty**

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes as well as the disclosure of contingent assets and liabilities at the financial statement date.

Accounts receivable, unbilled service revenue, regulatory assets, regulatory liabilities and employee future benefits are reported based on amounts expected to be recovered or incurred and reflect an appropriate allowance for unrecoverable amounts based on management's estimates. Amounts recorded for amortization of property, plant and equipment are based on estimates of useful service life.

Due to inherent uncertainty involved in making such estimates, actual results could differ from those estimates, including changes as a result of future decisions made by the OEB or the Minister of Energy or the Minister of Finance. The financial statements have, in management's opinion, been properly prepared using careful judgement within reasonable limits of materiality and within the framework of the accounting policies.

**Corporate income taxes**

The current tax-exempt status of the Corporation's parent company under the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario) reflects the fact that the Corporation's parent company is wholly-owned by a municipality. This tax-exempt status might be lost in a number of circumstances, including if the municipality ceases to own 90% or more of the shares or capital of the Corporation's parent company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently,

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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to acquire more than 10% of the shares of the Corporation's parent company.

Under the Electricity Act, 1998, the Corporation is required to make payments in lieu of corporate taxes to the Ontario Electricity Financial Corporation ("OEFC"). These payments are calculated in accordance with the rules for computing income taxes and taxable capital and other relevant amounts contained in the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario) as modified by the Electricity Act, 1998, and related regulations.

#### *Current income taxes*

The provision for current taxes and the assets and liabilities recognized for the current and prior periods are measured at amounts receivable or payable from/to the OEFC.

#### *Future income taxes*

Future income taxes are provided for using the liability method and are recognized on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Future income tax liabilities are generally recognized on all taxable temporary differences and future tax assets are recognized to the extent that it is more likely than not that they will be realized from taxable profits available against which deductible temporary differences can be utilized.

Future income taxes are calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realized, based on the tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date.

The carrying amount of future income tax assets is reviewed at each balance sheet date and reduced to the extent that all or part of the future income tax assets have not met the "more likely than not" criterion. Previously unrecognized future income tax assets are reassessed at each balance sheet date and are recognized to the extent that it has become more likely than not of being recovered from future taxable profits.

#### **Asset retirement obligation**

The Corporation recognizes a liability for the future removal and handling cost for contamination in distribution equipment and units in storage. Initially, the liability is measured at present value and the amount of the liability is added to the carrying amount of the related asset. In subsequent periods, the asset is amortized and the liability is adjusted annually for the discount applied upon initial recognition of the liability ("accretion expense") and for changes in the underlying assumptions. The liability is recognized when the asset retirement obligation ("ARO") is incurred and when the fair value is determined.

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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#### **Financial instruments**

On initial recognition, all financial instruments which meet the definition of a financial asset or financial liability are to be recorded at fair value, unless fair value cannot be reliably determined. Depending on the nature of the financial instrument, revenues, expenses, gains and losses would be reported in either net income or other comprehensive income. Subsequent measurement of each financial instrument will depend on the balance sheet classification elected by the Corporation. The fair value of a financial instrument is the amount of consideration that would be agreed upon in an arm's-length transaction between willing parties.

The Corporation classifies its financial instruments as follows and uses the following methods and assumptions to estimate the fair value of each class of financial instruments for which carrying amounts are included in the Balance Sheet:

- Cash is classified as "Held-for-Trading" and is measured at fair value.
- Investments comprising short-term investments, are classified as "Held-for-Trading" and are measured at fair value.
- Accounts receivable and long term accounts receivable are classified as "Loans and Receivables" and are measured at amortized cost, which, upon initial recognition, is considered equivalent to fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Due to/from related parties are classified as "Loans and Receivables" and are measured at amortized cost, which, upon initial recognition, is considered equivalent to fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Accounts payable and accrued liabilities are classified as "Other Financial Liabilities" and are initially measured at their fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.
- Customer deposits and deferred contributions are classified as "Other Financial Liabilities" and are initially measured at their fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method. The carrying amounts approximate fair value because of the short maturity.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

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- Note payable to The Corporation of the City of Thunder Bay is classified as "Other Financial Liabilities" and are initially measured at cost. The fair value and future expected repayment schedule for the note payable to the City of Thunder Bay have not been disclosed due to the fact that cash flow streams are not determinable.
- Other long term liabilities are classified as "Other Financial Liabilities" and are initially measured at their fair value. Subsequent measurements are recorded at amortized cost using the effective interest method.
- Long-term debt is classified as "Other Financial Liabilities" and was initially measured at cost. Subsequent measurements are recorded at amortized cost using the effective interest method.

**2. INTANGIBLE ASSETS**

Details of year-end intangible asset balances are as follows:

	2014		2013	
	Cost \$	Accumulated amortization \$	Cost \$	Accumulated amortization \$
Computer software	1,240,119	1,144,400	1,177,699	1,072,159
Capital contributions to Hydro				
One for wholesale meters	1,272,321	238,811	1,272,321	187,919
	<b>2,512,440</b>	<b>1,383,211</b>	<b>2,450,020</b>	<b>1,260,078</b>
<b>Intangible assets, net</b>		<b>1,129,229</b>		<b>1,189,942</b>

See note 13 for details of amortization for the year.

**Thunder Bay Hydro Electricity Distribution Inc.**  
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**3. REGULATORY ASSETS (LIABILITIES)**

	2014	2013
	\$	\$
		<i>[restated - note 22]</i>
<b>Regulatory Assets</b>		
IFRS transition cost deferral	116,114	114,473
Retailer service cost variance	256,321	168,999
Stranded meter deferral	-	448,130
	<b>372,435</b>	<b>731,602</b>
Less current portion of regulatory assets	-	448,130
<b>Long Term Regulatory Assets</b>	<b>372,435</b>	<b>283,472</b>
<b>Regulatory Liabilities</b>		
Lost revenue adjustment mechanism variance	(65,597)	(65,597)
Smart meter deferral	(48,956)	(249,044)
Recovery/repayment of regulatory balances	(437,306)	(632,440)
Retail settlement variance accounts	(2,193,983)	(4,273,917)
	<b>(2,745,842)</b>	<b>(5,220,998)</b>
Less current portion of regulatory liabilities	(2,300,480)	(1,962,762)
<b>Long Term Regulatory Liabilities</b>	<b>(445,362)</b>	<b>(3,258,236)</b>

In the absence of rate regulation, carrying charges on regulatory assets and liabilities in 2014 would have decreased by \$78,888 [2013 - decreased by \$41,415] (see Statement of Operations and Retained Earnings).

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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### *Regulatory assets*

[a] International Financial Reporting Standards ("IFRS") transition cost deferral

The OEB authorized this account to record one-time administrative incremental IFRS transition costs, caused by the transition of accounting policies, procedures, systems and processes to IFRS, and for costs which were not already approved and included for recovery in distribution rates.

Costs have been captured under this deferral account for future rate recovery. During 2014, no additional IFRS transitional costs were incurred. In the absence of rate regulation, expenses in 2014 are \$nil [2013 - \$18,023].

[b] Retailer service cost variance

In compliance with the Accounting Procedures Handbook, the Corporation defers the net of revenues and costs of services pertaining to the supply of competitive electricity to retailer customers. Net costs have been captured under this deferral account for future rate recovery. In the absence of rate regulation, expenses in 2014 would have been \$84,293 higher [2013 - \$64,000].

### *Regulatory liabilities*

[c] Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA")

The OEB authorized the establishment of a LRAMVA to capture the variance between the OEB-approved Conservation and Demand Management ("CDM") forecast and the actual results at the customer rate class level.

The variance calculated results in a liability of (\$65,597) [2013 - (\$65,597)] owing to the Corporation's ratepayers as at December 31, 2014.

At a minimum, the Corporation must apply for disposition of the LRAMVA balance at the next cost of service application. If the balance is deemed significant, the Corporation may apply for disposition of the LRAMVA on an annual basis, as part of the Incentive Regulation Mechanism ("IRM") rate application.

[d] Smart meter deferral

The provincial government mandated the installation of smart meters for all residential and small business rate payers in Ontario by 2010. The Corporation has been authorized under the *Electricity Act, 1998, O. Reg. 427/06*, to undertake metering activities pursuant to the Provincial Smart Meter Program, and to recover through rates, the funding required for the implementation of this program.

- Smart Meter Disposition Rider (SMDR) recovers, over a specified period of time, the variance between: 1) the deferred revenue requirement for the installed smart meters up to the time of disposition (December 2012); and 2) the Smart Meter Funding Adder ("SMFA") revenues and related interest collected from 2006

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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to April 30, 2012. The resulting SMDR liability was \$1,136,137.

The OEB approved the disposition of this balance through a two year rate rider to Residential and General Service < 50kW rate payers ending April 30, 2014. The balance has been recovered and the liability as at December 31, 2014 is \$nil [2013 - (\$249,044)].

The OEB recognized that the installation of smart meters would mean that older meters would be retired earlier than planned and that the costs associated with retired meters would not have been fully depreciated. As a result, the OEB allowed these stranded costs to be recoverable.

- Stranded meter deferral - The Corporation deferred the loss on disposition for applicable residential and small business meters which have been removed and replaced with Smart Meters. The stranded asset cost and distribution revenue have been reduced by the amount of funding in current rates for depreciation on these assets in the amount of \$nil [2013 - \$70,221].

The OEB approved the recovery of the stranded asset cost from Residential and General Service < 50kW ratepayers for a one year period, ending April 30, 2014. The net stranded asset (liability) as at December 31, 2014 is (\$48,956) [2013 - \$448,130]. Account balances for stranded meters will be brought forward for disposition in the next cost of service application.

[e] Recovery/repayment of regulatory balances

2014 OEB Approved

OEB approved regulatory account balances as at December 31, 2012, including carrying charges on such balances to April 30, 2014, were transferred to this account for disposition. The net liability entry closing the asset and liability accounts amounted to (\$1,452,446). Distribution rate rider amounts are credited/debited to this account as are OEB prescribed carrying charges.

[f] Retail settlement variance accounts

Variances between the amounts billed to ratepayers and the corresponding purchase costs are required to be captured in the Retail Settlement Variance Accounts for disposition in future rates. The variance accounts have been further defined by the regulator into commodity related and non-commodity related accounts. Those accounts defined as commodity accounts are eligible for regular review on a quarterly basis. All other accounts are defined as non-commodity and are currently eligible for review on an annual basis. The regulator determines in all cases, when the balances are material enough to warrant an adjustment to rates.

These variances are for future disposition. Variances accumulated prior to January 1, 2013 have been transferred to the recovery/repayment of regulatory balances.

The Independent Electrical System Operator ("IESO") was designated as the Smart Metering Entity ("SME") per *Ontario Regulation 393/07* made under the *Electricity Act*,

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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1998. The IESO was approved by the OEB to levy a SME charge to LDCs, who in turn were ordered to pass along the charge to the LDC's Residential and General Service <50 kW ratepayers. The SME charge is effective from May 1, 2013 to October 31, 2018. A new SME Retail Settlement Variance Account was approved in 2013 to track the variances between the payment and collection of this charge.

See note 22.

Regulatory asset and liability balances attract carrying charges at OEB prescribed rates and are recorded to the related regulatory account.

### 4. CORPORATE INCOME TAXES

The provision for payments in lieu of corporate income and capital taxes differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate.

The impact of differences between the Corporation's reported income tax expense on operating income and the expense that would otherwise result from the application of statutory rates is as follows:

	2014	2013
	\$	\$
Earnings before provision for taxes	3,193,023	3,512,817
Statutory Canadian federal and provincial income tax rate (%)	26.50	26.50
Expected provision	846,151	930,897
Apprenticeship tax credit	(49,278)	(64,701)
Ontario small business deduction	-	(32,181)
Amortization and capital cost allowance	(6,664)	(182)
Employee future benefits	(2,122)	(224)
Asset retirement obligation	11,370	1,441
Smart meter deferral	84,836	129,211
Regulatory assets	(66,795)	388,602
Corporate minimum tax	86,971	74,158
Permanent differences	13,467	2,094
<b>Tax provision</b>	<b>917,936</b>	<b>1,429,115</b>
<b>Effective tax rate (%)</b>	<b>28.75</b>	<b>40.68</b>

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**Thunder Bay Hydro Electricity Distribution Inc.**  
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Significant components of the Corporation's future income tax assets and liabilities are as follows:

	2014	2013
	\$	\$
Property, plant and equipment and intangible assets	2,063,519	3,113,690
Post-employment benefits liability	733,435	765,056
Asset retirement obligation	23,754	46,396
Regulatory accounts	(68,340)	(110,495)
	<b>2,752,368</b>	<b>3,814,647</b>

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Presented on the balance sheet as follows:

	2014	2013
	\$	\$
Future income tax assets, current	-	65,997
Future income tax assets, long-term	5,070,639	4,668,208
Future income tax liabilities, current	-	(118,755)
Future income tax liabilities, long-term	(2,318,271)	(800,803)

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**  
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**5. PROPERTY, PLANT AND EQUIPMENT**

[a] Details of year-end property, plant and equipment balances are as follows:

	2014		2013	
	Cost \$	Accumulated amortization \$	Cost \$	Accumulated amortization \$
Buildings	7,274,710	2,188,445	7,273,181	1,970,931
Distribution equipment	170,473,649	80,631,324	162,838,669	78,512,024
General office equipment	4,611,473	4,144,163	4,529,505	4,030,114
Land	133,038	-	133,038	-
Other equipment	3,586,390	2,942,644	3,395,768	2,827,189
Rolling stock	7,550,944	4,597,641	7,254,571	4,690,155
Transformation equipment	8,678,231	6,916,430	8,639,193	6,666,690
Renewable solar	3,679,113	288,853	3,679,113	104,897
	<b>205,987,548</b>	<b>101,709,500</b>	<b>197,743,038</b>	<b>98,802,000</b>
<b>Property, plant and equipment, net</b>	<b>104,278,048</b>		<b>98,941,038</b>	

See note 13 for details of the amortization for the year.

[b] Details of year-end capital contributions balances are as follows:

	2014		2013	
	Capital contributions \$	Accumulated amortization \$	Capital contributions \$	Accumulated amortization \$
Distribution equipment	20,679,331	4,565,471	18,542,289	4,106,521
<b>Capital contributions, net</b>	<b>16,113,860</b>		<b>14,435,768</b>	

See note 13 for details of the amortization for the year.

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

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**6. LONG-TERM DEBT**

Long-term debt consists of the following:

	2014 \$	2013 \$
Bank term loan payable in monthly instalments of \$64,400 including interest at 5.27%, maturing July, 2024.	5,806,592	6,260,358
Promissory note payable in semi annual instalments of \$167,663 including interest at 4.04%, maturing June, 2043	5,645,409	5,749,497
Promissory note payable in semi annual instalments of \$176,067 including interest at 3.96%, maturing October 2044.	6,150,000	-
	<b>17,602,001</b>	<b>12,009,855</b>
Less amounts included in current liabilities	<b>696,277</b>	<b>557,848</b>
<b>Long-term portion</b>	<b>16,905,724</b>	<b>11,452,007</b>

Principal repayments required over the next five years and thereafter are as follows:

	\$
2015	696,277
2016	730,913
2017	767,300
2018	800,738
2019	840,704
Thereafter	13,766,069
	<b>17,602,001</b>

As collateral for the above loans, the Corporation has provided a general security agreement representing a first charge on all assets and undertaking, excluding solar assets.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### 7. BANK CREDITS

[a] The Corporation has an operating loan available in the amount of \$6,395,495 [2013 - \$6,395,495] by way of prime rate based loans or bankers' acceptances. At year-end, \$nil [2013 - \$nil] was utilized. The prime rate based loans bear interest at bank prime. Prime at December 31, 2014 was 3.0% [2013 - 3.0%]. The bankers' acceptances bear a stamping fee at 0.5% per annum.

The operating loan is secured by:

- [i] Guarantee of Advance, unlimited, as executed by Thunder Bay Hydro Corporation; and
- [ii] Subordination Agreement with respect to the \$26,490,500 promissory note given to the City of Thunder Bay, with said Subordination Agreement providing for no acceleration rights, as approved by the Bank's legal department.

[b] The Corporation has a letter of credit or stand-by letters of guarantee available in the amount of \$9,708,637 [2013 - \$9,708,637] of which \$9,708,637 [2013 - \$9,708,637] was issued at December 31, 2014. This credit will be used by the Corporation to assist in meeting its prudential obligations to the Independent Electricity System Operator ("IESO"). The credit bears interest at bank prime. Prime at December 31, 2014 was 3.0% [2013 - 3.0%]. Amounts payable to the IESO are recorded in current liabilities on the balance sheet.

### 8. EMPLOYEE FUTURE BENEFITS

The Corporation has a number of unfunded benefit plans providing retirement and post-employment benefits (excluding pension) to most of its employees.

Information about the Corporation's defined benefit plans is as follows:

	2014	2013
	\$	\$
Accrued benefit obligation at January 1	2,293,910	3,126,667
Actuarial gains	(237,209)	(865,639)
Current service costs	75,173	95,565
Interest cost	93,926	85,592
Benefits paid in the year or moved to current liability	(148,051)	(148,275)
<b>Accrued benefit obligation, end of year</b>	<b>2,077,749</b>	<b>2,293,910</b>
Projected accrued benefit obligation at December 31, using a 4.60% [2013 - 4.60%] discount rate	2,077,749	2,293,910
Unamortized actuarial gain	689,929	593,092
<b>Accrued benefit liability</b>	<b>2,767,678</b>	<b>2,887,002</b>

**Thunder Bay Hydro Electricity Distribution Inc.**  
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The main actuarial assumptions employed for the valuations are as follows:

**[a] General inflation**

Future general inflation levels, as measured by changes in the Consumer Price Index ("CPI"), were assumed at 2.0% [2013 - 2.0%].

**[b] Salary levels**

Future general salary and wage levels were assumed to increase at 2.9% per annum [2013 - 2.9%].

**[c] Medical costs**

Medical costs were assumed to increase at a rate of 6.70% in 2014 graded-down by .30% per annum leveling off at 4.60% in 2021 and thereafter [2013 - 7.00% graded-down by .30% per annum leveling off at 4.60% in 2021].

**9. NOTE PAYABLE TO THE CORPORATION OF THE CITY OF THUNDER BAY**

The note is a non-interest bearing, unsecured note payable to The Corporation of the City of Thunder Bay (sole shareholder of Thunder Bay Hydro Corporation, the Corporation's parent company) and not due within one year.

	2014 \$	2013 \$
Note payable to The Corporation of the City of Thunder Bay	26,490,500	26,490,500

**10. ASSET RETIREMENT OBLIGATION**

A reconciliation between the opening and closing ARO liability balances is as follows:

	2014 \$	2013 \$
<b>Balance, beginning of year</b>	<b>175,082</b>	<b>205,833</b>
Adjustment for change in estimates	(48,717)	(14,255)
ARO liabilities settled in the year	(42,542)	(25,309)
Accretion expense	5,813	8,813
<b>Balance, end of year</b>	<b>89,636</b>	<b>175,082</b>

At December 31, 2014 the Corporation estimates the undiscounted amount of cash flows required over the six years [2013 - seven years] to settle the ARO is \$140,042 [2013 - \$220,954]. A discount rate of 4.60% [2013 - 4.60%] was used to calculate the carrying value of the ARO liabilities. No assets have been restricted for settlement of the liability.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**  
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**11. SHARE CAPITAL**

During the year, 950,000 common shares were issued to Thunder Bay Hydro Corporation for cash consideration of \$950,000.

**12. OTHER OPERATING REVENUE**

	2014 \$	2013 \$
Pole line rentals	493,804	479,421
Competitive market revenues	173,074	178,910
Interest earned	138,176	194,985
Income from affiliates	390,828	351,792
Reconnection and change in occupancy charges	290,320	250,990
Late payment charges	329,078	287,463
Recoverable	157,184	591,111
FIT Revenue	545,214	263,301
OPA program income	2,105,896	2,018,985
Sundry	371,599	111,476
	<b>4,995,173</b>	<b>4,728,434</b>

**13. AMORTIZATION**

	2014 \$	2013 \$
Amortization of general plant	3,291,628	3,265,344
Amortization of capital contributions	(458,950)	(422,210)
Amortization of wholesale meters	50,893	50,893
Amortization of unallocated office and data processing equipment	75,384	72,563
	<b>2,958,955</b>	<b>2,966,590</b>
Amortization of other property, plant and equipment included in relevant expense categories in the Statement of Operations and Retained Earnings	826,426	586,647
	<b>3,785,381</b>	<b>3,553,237</b>
Amortization included in capitalized expenditures	68,227	72,031
Amortization of property, plant and equipment	4,052,970	3,767,072
Amortization of intangible assets	123,134	136,344
Amortization of capital contributions	(458,950)	(422,210)
	<b>3,785,381</b>	<b>3,553,237</b>

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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### 14. PENSION PLAN

The Corporation's current service pension costs for the year ended December 31, 2014 were \$1,056,358 [2013 - \$1,021,349].

### 15. STATEMENT OF CASH FLOWS

[a] The net change in non-cash working capital balances related to operations consists of the following:

	2014	2013
	\$	\$
<b>Decrease (increase) in current assets</b>		
Accounts receivable	(2,188,288)	(66,079)
Unbilled revenue	1,319,145	(2,811,913)
Payments in lieu of corporate income taxes receivable	(353,285)	430,428
Due from related parties	26,480	(27,111)
Stores inventory	(236,204)	21,607
Prepaid expenses	(48,809)	29,220
<b>Funded by cash</b>	<b>(1,480,961)</b>	<b>(2,423,848)</b>
<b>Increase (decrease) in current liabilities</b>		
Accounts payable and accrued liabilities	(1,009,440)	1,147,926
Debt retirement charges payable	67,386	13,216
Deferred revenue	(5,313)	(527,360)
Due to related party	-	(74,013)
Customer deposits and deferred contributions	(179,848)	(85,865)
	<b>(1,127,215)</b>	<b>473,904</b>
	<b>(2,608,176)</b>	<b>(1,949,944)</b>

[b] During the year, property, plant and equipment were acquired as follows:

Aggregate	10,581,024	14,816,989
Funded by cash contributions	(1,640,114)	(1,412,808)
Funded by contributions in-kind	(496,928)	(379,701)
Funded by capitalized amortization	(68,227)	(72,031)
Funded by non-cash decrease to an asset retirement obligation	48,717	14,255
Funded by loan proceeds	(6,150,000)	(5,800,000)
<b>Funded by cash</b>	<b>2,274,472</b>	<b>7,166,704</b>

[c] Cash outflows (inflows) during the year for interest and income taxes were as follows:

	2014	2013
	\$	\$
Income taxes(received) paid	208,942	(355,428)

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

December 31, 2014

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#### **16. RELATED PARTY TRANSACTIONS**

##### **The Corporation of the City of Thunder Bay**

The Corporation provides certain services to The Corporation of the City of Thunder Bay (the Corporation's parent's shareholder) in the normal course of business at commercial rates.

For the year ended December 31, 2014, pole rental revenue from The Corporation of the City of Thunder Bay in the amount of \$316,230 [2013 - \$312,900] and other sundry revenues in the amount of \$66,300 [2013 - \$60,964] were recorded. The Corporation of the City of Thunder Bay also contributed towards capital construction during the year in the amount of \$461,404 [2013 - \$117,639]. Included in "Accounts receivable" is \$4,509 [2013 - \$85,747] receivable from The Corporation of the City of Thunder Bay related to these other activities. Included in "Customer deposits" is \$237,174 [2013 - \$49,941] held as deposit from The Corporation of the City of Thunder Bay related to capital work to be completed.

For the year ended December 31, 2014, the Corporation billed electricity revenues in the amount of \$8,021,275 [2013 - \$8,330,042] to The Corporation of the City of Thunder Bay. At December 31, 2014, included in "Accounts receivable" is \$949,964 [2013 - \$705,755] receivable from The Corporation of the City of Thunder Bay, related to this electricity revenue.

The Corporation purchases certain services from The Corporation of the City of Thunder Bay in the normal course of business at commercial rates. For the year ended December 31, 2014, the Corporation was charged rent of \$322,714 [2013 - \$318,051], telecommunication capital and operating costs of \$254,062 [2013 - \$309,228], water billings of \$11,166 [2013 - \$7,919], property taxes of \$136,124 [2013 - \$135,498], Solar lease fees of \$16,558 [2013 - \$8,144], Ontario Power Association incentives of \$36,393 [2013 - \$21,289] and various sundry amounts of \$40,281 [2013-\$36,766].

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### Companies under Common Control

The Corporation provides services to Thunder Bay Hydro Utility Services Inc. ("TBHUSI") at cost plus the higher of bank prime and the Corporation's approved rate of return of 7.00%, effective May 1, 2013 [3.75% previously]. During 2014, the Corporation charged TBHUSI \$293,814 [2013 - \$248,235] for direct costs and administration fees.

The Corporation provides services to Thunder Bay Hydro Renewable Power Incorporated ("TBHRPI") for cost plus an annual administrative charge of \$8,000 [2013 - \$7,500]. During 2014, the Corporation charged TBHRPI \$86,994 [2013 - \$93,481] for direct costs and administration fees.

The Corporation also charged interest at bank prime on outstanding advances from TBHRPI. Interest charged during 2014 was \$3,430 [2013 - \$3,430].

The Corporation is reimbursed by Thunder Bay Hydro Corporation ("TBHC"), the parent company, for costs associated with the compensation for TBHC Board of Director fees at cost. During 2014, the Corporation charged TBHC \$6,591 [2013 - \$6,646] for direct costs and administration fees.

	2014	2013
<b>Amounts owed:</b>	\$	\$
Owing from TBHRPI	6,371	2,887
Owing from TBHUSI	37,907	69,176
Owing from TBHC	2,687	1,382
	<u>46,965</u>	<u>73,445</u>

The balance due from TBHRPI is unsecured and due on demand. Balances outstanding in excess of 30 days bear interest at prime.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### 17. DETERMINATION OF FAIR MARKET VALUE

Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

The Corporation's cash and cash equivalents, investments, accounts receivable, accounts payable and accrued liabilities, and customer deposits carrying values approximate fair value due to the short maturity of these balances. All financial instruments are reported at amortized cost on the balance sheet, which approximates fair value due to their short-term nature except long-term debt. The fair value of long-term debt based on management's estimate to renegotiate debt with similar terms at the year end is approximately \$19,585,000.

The fair value of amounts due to/from related parties and the note payable cannot be determined as there is no readily available comparative market.

#### Fair value hierarchy:

Financial instruments that are measured subsequent to initial recognition at fair value are grouped into Levels 1 to 3, based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities; and
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

There were no transfers between the levels in the period. The fair values of financial assets and liabilities carried at amortized cost are approximated by their carrying values.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2014

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**18. FINANCIAL INSTRUMENTS**

The following is a discussion of risks and related mitigation strategies that have been identified by the Corporation for financial instruments. This is not an exhaustive list of all risks, nor will the mitigation strategies eliminate all risks listed.

The Corporation's activities provide for a variety of financial risks, particularly credit risk, interest rate risk and liquidity risk.

Credit risk

Financial instruments are exposed to credit risk as a result of the risk of the counterparty defaulting on its obligations. The Corporation monitors and limits its exposure to credit risk on a continuous basis. The Corporation provides reserves for credit risks based on the financial condition and short and long-term exposures to counter-parties.

The Corporation's credit risk associated with accounts receivable is primarily related to payments from the Corporation's customers. The Corporation has approximately 50,000 customers, the majority of which are residential. The Corporation collects security deposits from customers in accordance with directions provided by the OEB. As at December 31, 2014, the Corporation held security deposits in the amount of \$1,237,481 [2013 - \$1,208,717].

The carrying amount of accounts receivable is reduced through the use of an allowance for doubtful accounts and the amount of the related impairment loss is recognized in the Statement of Operations and Retained Earnings. Subsequent recoveries of receivables previously provisioned are credited to the Statement of Operations and Retained Earnings.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

Credit risk associated with accounts receivable is as follows:

	2014	2013
	\$	\$
Total accounts receivable	12,339,673	10,203,168
Less: Allowance for doubtful accounts	(371,196)	(422,979)
<b>Total accounts receivable, net</b>	<b>11,968,477</b>	<b>9,780,189</b>
Of which		
Outstanding for less than 19 days	10,094,609	8,589,205
Outstanding for more than 20 days but not more than 180 days	1,389,403	1,342,956
Outstanding for more than 181 days	625,394	406,465
Amounts unbilled	230,267	(135,458)
Less: Allowance for doubtful accounts	(371,196)	(422,979)
<b>Total accounts receivable, net</b>	<b>11,968,477</b>	<b>9,780,189</b>

Unbilled revenue represents amounts to which the Corporation has a contractual right to receive cash through future billings but are unbilled at year-end. As at December 31, 2014, total unbilled revenue is \$13,666,371 [2013 - \$14,985,516]. Unbilled revenue outstanding is considered current.

At December 31, 2014, there were no significant concentrations of credit risk with respect to any class of financial assets or counterparties. The Corporation's maximum exposure to credit risk is equal to the carrying value of its financial assets.

### Interest rate risk

The Corporation is exposed to interest rate risk in holding certain financial instruments. The Corporation's objective is to minimize net interest expense. Under the Corporation's Revolving Credit Facility, the Corporation may obtain short-term borrowings for working capital purposes. These borrowings expose the Corporation to fluctuations in short-term interest rate [borrowings in the form of prime rate loans in Canadian dollars and bankers' acceptances and letters of credit]. The fee payable for bankers' acceptances and letters of credit is based on 0.5% fee per annum plus stamping fee when applicable.

Cash balances that are not required to meet day-to-day obligations of the Corporation are periodically invested in short-term Canadian money market instruments, exposing the Corporation to fluctuations in short-term interest rates. These fluctuations could impact the level of interest income earned by the Corporation.

### Liquidity risk

The Corporation monitors and manages its liquidity risk to ensure access to sufficient funds to meet operational and investing requirements. The Corporation's objective is to ensure that sufficient liquidity is on hand to meet obligations as they fall due while

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

minimizing interest expense. The Corporation has access to credit facilities and monitors cash balances regularly to ensure that sufficient levels of liquidity are on hand to meet financial commitments as they come due. Liquidity risks associated with financial commitments are as follows:

December 31, 2014			
	Due within 1 year \$	Due between 1 year and 5 years \$	Due after 5 years \$
<b>Financial liabilities</b>			
Accounts payable and accrued liabilities	13,182,833	-	-
Debt retirement charges payable	589,615	-	-
Customer deposits and deferred contributions	2,207,563	-	-
Note payable to The Corporation of the City of Thunder Bay	-	-	26,490,500
Long-term debt	696,277	3,139,655	13,766,069

December 31, 2013			
	Due within 1 year \$	Due between 1 year and 5 years \$	Due after 5 years \$
<b>Financial liabilities</b>			
Accounts payable and accrued liabilities	14,192,273	-	-
Debt retirement charges payable	522,229	-	-
Customer deposits and deferred contributions	2,387,411	-	-
Note payable to The Corporation of the City of Thunder Bay	-	-	26,490,500
Long-term debt	557,848	2,534,313	8,917,694

Foreign exchange risk

As at December 31, 2014, the Corporation has limited exposure to the changing values of foreign currencies. While the Corporation purchases goods and services which are payable in U.S. dollars, and purchases U.S. currency to meet the related payables commitments when required, the impact of these transactions is not material to the financial statements.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2014

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### 19. LIABILITY INSURANCE

The Corporation belongs to the Municipal Electrical Reciprocal Insurance Exchange ("MEARIE"). MEARIE is a self-insurance plan that pools the risks of all of its members. Any losses experienced by MEARIE are shared amongst its members. As at December 31, 2014, the Corporation has not been made aware of any assessments for losses.

### 20. CAPITAL DISCLOSURES

The Corporation's main objectives when managing capital are to:

- ensure ongoing access to funding in order to maintain and improve the electricity distribution system of the Corporation;
- ensure compliance with covenants related to its credit facilities and the note payable to The Corporation of the City of Thunder Bay ("City Note");
- begin to align its capital structure for regulated activities of the Corporation with the debt to equity structure recommended by the OEB.

As of December 31, 2014, the Corporation's definition of capital includes shareholder's equity and long-term debt and has remained unchanged from December 31, 2013. As of December 31, 2014, shareholder's equity amounts to \$61,132,818 [2013 - \$57,907,731] and long-term debt amounts to \$44,092,501 [2013 - \$38,500,355]. The Corporation's long-term capital structure at December 31, 2014 is 41.9% debt and 58.1% equity [2013 - 40% debt and 60% equity]. There have been no changes in the Corporation's approach to capital management during the year.

As at December 31, 2014, the Corporation is subject to debt agreements that contain various covenants. The Corporation is governed by the Shareholder Declaration which limits future borrowings, liens, and provisions of security without prior written consent. The Corporation is also subject to a Subordination Agreement with respect to the \$26,490,500 promissory note given to The Corporation of the City of Thunder Bay, with said Subordination Agreement providing for no acceleration rights, as approved by the Bank's legal department.

The Corporation's revolving credit facility limits the debt to capitalization ratio to a maximum of 60% [2013 - 60%] and a debt service coverage ratio of not less than 1.20:1 [2013 - 1.20:1]. As at December 31, 2014, the debt to capitalization ratio was 22% [2013 - 18%] and debt service coverage was 3.42:1 [2013 - 2.84:1]. The Corporation's long-term debt agreements also include positive and negative covenants such as limitations on funded indebtedness, capital expenditures restrictions on mergers, amalgamations or consolidations, and limitations on providing security or guarantees to any third party. As at December 31, 2014, the Corporation was in compliance with the financial covenants included in its long-term debt agreements, City Note and short-term revolving credit facility.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2014

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**21. SUBSEQUENT EVENT**

Subsequent to year end, the Corporation signed extension agreements with the IESO for the current CDM programs to December 31, 2015.

**22. PRIOR PERIOD RECLASSIFICATION AND COMPARATIVE FINANCIAL STATEMENTS**

An error in the calculation and allocation of the Global Adjustment ("GA") component of flow-through costs of energy (since 2005) has been corrected as a prior period restatement. As a result the 2013 comparative statements were adjusted as follows:

	Previously Reported	Correction	Restated
<b>State of Operations and Retained Earnings</b>			
Flow-through charges plus distribution revenues	\$ 117,949,521	\$ (416,491)	\$ 117,533,030
Flow-through costs of energy	(99,075,247)	416,491	(98,658,756)
<b>Balance Sheet</b>			
Accounts receivable	10,106,300	(326,111)	9,780,189
Accounts payable and accrued liabilities	17,448,225	(3,255,952)	14,192,273
Regulatory liabilities	433,862	2,824,374	3,258,236
Other long term liabilities	-	105,467	105,467

The comparative financial statements have also been reclassified from statements previously presented to conform to the presentation of the 2014 financial statements.

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Schedule - Expenses**

Year ended December 31	2014	2013
	\$	\$
<b>OPERATIONS AND MAINTENANCE</b>		
Customer premises/meters and devices	340,138	251,387
Distribution	4,917,216	4,163,691
Safety and training	459,201	437,226
System control/station maintenance	1,868,913	1,742,275
Transformer	595,354	971,316
<b>Total operations and maintenance expenses</b>	<b>8,180,822</b>	<b>7,565,895</b>
<b>ADMINISTRATION</b>		
Bad debts	68,322	120,074
Billing and collecting	1,058,633	984,121
Customer information service	959,691	956,301
Information services	858,277	803,349
Meter reading	334,379	359,030
Recoverable	123,404	486,423
<b>Total customer - related administration expenses</b>	<b>3,402,706</b>	<b>3,709,298</b>
<b>General</b>		
Corporate	787,048	640,871
Directors' expenses	100,640	101,625
Finance	892,382	906,340
Human resources	318,801	354,662
President's office	394,717	396,250
Power systems administration	333,304	277,777
Renewable generation administration	163,876	126,706
Solar pv generation direct costs	330,477	240,489
Purchasing	215,150	231,690
<b>Total general administration expenses</b>	<b>3,536,395</b>	<b>3,276,410</b>
<b>Total administration expenses</b>	<b>6,939,101</b>	<b>6,985,708</b>



Financial Statements

Thunder Bay Hydro Electricity Distribution Inc.

December 31, 2015

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## Thunder Bay Hydro Electricity Distribution Inc.

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BDO Canada LLP  
1095 Barton Street  
Thunder Bay ON P7B 5N3 Canada

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## Independent Auditor's Report

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**To the Shareholder of  
Thunder Bay Hydro Electricity Distribution Inc.**

We have audited the accompanying financial statements of Thunder Bay Hydro Electricity Distribution Inc., which comprise the statements of financial position as at December 31, 2015, December 31, 2014 and January 1, 2014 and the statements of comprehensive income, changes in equity and cash flows for the years ended December 31, 2015 and December 31, 2014, and a summary of significant accounting policies and other explanatory information.

**Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International financial reporting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the financial statements present fairly, in all material respects, the financial position of Thunder Bay Hydro Electricity Distribution Inc. as at December 31, 2015, December 31, 2014 and January 1, 2014, and the results of its operations and its cash flows for the years ended December 31, 2015 and December 31, 2014 in accordance with International financial reporting standards.

*BDO Canada LLP*

Chartered Professional Accountants, Licensed Public Accountants

Thunder Bay, Ontario  
April 21, 2016



**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Financial Position** (Expressed in Canadian Dollars)

As at	Notes	December 31, 2015	December 31, 2014	January 1, 2014
		\$	\$	\$
<b>LIABILITIES AND SHAREHOLDER'S EQUITY</b>				
<b>Current</b>				
Accounts payable and accrued liabilities		17,724,858	13,182,834	14,192,273
Customer deposits and deferred contributions	10	3,349,063	2,207,563	2,387,411
Debt retirement charges payable		555,932	589,615	522,229
Deferred revenue		107,009	114,439	124,327
Current portion of long-term debt	13	767,529	696,277	557,848
<b>Total current liabilities</b>		<b>22,504,391</b>	<b>16,790,728</b>	<b>17,784,088</b>
<b>Non-current liabilities</b>				
Contributions in aid of construction	11	4,023,633	2,110,763	-
Note payable to the Corporation of the City of Thunder Bay	12	26,490,500	26,490,500	26,490,500
Employee future benefits	8	2,415,256	2,973,616	2,920,603
Other long term liabilities		108,695	105,467	105,467
Asset retirement obligation	14	274,300	311,122	403,388
Long-term debt	13	20,138,195	16,905,724	11,452,007
Deferred taxes	7	31,688	29,488	26,362
<b>Total non-current liabilities</b>		<b>53,482,267</b>	<b>48,926,680</b>	<b>41,398,327</b>
<b>Shareholder's equity</b>				
Share capital	19	42,881,625	42,881,625	41,931,625
Accumulated other comprehensive income		370,006	(33,601)	(33,601)
Retained earnings		20,023,496	18,185,893	15,985,010
<b>Total shareholder's equity</b>		<b>63,275,127</b>	<b>61,033,917</b>	<b>57,883,034</b>
<b>Total liabilities and shareholder's equity</b>		<b>139,261,785</b>	<b>126,751,325</b>	<b>117,065,449</b>
Regulatory deferral account credit balances and related deferred tax	3	1,820,869	2,741,850	5,145,545
<b>Total equity, liabilities and regulatory deferral account credit balances</b>		<b>141,082,654</b>	<b>129,493,175</b>	<b>122,210,994</b>

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Comprehensive Income** (Expressed in Canadian Dollars)

Year ended December 31		2015	2014
	Notes	\$	\$
<b>REVENUE</b>			
Electricity sales		132,024,407	125,123,014
Other	9	10,240,413	4,956,824
		<b>142,264,820</b>	<b>130,079,838</b>
<b>EXPENSES</b>			
Purchased power		111,404,176	103,885,319
Administration [schedule]		8,021,198	7,087,178
Operations and maintenance [schedule]		8,345,641	8,221,302
Amortization	15	3,153,321	2,985,334
IESO programs		6,502,216	2,109,075
Loss on disposal of property, plant and equipment		250,745	168,777
		<b>137,677,297</b>	<b>124,456,985</b>
<b>Income from operating activities</b>		<b>4,587,523</b>	<b>5,622,853</b>
Finance income	20	83,664	67,906
Finance cost	20	(811,303)	(669,144)
<b>Income before provision for payment in lieu of taxes</b>		<b>3,859,884</b>	<b>5,021,615</b>
<b>Provision for (recovery of) payment in lieu of taxes</b>			
Current	7	(116,300)	(144,343)
Deferred	7	919,943	1,060,573
		<b>803,643</b>	<b>916,230</b>
<b>Profit for the year before net movements in regulatory deferral account balances</b>		<b>3,056,241</b>	<b>4,105,385</b>
<b>Net movement in regulatory deferral account balances related to profit or loss and the related deferred tax movement</b>		<b>(1,218,638)</b>	<b>(1,904,502)</b>
<b>Profit for year and net movements in regulatory deferral account balances</b>		<b>1,837,603</b>	<b>2,200,883</b>
<b>Other comprehensive income: Items that will not be reclassified to profit or loss, net of income tax</b>			
Remeasurements of future employee benefits		403,607	-
<b>Total comprehensive income for the year</b>		<b>2,241,210</b>	<b>2,200,883</b>

The accompanying notes are an integral part of these financial statements.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Changes in Equity** (Expressed in Canadian Dollars)

Year ended December 31, 2015

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	Share capital \$	Accumulated other comprehensive income \$	Retained earnings \$	Total \$
<b>Balance at January 1, 2014</b>	41,931,625	(33,601)	15,985,010	57,883,034
Profit for the year and net movements in regulatory deferral account balances	-	-	2,200,883	2,200,883
Common shares issued	950,000	-	-	950,000
<b>December 31, 2014</b>	42,881,625	(33,601)	18,185,893	61,033,917
Profit for the year and net movements in regulatory deferral account balances	-	-	1,837,603	1,837,603
Other comprehensive income, net of tax	-	403,607	-	403,607
<b>December 31, 2015</b>	42,881,625	370,006	20,023,496	63,275,127

The accompanying notes are an integral part of these financial statements.

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Statement of Cash Flows** (Expressed in Canadian Dollars)

Year ended December 31	2015	2014
	\$	\$
<b>Cash flows from operating activities</b>		
Profit for the year and net movements in regulatory deferral account balance	1,837,603	2,200,883
Adjustments to reconcile income to net cash used in operating activities		
Amortization [note 15]	3,938,097	3,743,434
Payments in lieu of taxes	459,327	(353,285)
Loss on disposal of property, plant and equipment	250,745	168,777
Amortization of contributions in aid of construction	(71,801)	(26,279)
Deferred taxes	919,943	1,060,573
(Decrease) Increase in future employee benefits	(9,235)	53,013
Accretion expense related to asset retirement obligation	12,706	(1,008)
	<b>7,337,385</b>	<b>6,846,108</b>
Changes in non-cash working capital balances related to operations		
Trade and other receivables	(1,715,951)	(2,166,406)
Unbilled revenue	(846,632)	1,319,145
Stores inventory	(246,878)	(236,204)
Prepaid expenses	151,044	(48,809)
Accounts payable and accrued liabilities	4,542,024	(1,009,439)
Customer deposits and deferred contributions	1,141,500	(179,848)
Debt retirement charges payable	(33,683)	67,386
Deferred revenue	(7,430)	(9,888)
<b>Net cash flows from operating activities</b>	<b>10,321,379</b>	<b>4,582,045</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Proceeds on disposal of property, plant and equipment	31,666	212,495
Purchase of property, plant and equipment	(5,802,428)	(2,336,893)
Changes in regulatory deferral account balances	(974,472)	(2,177,986)
<b>Net cash used in investing activities</b>	<b>(6,745,234)</b>	<b>(4,302,384)</b>
<b>CASH FLOWS FROM FINANCIAL ACTIVITIES</b>		
Repayments of long-term debt	(696,277)	(557,854)
Asset retirement obligation	(22,843)	(42,542)
Other long term liabilities	3,228	-
Equity investment by Thunder Bay Hydro Corporation	-	950,000
<b>Net cash provided by (used in) financing activities</b>	<b>(715,892)</b>	<b>349,604</b>
<b>Increase in cash during year</b>	<b>2,860,253</b>	<b>629,265</b>
Cash, beginning of year	3,263,021	2,633,756
<b>Cash, end of year</b>	<b>6,123,274</b>	<b>3,263,021</b>
<b>Represented by</b>		
Cash - unrestricted	2,774,211	1,055,458
- restricted	3,349,063	2,207,563
	<b>6,123,274</b>	<b>3,263,021</b>

The accompanying notes are an integral part of these financial statements.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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### 1. CORPORATE INFORMATION

Thunder Bay Hydro Electricity Distribution Inc.'s ("the Company") main business is the distribution of electricity. The Company owns and operates an electricity distribution system, which delivers electricity to approximately 50,000 customers located in Thunder Bay, Ontario and Fort William First Nation. The address of the Company's corporate office and principal place of business is 34 Cumberland Street North, Thunder Bay, Ontario, Canada.

The sole shareholder of the Company is The Corporation of the City of Thunder Bay.

The Company was incorporated under the Business Corporations Act on October 26, 2000 and has continued as a Corporation under the Business Corporations Act of Ontario. The Company distributes electricity to residents and businesses in the City under a license issued by the Ontario Energy Board ("OEB"). The Company is regulated by the OEB and adjustments in the Company's distribution require OEB approval.

### 2. BASIS OF PREPARATION

#### a) Statement of compliance

The financial statements of Thunder Bay Hydro Electricity Distribution Inc. have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and interpretations of the International Financial Reporting Interpretations Committee ("IFRIC") of the IASB.

These are the Company's first financial statements prepared in accordance with IFRS and IFRS 1 First-time Adoption of International Financial Reporting Standards has been applied. They should be read in conjunction with the 2014 Canadian generally accepted accounting principles ("Canadian GAAP") financial statements and related notes. In this context, the term "Canadian GAAP" refers to generally accepted accounting principles before the addition of IFRS. An explanation of how the transition to IFRS has affected the reported financial position, financial performance and cash flows of the Company is provided in *[note 24]*.

The financial statements were authorized for issue by the Board of Directors on April 21, 2016.

#### b) First time adoption of IFRS

The transition to IFRS resulted in a decrease of shareholders equity of \$24,697 and \$98,901 at January 1, 2014 and December 31, 2014, respectively and an decrease in Comprehensive Income for the year ended December 31, 2014 of \$74,204 *[note 24]*. In addition, the adoption of IFRS 14, Regulatory Deferral Accounts, resulted in a significant change in presentation, as regulatory deferral accounts are now presented separately from assets and liabilities and the change in regulatory deferral accounts is presented separately from net profit.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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### c) Basis of measurement

The financial statements have been prepared on a historical cost basis. The financial statements are presented in Canadian dollars (CDN\$), which is also the Company's functional currency, and all values are rounded to the nearest dollar, unless otherwise indicated.

### d) Explanation of Activities subject to Rate Regulation

Thunder Bay Hydro Electricity Distribution Inc., as an electricity distributor, is both licensed and regulated by the OEB which has a legislative mandate to oversee various aspects of the electricity industry. The OEB exercises statutory authority through setting or approving all rates charged by the Company and establishing standards of service for the Company's customers.

The OEB has broad powers related to licensing, standards of conduct and service and the regulation of rates charged by the Company and other electricity distributors in Ontario. The Ontario government enacted the Energy Competition Act, 1998, to introduce competition of the Ontario energy market. Rates are set by the OEB on an annual basis for May 1 to April 30.

### Regulatory risk

Regulatory risk is the risk that the Province and its regulator, the OEB, could establish a regulatory regime that imposes conditions that restrict the electricity distribution business from achieving an acceptable rate of return that permits financial sustainability of its operations including the recovery of expenses incurred for the benefit of other market participants in the electricity industry such as transition costs and other regulatory assets. All requests for changes in electricity distribution charges require the approval of the OEB.

### Recovery risk

Regulatory developments in Ontario's electricity industry, including current and possible future consultations between the OEB and interested stakeholders, may affect distribution rates and other permitted recoveries in the future. Thunder Bay Hydro Electricity Distribution Inc. is subject to a cost of service regulatory mechanism under which the OEB establishes the revenues required (i) to recover the forecasted operating costs, including depreciation and amortization and income taxes, of providing the regulated service, and (ii) to provide a fair and reasonable return on utility investment, or rate base. As actual operating conditions may vary from forecast, actual returns achieved can differ from approved returns.

### Demand risk

The volume of electricity consumed by customers during any period is largely influenced by events outside of the Company's control (e.g. sustained periods of hot or cold weather could increase the consumption of electricity, sustained periods of mild weather could decrease the consumption of electricity and general economic conditions could affect overall electricity consumption). Additionally, consumption may be decreased in the future due to the impact of CDM programs, distributed generation, renewable energy, and advances in technology. Accordingly there can be no assurance that the Company will earn the revenue requirement approved by the OEB.

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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#### **e) Judgment and Estimates**

The preparation of financial statements in compliance with IFRS requires management to make certain critical accounting estimates. It also requires management to exercise judgment in applying the Company's accounting policies. The areas involving critical judgments and estimates in applying accounting policies that have the most significant risk of causing material adjustment to the carrying amounts of assets and liabilities recognized in the financial statements within the next financial year are:

- The calculation of impairment of accounts receivables [Note 22];
- The determination for the provision of Payment in Lieu of Taxes since there are many transactions and calculations for which the ultimate tax determination is uncertain [Note 7];
- The calculation of unbilled revenue [Note 5];
- The determination of the useful lives of property, plant and equipment [Note 4];
- The calculation of the net future obligation for certain unfunded health, dental and life insurance benefits for the Company's retired employees, and calculation of unvested sick leave benefits for employees [Note 8]; and
- The calculation of regulatory deferral account balances [Note 3].

In addition, in preparing the financial statements the notes to the financial statements were ordered such that the most relevant information was presented earlier in the notes and the disclosures that management deemed to be immaterial were excluded from the notes to the financial statements. The determination of the relevance and materiality of disclosures involved significant judgment.

### **3. REGULATORY DEFERRAL ACCOUNT BALANCES**

In January 2014, the IASB issued IFRS 14 as an interim standard giving organizations conducting rate-regulated activities the option of continuing to recognize regulatory balances according to the previous GAAP. Regulatory balances provide useful information about the Company's financial position, financial performance and cash flows. IFRS14 is restricted to first-time adopters of IFRS and will remain in force until either repealed or replaced by permanent guidance on rate regulated accounting from the IASB. The standard is effective for annual periods beginning on or after January 1, 2016 with early adoption permitted. The Company has elected to early adopt IFRS 14.

The Company has early adopted IFRS 14 Regulatory Deferral Accounts. In accordance with IFRS 14, the Company has continued to apply the accounting policies it applied in accordance the pre-changeover Canadian GAAP for the recognition, measurement and impairment of assets and liabilities arising from rate regulation. These are referred to as regulatory deferral account balances.

Regulatory deferral account debit balances represent future revenues associated with certain costs incurred in the current period or in prior period(s), that are expected to be recovered from consumers in future periods through the rate-setting process. Regulatory deferral account credit balances are associated with the collection of certain revenues earned in the current period or in prior period(s), that are expected to be returned to

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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consumers in future periods through the rate-setting process. Regulatory deferral account balances can arise from differences in amounts collected from customers (based on regulated rates) and the corresponding cost of noncompetitive electricity service incurred by the Company in the wholesale market administered by the Independent Electricity System Operator (the "IESO") after May 1, 2002. These amounts have been accumulated pursuant to regulation underlying the Electricity Act (the "EA") and deferred in anticipation of their future recovery or expense in electricity distribution service charges.

### *Explanation of Recognized Amounts*

Regulatory deferral account balances are recognized and measured initially and subsequently at cost. They are assessed for impairment on the same basis as other non-financial assets as described below.

Management continually assesses the likelihood of recovery of regulatory assets. If recovery through future rates is no longer considered probable, the amounts would be charged to the results of operations in the period that the assessment is made.

All amounts deferred as regulatory deferral account debit balances are subject to approval by the OEB. As such, amounts subject to deferral could be altered by the regulators. Remaining recovery periods are those expected and the actual recovery or settlement periods could differ based on OEB approval. Due to previous, existing or expected future regulatory articles or decisions, the Company has the following amounts expected to be recovered from customers (returned to customers) in future periods and as such regulatory deferral account balances arise as follows:

	January 1, 2015	Balances arising in the period	Recovery /reversal \$	December 31, 2015 \$
<b>Debit balances consist of the following:</b>				
IFRS Transitional Costs and Adjustments	396,500	10,952	-	407,452
Retailer Services	256,321	61,825	-	318,146
Deferred Taxes	(172,998)	-	(19,286)	(192,284)
	<b>479,823</b>	<b>72,777</b>	<b>(19,286)</b>	<b>533,314</b>
<b>Credit balances consist of the following:</b>				
Settlement Variances	(2,631,289)	932,143	-	(1,699,146)
Stranded Meter	(48,956)	(742)	-	(49,698)
Lost Revenue Adjustment Mechanism	(65,597)	(782)	-	(66,379)
Renewable Generation	(26,364)	(10,042)	-	(36,406)
Deferred Taxes	30,356	-	404	30,760
	<b>(2,741,850)</b>	<b>920,577</b>	<b>404</b>	<b>(1,820,869)</b>
<b>Net</b>	<b>(2,262,027)</b>	<b>993,354</b>	<b>(18,882)</b>	<b>(1,287,555)</b>

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

	January 1, 2014	Balances arising in the period	Recovery /reversal \$	December 31, 2014 \$
<b>Debit balances consist of the following:</b>				
IFRS Transitional Costs and Adjustments	342,779	1,641	52,080	396,500
Retailer Services	168,999	87,322	-	256,321
Smart Meter	448,130	-	(448,130)	-
Deferred Taxes	(254,376)	-	81,378	(172,998)
	705,532	88,963	(314,672)	479,823
<b>Credit balances consist of the following:</b>				
Lost Revenue Adjustment Mechanism Variance	(65,597)	-	-	(65,597)
Stranded Meter	(249,044)	200,088	-	(48,956)
Settlement Variances	(4,906,358)	2,275,069	-	(2,631,289)
Renewable Generation	(7,926)	(18,438)	-	(26,364)
Deferred Taxes	83,380	-	(53,024)	30,356
	(5,145,545)	2,456,719	(53,024)	(2,741,850)
<b>Net</b>	<b>(4,440,013)</b>	<b>2,545,682</b>	<b>(367,696)</b>	<b>(2,262,027)</b>

"Balances arising in the period" column consists of new additions to regulatory balances (for both debits and credits)

"Recovery/Reversal" column consists of amounts collected through rate riders or transactions reversing an existing regulatory balance

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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The Company expects to apply for disposition of these account balances at its next rate order application for rates effective May 1, 2017. The Company will not apply for disposition of the deferred tax balance since it will be reversed through timing differences in the recognition of deferred tax assets.

Carrying charges at a rate of 1.47% in the 1<sup>st</sup> quarter and 1.10% for the 2<sup>nd</sup> – 4<sup>th</sup> quarters have been added to the regulatory balances in accordance with the OEB's direction.

### **International Financial Reporting Standards ("IFRS") transitional costs and adjustments:**

This regulatory balance includes one-time administrative incremental IFRS transitional costs and the differences arising from accounting policy changes for property, plant and equipment ("PP&E") to the transition from GAAP to IFRS effective January 1, 2014.

One-time administrative incremental IFRS transitional costs of \$10,952 (2014 - \$1,641) relates to the transition of accounting policies, procedures, systems and processes to IFRS, for costs which were not already approved and included for recovery in distribution rates. The OEB has permitted these costs to be captured for future rate recovery. As at December 31, 2015, the total for IFRS transitional costs are \$127,066 (2014 - \$116,114).

Costs associated with accounting policy changes for PP&E due to the transition from GAAP to IFRS were deferred for future recovery were \$nil (2014 - \$52,080). As at December 31, 2015, the total for GAAP to IFRS transition costs are \$280,386 (\$2014 - \$280,386).

The Company expects to request disposition of these balances in its next rate application, for rates to be effective May 1, 2017.

### **Retailer Services:**

This regulatory balance relates to the net of revenues and costs of services pertaining to the supply of competitive electricity to retailer customers. Net costs have been captured for future rate recovery. The Company expects to request disposition of this balance in its next rate application, for rates to be effective May 1, 2017.

### **Deferred Taxes:**

This regulatory balance relates to both deferred tax amounts reclassified under IFRS14 and to the expected future electricity distribution rate increase for customers arising from timing differences in the recognition of deferred tax assets.

The amounts reclassified under IFRS14 include the deferred tax asset related to regulatory net debit balance of \$192,284 (2014 - \$172,998).

### **Settlement Variances:**

This regulatory account includes the variances between the amounts billed to ratepayers based on regulatory rates, and the corresponding costs of electricity and non-competitive electricity service costs incurred to service those customers.

The settlement variances relate primarily to commodity charges, non-competitive electricity charges and the global adjustment and in accordance with the criteria set out in the accounting principles prescribed by the OEB, these variances have been deferred.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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These variances are for future disposition and the regulator determines in all cases, when the balances are material enough to warrant an adjustment to rates.

The Company expects to request disposition of this balance in its next rate application, for rates to be effective May 1, 2017.

### **Stranded Meters:**

The provincial government mandated the installation of smart meters for all residential and small business rate payers in Ontario by 2010.

The OEB recognized that the installation of smart metres would mean that older meters would be retired earlier than planned and that the costs associated with retired meters would not have been fully depreciated. As a result, in May 2013 the OEB approved these stranded costs to be recoverable and approved the recovery of the stranded asset cost from Residential and General Service < 50 kW ratepayers for a one year period, ending April 30, 2014.

The Company expects to request disposition of this remaining credit balance in its next rate application, for rates to be effective May 1, 2017.

### **Lost Revenue Adjustment Mechanism:**

This regulatory balance relates to the variance between the OEB approved Conservation and Demand Management ("CDM") forecast and the actual results at the customer rate class level for the period 2011-2014.

The Company expects to request disposition of this balance in its next rate application, for rates to be effective May 1, 2017.

### **Renewable Generation:**

Ontario's *Green Energy Act, 2009* (GEA) was created to expand renewable energy generation, encourage energy conservation and promote the creation of clean energy jobs. The Company is required to plan its systems on the expectations of new electricity generation projects connecting to its systems. As a result, the OEB allowed for funding to recover the cost of assets to enable and to connect renewable generation.

The OEB has permitted incremental operating, maintenance, amortization and administrative expense directly related to expansions to connect renewable generation facilities, and renewable enabling improvements to be captured for future rate recovery. This regulatory balance includes a debit balance \$12,376 (2014 - \$nil) for such costs.

As part of its 2013 rate application, the Company had its Basic Green Energy Act plan accepted and the OEB approved external funding through the province for renewable enabling improvements. As of December 31, 2015, the Company has a credit balance of \$48,782 (2014 - \$26,364) for the funding received from the province, pertaining to renewable enabling improvements that have not materialized.

The Company expects to request disposition of this balance in its next rate application, for rates to be effective May 1, 2017.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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### Smart Meter:

A Smart Meter Disposition Rider (SMDR) recovered, over a specified period of time, the variance between: 1) the deferred revenue requirement for the installed smart meters up to the time of disposition; and 2) the Smart Meter Funding Adder ("SMFA") revenues and related interest collected from 2006 to April 30, 2012. The resulting SMDR liability was \$1,136,137.

The OEB approved the recovery of this balance through a two year rate rider to Residential and General Service < 50kW rate payers ending April 30, 2014. The balance was fully recovered in 2014.

### Deferred tax:

The recovery from, or refund to, customers of deferred income taxes through future rates is recognized as a regulatory deferral account balance. The Company has recognized deferred taxes of \$30,760 [2014 - \$30,356]. The deferred tax balance is presented within the total regulatory deferral account balances presented in the statement of financial position.

## 4. PROPERTY, PLANT AND EQUIPMENT

### *Recognition and measurement*

Property, plant and equipment (PP&E) are recognized at cost, being the purchase price and directly attributable cost of acquisition or construction required to bring the asset to the location and condition necessary to be capable of operating in the manner intended by the Company, including eligible borrowing costs.

Depreciation of PP&E is recorded in the Statements of Comprehensive Income on a straight-line basis over the estimated useful life of the related asset. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

The estimated useful lives are as follows:

Buildings	2%
Distribution and transformation equipment	1% to 6%
Other assets	3.3% to 5%
Rolling stock	5% to 8%

Land is not depreciated.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

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*Major spare parts*

Major spares such as spare transformers and meters kept as standby/back up equipment are accounted for as PP&E since they support the Company's distribution system reliability, but are not depreciable until installed.

*Contributions in aid of construction*

When an asset is received as a capital contribution, the asset is initially recognized at its fair value, with the corresponding amount recognized as contributions in aid of construction.

*Gains and losses on disposal*

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the net proceeds from disposal with the carrying amount of the asset, and are included in the Statement of Comprehensive Income when the asset is disposed of. When an item of property, plant and equipment with related Contributions in aid of construction is disposed, the remaining deferred revenue is recognized in full in the Statement of Comprehensive Income.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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	Land and Buildings	Distribution equipment	Transformation equipment	Renewable Solar	Other Fixed Assets	Construction- in-progress	Total
<b>Cost</b>							
Balance as of January 1, 2014	\$7,406,218	\$148,402,901	\$8,639,193	\$3,679,113	\$16,357,545	\$2,147,194	\$186,632,164
Additions	1,530	8,931,475	39,038	-	988,524	741,545	10,702,112
Disposals		(1,296,496)			(357,141)		(1,653,637)
Balance as of December 31, 2014	7,407,748	156,037,880	8,678,231	3,679,113	16,988,928	2,888,739	195,680,639
Additions	152,835	10,406,182			1,195,149	125,762	11,879,928
Disposals		(1,387,495)			(514,202)		(1,901,697)
Balance as of December 31, 2015	<b>7,560,583</b>	<b>165,056,567</b>	<b>8,678,231</b>	<b>3,679,113</b>	<b>17,669,875</b>	<b>3,014,501</b>	<b>205,658,870</b>
<b>Accumulated depreciation</b>							
Balance as of January 1, 2014	\$1,970,931	\$78,512,024	\$6,666,690	\$104,897	\$12,619,618	\$-	\$99,874,160
Depreciation for the year	217,514	2,555,409	249,740	183,956	554,150	-	3,760,769
Disposals		(868,780)			(344,919)		(1,213,699)
Balance as of December 31, 2014	2,188,445	80,198,653	6,916,430	288,853	12,828,849	-	102,421,230
Depreciation for the year	191,984	2,756,550	225,108	183,956	630,160	-	3,987,758
Disposals		(1,090,824)			(509,502)		(1,600,326)
Balance as of December 31, 2015	<b>2,380,429</b>	<b>81,864,379</b>	<b>7,141,538</b>	<b>472,809</b>	<b>12,949,507</b>	<b>-</b>	<b>104,808,662</b>
<b>Net Book Value</b>							
At January 1, 2014	5,435,287	69,890,877	1,972,503	3,574,216	3,737,927	2,147,194	86,758,004
At December 31, 2014	5,219,303	75,839,227	1,761,801	3,390,260	4,160,079	2,888,739	93,259,409
At December 31, 2015	<b>5,180,154</b>	<b>83,192,188</b>	<b>1,536,693</b>	<b>3,206,304</b>	<b>4,720,368</b>	<b>3,014,501</b>	<b>100,850,208</b>

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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#### **5. REVENUE**

Revenue is recognized to the extent that it is probable that economic benefits will flow to the Company and that the revenue can be reliably measured. Revenue is comprised of sales and distribution of energy, pole use rental, collection charges, investment income and other miscellaneous revenues.

As a licensed distributor, the Company is responsible for billing customers for electricity generated by third parties and the related costs of providing electricity service, such as transmission services and other services provided by third parties. The Company is required, pursuant to regulation, to remit such amounts to these third parties, irrespective of whether the Company ultimately collects these amounts from customers. The Company has determined that they are acting as a principal for the electricity distribution and, therefore, have presented the electricity revenues on a gross basis.

Electricity sales are recognized on an accrual basis, including unbilled revenues accrued in respect of electricity delivered but not yet billed. Customer billings for electricity sales are recorded based on meter readings.

Other revenues, which include revenues from pole use rental, collection charges and other miscellaneous revenues are recognized at the time services are provided. Where the Company has an ongoing obligation to provide services, revenues are recognized as the service is performed and amounts billed in advance are recognized as deferred revenue.

Certain assets may be acquired or constructed with financial assistance in the form of contributions from customers when the estimated revenue is less than the cost of providing service or where special equipment is needed to supply the customers' specific requirements. Since the contributions will provide customers with ongoing access to the supply of electricity, these contributions are classified as contributions in aid of construction and are amortized as revenue on a straight-line basis over the useful life of the constructed or contributed asset.

When an asset is received as a capital contribution, the asset is initially recognized at its fair value, with the corresponding amount recognized as contributions in aid of construction [note 11].

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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### 6. TRADE AND OTHER RECEIVABLES

	December 31, 2015 \$	December, 31 2014 \$	January 1, 2014 \$
Trade receivables	12,961,795	10,765,681	8,613,633
Less: provision for impairment of trade receivables	(498,692)	(371,196)	(422,979)
Trade receivables - net	12,463,103	10,394,485	8,190,654
(Payable) receivable from related parties	(39,043)	(67,366)	44,861
Loans to related parties	114,331	114,331	114,331
Other receivables	1,328,716	1,709,706	1,634,904
Total trade and other receivables	13,867,107	12,151,156	9,984,750
Less: non-current portion - loaned to related parties	(114,331)	(114,331)	(114,331)
<b>Current portion</b>	<b>13,752,776</b>	<b>12,036,825</b>	<b>9,870,419</b>

The carrying value of trade and other receivables classified as loans and receivables approximate fair value due to their short maturity.

### 7. PAYMENTS IN LIEU OF TAXES PAYABLE

The Company is a Municipal Electricity Utility ("MEU") for purposes of the payments in lieu of taxes ("PILs") regime contained in the Electricity Act, 1998. As an MEU, the Company is exempt from tax under the Income Tax Act (Canada) and the Corporations Tax Act (Ontario).

Under the Electricity Act, 1998, the Company is required to make, for each taxation year, PILs to Ontario Electricity Financial Corporation ("OEFC"), commencing October 1, 2001. These payments are calculated in accordance with the rules for computing taxable income and taxable capital and other relevant amounts contained in the Income Tax Act (Canada) and the Corporation Tax Act (Ontario) as modified by the Electricity Act, 1998, and related regulations.

PILs expense is comprised of current and deferred tax. Current tax and deferred tax are recognized in comprehensive income except to the extent that it relates to items recognized directly in equity or regulatory deferral account balances [note 3].

Significant judgment is required in determining the provision for PILs. There are many transactions and calculations undertaken during the ordinary course of business for which the ultimate tax determination is uncertain. The Company recognizes liabilities for anticipated tax audit issues based on the Company's current understanding of the tax law. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred tax provision in the period in which such determination is made.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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The income tax expense varies from amounts which would be computed by applying the Company's combined statutory income tax rate as follows:

	2015 \$	2014 \$
Earnings before provision for taxes	2,641,246	3,117,113
Statutory Canadian federal and provincial income tax rate (%)	26.50	26.50
Expected provision	699,930	826,035
Increase (decrease) in income tax resulting from:		
Permanent differences	8,691	13,467
Apprenticeship tax credit	(29,158)	(38,180)
Other	36,276	27,937
Corporate minimum tax	87,904	86,971
<b>Tax provision</b>	<b>803,643</b>	<b>916,230</b>
<b>Effective tax rate</b>	<b>30.43%</b>	<b>29.39%</b>

The significant components of the tax effect of the amount recognized in other comprehensive income are composed of:

	2015 \$	2014 \$
<b>Deferred tax</b>		
Remeasurements of defined benefit plan	145,518	-

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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The movement in the 2015 deferred tax assets and liabilities are:

	Opening balance January 1, 2015	Recognize in net income	Recognize in OCI \$	Closing balance at December 31, 2015 \$
<b>2015</b>				
<b>Deferred tax asset</b>				
Property, plant and equipment	1,520,734	(1,411,545)	-	109,189
Employee future benefits	788,008	(2,447)	(145,518)	640,043
Contributions in aid of construction	559,352	506,911	-	1,066,263
Asset retirement obligation	82,447	(9,757)	-	72,690
Cumulative eligible capital	12,922	(905)	-	12,017
	<b>2,963,463</b>	<b>(917,743)</b>	145,518	<b>1,900,202</b>
<b>Deferred tax liability</b>				
Intangible asset	(29,488)	(2,200)	-	(31,688)
	<b>2,933,975</b>	<b>(919,943)</b>	145,518	<b>1,868,514</b>
<hr/>				
	Opening balance January 1, 2014 \$	Recognize in net income \$	Recognize in OCI \$	Closing balance at December 31, 2014 \$
<b>2014</b>				
<b>Deferred tax asset</b>				
Property, plant and equipment	3,126,158	(1,605,424)	-	1,520,734
Employee future benefits	773,960	14,048	-	788,008
Contributions in aid of construction	-	559,352	-	559,352
Asset retirement obligation	106,898	(24,451)	-	82,447
Cumulative eligible capital	13,894	(972)	-	12,922
	<b>4,020,910</b>	<b>(1,057,447)</b>	-	<b>2,963,463</b>
<b>Deferred tax liability</b>				
Intangible asset	(26,362)	(3,126)	-	(29,488)
	<b>3,994,548</b>	<b>(1,060,573)</b>	-	<b>2,933,975</b>

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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At December 31, 2015, a deferred tax asset of \$1,900,202 (2014 - \$2,963,463) has been recorded. The utilization of this tax asset is dependent on future taxable profits in excess of profits arising from the reversal of existing taxable temporary differences. The Company believes that this asset should be recognized as it will be recovered through future rates.

### 8. EMPLOYEE FUTURE BENEFITS

#### *Defined contribution plan*

The employees of the Company participate in the Ontario Municipal Employees Retirement System ("OMERS"). The Company also makes contributions to the OMERS plan on behalf of its employees. The plan has a defined benefit option at retirement available to some employees, which specifies the amount of the retirement benefit plan to be received by the employees based on length of service and rates of pay. However, the plan is accounted for as a defined contribution plan as insufficient information is available to account for the plan as a defined benefit plan. The contribution payable in exchange for services rendered during a period is recognized as an expense during that period. The employer portion of amounts paid to OMERS during the year was \$1,085,787 (2014 - \$1,056,358).

#### *Defined benefit plans*

The Company provides certain unfunded health, dental and life insurance benefits on behalf of its retired employees. These benefits are provided through a group defined benefit plan. The Company's net obligation for these benefits is calculated by estimating the amount of future benefits that are expected to be paid out discounted to determine its present value. Any unrecognized past service costs are deducted. The Company has also provided for a provision for non-vested sick leave benefits to current employees.

The cost of these benefits are determined using actuarial valuations. An actuarial valuation involves making various assumptions. Due to the complexity of the valuation, the underlying assumptions and its long term nature, the cost of these benefits are highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

The calculation is performed by a qualified actuary using the projected unit credit method discounted to its present value using yields available on high quality corporate bonds that have maturity dates approximating to the terms of the liabilities. The valuation is performed every third year or when there are significant changes to workforce.

Remeasurements of the defined benefit obligation are recognized directly within equity in other comprehensive income. The remeasurements include actuarial gains and losses.

Service costs include current and past service costs as well as gains and losses on curtailments.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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Net interest expense is calculated by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the balance of the net defined benefit obligation, considering the effects of benefit payments during the period. Gains or losses arising from changes to defined benefits or plan curtailment are recognized immediately in the Statement of Comprehensive Income. Settlements of defined benefit plans are recognized in the period in which the settlement occurs.

### *Other long-term service benefits*

Other employee benefits that are expected to be settled wholly within 12 months after the end of the reporting period are presented as current liabilities. Other employee benefits that are not expected to be settled wholly within 12 months after the end of the reporting period are presented as non-current liabilities and calculated using the projected unit credit method and then discounted using yields available on high quality corporate bonds that have maturity dates approximating to the expected remaining period to settlement.

The plan is exposed to a number of risks, including:

Interest rate risk: decreases/increases in the discount rate used (high quality corporate bonds) will increase/decrease the defined benefit obligation.

Longevity risk: changes in the estimation of mortality rates of current and former employees.

Health care cost risk: increases in cost of providing health, dental and life insurance benefits.

Information about the group unfunded defined benefit plan as a whole and changes in the present value of the unfunded defined benefit obligation and the accrued benefit liability are as follows:

	Defined benefit liability	
	2015	2014
	\$	\$
Accrued benefit obligation at January 1	2,973,616	2,920,603
Current service costs	82,248	109,861
Interest cost	91,434	91,203
	3,147,298	3,121,667
Remeasurement loss (gain):		
Changes in financial assumptions	(153,404)	-
Changes in demographic assumptions	17,152	-
Changes in experience and methodology assumptions	(412,873)	-
	2,598,173	3,121,667
Benefits paid in the year or moved to current liability	(182,917)	(148,051)
	2,415,256	2,973,616

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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The main actuarial assumptions underlying the valuations are as follows:

[a] General inflation:

Future general inflation levels, as measured by changes in the Consumer Price Index ("CPI"), were assumed at 2.0% [2014 - 2.0%].

[b] Interest (Discount) Rate

The obligation at year end, of the present value of future liabilities and the expense for the year ended, were determined using a discount rate of 4.0% (2014 3.8%). The discount rate for 2015 reflects the assumed long term yield on high quality bonds as at December 31, 2015 (most recent valuation date).

[c] Salary levels:

Future general salary and wage levels were assumed to increase at 2.9% per annum [2014- 2.9%]

[d] Medical costs:

Medical costs were assumed to increase at a rate of 6.50% in 2015 graded-down by .25% per annum leveling off at 4.60% in 2024 and thereafter [2014 - 6.70% graded-down by .30% per annum leveling off at 4.60% in 2021].

The corporation's sick accrual is included above in the amount of \$631,200 (2014 - \$895,100) and is the accumulation of non-vested sick leave benefits under IAS 19 standards for financial reporting purposes. The company hired an outside consulting firm to assess the future payments to be made as a result of the company's employees' sick leave bank hours. The discount rate used was 4.0% per annum at December 31, 2015 and 3.08% per annum at December 31, 2014 and January 1, 2014. The future general salary and wage levels were assumed to increase at 2.9% per annum.

If the discount rate increased to 5% the accrued benefit obligation would decrease to approximately \$2,112,700. If the discount rate decreased to 3% the accrued benefit obligation would increase to approximately \$2,572,700.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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### 9. OTHER OPERATING REVENUE

Major components of other operating revenues consist of the following:

	December 31, 2015 \$	December 31, 2014 \$
Pole line rentals	493,804	493,804
Competitive market revenues	172,144	173,074
Income from affiliates	404,400	390,828
Sundry	142,936	441,868
Reconnection and change of occupancy charges	369,137	290,320
Late payment charges	326,892	329,078
FIT Revenue	646,072	545,214
Recoverable	1,111,011	157,184
IESO program income	6,502,216	2,109,075
Amortization of contributions in aid of construction	71,801	26,379
	<b>10,240,413</b>	<b>4,956,824</b>

### 10. CUSTOMER DEPOSITS AND DEFERRED CONTRIBUTIONS

Customer deposits represents cash deposits from electricity distribution customers and retailers, as well as construction deposits.

Deposits from electricity distribution customers are refundable to customers demonstrating an acceptable level of credit risk as determined by the Company in accordance with policies set out by the OEB or upon termination of their electricity distribution service.

Construction deposits represent cash prepayments for the estimated cost of capital projects recoverable from customers and developers. Upon completion of the capital project, these deposits are transferred to contributions in aid of construction. The carrying value of the customer deposits approximates fair value because the amounts are payable on demand.

	December 31, 2015 \$	December 31, 2014 \$	January 1, 2014 \$
Customer deposits	2,048,538	1,237,481	1,208,717
Construction deposits	1,300,525	970,082	1,178,694
<b>Total customer deposits</b>	<b>3,349,063</b>	<b>2,207,563</b>	<b>2,387,411</b>

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

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**11. CONTRIBUTIONS IN AID OF CONSTRUCTION**

	December 31, 2015 \$	December 31, 2014 \$	January 1, 2014 \$
<b>Contributions, net, beginning of year</b>	<b>2,110,763</b>	-	-
Contributions in aid of construction received	1,984,671	2,137,042	-
Contributions in aid of construction recognized as revenue	(71,801)	(26,279)	-
<b>Contribution, net, end of year</b>	<b>4,023,633</b>	<b>2,110,763</b>	-

**12. NOTE PAYABLE TO THE CORPORATION OF THE CITY OF  
THUNDER BAY**

The note is a non-interest bearing, unsecured note payable to The Corporation of the City of Thunder Bay (sole shareholder of Thunder Bay Hydro Corporation, the Company's parent company) and not due within one year. The fair value of this amount is approximately \$8,098,000.

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

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**13. LONG-TERM DEBT**

Long-term debt consists of the following:

	December 31, 2015 \$	December, 31 2014 \$	January 1, 2014 \$
Bank term loan payable in monthly instalments of \$64,400 including interest at 5.27%, maturing July, 2024.	5,328,320	5,806,592	6,260,358
Promissory note payable in semi annual instalments of \$167,663 including interest at 4.04%, maturing June, 2043.	5,537,074	5,645,409	5,749,497
Promissory note payable in semi annual instalments of \$176,067 including interest at 3.96%, maturing October, 2044.	6,040,330	6,150,000	-
Promissory note payable in semi annual instalments of \$111,616 including interest at 3.75%, maturing March 2046.	4,000,000	-	-
	<b>20,905,724</b>	17,602,001	12,009,855
Less amounts included in current liabilities	767,529	696,277	557,848
<b>Long-term portion</b>	<b>20,138,195</b>	16,905,724	11,452,007

Principal repayments required over the next five years are as follows:

	\$
2016	767,529
2017	842,604
2018	883,681
2019	926,802
2020	972,068
Thereafter	16,513,040
	<b>20,905,724</b>

As collateral for the above loans, the Corporation has provided a general security agreement representing a first charge on all assets and undertaking, excluding solar assets.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

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**14. ASSET RETIREMENT OBLIGATION**

A reconciliation between the opening and closing ARO liability balances is as follows:

	2015	2014
	\$	\$
Balance, beginning of year	311,122	403,388
Adjustment for change in estimates	(26,685)	(48,716)
ARO liabilities settled in the year	(22,843)	(42,542)
Accretion expense	12,706	(1,008)
	<b>274,300</b>	<b>311,122</b>

At December 31, 2015, the Corporation estimates the undiscounted amount of cash flows required over the five years (2014 - six years) to settle the ARO is \$397,543 (2014 - \$469,542). A discount rate of 4.60% (2014 - 4.60%) was used to calculate the carrying value of the ARO liabilities. No assets have been restricted for settlement of the liability.

**15. AMORTIZATION**

	2015	2014
	\$	\$
Amortization of general plant	2,981,659	2,858,859
Amortization of wholesale meters	50,893	50,892
Amortization of unallocated office and data processing equipment	120,769	75,583
	<b>3,153,321</b>	<b>2,985,334</b>
Amortization of other property, plant and equipment included in relevant expense categories in the Statement of Comprehensive Income	885,330	826,327
	<b>4,038,651</b>	<b>3,811,661</b>
Amortization included in capitalized expenditures	100,554	68,227
Amortization of property, plant and equipment	3,887,204	3,692,542
Amortization of intangible assets	50,893	50,892
	<b>4,038,651</b>	<b>3,811,661</b>

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

**16. INTANGIBLE ASSETS**

*Capital contributions*

Payments to Hydro One for required upgrades on their metering equipment are classified as intangible assets. Capital contributions are measured at cost less accumulated amortization and accumulated impairment losses.

*Amortization*

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful life of the intangible asset, from the date that it was available for use. The amortization method and useful life of the intangible asset is reviewed at each reporting date. Capital contributions are amortized at a rate of 4%.

	<b>Capital contributions to Hydro One for wholesale meters</b>
<b>Cost</b>	
Balance as of January 1, 2014	\$1,272,321
Additions	-
Disposals	-
Balance as of December 31, 2014	1,272,321
Additions	-
Disposals	-
Balance as of December 31, 2015	<b>1,272,321</b>
<b>Accumulated depreciation</b>	
Balance as of January 1, 2014	\$187,919
Depreciation for the year	50,892
Disposals	-
Balance as of December 31, 2014	238,811
Depreciation for the year	50,893
Disposals	-
Balance as of December 31, 2015	<b>289,704</b>
<b>Carrying amounts</b>	
At January 1, 2014	1,084,402
At December 31, 2014	1,033,510
At December 31, 2015	<b>982,617</b>

See note 15 for details of amortization for the year.

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

December 31, 2015

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#### **17. RELATED PARTY TRANSACTIONS**

##### **The ultimate parent**

The common shares of Thunder Bay Hydro Distribution Inc. are owned by The Corporation of the City of Thunder Bay, the ultimate parent, which constitutes a local government. Consequently, the Company is exempt from some of the general disclosure requirements of IAS 24 with relation to transactions with government-related parties, and has applied the government-related disclosure requirements.

##### **Transactions with related parties**

The Company provides certain services to The Corporation of the City of Thunder Bay in the normal course of business at commercial rates.

For the year ended December 31, 2015, pole rental revenue from The Corporation of the City of Thunder Bay in the amount of \$316,230 [2014 - \$316,230] and other sundry revenues in the amount of \$103,301 [2014 - \$66,300] were recorded. The Corporation of the City of Thunder Bay also contributed towards capital construction during the year in the amount of \$83,816 [2014 - \$461,404]. Included in "Accounts receivable" is \$11,912 [2014 - \$4,509] receivable from The Corporation of the City of Thunder Bay related to these other activities. Included in "Customer deposits" is \$345,121 [2014 - \$237,714] held as deposit from The Corporation of the City of Thunder Bay related to capital work to be completed.

For the year ended December 31, 2015, the Company billed electricity revenues in the amount of \$8,828,539 [2014 - \$8,021,275] to The Corporation of the City of Thunder Bay. At December 31, 2015, included in "Accounts receivable" is \$847,660 [2014 - \$949,964] receivable from The Corporation of the City of Thunder Bay, related to this electricity revenue.

The Company purchases certain services from The Corporation of the City of Thunder Bay in the normal course of business at commercial rates. For the year ended December 31, 2015, the Company was charged rent of \$325,941 [2014 - \$322,714], telecommunication capital and operating costs of \$210,449 [2014 - \$254,062], water billings of \$12,533 [2014 - \$11,166], property taxes of \$270,701 [2014 - \$136,124], Solar lease fees of \$18,936 [2014 - \$15,558], IESO incentives of \$64,564 [2014 - \$36,363] and various sundry amounts of \$44,839 [2014-\$40,281].

##### **Companies under Common Control**

The Company provides services to Thunder Bay Hydro Utility Services Inc. ("TBHUSI") at cost plus the higher of bank prime and the Corporation's approved rate of return of 7.00%. During 2015, the Company charged TBHUSI \$247,211 [2014 - \$293,814] for direct costs and administration fees.

The Company provides services to Thunder Bay Hydro Renewable Power Incorporated ("TBHRPI") for cost plus an annual administrative charge of \$8,000 [2014 - \$8,000].

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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During 2015, the Company charged TBHRPI \$82,463 [2014 - \$86,994] for direct costs and administration fees.

The Company also charged interest at bank prime on outstanding advances from TBHRPI. Interest charged during 2015 was \$3,185 [2014 - \$3,430].

The Company is reimbursed by Thunder Bay Hydro Corporation ("TBHC"), the parent company, for costs associated with the compensation for TBHC Board of Director fees at cost. During 2015, the Company charged TBHC \$6,538 [2014 - \$6,591] for direct costs and administration fees.

### Key management personnel compensation comprised:

The key management personnel of the Company has been defined as members of its board of directors and executive management team members.

	2015 \$	2014 \$
Compensation	869,961	867,140
Short-term employee benefits and director fees	44,509	40,081
Post-employment benefits	165,883	151,865
	<b>1,080,353</b>	<b>1,059,086</b>

### 18. INVENTORY

Cost of inventory is comprised of direct materials, which typically consists of distribution assets not deemed as major spares, unless purchased for specific capital projects in process or as spare units. Costs, after deducting rebates and discounts, are assigned to individual items of inventory on the basis of weighted average cost. Decommissioned assets that are transferred to inventory are tested for impairment once they are removed from service and placed in inventory. Inventory is recognized at the lower of cost and net realizable value.

The amount of inventories consumed by the Company and recognized as an expense during 2015 was \$325,635 [2014 - \$296,724].

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

December 31, 2015

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#### **19. SHARE CAPITAL**

a) Ordinary shares

An unlimited number of common shares are authorized for issue and unlimited Class A common shares. There are no preference shares.

As of December 31, 2015, the Company has issued and fully paid 951,000 (December 31, 2014: 951,000; January 1, 2014: 1,000) common shares and 7,000,000 (December 31, 2014: 7,000,000; January 1, 2014: 7,000,000) Class A common shares. The shares have no par value.

All shares are ranked equally with regards to the Company's residual assets.

b) Movement in ordinary share capital

No movement in ordinary share capital has occurred during 2015. In 2014 950,000 common shares were issued to Thunder Bay Hydro Corporation for cash consideration of \$950,000.

c) Nature and purpose of equity

The reserves recorded in equity on the Company's Statement of Financial Position include 'Share capital' and 'Retained earnings'.

'Share capital' is used to record the issuance of equity.

'Retained earnings' is used to record the Company's change in retained earnings from year to year.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

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**20. FINANCE INCOME AND FINANCE COST**

**Cash and cash equivalents**

Cash and cash equivalents include cash on hand, deposits held at all financial institutions, maturities of three months or less that are readily convertible to known amounts of cash and subject to an insignificant risk of change in value.

**Financial assets**

Financial assets are classified as loans and receivables.

These include cash, accounts receivables and loan to related party. Collectability of accounts receivable is reviewed on an ongoing basis. Accounts receivable which are known to be uncollectible are written off. A provision for doubtful receivables is established when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of future cash flows. The amount of the provision is recognized in the Statement of Comprehensive Income.

**Financial liabilities**

Accounts payable and accrued liabilities, note payable to the City of Thunder Bay, customer deposits, long-term debt, and other payables are classified as other financial liabilities. These liabilities are measured at amortized cost.

**Customer Deposits**

Customers may be required to post security to obtain electricity or other services, which are refundable. Where the security posted is in the form of cash or cash equivalents, these amounts are recorded in the accounts as deposits, which are reported separately from the Company's own cash and cash equivalents. Deposits to be refunded to customers within the next fiscal year are classified as a current liability. Interest rates paid on customer deposits are based on the Bank of Canada's prime business rate less 2%.

Also included in this balance are cash and securities lodged with the Company by counterparties under electricity supply agreements.

Finance income comprises of interest income on funds invested such as cash and short-term investments. Interest income is recognized as it accrues in the Statement of Comprehensive Income, using the effective interest method.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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Finance cost comprises of interest payable on debt and impairment losses recognized on financial assets and net interest on employee future benefits.

	2015	2014
	\$	\$
<b>Finance Income:</b>		
Interest income on bank deposits	83,664	67,906
	<b>83,664</b>	<b>67,906</b>
<b>Finance Cost:</b>		
Interest on debt	811,303	669,144
Net interest on employee future benefits	91,434	91,203
	<b>902,737</b>	<b>760,347</b>

### 21. STAFF COSTS

	2015	2014
	\$	\$
<b>Staff costs</b>		
Wages, salaries and employee short-term benefits	11,977,430	10,930,851
Post-employment benefits	1,840,428	877,053
	<b>13,817,858</b>	<b>11,807,904</b>

### 22. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

i. Credit risk:

Financial assets carry credit risk that a counter-party will fail to discharge an obligation which would result in a financial loss. Financial assets held by the Company, such as accounts receivable, expose it to credit risk. The Company earns its revenue from a broad base of customers located in the City. No single customer accounts for revenue in excess of 10% of total revenue.

## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

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The carrying amount of accounts receivable is reduced through the use of an allowance for impairment and the amount of the related impairment loss is recognized in the statement of comprehensive income. Subsequent recoveries of receivables previously provisioned are credited to the statement of comprehensive income. The balance of the allowance for impairment at December 31, 2015 is \$498,692 (2014 - \$371,196). An impairment loss of \$233,191 (2014 - \$68,322) was recognized during the year. The Corporation's credit risk associated with accounts receivable is primarily related to payments from distribution customers. At December 31, 2015, approximately \$784,680 (2014 - \$824,513) is considered 60 days past due. The Company has approximately 50,000 customers, the majority of which are residential. Credit risk is managed through collection of security deposits from customers in accordance with directions provided by the OEB. As at December 31, 2015, the Company holds security deposits in the amount of \$2,048,538 (2014 - \$1,237,481). The Corporation's activities provide for a variety of financial risks, particularly credit risk, market risk and liquidity risk.

ii. Market risk:

The Company is not exposed to significant market risk given they do not have investments in foreign currency, and have minimal investment in interest bearing instruments.

iii. Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The Company monitors its liquidity risk to ensure access to sufficient funds to meet operational and investing requirements. The Company's objective is to ensure that sufficient liquidity is on hand to meet obligations as they fall due while minimizing interest exposure. The Company has access to a \$6,395,495 line of credit and monitors cash balances to ensure that sufficient levels of liquidity are on hand to meet financial commitments as they come due.

The following table sets out the contractual maturities (representing undiscounted contractual cash-flows) of financial liabilities:

	Up to 12 months \$	Between 1-5 years \$	Over 5 years \$
<b>At December 31, 2015</b>			
Accounts payable and accrued liabilities	17,724,858	-	-
Customer deposits and deferred contributions	3,349,063	-	-
Debt retirement charges payable to The Corporation of the City of Thunder Bay	555,932	-	-
Long-term debt	-	-	26,490,500
	767,529	3,625,155	16,513,040
	<b>22,397,382</b>	<b>3,625,155</b>	<b>43,003,540</b>

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

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**At December 31, 2014**

Accounts payable and accrued liabilities	13,182,834	-	-
Customer deposits and deferred contributions	2,207,563	-	-
Debt retirement charges payable	589,615	-	-
Note payable to The Corporation of the City of Thunder Bay	-	-	26,490,500
Long-term debt	696,277	3,139,655	13,766,069
	<u>16,676,289</u>	<u>3,139,655</u>	<u>40,256,569</u>

**23. CAPITAL MANAGEMENT**

The main objectives of the Company, when managing capital, are to ensure ongoing access to funding to maintain and improve the electricity distribution system, prudent management of its capital structure with regard for recoveries of financing charges permitted by the OEB on its regulated electricity distribution business, and to deliver the appropriate financial returns.

The Company's definition of capital is shareholder's equity. As at December 31, 2015, shareholder's equity amounts to \$63,275,127 (2014 - \$61,033,917).

As at December 31, 2015, the Corporation is subject to debt agreements that contain various covenants. The Corporation is governed by the Shareholder Declaration which limits future borrowings, liens, and provisions of security without prior written consent. The Corporation is also subject to a Subordination Agreement with respect to the \$26,490,500 promissory note given to The Corporation of the City of Thunder Bay, with said Subordination Agreement providing for no acceleration rights, as approved by the Bank's legal department.

The Corporation's revolving credit facility limits the debt to capitalization ratio to a maximum of 60% [2014 - 60%] and a debt service coverage ratio of not less than 1.20:1 [2014 - 1.20:1]. As at December 31, 2015, the debt to capitalization ratio was 23% [2014 - 22%] and debt service coverage was 2.08:1 [2014 - 3.42:1]. The Corporation's long-term debt agreements also include positive and negative covenants such as limitations on funded indebtedness, capital expenditures restrictions on mergers, amalgamations or consolidations, and limitations on providing security or guarantees to any third party. As at December 31, 2015, the Corporation was in compliance with the financial covenants included in its long-term debt agreements, City Note and short-term revolving credit facility.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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### 24. FIRST TIME ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS

IFRS 1, *First Time Adoption of International Financial Reporting Standards*, requires that comparative financial information be provided. As a result, the first date at which the Company has applied IFRS was January 1, 2014 (the "Transition Date"). IFRS 1 requires first-time adopters to retrospectively apply all effective IFRS standards as of the reporting date, which for the Company will be December 31, 2015. However, it also provides for certain optional exemptions and certain mandatory exceptions for first-time IFRS adoption. Prior to transition to IFRS, the Company prepared its financial statement in accordance with Canadian generally accepted accounting principles ("pre-changeover Canadian GAAP").

The IFRS 1 applicable exemptions and exceptions applied in the conversion from pre-changeover Canadian GAAP to IFRS are as follows:

#### **Mandatory exceptions:**

##### *Derecognition of financial assets and liabilities*

The Company has applied the derecognition requirements in IAS 39 prospectively for transactions occurring on or after January 1, 2014. As a result any non-derivative financial assets or non-derivative financial liabilities derecognized in accordance with pre-changeover Canadian GAAP as a result of a transaction that occurred before January 1, 2014, have not been recognized in accordance with IFRS unless they qualify for recognition as a result of a later transaction or event.

##### *Estimates*

The estimates previously made by the Company under pre-changeover Canadian GAAP were not revised for the application of IFRS, except where necessary to reflect any difference in accounting policy or where there was objective evidence that those estimates were in error. As a result, the Company has not used hindsight to revise estimates.

##### *Government Loans*

The company classifies government loans received as financial liabilities or equity instruments in accordance with IAS 32 Financial Instruments: Presentation. At the date of transition, these loans are measured at the pre-changeover Canadian GAAP carrying amount as a government grant. No benefit element is recognized for below market interest rate loans. The loans are subsequently measured using an effective interest rate calculated at the date of transition and the guidance in IAS 20 Accounting for Government Grants and Disclosure of Government Assistance is applied after the date of transition.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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### Optional elections:

#### *Business Combinations*

The Company has elected not to retrospectively apply IFRS 3, Business Combinations, to business combinations that occurred prior to its Transition Date and such business combinations have not been restated.

#### *Borrowing costs*

The Company has elected to apply the transitional provisions of IAS 23 Borrowing Costs which permits prospective capitalization of borrowing costs on qualifying assets from the Transition Date.

#### *Deemed cost for Operations subject to Rate Regulation*

The Company has elected the deemed cost exemption applicable to entities subject to rate regulation as described under IFRS 1. The election permits the Company, at the date of transition to IFRS, to use the previous Canadian GAAP carrying amount of items of PP&E and intangible assets as deemed cost; hence there will be no impact on retaining earnings for opening balances of PP&E and intangible assets at the date of transition. In accordance with the election, the Company has tested these items of property, plant and equipment and intangible assets at the date of transition to IFRS. No impairment losses were recognized.

#### *Transfers of Assets from Customers*

The Company has elected to apply the IFRS 1 election to only apply IFRIC 18 prospectively from the date of transition to non- repayable supply contribution made by customers.

### **Reconciliation's of pre-changeover Canadian GAAP equity and comprehensive income to IFRS**

IFRS 1 requires an entity to reconcile cash flows, equity, and comprehensive income for prior periods as shown below.

In the statement of changes in cash flows, there is a reclassification from the movement in regulatory assets and regulatory liabilities to a movement in the regulatory deferral account balance. These are both shown as movements within investing activities and as such do not result in material adjustments to the net cash flow balance.

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**Thunder Bay Hydro Electricity Distribution Inc.**  
**Notes to the Financial Statements**

December 31, 2015

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The explanations for the impact of the transition to IFRS on the specific accounts is described below. Reconciliation of equity and comprehensive income as previously reported under Canadian GAAP to IFRS are provided below. Other than the employee future benefits and the related deferred taxes, all other items have no impact on Equity or Comprehensive Income as they are reclassifications within the relevant statements.

	December 31, 2014	January 1, 2014
	\$	\$
<b>Equity</b>		
Equity as reported under Canadian GAAP	61,132,818	57,907,731
Adjustments to retained earnings:		
Provision for sick leave	(884,585)	(863,900)
Employee future benefits	739,900	830,299
Constructive obligation	6,821	-
Deferred tax expense	38,963	8,904
<b>Equity as reported under IFRS</b>	<b>61,033,917</b>	<b>57,883,034</b>

	December 31, 2014
	\$
<b>Comprehensive income</b>	
Net income as reported under Canadian GAAP	2,275,087
Adjustments to retained earnings:	
Provision for sick leave	(20,685)
Constructive obligation	6,821
Future employee benefits	(90,399)
Deferred tax expense	30,059
<b>Comprehensive income as reported under IFRS</b>	<b>2,200,883</b>

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## **Thunder Bay Hydro Electricity Distribution Inc.**

### **Notes to the Financial Statements**

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#### **i) Regulatory assets and liabilities**

Regulatory assets and liabilities that were recognized under pre-changeover Canadian GAAP have been reclassified to the regulatory deferral account balance as either a debit balance or a credit balance. The amount recorded as a regulatory asset and liabilities respectively, under pre-changeover Canadian GAAP was \$372,435, and \$(2,745,842). This transitional adjustment is a reclassification on the Statement of Financial Position and has no impact on the Statement of Equity or the Statement of Comprehensive Income.

#### **ii) Employee Future Benefits**

Under IFRS, the Company recognizes remeasurements in Other Comprehensive Income. These amounts are not reclassified in subsequent periods. Employee benefits expected to be settled wholly within 12 months after the end of the reporting period are short-term benefits, and are not discounted. Under previous pre-changeover Canadian GAAP, the Company amortized the excess of the net actuarial gains or losses over 10% of the accrued benefit into the Statement of Comprehensive Income on a straight line basis over the average remaining service period of active employees to full eligibility. At the date of transition, all previously unamortized actuarial gains or losses were recognized in retained earnings.

In addition, under IFRS, a liability is recognized for both non-vested accumulating and vested sick leave benefits, unlike Canadian GAAP which only required a liability for the vested sick leave component.

The impact of these recognition and measurement differences on January 1, 2014 was an overall increase to future employee benefits and a decrease to retained earnings. At December 31, 2014 the impact of these recognition and measurement differences was to increase to future employee benefits, increase to operating expenses and an increase to regulatory debit balances.

#### **iii) Contributions in Aid of Construction**

Under IFRS Contributions in aid of construction are recognized as deferred revenue and are amortized as revenue on a straight-line basis over the useful life of the constructed or contributed asset in the Statement of Comprehensive Income. Contributions in aid of construction under Canadian GAAP at January 1, 2014 which totaled \$14,435,768 are shown net of property, plant and equipment upon transition. The impact of this transitional adjustment related to Contributions in Aid of Construction at December 31, 2014 is an increase in assets and an increase in liabilities on the Statement of Financial Position. On transition, \$2,110,763 was reclassified as Contributions in Aid of Construction from property plant & equipment for the period ended December 31, 2014.

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## Thunder Bay Hydro Electricity Distribution Inc. Notes to the Financial Statements

December 31, 2015

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### iv) Borrowing Costs

Borrowing costs that were not recognized as a regulatory asset or liability were previously expensed under pre-changeover Canadian GAAP. Under IFRS, borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset. Since the Company has elected to take the Borrowing Costs exemption, there is no transitional adjustment.

### v) Deferred taxes

The above changes have decreased the deferred tax liability as follows based on a tax rate of 26.5%:

	December 31, 2015 \$	December 31, 2014 \$	January 1, 2014 \$
Reclassification of regulatory assets and liabilities	161,524	142,642	170,996

## 25. STANDARDS, AMENDMENTS AND INTERPRETATIONS NOT YET EFFECTIVE

Certain pronouncements were issued by the IASB or the IFRS Interpretations Committee that are mandatory for accounting years beginning after January 1, 2016 or later years. As discussed in note 2, the Company early adopted IFRS 14, Regulatory Deferral Accounts. In addition as disclosed in note 2 under significant judgments and estimates, the Company applied judgments related to the order and exclusion of immaterial disclosures, consistent with the amendment to IAS 1, Presentation of Financial Statements, which were also adopted early.

The Company has not yet determined the extent of the impact of the following new standards, interpretations and amendments, which have not been applied in these financial statements:

- IFRS 9 Financial Instruments
- IFRS 15 Revenue from Contracts with Customers
- IFRS 16 Leases

**Thunder Bay Hydro Electricity Distribution Inc.**  
**Schedule - Expenses**

Year ended December 31	2015	2014
	\$	\$
<b>OPERATIONS AND MAINTENANCE</b>		
Customer premises/meters and devices	335,720	347,743
Distribution	4,922,816	4,935,536
Safety and training	480,320	463,666
System control/station maintenance	1,875,865	1,876,587
Transformer	730,920	597,770
<b>Total operations and maintenance expenses</b>	<b>8,345,641</b>	<b>8,221,302</b>
<b>ADMINISTRATION</b>		
Bad debts	233,191	68,322
Billing and collecting	1,037,725	1,104,687
Customer information service	1,033,277	990,483
Information services	937,538	867,925
Meter reading	289,576	335,569
Recoverable	1,065,862	124,098
<b>Total customer - related administration expenses</b>	<b>4,597,169</b>	<b>3,491,084</b>
<b>General</b>		
Corporate	548,282	792,227
Directors' expenses	93,160	100,640
Finance	954,250	927,273
Human resources	333,074	322,365
President's office	436,052	400,456
Power systems administration	370,584	338,149
Renewable generation administration	157,944	166,269
Solar pv generation direct costs	288,070	330,477
Purchasing	242,613	218,238
<b>Total general administration expenses</b>	<b>3,424,029</b>	<b>3,596,094</b>
<b>Total administration expenses</b>	<b>8,021,198</b>	<b>7,087,178</b>

# **ATTACHMENT 1 – M**

Annual Reports

Year 2013, 2014, 2015



# THUNDER BAY HYDRO

ANNUAL REPORT 2013







# INTRODUCTION

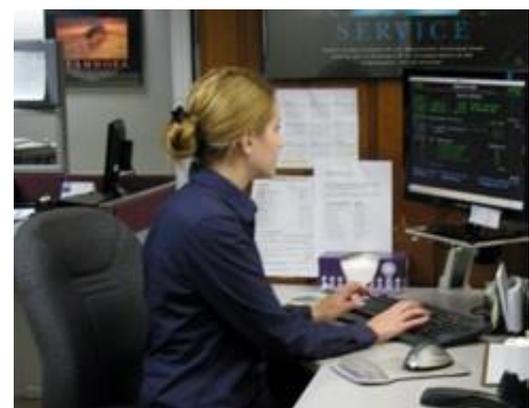
## THUNDER BAY HYDRO

**Thunder Bay Hydro Electricity Distribution Inc.** is responsible for the power line system and delivering electricity to the homes and businesses within the city limits of Thunder Bay and Fort William First Nation.

We build and maintain the local power line system, provide 24-hour emergency response, answer billing questions, provide for the reading of meters, and offer energy conservation advice and programs.

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**Thunder Bay Hydro Utility Services Inc.** provides back office systems and support, IT hosted applications and program management that includes conservation programs to other electric utility companies in the district. ■





## CORPORATE GOALS

☀️ Ensure that the health and safety of our employees and the public is the utility's first priority.

☀️ Provide a reliable supply of electricity to the residents and businesses in Thunder Bay.

☀️ Protect and grow the value of our utility to our shareholder.



Robert Mace, President & CEO

Ralph Falcioni, Board Chair

## CEO & BOARD CHAIR MESSAGE

On behalf of the management and the Board of Directors of Thunder Bay Hydro, including our subsidiary companies, we are pleased to provide this report on our 2013 accomplishments.

The past year has been successful in many ways at Thunder Bay Hydro. Much of the work that has been done has created a foundation of good governance, a stronger more sustainable business model and a positioning that will help us effectively manage the distribution rates that local electricity customers are charged.

The Board of Directors focused on a number of governance initiatives this past year. Further integrating risk management into our strategy development was a key aspect of Board work and is consistent with the Board's goal of continually evolving governance. In this respect, the Board also increased the scope of the Audit Committee's financial oversight and undertook a process to pursue Board-driven strategic initiatives.

Financial challenges continue to be front and centre in the management of our electricity distribution business. While distribution revenue was slightly less than budgeted in 2013, prudent expense management produced a better than predicted contribution to net income from our regulated utility operations.

Additionally, the utility was faced with difficult financial choices to make following an unfavourable OEB decision on our 2013 distribution rate application. One of the outcomes of this decision was freezing the planned investment in distribution system replacement at the 2012 level. Going forward, our plan is to resume increasing this investment by \$400,000 in 2014, and annually afterwards, until our next significant Rate Application in 2017. While this slows our plan to replace end of life infrastructure slightly, this slower expenditure growth still results in a steady decrease in the average age of our distribution infrastructure. The result is a more robust, reliable supply of electricity for our customers.

Our electricity supply reliability figures have continued to show an improving trend spanning the past several years. This can be credited to our

distribution system replacement program, an aggressive forestry management program and excellent outage response by our staff. A relatively calm 2013 in terms of severe weather events also contributed to last year's excellent reliability.

Because 41% of our staff are eligible to retire in the next 5 years, the issue of staff demographics continues to be a challenge. To address this, a Succession Planning strategy has been a key component of our strategic plan for the last several years. Replacing skilled trades and technical staff requires significant preplanning. The tight supply of key utility skills in the industry combined with the relative isolation of Thunder Bay means that hiring staff with these skills is problematic. To ensure we have the talent we need in the future, we have committed to developing key trades and technical skills internally.

Safety is an integral part of the work culture at Thunder Bay Hydro and we work hard to ensure that our 'Committed to Safety' program enjoys a high profile within the utility. In August 2013, we received the President's Award from the Infrastructure Health and Safety Association (IHSA) for achieving 250,000 consecutive hours of work without a lost time incident (LTI). By November, staff had worked 669 consecutive days without an LTI.

A milestone event for Thunder Bay Hydro was the celebration to mark the completion of six rooftop solar photovoltaic (PV) installations on City of Thunder Bay owned buildings. The project represents an investment of \$4 million done under Thunder Bay Hydro's SEED Initiative. The rooftop solar PV arrays join the Mapleward Renewable Generating Station in creating a legacy of renewable electricity generation in the community and adding value for our shareholder. Over the next twenty years, these projects will generate income for the City through lease payments and dividends.

In 2013, we completed construction on a new Fleet Maintenance Facility. This new \$3.3 million building replaces a building that, at one point, housed street cars for the then City of Port Arthur. The eighty plus year-old facility was replaced by a state-of-the-art facility which will allow staff to maintain our fleet more safely and efficiently.

Now that we have moved into the new facility, the project will continue as we carefully demolish the old garage using appropriate environmental precautions to deal with the hazardous materials common in buildings of this vintage.

As we move into the new year, we are implementing plans to improve customer communications through technology. A web presentment tool will give our customers access to next day electricity usage online. We will be updating our phone systems to provide business continuity. Our website will be rebuilt to respond to different screen sizes and integrate secure forms for easy 24/7 account updates. Improvements such as these will provide higher levels of secure, reliable and continuous service by better meeting the expectations of modern consumers.

We are very pleased with the company's performance in 2013 and believe Thunder Bay Hydro continues to be successful in the pursuit of our three primary goals, " Safety, Reliability and Shareholder Value".

We would like to express our thanks to the Board of Directors and recognize Mr. Multimaki and Mr. Armstrong for their service as Chairs of the Governance and Audit Committees respectively. ■



Robert Mace  
President & CEO



Ralph Falcioni  
Board Chair

# OPERATIONS

## Reliability

We report our power reliability statistics by monitoring both the frequency and duration of power interruptions for our customers. During 2013, the impact of calm weather and our long-term Infrastructure Replacement Program resulted in a continuation of a trend of improved reliability over several years. ■

### System Average Interruption Duration Index (SAIDI)

2009	2010	2011	2012	2013
4.4007	2.9386	2.7957	1.2894	1.035

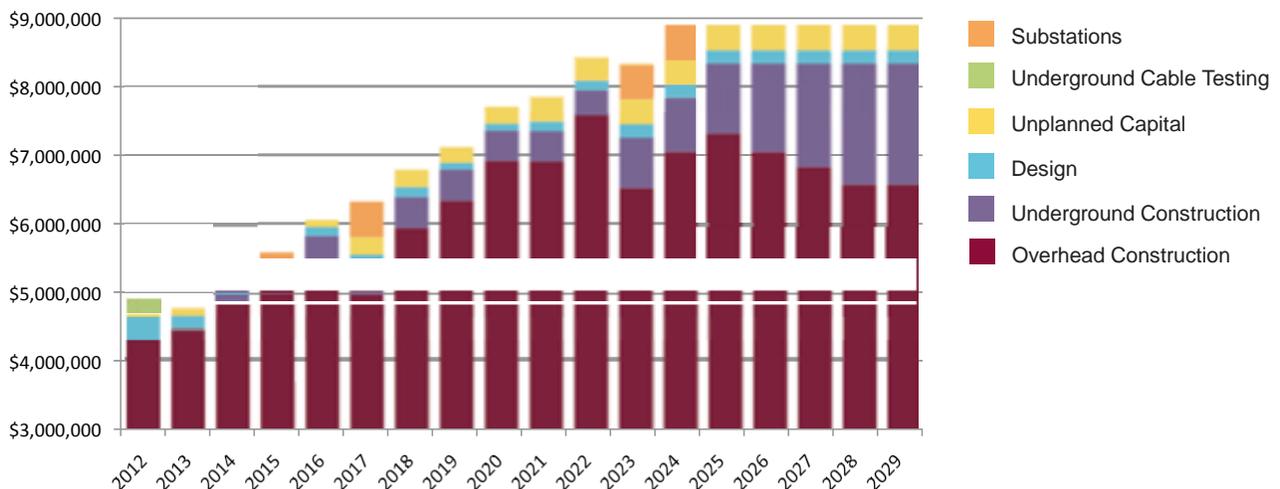
## Capital Program

As part of our strategy to increase our investment in end of life system replacement, crews have been replacing hydro poles and upgrading lines to a higher voltage throughout the city. During 2013, upgrading work took place in the following general neighbourhoods:

- Frederica / Amelia Streets
- Durban / Brodie Streets
- Leslie / Elliott Streets
- Huron / Otto Streets

YEAR	# OF POLES REPLACED
2006	197
2007	253
2008	319
2009	354
2010	450
2011	500
2012	580
2013	620

### Planned Infrastructure Replacement Program 2009-2029



Historically, our system was built using substations to step down the voltage to meet the lower capacity of overhead lines that distributed electricity throughout city neighbourhoods. With the new technology available to us, we have been upgrading the voltage of our lines from 4 kV to 25kV. This allows us to remove sub-stations that are at their end of life and reduce power losses to create a more efficient distribution system.

As of 2013, we have removed four of the eighteen sub-stations on our system. As part of our capital program, we replaced 620 poles during the year. ■



*Before - with Sub-station*



*After - Sub-station removed*



### Locates

A change for how customers initiate requests for underground locates was made when the Ontario One Call was adopted by Thunder Bay Hydro. Customers have one point of contact for the process through a 1-800 number when they plan to dig. The Call Centre connects with Thunder Bay Hydro and other pertinent utilities to move the locate process forward. ■



**1-800-400-2255**



*New Fleet Maintenance Garage. L-R Duane Szyszka, Operations Superintendent; Ralph Falcioni, Board Chair; Robert Mace, President; Steve MacKinnon, mechanic.*

## New Fleet Maintenance Garage

A major upgrade to our facilities came in the form of a new Fleet Maintenance Garage. The original structure was built circa 1932. Over the years, numerous structural issues including a sinking floor, leaking roof and deteriorating walls became significant.

In December 2013, after a \$3.3 million investment, we were able to move into the new facility. Many up-to-date features such as proper sized entry doors, indoor storage and ventilation, exhaust, heating and lighting systems that meet current standards were part of the design. ■

## Engineering

Last year, we worked on installing 200 new residential and small business services, provided a design for a small subdivision and upgraded or installed 41 new commercial services.

As of the end of 2013, we had connected 191 customer-owned Microfit Solar PV systems and five FIT Renewable Generation systems that totalled 475kW.

Our Engineering Services estimated work valued at \$1.3M for new commercial services including new large renewable generators, industrial and residential projects. ■

# Human Resources, Safety & Training

## Staffing & Recruitment

The ongoing retirements of boomer generation employees have figured into our recruitment efforts. During 2013, we successfully filled ten job competitions. We attended the Annual



Technology Symposium at Confederation College to raise awareness of electricity industry skill needs. We pursued provincial funding to bring in six students and one internship. ■

## Training

We continued with a substantial annual training program that focussed mainly on mandatory trades training and safe work practices.

Employees were also trained to implement a company-wide installation of automated external defibrillator (AED) units. ■

## Employee Safety

Early in the year, we were able to celebrate a quarter million hours worked without a Lost Time Injury. This qualified us for a President's Award from the Infrastructure Health and Safety Association.

Unfortunately, our run ended after 669 consecutive days on November 26, 2013. Fortunately, the injury suffered by one of our workers was non-critical.



Our Committed to Safety initiative for this year focussed on Prevention of Musculoskeletal Disorders. It was launched during a BBQ & Celebration of North American Occupational Safety & Health Week in May. Monthly educational posters followed with activities and a contest to personally apply awareness of the four causes of these injuries in October. ■



### 2013 Employee Relations Highlights

-  Successfully negotiated 3-year union contracts
-  No orders received from the Ministry of Labour
-  No grievances or arbitrations filed
-  Conducted an Employee Engagement Survey with excellent results ■



Receiving the Infrastructure Health and Safety Association President's Award.  
L-R Corinna Lapointe, co-chair JHSC; Robert Mace, President; Duane Szyszka, co-chair JHSC

## Public Safety

This year, we participated in Powerline Safety Week by visiting local hardware businesses to distribute ladder safety tags. We also embedded two safety videos from the Electrical Safety Authority onto pages of our website.

Our Hi-Line Hazard, public safety program was streamlined to meet the needs of Grades 3 & 4 students. We were able to provide presentations to more than 1,100 local students during the spring. ■



Hi-Line Hazard Grade 3 first prize winner.

# Customer & Information Services

## Customer Service

Our Call Centre for Customer Services handled 42,353 calls in 2013.

We evaluate our work based on Ontario Energy Board Service Standards. As illustrated in the figures provided below, we have significantly exceeded these standards.

ITEM	OEB STANDARD	OUR RATE
Abandoned Calls	no more than 1.75%	.7%
Answer Rate within 30 seconds	65%	91.98%
Reconnection standard for arrears customers	85% within 2 days	99.4% within the same day

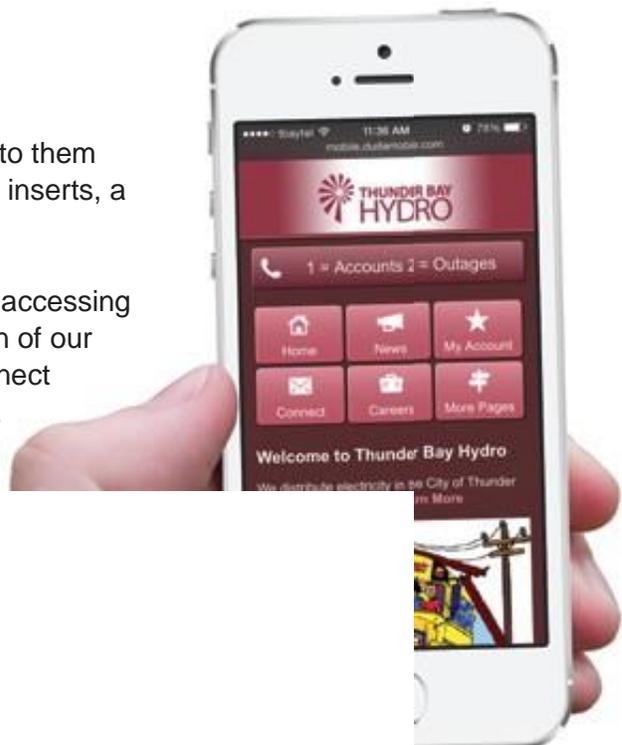
We were pleased to have our statistics affirmed by the receipt of numerous positive written statements from customers regarding excellent service from our staff.

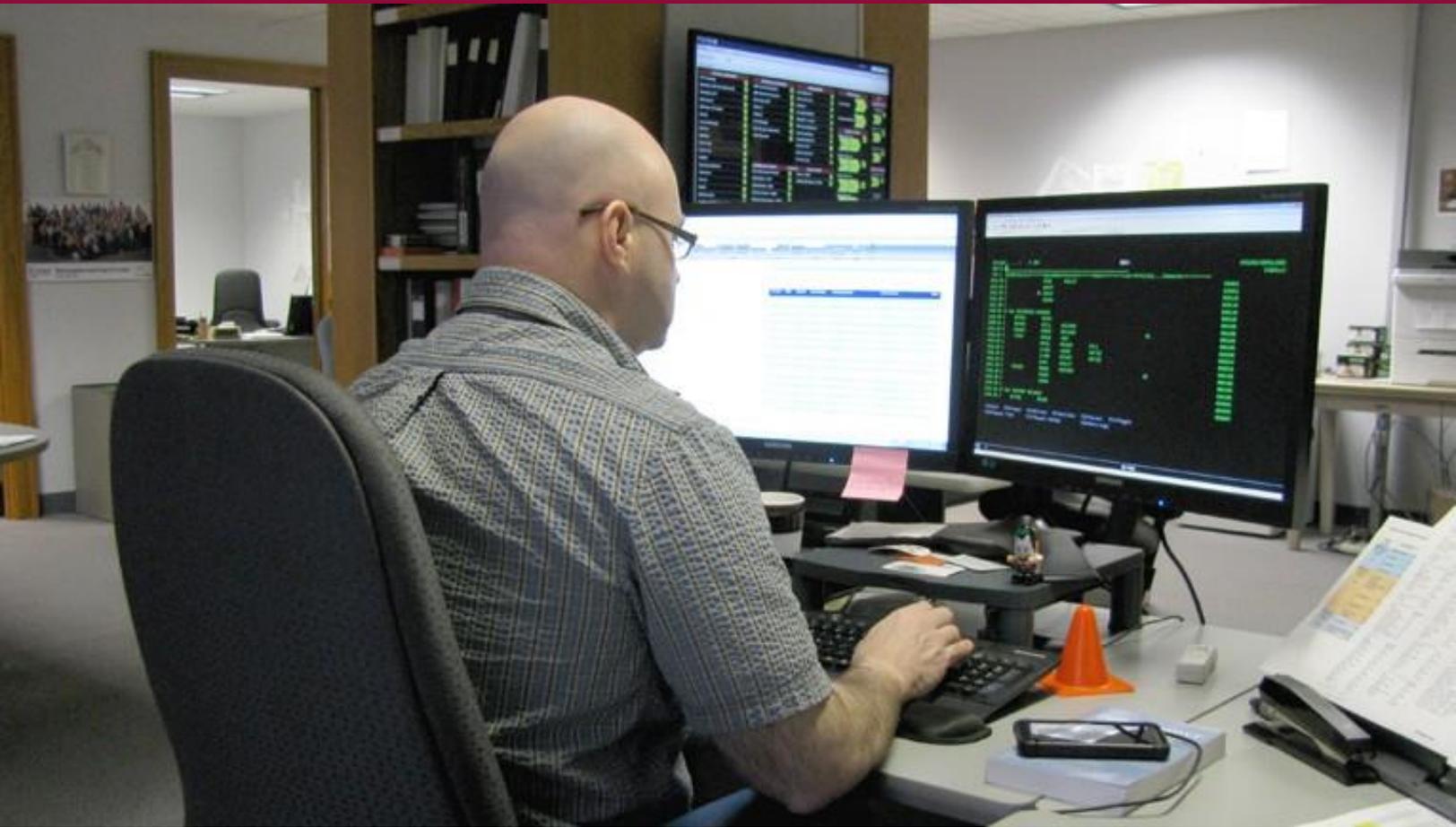
Customers have embraced electronic delivery of their statements. At the end of the year, we had 16% of our customers on the electronic system which consists of an email that states the amount owing on their account, the due date and includes a full pdf attachment of their regular statement. During the year, we evaluated web presentation options to provide customers with even more access to their electronic usage. ■

## Customer Communications

We educate our customers about topics that relate to them as electricity consumers through bill messages and inserts, a semi-annual newsletter and our website.

Due to a significant trend in the size of the screens accessing our website, we developed a mobile-friendly version of our site that includes a “Click to Call” button and a Connect button that allows mobile users to send a message. Online contact is often made after hours. The convenience of lodging a question when it occurs provides a higher level of customer care and satisfaction. ■





## Billing

An extensive project took place to comply with changes to Measurement Canada bill requirements that required actual meter reads on bills in addition to the Time of Use period totals that we were providing. We were also required to reconfigure our billing calculations in order to place the Line Loss calculation into the Delivery line of the bills.

Opportunities for automation of processes were identified and we worked with our supplier to develop new settlement processes and reports.

Larger interval meter customers have been provided with a new tool to view their usage data online. This has reduced requests to our staff to provide such data and assists with the promotion of our conservation programs for high demand users. ■

## Technology

Network efficiency, design and functionality improvements were made during the year. These vital business continuity projects included:

- A virtualization initiative that will enhance our business process protections while reducing maintenance overheads and hardware costs.
- Development of a consolidated I.T. infrastructure health monitoring system.
- Upgrades to mission critical software, security and communications processes.

During third-party cyber-security testing, our existing system protections were found to be robust but areas for further improvement were identified. ■



In June 2013, the Retrofit Awards recognized four local businesses for their energy conservation efforts. Left to right: Tony Barile of the DaVinci Centre, Ansanual Habib of McKellar Place, Ted Ciotucha of Galaxy Lanes, and Gino Mascarin of Mascarin Collision & Auto Care Centre.



Over \$850,000 in incentives were provided to 105 local businesses who participated in the Retrofit Program in 2013.

**saveONenergy**<sup>™</sup>

## Conservation & Demand Management

The Province has established targets for the reduction of electricity consumption and peak provincial electricity demand to be met as a condition of our license. The Conservation & Demand Management group works toward achieving the goals set for us by offering a variety of programs that help different classes of customers lower their electricity usage and, thus, costs.

### Some highlights of our work include:

- Through the Fridge & Freezer Program, 306 older inefficient fridges were removed from the electricity grid in the Thunder Bay Community.
- All of the Lakehead University resident housing is enrolled in the Peaksaver PLUS program, making it one of the first campuses in Ontario to do so.
- The Heating & Cooling initiative has provided 215 Thunder Bay homes with efficient heating & cooling system upgrades.
- Over 1700 energy saving coupons were redeemed in Thunder Bay last year.
- Over \$850,000 in incentives were provided to 105 local businesses who participated in the Retrofit Program resulting in savings of 7.6 million kWh in that year alone.
- In June 2013, the Retrofit Awards recognized four local businesses for their energy conservation efforts: Mascarin Collision & Auto Care Centre, Galaxy Lanes, McKellar Place and the DaVinci Centre.
- Over \$270,000 in incentives were provided to 177 small local businesses who took part in the Small Business Lighting Program.
- A new initiative called the Home Assistance Program helped over 200 low income and senior customers with energy efficient upgrades. ■





## Renewable Power

### The SEED Initiative (Sustainable Electric Energy Development)



The SEED Initiative is part of the overall strategy by Thunder Bay Hydro to develop renewable energy in the community and to add value for the shareholder, the City of Thunder Bay.

In the four year period since 2009, Thunder Bay Hydro has strategically invested \$13.4 million in renewable energy projects within the City of Thunder Bay. ■

### Solar Photovoltaic (PV) Generation Project

In 2013, Thunder Bay Hydro successfully completed and achieved commercial operation on six rooftop solar PV installations on City of Thunder Bay owned buildings.

- Victoriaville Parkade
- Superior North EMS
- Thunder Bay Transit
- Mountdale Maintenance Garage
- TBayTel Work Centre
- Port Arthur Arena

The combined arrays of over 3,100 solar PV panels, cover 183,000 square feet of otherwise unused roof space and will generate approximately 860,000 kWhs annually. ■



*The Mapleward Renewable Generating Station*

### Mapleward Renewable Generating Station

The Mapleward Renewable Generating Station completed its third full year of operation in 2013 with total generation of 17.5 million kWhs of green energy. During the year, the generating station was impacted by lower available landfill gas supply, which will be addressed with the planned installation by the City of Thunder Bay of additional wells. ■



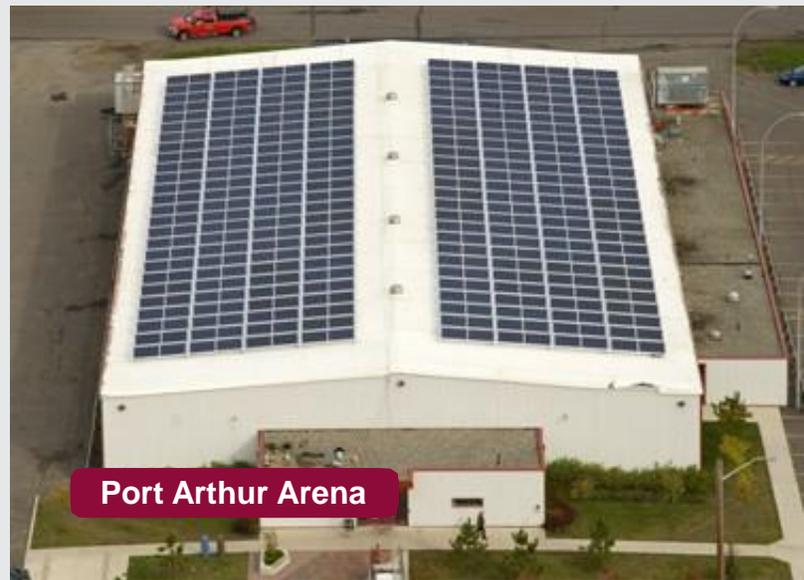
Mountdale



EMS



Victoriaville Mall



Port Arthur Arena

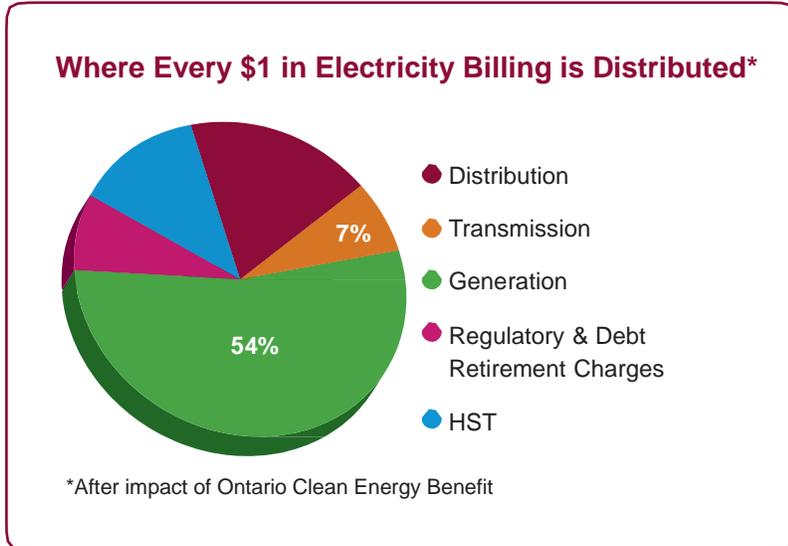


Thunder Bay Transit



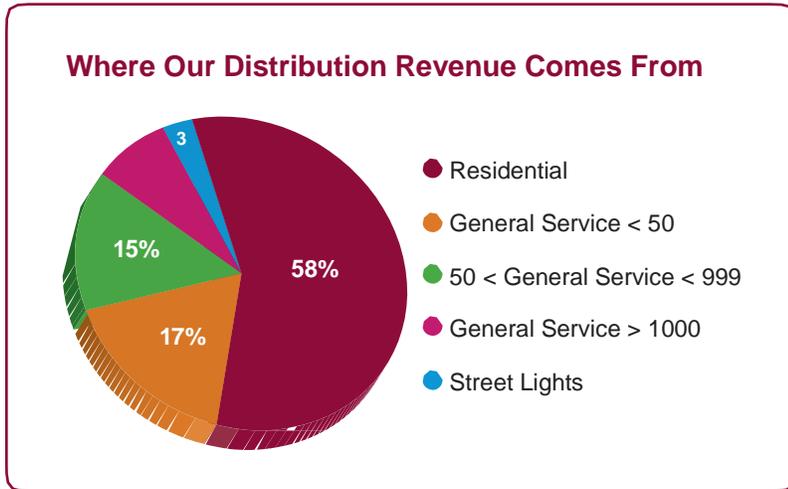
TBayTel

# Financial Picture



## Consolidated Financial Highlights

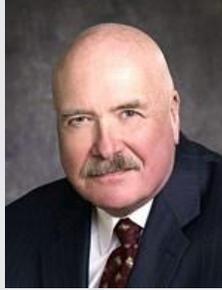
<b>Revenues:</b> <b>\$25,921,063</b>
<b>Expenses:</b> <b>\$21,626,328</b>
<b>Earnings Before Taxes:</b> <b>\$4,294,735</b>
<b>Payments In Lieu of Corporate Taxes:</b> <b>\$1,646,981</b>
<b>Earnings For Year:</b> <b>\$2,647,754</b>



## Board of Directors



**Ralph Falcioni,**  
**P. Eng MBA**  
Chair  
1 2 3 4



**Art Leitch, P. Eng**  
**MBA ICD.D**  
Vice-Chair  
2 6



**Mark Bentz**  
City Councillor  
1 2 3 4 6



**Hartley Multamaki,**  
**R.P.F.**  
1 2 3 4 6 \*



**Denise Carpenter,**  
**ICD.D**  
2 5



**Gary Armstrong,**  
**F CPA, FCMA**  
2 5 \*



**Frank Pullia,**  
**CPA, CMA, MBA**  
2 5

### Legend:

1. Thunder Bay Hydro Corporation
2. Thunder Bay Hydro Electricity Distribution Inc.
3. Thunder Bay Hydro Renewable Power Incorporated
4. Thunder Bay Hydro Utility Services Inc.
5. Audit Committee  
(\* indicates Chair)
6. Governance Committee  
(\* indicates Chair)

## Executive Management Team



**Robert Mace,**  
**MBA**  
President and  
CEO



**Tim Wilson,**  
**MBA**  
Vice President  
Customer and  
Information  
Services



**Andrew Covello,**  
**CHRP, SHRP**  
Vice President  
Human Resources  
and Safety



**Cindy Speziale,**  
**CPA, CA**  
Vice President  
Finance



**Don Zimak**  
Vice President  
Power Systems

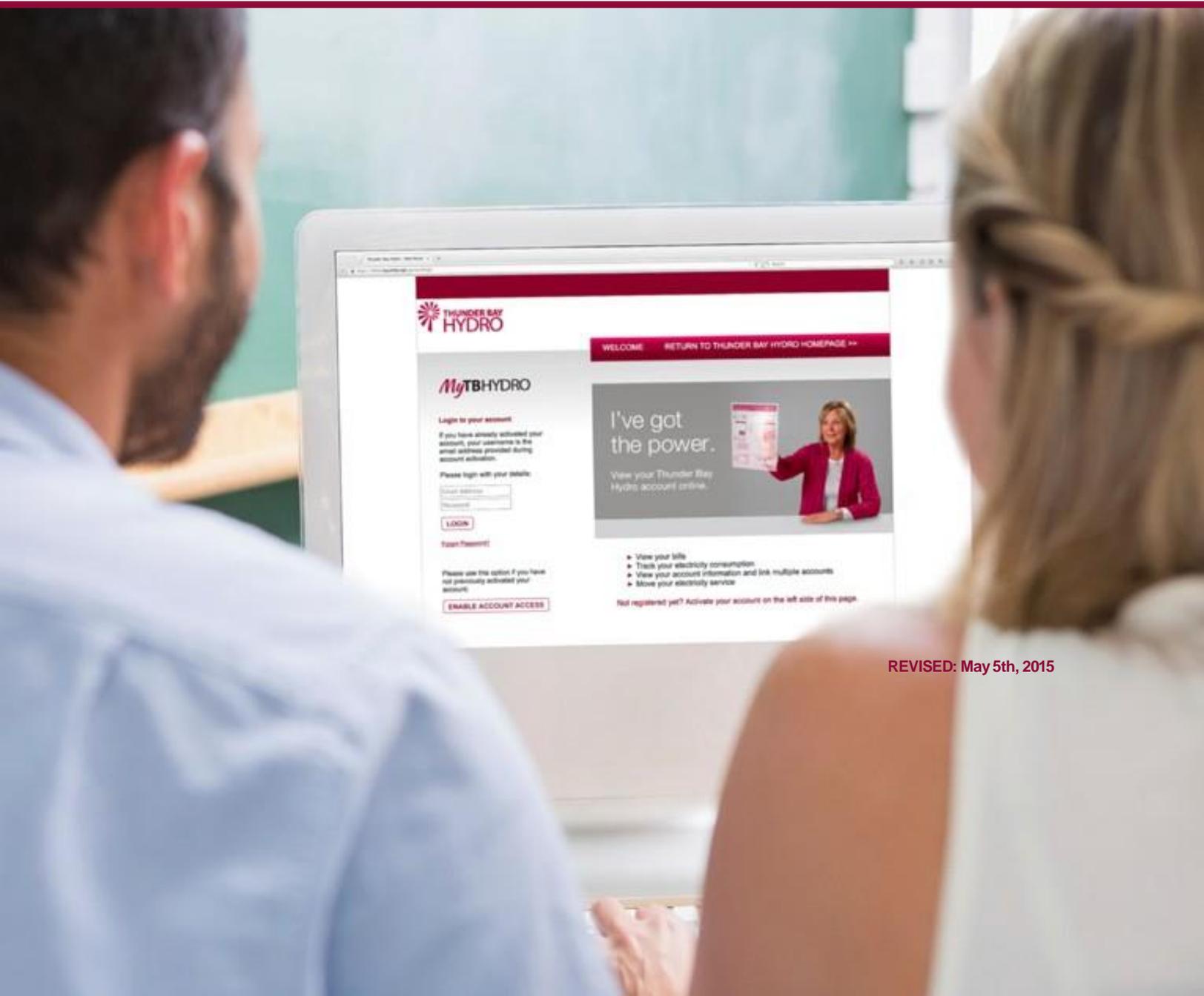


**ANNUAL  
REPORT 2013**



**THUNDER BAY  
HYDRO**

**ANNUAL REPORT  
2014**



REVISED: May 5th, 2015





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-  Provide a reliable supply of electricity to the residents and businesses in Thunder Bay.
-  Protect and grow the value of our utility to our shareholder.



Robert Mace, President & CEO



Ralph Falcioni, Board Chair

## CEO & BOARD CHAIR MESSAGE

On behalf of the management and the Board of Directors of Thunder Bay Hydro, including our subsidiary companies, we are pleased to provide this report highlighting our work in 2014.

It has been a good year for the Board. The focus of past years' efforts are being realised. Both the Governance and Audit Committees are well established and integrated into our Board activities. We continue to apply a risk management perspective to the ongoing development of our corporate strategy. We have, additionally, ensured that succession planning is in place for key positions in the organization.

As an organization, we have much to be proud of as well. The product that we deal with demands the highest regard for safety. To that end, we are pleased to have closed the past year with no lost time injuries. This is no coincidence. We have invested heavily into an effective safety management system. Besides mandatory training for our industry, we exceed minimum standards for other training such as first aid. We also support an active Ergonomic Change Team, proactively encourage best practices through our Committed to Safety team and maintain an involved Joint Health and Safety Committee. In conjunction with these activities, our Concern Reporting System helps us strive for continuous improvement.

We are pleased with the results of our ongoing infrastructure investment. In 2014, we, again, increased our annual spending to replace poles and equipment that had been moving beyond their expected lifespan. We are on track to achieve the desired average age of 25 years by the year 2024. This work has contributed to a favourable long-term trend for reliability.

As we rebuild, we have found opportunity to bring efficiency to our system with new technology to monitor and control outages. For example, the installation of smart reclosures can support embedded renewable generation by isolating a trouble area and minimizing the impact of an outage on our customers. Smart reclosures also have the added benefit of protecting our equipment.

Energy conservation has gained considerable focus for our company. The implementation of the Province's new six-year Conservation First Framework is expected to provide a streamlined approach for LDCs to design local saveONenergy programs for customers. It includes energy efficiency targets based on the LDC service territory and offers more flexibility to allocate budgets based on local priorities. The goal will be to help customers better manage their costs based on programs that make sense within our climate and demographics.

We continually revisit how we conduct our business and strive to keep costs down. Increasing regulatory demands put strain on our limited resources. One of our approaches is to use technology to reduce workloads while balancing the cost of implementing that technology.

*“ Looking forward, there will continue to be significant change occurring in the electricity industry. Emerging issues for LDCs will require integrating new technologies, embracing new customer-centric ways of doing business...”*

In response to direction from the Ontario Energy Board, we find ourselves in the planning stages to provide monthly billing for our customers. That change comes with obvious increases in cost. In 2014, we launched a new online service so customers could access their statements, electricity usage statistics and historical billing. The MyTBHYDRO online account portal will realise savings as more customers sign up and eliminate the need to print and mail their bills. Subsequently, we are strengthening our efforts to move customers online.

Weather continues to test our planning and resources. In 2014, we wrapped up the coldest winter in 35 years with frequent and above average snowfalls that lasted through to the end of April. A late spring storm created extensive power outages and equipment damage. Our renewable generation income was impacted by deep frost that limited the landfill gas supply and frequent requirements to clean snow from our solar installations.

Looking forward, there will continue to be significant change occurring in the electricity industry. Emerging issues for LDCs will require integrating new technologies, embracing new customer-centric ways of doing business as well as advocating for and working with customers throughout our city to become more conservation-oriented.

We will continue to work cooperatively with the City to be proactive in planning various infrastructure needs such as we did with the Golf Links expansion, Solar PV installations and the preparation for the Thunder Bay Event and Convention Centre.

The successful financial and operational results outlined in this year's Annual Report are driven by the ongoing contributions of the people who work for Thunder Bay Hydro. Their commitment, energy and focus to maintain the reliability of our service, protect the interests of our customers and make the necessary decisions to meet both regulatory changes and market conditions are the real power behind our company.

Finally, we would like to express our thanks to the Board of Directors and recognize Mr. Multamaki and Mr. Armstrong for their service as Chairs of the Governance and Audit Committees respectively. ■



Robert Mace  
President & CEO



Ralph Falcioni  
Board Chair



## INFRASTRUCTURE INVESTMENT PROGRAM

By measuring pole age, we have a general indicator of the lifespan of our distribution system.

In 2007, our average pole age was 32 years. With almost 20,000 poles in our system and an assumed lifespan of 50 years per pole, it was necessary to ramp up both our hiring and our budget to address the issue and bring increased reliability to our customers. As of 2014, we have decreased the average pole age down to just over 30 years. We are on track to achieve the more desirable average age of 25 years by the year 2024.

Pole replacements are done in conjunction with system rebuilds. In the past year, rebuild projects took place in the following neighbourhoods:

- Tarbutt / Selkirk Streets
- Clayte / Burriss Streets
- Minot / Balsam Streets
- McKenzie / Dease Streets

This resulted in the renewal of 649 poles and supporting equipment in the last year.

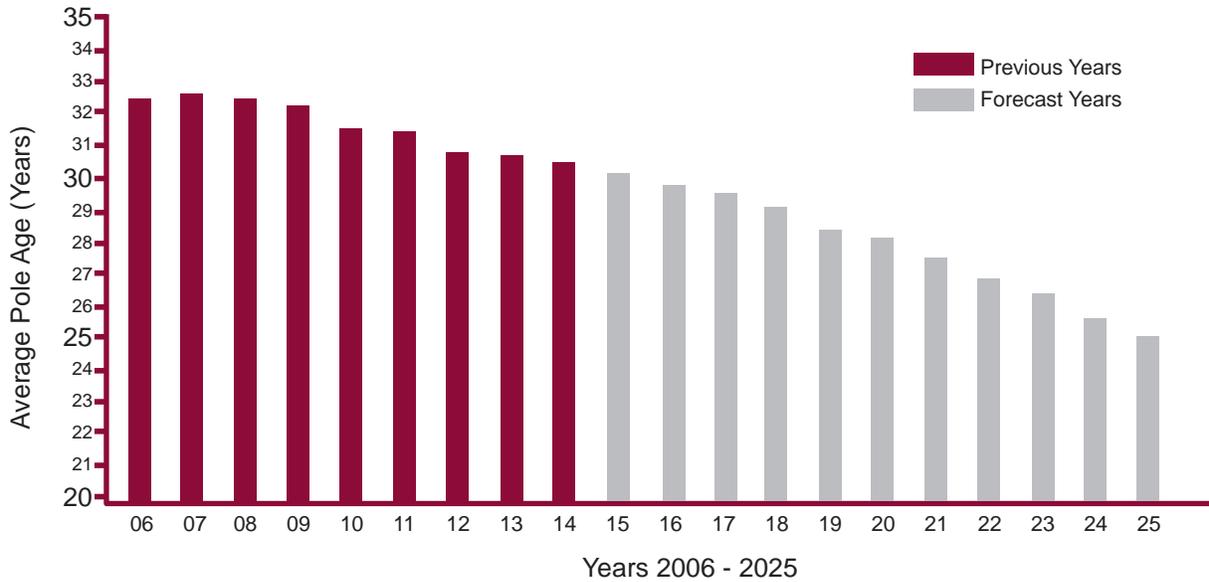
As we are replacing lines within the city, we are upgrading the operating voltage of lines from 4 kV to 25 kV. This move will allow us to decommission sub-stations that are at the end of their life and reduce system losses to create a more efficient distribution system. During 2014, we removed the McPherson Sub-station and decommissioned the 4 kV portion of the Balsam Sub-station.



### CHALLENGE:

As we move into certain neighbourhoods, utility easements will present a challenge as many homeowners have expanded their yard use in a way that blocks access to our equipment.

### Average Pole Age



### Locates

Locate request numbers continue to show the impact of the provincial “Ontario One Call” program. Despite a 95% increase in the number of requests over the past 4 years, we have managed to continue to complete most requests within 5 days.

YEAR	TOTAL LOCATE REQUESTS	MET WITHIN 5 DAYS
2010	3719	98.71%
2011	3795	89.70%
2012	4901	99.53%
2013	6071	97.35%
2014	7255	98.57%



### Technology

Thunder Bay Hydro is installing more sophisticated technology as we rebuild our system. This is expected to show returns in the benefits of better diagnostics and quicker isolation of trouble areas and result in enhanced reliability. ■



## CUSTOMER AND INFORMATION SERVICES



In 2014, we tracked over 84,000 customer interactions.

Customer services is handling an increasing number of interactions through the years. In 2014, we tracked over 84,000 customer interactions. These took place mainly via phone calls. The average customer call is answered in 14 seconds and is completed in 2.5 minutes. Customer walk-ins and emails round out the numbers.

Mainly, customers connect with us to handle bill payments, arrears issues and account changes (opening, moving and closing). We are seeing an increased number of emails and after hours web inquiries to coincide with the increased penetration of internet access for households in the city.

The timing was considered right to begin to make the investment in providing online systems to handle these administrative details for customers. MyTBHYDRO online account access was launched during the year and planning for a new website with more self-service capacity was set in motion. ■

TOPIC	TOTAL CALLS (ANNUAL)
Bill Payment	15304
Arrears Payment Plan	11450
Account Opening	3244
Call Transfer	2617
Account Close	2443
Account Move	2328
Consumption	1855
General Inquiry	1795
Web Presentment	1103
Deposit Inquiry	632
Name/Address Change	472
Outage	386
Retailer Inquiry	272
Rate/Adjust Inquiry	228
Residential Conservation	160
New Service/Inspection	141
Conservation	111
TOU	91
Water Heater	84
Smart Metering	31
Sentinel Light	13

Our service continues to exceed the standards set by the Ontario Energy Board. A sampling of some of the reportable services is shown below:

Service	OEB STANDARD	OUR RATE
Abandoned Calls	no more than 10%	1.25%*
Reconnection for arrears customers	85% within two days	100% within same day
Answer Rate within 30 seconds	65%	87.05%

\*includes a major storm in April 2014



Demographics continue to play a role in our recruitment. We held job competitions for 27 job postings throughout the year due to a growing number of retirements and internal promotions within the organization. We were also able to hire six summer students and secured funding for two internship positions.

We closed the year with no outstanding grievances or arbitrations.

Career Fairs are a valuable touch point with emerging workers. We attended the Career Fair & Job Fair at Confederation College as well as the Lakehead University Engineering Fair. Take Our Kids to Work Day held each November provided an opportunity to encourage career choices in the electric field at a younger age.

## Safety

*The Rewards & Recognition Program* is designed to positively reinforce desired behaviours such as working safely, mentoring co-workers and going beyond one's regular job requirements. In 2014, most employees received an award and a number of plaques were awarded to individuals receiving an Employee Nomination Award.

Once again, Thunder Bay Hydro sponsored the *Forum North Health & Safety Conference*. Both management and staff attended the Conference and received valuable up-to-date information concerning health and safety issues or best practices.

## Public Safety

Thunder Bay Hydro partnered with community organizations to remind residents that they need to be prepared to be able to take care of themselves and their families for 72 hours in the event of an emergency. The Storm Ready campaign was well received locally and resulted in enquiries from across the province.

In the spring, our team presented *The Hi-Line Hazard Electrical Safety & Energy Conservation Awareness Program* to over 1,000 students in Grades 3 and 4 from 37 classes in 16 different schools. Thunder Bay Hydro is also a silver sponsor for St. John Ambulance's educational programs for providing take home materials for 2,500 students.

Thunder Bay Hydro sponsored a VIP evening targeting back yard renovators with *HGTV Star, Paul Lafrance* where "Call Before You Dig" carpenter pencils and information regarding the new Ontario One Call locates service were distributed. We also visited local hardware and lumber yards with material promoting the Ontario One Call number. Staff from the Asset Management & Engineering Department delivered a presentation at the "Damage Prevention Presentation & Breakfast" for local contractors hosted by the local Public Utility Coordinating Committee.

*The Electrical Safety Authority (ESA)* provided information regarding their ESA Fall Electrical Safety Campaign which included cottage closing electrical safety tips and back to school information. We distributed the message locally. ■

☀ As of December 31, 2014,  
we had achieved 399 days  
without a lost time incident.



## CONSERVATION & DEMAND MANAGEMENT

A four-year-old approach to the delivery and funding of conservation programs prescribed by the Ontario Power Authority (OPA) came to an end in 2014 when the OPA was merged with the Independent Electricity System Operator (IESO).

The newly formed regulator negotiated a formula with all LDCs that focussed on attaching conservation targets to conditions of licensing and funding. The formula provides credit in a different way. Whereas before demand savings were measured and credited cumulatively, now, only consumption savings will be measured and the numbers will not carry forward. Reducing demand is no longer a component of our target.

A key win for LDCs was the ability to develop more local content in their programming. Because Northwestern Ontario electricity use peaks in the winter, our customers will be able to benefit by the offer of programs targeting heating rather than cooling.

Challenges include the limited resources available for installation in both the residential and business settings. As project managers for several smaller LDCs in Northwestern Ontario, getting installers out to the large service area will present an even greater challenge.

The next step was to work on a comprehensive six-year plan for 2015-2020

that outlines programs that will realistically achieve the targets. Staff spent many hours in research and planning to prepare our submission for the Province's new Conservation First Framework.

### Thunder Bay Regional Health Sciences Centre



Saving energy can pay big dividends and Thunder Bay Regional Health Sciences Centre (TBRHSC) is a perfect example. TBRHSC was the recipient of a RETROFIT rebate from Thunder Bay Hydro in the amount of \$597,554.62. This is the largest rebate in the history of Thunder Bay Hydro, and one of the largest in Ontario.

The project has significantly improved electricity performance and is expected to save a total of 5,288,093 kilowatt-hours annually, which represents 22% of TBRHSC's annual energy consumption. ■



## 2014 RETROFIT Awards



### Ben Hettrick - *Smith's RV Centre*

- More efficient lighting
- Saving 35% of total energy use

### Rob Coffey - *Dufrense*

- LED lighting upgrades.
- Payback period for installation less than 1 year.

### Pat Spina - *Badanai Motors*

- Lighting fixture replacements.
- Saving 44,000 kWh annually.

### Roy Summers - *LMI Thunder Bay*

- More efficient lighting.
- Saving \$25,000 on annual electricity bill.

## HEATING and COOLING INCENTIVE

The Heating & Cooling Incentive resulted in 330 homes with efficient heating and cooling system upgrades.



## HOME ASSISTANCE PROGRAM

The Home Assistance Program helped 585 low income and senior customers with energy efficient upgrades.



save energy  
HOME ASSISTANCE

### Helping Seniors with FREE energy upgrade

You may qualify for free upgrades to make your home more energy efficient




## peaksaver PLUS

The peaksaverPLUS Program saw 200 residents enrolled in 2014. ■





## myTBHydro

The Thunder Bay Hydro billing department produces approximately 610,000 bills annually. Each bill costs \$1.09 to print and mail out. In 2012, we introduced an e-billing service that produced a electronic file of our bill and sent it to customers via email. As sign-ups increased, so did our cost savings.

In April of 2014, we introduced MyTBHYDRO, our online portal for customers. The transition followed months of development for new processes on the back end of our billing systems, a creative approach to the procurement of a shared system that did not exist elsewhere and extensive testing for integration with the IESO to pull data directly from the provincial repository.

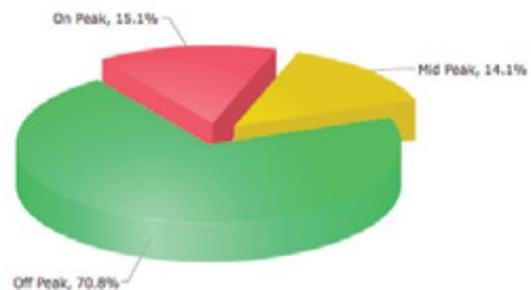
A careful marketing and communication plan was implemented that encouraged new users while retaining those who liked the emailed bills.

Marketing and financial support was provided from our Conservation team, and customer service representatives underwent extensive training on the new portal.

Ultimately, we were fortunate to find a vendor who provided excellent service and project management resources that resulted in successful delivery of the system.

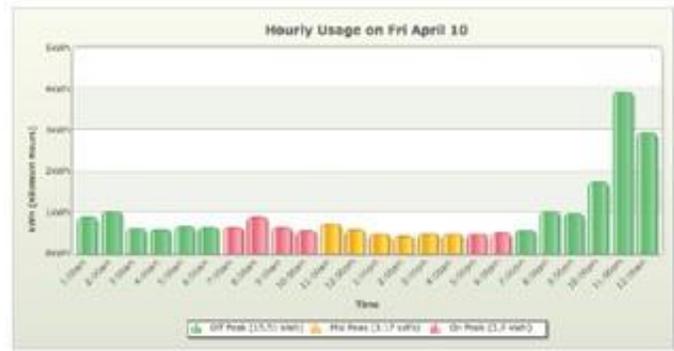


Your Time-Of-Use (TOU) Consumption  
For The Past 30 Days



Screenshot of MyTBHYDRO user account illustrating Time-of-Use.

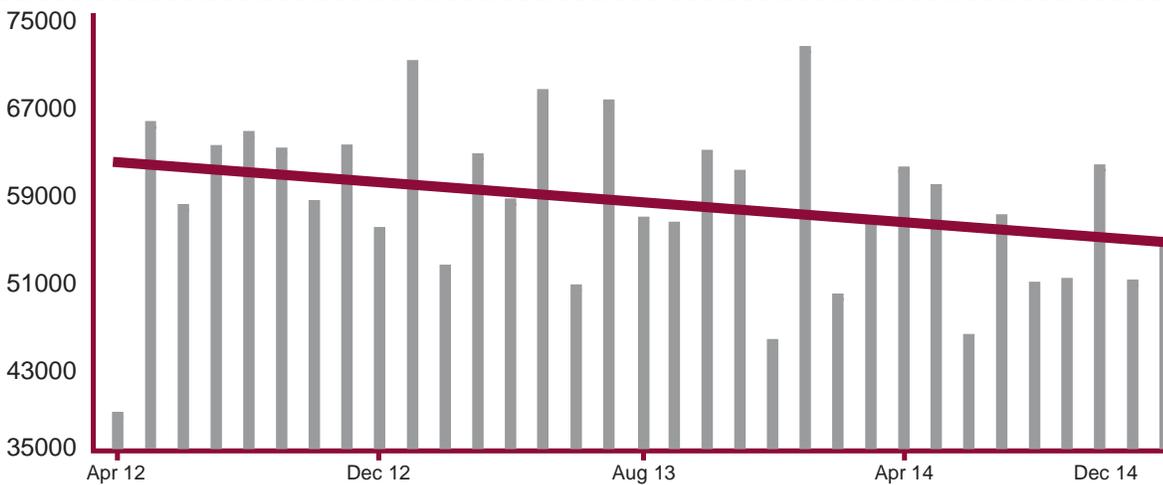
Customers are now able to take advantage of the collection of Smart Meter data to obtain hour-by-hour statistics of their electricity use, interactive graphing of their usage trends and access to historic copies of their bills. The customer service benefits included a better understanding of their own electricity use patterns and an ability for our customer service representatives to have better informed conversations with customers when they were calling with high bill complaints.



Screenshot of myTBHydro online portal illustrating hourly usage.

Our customer service agents worked diligently to transition a large majority of customers to the portal and we now have 8522 customers (17%) signed up. The result is almost 104,000 bills that do not need to be printed producing a savings of about \$113,360 annually. The amount of bills printed and mailed has gradually decreased since E-billing was first implemented. ■

**MyTBHYDRO impacts the number of bills we need to print and mail.**



**MyTBHYDRO**

Electronic Billing

**Payments and Terms**

To view payment information and explanation of the terms in your statement of account, please [click here](#).

**Bill History**

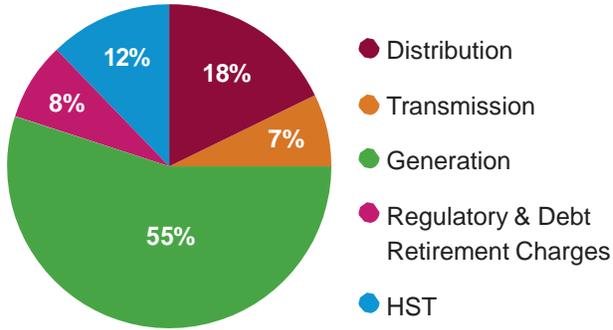
Shown below are the last 24 transactions on your account since you have signed up for My TBHYDRO.

Bill Date	Days Billed	Activity Description	Transaction Amount	Due Date	
2015-03-13	56	Regular Billing	\$209.09	2015-04-01	<a href="#">View Bill</a>
2015-01-14	58	Regular Billing	\$199.98	2015-02-02	<a href="#">View Bill</a>
2014-11-12	61	Regular Billing	\$196.14	2014-12-01	<a href="#">View Bill</a>
2014-09-12	63	Regular Billing	\$181.56	2014-10-01	<a href="#">View Bill</a>
2014-07-11	63	Regular Billing	\$79.50	2014-07-30	<a href="#">View Bill</a>
2014-05-09	63	Regular Billing	\$128.74	2014-05-28	<a href="#">View Bill</a>

Screenshot of myTBHydro online portal listing transaction and bill history.

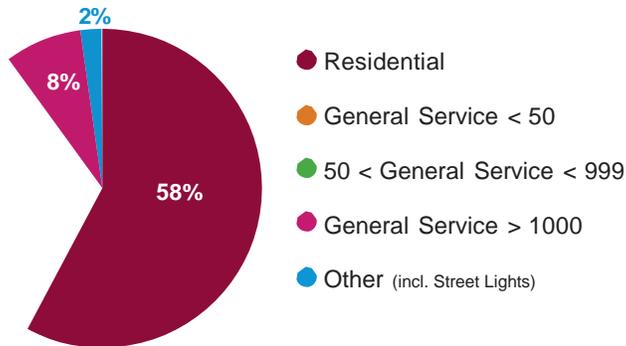
# FINANCIAL PICTURE

## Where Every \$1 in Electricity Billing is Distributed\*



\*After impact of Ontario Clean Energy Benefit

## Where Our Distribution Revenue Comes From



## Consolidated Financial Highlights

**Revenues:**  
**\$26,871,587**

**Expenses:**  
**\$23,145,418**

**Earnings Before Taxes:**  
**\$3,726,169**

**Payments In Lieu of Corporate Taxes:**  
**\$1,062,487**

**Earnings For Year:**  
**\$2,663,682**

## Who are our Customers?

**45,319**



**RESIDENTIAL**

**5,141**



**SMALL BUSINESS**

**22**



**COMMERCIAL / INDUSTRIAL**

# BOARD OF DIRECTORS



**Ralph Falcioni,**  
P. Eng MBA  
Chair  
1 2 3 4



**Art Leitch, P. Eng**  
MBA ICD.D  
Vice-Chair  
2 6



**Mark Bentz**  
City Councillor  
1 2 3 4 6



**Hartley Multamaki,**  
R.P.F.  
1 2 3 4 6 \*



**Denise Carpenter,**  
ICD.D  
2 5



**Gary Armstrong,**  
FCPA, FCMA  
2 5 \*



**Frank Pullia,**  
CPA, CMA, MBA  
2 5

## Legend:

1. Thunder Bay Hydro Corporation
2. Thunder Bay Hydro Electricity Distribution Inc.
3. Thunder Bay Hydro Renewable Power Incorporated
4. Thunder Bay Hydro Utility Services Inc.
5. Audit Committee (\* indicates Chair)
6. Governance Committee (\* indicates Chair)

## Executive Management Team



**Robert Mace,**  
MBA  
President and  
CEO



**Tim Wilson,**  
MBA  
Vice President  
Customer and  
Information  
Services



**Andrew Covello,**  
CHRP, SHRP  
Vice President  
Human Resources  
and Safety



**Cindy Speziale,**  
CPA, CA  
Vice President  
Finance



**Don Zimak**  
Vice President  
Power Systems



2015  
Annual  
Report

Committed to Customer Service







## Committed to Customer Service



### Goals



Ensure that the health and safety of our employees and the public is the utility's first priority.



Provide a reliable supply of electricity to the residents and businesses in Thunder Bay.



Protect and grow the value of our utility to our shareholder.

**Thunder Bay Hydro Electricity Distribution Inc.** is responsible for the power line system and delivering electricity to the homes and businesses within the city limits of Thunder Bay and Fort William First Nation.

We build and maintain the local power line system, provide 24-hour emergency response, answer billing questions, provide for the reading of meters, and offer energy conservation advice and programs.

**Thunder Bay Hydro Renewable Power Incorporated** is a subsidiary whose strategy is to develop renewable energy generation projects in the Thunder Bay area. We own and operate the Mapleward Renewable Generating Station.

**Thunder Bay Hydro Utility Services Inc.** provides back office systems and support, IT hosted applications and program management that includes conservation programs to other electric utilities companies in Northwestern Ontario.

# CEO & Board Chair Message

We are pleased to provide our 2015 Annual Report outlining highlights of how we have served our customers in the past year.

Thunder Bay Hydro exists to provide a reliable supply of electricity to our customers in a safe manner that also provides value for our shareholder, the City of Thunder Bay. There is a challenge to ensure a safe work environment, attract and retain a skilled workforce and adopt the best business practices within our industry while, at the same time, responding to cost pressures, regulatory demands and a customer base that views our product as an essential service for day-to-day living and expects reliable delivery of that product.

Our company is committed to customer service. This report outlines the ways we focus on various customer needs.

Upgrading and pro-actively maintaining our infrastructure plays a key role in ensuring that we provide a safe reliable electricity service. We continue to remain on track to increase our capital investment in our system and bring the average age of system

equipment down to a more sustainable age of 25 years. This renewal of equipment is vital to ensure reliability and to take advantage of the new technological efficiencies that can be built into our system.

Our customers are finding more ways to keep in touch in the digital world and we are working continuously to keep up with them. We increased our social media presence to ensure that all major outages are broadcast over our Twitter Channel and Facebook Page. We also regularly post news and pertinent messaging through social media. We rebuilt our website in a responsive design so customers could access it over a wider range of devices. Finally, we worked to develop an online outage map to allow customers to see the extent of current outages and expectations for response times.

After the implementation of Ontario One Call legislation, we entered into discussions with other utilities who had locates needs. A new partnership



Gary Armstrong, Board Chair

Robert Mace, President & CEO

# Executive Team



Robert Mace,  
MBA  
President and CEO



Tim Wilson,  
MBA  
Vice President  
Customer and  
Information  
Services



Andrew Covello,  
CHRL, CHRE  
Vice President  
Human Resources  
and Safety



Cindy Speziale,  
CPA, CA  
Vice President  
Finance



Don Zimak  
Vice President  
Power Systems

# Responding To Regulators

## Scorecard

The OEB has established an LDC Scorecard which is designed to encourage LDCs to operate effectively, continually seek ways to improve productivity and to focus on improvements that their customers value. It is mandatory that LDCs report their scorecard performance results annually, and make the results available to the public.

The scorecard includes traditional metrics for assessing an LDC's services, such as frequency of power outages, financial performance and costs per customer. These are metrics that can be gleaned from ongoing business reporting. It also includes new metrics for measuring customer satisfaction and safety awareness.

Our latest scorecard results show that we consistently perform better than the Ontario Energy Board Standards.

## Surveys

Thunder Bay Hydro had been conducting a Customer Satisfaction Survey every few years to provide information that supported discussion about improving customer care and meeting changing needs. This survey will now be conducted biannually in order to satisfy OEB requirements to report on customer satisfaction rates on the above mentioned scorecard.

The Electrical Safety Association recommended that a Public Electrical Safety measure be introduced to the LDC scorecard. To that end, the measurement will be based on a survey done among members of the general public in our distribution area on years alternating with the Customer Satisfaction Survey.

We worked in concert with other utilities throughout the year to develop a common core of questions. This also allows individual LDCs to gather information pertinent to their needs and collect consistent data to report to the province.

Going forward, each year a survey will be conducted to provide regular touchpoints with customer opinions and knowledge.

## Bill Changes

The end of 2015 marked the termination of the Ontario Clean Energy Benefit and the commencement of the Ontario Electricity Support Program. While one program involved a consistent credit across all residential customers, the other calls for intricate individual bill credits based on customer applications.

## Long Term Load Transfer

There are some customers on the edges of our distribution area that, while within our service territory, are physically supplied by Hydro One, our neighbouring utility. An arrangement called a Long Term Load Transfer allowed each distributor to directly bill customers within their service territory at company rates while settling up between utilities occurred for actual costs.

The Ontario Energy Board has issued an order that these arrangements end. This requires an extensive reconciliation of capital assets that was started in 2015. It will conclude with the transfer of some customers to Hydro One and others from Hydro One to us.

# Adopting Innovative Business Models



## Tbaytel Partnership

In 2015, we entered into a partnership agreement with Tbaytel to provide locates for their underground lines. This includes both field locates and back office work where a map review is made. To handle the increased workload, we hired two new staff and manage a contractor for those locates taking place in the *tbaytel01* region which spans from Nipigon to Atikokan.



## Renewable Generation Projects

The six solar projects developed on city-owned rooftops and the Mapleward Renewable Generating Station located at the Solid Waste and Recycling Facility on John St. Rd. continue to provide green energy to the grid. In 2015, a total of 14,190,000 kW of electricity was generated. This is equal to the amount needed to power almost 1,500 homes annually.



## Committed to Safety Video

While a safe work force has many business benefits, the 2015 Committed to Safety Campaign was focused on keeping the eye on the most important prize – going home to our families. To achieve this, we created a video featuring both workers and their families sharing their personal reasons for being committed to safety.

The final product was viewed with pride and accompanied by a sense of greater employee engagement.



OF



**320 DAYS WITHOUT  
A LOST TIME INJURY**  
(AS OF DECEMBER 31, 2015)

# Responding To Local Businesses



## Underground Locates

Before any form of digging occurs in construction and during the normal maintenance of streets and roadways, locates are a necessary step for businesses doing the work.

The number of underground locates being conducted has increased substantially in 2015 due to the new partnership with Tbaytel. Yet, we were able to complete 99% of requests within the expected five day window.

**5147 LOCATES**  
(AVERAGE OF PREVIOUS 5 YEARS)



**13,718**  
**LOCATES**  
in 2015



## Damage Prevention Presentation and Breakfast

Staff from the Asset Management and Engineering Department participated in an event with other local utilities. The event was held on April 29, 2015 and focused on contractor safety and excavation procedures when working in the vicinity of construction sites.



## Conservation Incentives for Businesses

The ongoing efforts of local business to conserve electricity resulted in the following recognition in the 2015 Retrofit Awards.



George Jeffery Children's Centre had over 35% of the costs of a light fixture project covered by Retrofit Program.

MGM Electric secured and completed the most Retrofits of any Electrical Distributor in 2015.

Bombardier Transportation saved enough electricity to power 35 homes in Thunder Bay for one year with the installation of commercial high-bay lighting.

Best Western PLUS Nor'Wester lowered annual electricity consumption by 6% with both indoor and outdoor LED Lighting.

# Responding To Customer Needs

## Customer Services

Person-to-person phone contact continues to be the primary way to help out our customers. Thunder Bay Hydro continues to exceed the provincially mandated standards of customer care.

More people are looking for 24/7 customer services. This is available via a website form and a published customer services email. In 2015, we received 1,850 emails.

- Of over 62,000 incoming phone calls, 92% were answered in under 30 seconds.
- Of 1,068 reconnection requests, 100% were performed the same day as requested.
- While we do see a slight reduction in counter traffic, we still had 6,612 people come in for service.



## Public Safety

Thunder Bay Hydro supported the Electrical Safety Authority's efforts to make the public aware of electrical hazards during Powerline Safety Week and holiday social media campaigns. We supported local general safety messaging efforts with a sponsorship for the St. John Ambulance School Safety Program.

'Call Before You Dig' promotional items were offered to contractors and customers during our annual campaign to prevent powerline dig ups. This message is also promoted with on-bill messaging, website features and through social media.



## Residential Conservation

We offer residential conservation programs in the form of the Heating & Cooling Program and Home Assistance audits to help customers better manage their energy costs with a more energy-efficient home.

- During 2015, there was a 25% increase of Home Assistance audits and a record 953 homes received incentives for upgrades.

save energy HOME ASSISTANCE

*Giving your home a helping hand.*

Lower your energy use, manage your energy costs.

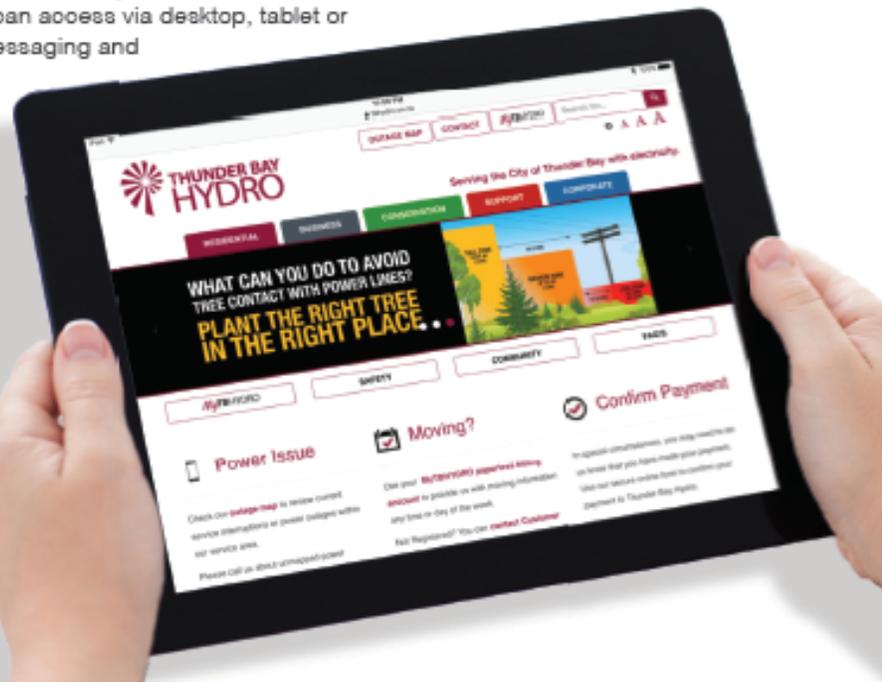
1-800-691-0877  
greensaver.org/homeassistance

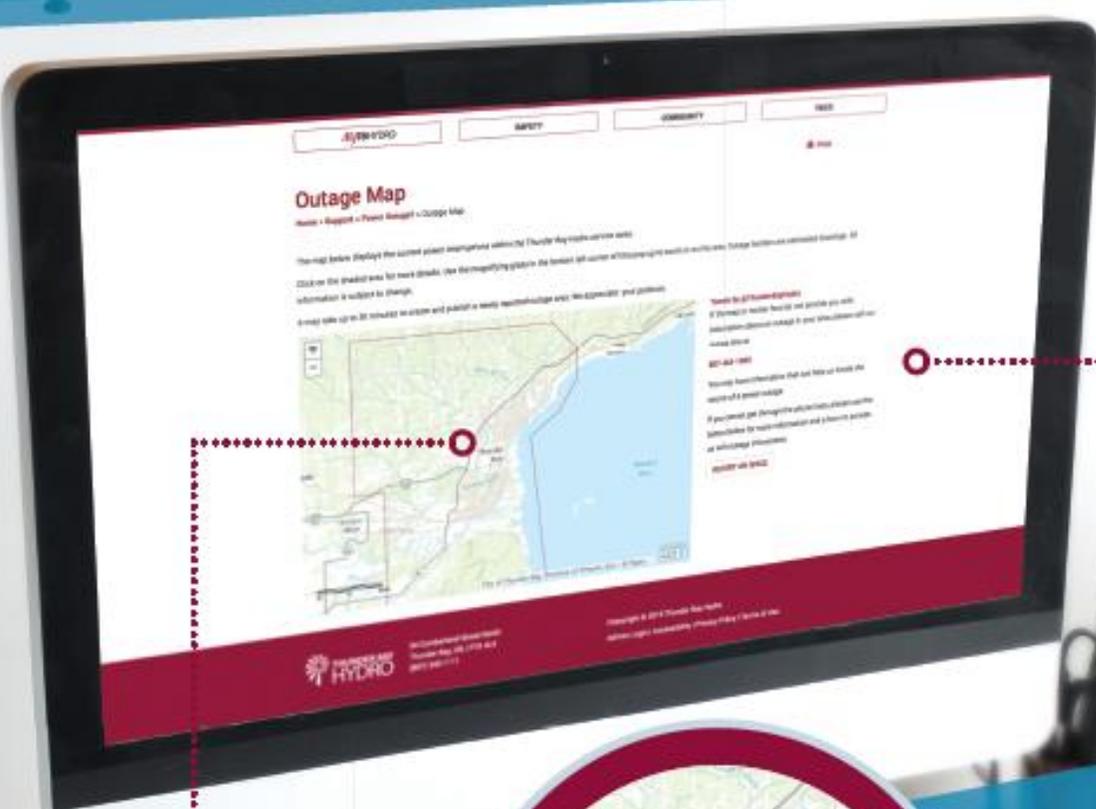


## Online Access

With an average of 6,000 visits monthly, our website has become a vital source of 24-hour information and connection for our customers. We updated our format to provide a more responsive portal that customers can access via desktop, tablet or mobile phone. More interactive forms, outage messaging and videos were added as well.

More of our customers look to social media for news and updates. We have moved into regular use of Twitter to provide vital updates during major power outages and Facebook postings for all news releases, advertisements, notices and safety campaigns.





## Outage map

In response to growing customer demand for current outage information, Thunder Bay Hydro developed an online outage map for our website.

Now, our customers are able to see all current power outages whether they are unplanned or scheduled. The map displays the number of customers affected, the status of power restoration efforts and the estimated time of power restoration if it is known.



# Minimizing Power Outages

## Forestry Management

In 2007, Thunder Bay Hydro announced a more preventative approach to its Right-of-Way Vegetation Maintenance program after identifying that trees and brush interfering with power lines are responsible for approximately half the logged interruptions of electrical service in overgrown neighbourhoods.

To minimize these outages and reduce potential safety hazards to the public, Thunder Bay Hydro proactively trims trees and vegetation in the proximity of its hydro lines. This requires customer notification, education and interaction.



## Capital Program

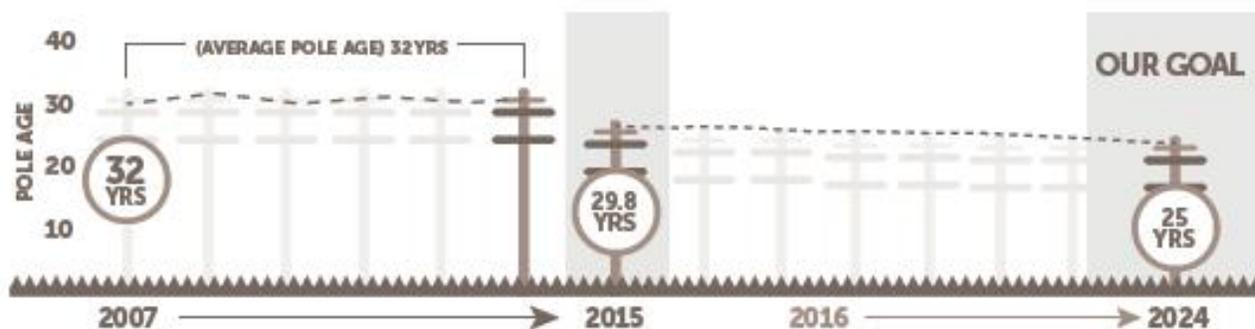
Thunder Bay Hydro crews continue to replace aging infrastructure and upgrade the hydro lines to a higher voltage throughout the city as part of our capital program and investment plan in end of life system replacements. During the 2015 construction season, rebuilds took place in the following neighbourhoods:

- Dawson / Rookwood Streets
- Balsam / Minot Streets
- Daore / Leslie Streets
- Mackenzie / Dease Streets
- Brunswick / Legion Streets
- Edward Street area

These projects resulted in the renewal of 653 poles and supporting equipment over the course of the year.

Our crews faced the challenge of replacing aging infrastructure in backyard easements. In many cases pole locations restricted access for our equipment. To increase the efficiency of our work, cranes were brought in to replace the poles and decrease manual labour.

Upgrading the lines from 4kV to 25kV in the Balsam/Minot Streets neighbourhood allowed us to decommission the 4kV portion of the Balsam St. Sub-Station.



We were able to reduce the average age of the poles from 32 years-of-age in 2007, to just under 30 years-of-age by 2015. Continuation of our efforts and investments in the capital program will result in a newer more robust system. Our goal is to reach and maintain an average pole age of 25 years.



Cranes were brought in to replace poles in restricted backyard easement locations.

# Putting Conservation First



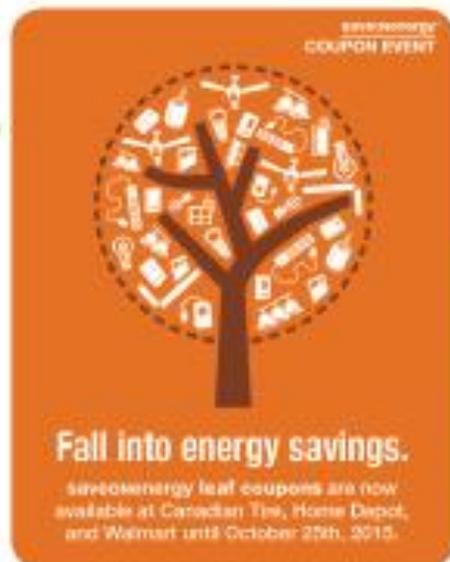
## Conservation First Framework

A six-year Comprehensive Conservation Demand Management (CDM) plan has been completed for the 2015-2020 Conservation First Framework (CFF).

The CDM plan offers programs across the residential, commercial, industrial, and low income sectors and is designed to satisfy the energy savings target assigned to Thunder Bay Hydro by the Independent Electricity System Operator (IESO) of 48,400 megawatt-hours (MWh).

The CDM plan allowed for the ability to develop more local programming. Due to differences in climate compared to the remainder of the province, Thunder Bay Hydro has begun development on programs which will better suit the needs of Northwestern Ontario.

The third quarter saw the commencement of the CFF. The main challenge is to offer programs while remaining cost-effective. Over the duration of the CFF, staff must ensure that our resources are allocated to best achieve energy savings.



Social Media Graphic



Billboard

saveenergy™



Poster

**WE WANT YOU.**  
**COMMIT. GET RETROFIT.**



Website Banner

## Thunder Bay Regional Health Sciences Centre

Thunder Bay Hydro awarded a \$3.1 million incentive from the IESO, to Thunder Bay Regional Health Sciences Centre, in support of its new Combined Heat and Power (Cogeneration) Plant (CHP).

The new plant came online December 23, 2015 and will provide significant benefits for the hospital. The CHP will efficiently generate electricity and thermal energy, and will also recover waste heat directed to the boiler plant.

The CHP will generate electricity savings of 16,191 MWh annually, which results in approximately \$614,000 in electricity cost savings each year. With a total project cost of \$8.3 million, the payback period is expected to be under six years after factoring in incentives and alternate energy savings within the hospital.

The energy savings achieved from this project alone is 30% of Thunder Bay Hydro's six-year energy target.



Photo: (Background) TBRHSC unveiled the fully operational Combined Heat and Power (CHP) plant. (From left to right) Robert Mace, President, Thunder Bay Hydro; Bill Mauro, MPP for Thunder Bay-Alberta, Minister of Natural Resources and Forestry; Michael Gavelli, MPP for Thunder Bay-Superior North, Minister of Northern Development and Mines; Anne-Marie Heron, Executive Director of Capital Planning and Operations, TBRHSC; Keith Taylor, Co-Chair, Patient Family Advisory Council, TBRHSC; Dr. Bill McCreesh, Interim President & CEO of TBRHSC, and Interim CEO of the Thunder Bay Regional Research Institute.

**save ON energy<sup>SM</sup>**  
**FOR HOME**

**CONGRATULATIONS TO THE WIEBE FAMILY!**  
WINNERS of the better things contest.

Angela, Lisa, Noah, Corbin, Scott & Scottie Wiebe of the Thunder Bay Water Conservation Team.

With energy saved, the Wiebe family will go on a winter getaway to a local cabin.

Learn how you can save like the Wiebe family by participating in one of the Thunder Bay Hydro save-on-energy programs.

To view the winning video visit: [tbhydro.on.ca/betterthings](http://tbhydro.on.ca/betterthings)

"Our family has so much fun on our energy-free vacations! On our canoe trips, we enjoy all that nature has to offer. It not only saves power, but gives our kids more of an appreciation and understanding of the resources we have."

#TBRHydroBetterThings  
-Scott & Angela Wiebe

**FROST BITES** **WARM UP TO ENERGY SAVINGS**

**THUNDER BAY HYDRO** HEATING & COOLING INCENTIVE **save ON energy<sup>SM</sup>**

[tbhydro.saveonenergy.ca/hvac](http://tbhydro.saveonenergy.ca/hvac)

Print Ad



save ON energy<sup>SM</sup> is a registered trademark of the Ontario Energy Board. The logo and design are the property of Thunder Bay Hydro. All rights reserved. © 2015 Thunder Bay Hydro. All other trademarks are the property of their respective owners.

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# Implementing Best Practices



## Conservation Promotion

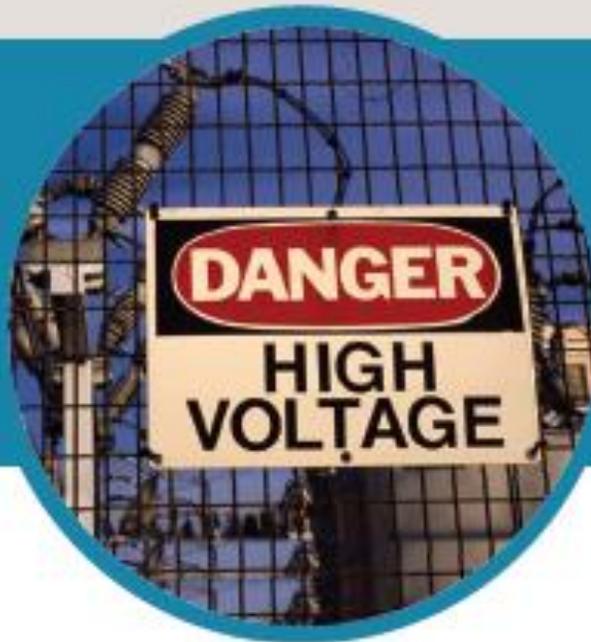
The Opportunity Accelerator Program adopts a more proactive approach to engaging large energy users in conservation programs. The new program is designed to strengthen relationships and identify energy efficiency opportunities for our largest customers. The program offer of an energy audit resulted in 15 large Retrofits and a detailed engineering study during 2015.

The recognition offered through our Retrofit Awards has reaped payback. Energy savings have more than tripled following their launch, with an annual average increase of 2,876,456 kWh. In 2015, 129 Retrofits were completed, with over \$350,000 paid out in incentives.



## Sub-Stations

As part of our strategy to increase our investment in end-of-life system replacement, crews have been upgrading the local lines to a higher voltage. This allows us to decommission sub-stations that are at the end of their life and reduce system losses to create a more efficient distribution system.



## Contractor Compliance Tool

During 2015, Thunder Bay Hydro decided to end the costly and time consuming process of paper audits for prequalifying its contractors. The company teamed up with a contractor to move the process online.

This is expected to shorten the time commitment for both contractors and our staff. The electronic records will enhance our supervisors' ability to monitor our contractor compliance with respect to employee training records and documentation in a more efficient manner and result in a safer workplace for all.

# Providing Community Support



## School Safety

Each year, we deliver the Hi-Line Hazard Electrical Safety Awareness Program to about 1000 elementary students from Grades 3 to 4. Students are invited to create an illustration of a safety message that they learned after the presentation. This year, we received an outstanding number of submissions for staff from across the corporation to review and vote on.

We also took our presentation to local school bus drivers. We were able to review downed power line procedures with 60 bus drivers and staff from First Student.

The safety message was also promoted through our sponsorship of the St. John's Ambulance "We Can Help" and "Lifesaver" Programs for area schools.



## Mayor's Community Safety Awards

The Annual Mayor's Community Safety Awards honour local citizens and groups who contribute to safety in our community with unique programs and services. For the second of a three-year commitment, Thunder Bay Hydro was the presenting sponsor.

These awards are just one of the many community initiatives that Thunder Bay Hydro supports. Last year, we supported over 50 organizations and projects that met our criteria of the promotion of safety messages, the environment or working to make Thunder Bay a better place to live.

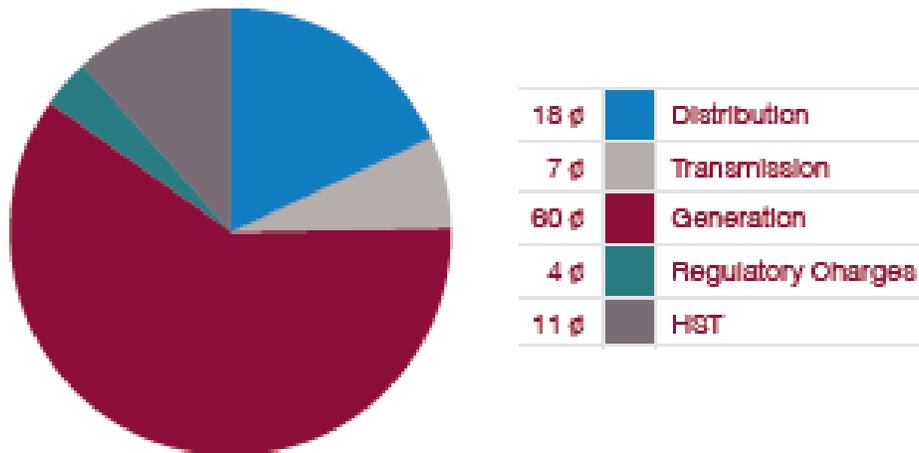
In 2015  
**Thunder Bay Hydro**  
**supported**  
**50** community  
organizations  
and projects

## Forum North

The Forum North Health & Safety Conference is held in Thunder Bay in each November. Thunder Bay Hydro is a gold level sponsor. Our sponsorship allows large and small companies to send employees to workshops and presentations that are designed for local businesses seeking solutions to improve safety and productivity in our community.

# Financial Picture

## Where Every \$1 in Electricity Billing is Distributed\*



\*After impact of Ontario Clean Energy Benefit

## Consolidated Financial Highlights

Revenues	\$144,764,654
Expenses	\$141,445,713
Earnings Before Taxes	\$3,318,941
Payments In Lieu of Corporate Taxes	\$977,099
Earnings For Year	\$2,341,842

Net capital expenditures for the year: \$9,906,212

## Who are our Customers?







2015  
Annual  
Report

# **ATTACHMENT 1 – N**

Reconciliation of Audited

Financial Statements to RRR Trial Balance

Thunder Bay Hydro Reconciliation between Audited Financial Statement and Regulatory USOA

		2017 Caseware				Consolidated			
Statement	Financial Statement Category	Financial Statement Presentation	USOA Account	Balance As @ 31-Dec-13	Non Wires	Consolidated	AFS as restated in 2014	Variance	
Balance sheet	01- Current Assets	A- Cash and cash equivalents	1005	\$2,601,131	(\$3,632,950)				
			1010	\$600					
		A- Cash and cash equivalents Total		\$2,601,731	(\$3,632,950)	(\$1,031,219)	\$2,601,731	(\$3,632,950)	
		B- Investments	1070	\$32,025					
		B- Investments Total		\$32,025	\$0	\$32,025	\$32,025	\$0	
		C- Accounts receivable	1100	\$9,642,219					
			1104	\$34,224					
			1110	\$522,853					
			1130	(\$422,979)					
			1140	\$5,254					
			1200	(\$1,382)					
		C- Accounts receivable Total		\$9,780,189	\$0	\$9,780,189	\$9,780,189	(\$0)	
		D- Unbilled Revenue	1120	\$14,985,516					
		D- Unbilled Revenue Total		\$14,985,516	\$0	\$14,985,516	\$14,985,516	\$0	
		E- PILS Receivable	2294	\$263,460					
		E- PILS Receivable Total		\$263,460	\$0	\$263,460	\$263,460	(\$0)	
		F- Due from related parties	1200	\$72,063					
			2205	\$1,382					
		F- Due from related parties Total		\$73,445	\$0	\$73,445	\$73,445	\$0	
		G- Finished goods inventory	1330	\$1,449,805					
		G- Finished goods inventory Total		\$1,449,805	\$0	\$1,449,805	\$1,449,805	\$0	
		H- Prepays	1180	\$324,859					
		H- Prepays Total		\$324,859	\$0	\$324,859	\$324,859	(\$0)	
	** Grouped with Future Income Tax assets	I- Current portion of Future income tax assets							
		I- Current portion of Future income tax assets Total							
	02- Other Assets	K- Intangibles	1609	\$1,272,321					
			1611	\$1,177,699					
			2120	(\$1,260,078)					
		K- Intangibles Total		\$1,189,942	\$0	\$1,189,942	\$1,189,942	(\$0)	
		I - Regulatory Assets	1508	\$114,473					
			1518	\$119,228					
			1548	\$49,772					
			1551	(\$2,546)					
			1555	\$448,130					
			1556	(\$249,044)					
			1568	(\$65,597)					
			1580	(\$2,338,568)					
			1584	(\$415,597)					
			1586	(\$1,199,363)					
			1588	(\$219,426)					
			1589	(\$98,418)			\$448,130	Current Asset	
			1592	(\$0)			\$283,472	Long Term Asset	
			1595	(\$632,440)			(\$1,962,762)	Current Liability	
		I - Regulatory Assets Total		(\$4,489,397)	\$0	(\$4,489,397)	(\$3,258,236)	Long Term Liability	
		M - Future Tax asset	2350	\$4,734,205			\$65,997	Current Asset	
		M - Future Tax asset Total		\$4,734,205	\$0	\$4,734,205	\$4,668,208	Long Term Asset	
		N - Long Term Account Receivable	1460	\$345,313					
		N - Long Term Account Receivable Total		\$345,313	\$0	\$345,313	\$345,313	\$0	

<b>03- Property Plant &amp; Equipment</b>		O - PPE	1805	\$133,038					
			1808	\$7,209,919					
			1810	\$63,262					
			1820	\$8,315,333					
			1830	\$34,898,676					
			1835	\$35,024,992					
			1840	\$14,566,565					
			1845	\$19,109,697					
			1850	\$28,751,853					
			1855	\$21,275,208					
			1860	\$9,123,013					
			1915	\$1,464,058					
			1920	\$3,059,894	\$5,554				
			1930	\$7,254,571					
			1935	\$63,417					
			1940	\$2,540,603					
			1945	\$299,184					
			1950	\$215,882					
			1955	\$276,683					
			1980	\$323,861					
			1985	\$0	\$88,666				
			2075	\$0	\$3,679,113				
			2105	(\$98,661,616)	(\$35,487)				
			2180	\$0	(\$104,897)				
		<b>O - PPE Total</b>		\$95,308,090	\$3,632,950	\$98,941,040	\$98,941,038		\$2
		P- Contributions in Kind	1995	(\$14,435,768)					
		<b>P- Contributions in Kind Total</b>		(\$14,435,768)	\$0	(\$14,435,768)	(\$14,435,768)		(\$0)
		Q - Construction in Progress	2055	\$2,147,194					
			2075	\$0					
		<b>Q - Construction in Progress Total</b>		\$2,147,194	\$0	\$2,147,194	\$2,147,194		\$0
<b>04- Current Liabilities</b>		A- Accounts Payable	2205	(\$13,850,686)					
			2220	(\$1,504,359)					
			2290	\$1,377,502					
			2292	(\$214,729)					
		<b>A- Accounts Payable Total</b>		(\$14,192,272)	\$0	(\$14,192,272)	(\$14,192,273)		\$1
		B- Debt Retirement Charges Payable	2250	(\$522,229)					
		<b>B- Debt Retirement Charges Payable Total</b>		(\$522,229)	\$0	(\$522,229)	(\$522,229)		(\$0)
		C- Deferred Revenue	2210	(\$124,327)					
			2320	(\$222,123)					
		<b>C- Deferred Revenue Total</b>		(\$346,450)	\$0	(\$346,450)	(\$346,450)		\$0
		D- Customer Deposits	2210	(\$2,387,411)					
		<b>D- Customer Deposits Total</b>		(\$2,387,411)	\$0	(\$2,387,411)	(\$2,387,411)		\$0
		F- Current Portion of Long Term Debt	2260	(\$453,766)					
		<b>F- Current Portion of Long Term Debt Total</b>		(\$557,848)	\$0	(\$557,848)	(\$557,848)		(\$0)
		I- Employee Future Benefits	2306	(\$2,887,002)					
		<b>I- Employee Future Benefits Total</b>		(\$2,887,002)	\$0	(\$2,887,002)	(\$2,887,002)		(\$0)
		L- ARO	2320	(\$175,082)					
		<b>L- ARO Total</b>		(\$175,082)	\$0	(\$175,082)	(\$175,082)		(\$0)
<b>05- Long -Term Liabilities</b>		J - Note Payable to the Corporation of the City of Thunder Bay	2550	(\$26,490,500)					
		<b>J - Note Payable to the Corporation of the City of Thunder Bay Total</b>		(\$26,490,500)	\$0	(\$26,490,500)	(\$26,490,500)		(\$0)
		K- Other Long Term Liabilities	2205	(\$105,467)					
		<b>K- Other Long Term Liabilities Total</b>		(\$105,467)	\$0	(\$105,467)	(\$105,467)		(\$0)
		M - Long Term Debt	2525	(\$11,452,007)					
		<b>M - Long Term Debt Total</b>		(\$11,452,007)	\$0	(\$11,452,007)	(\$11,452,007)		\$0
		N- Future Tax Liability	2350	(\$919,557)					
		<b>N- Future Tax Liability Total</b>		(\$919,557)	\$0	(\$919,557)	(\$919,558)	Long Term Liability Current Liability	\$1

<b>06- Share Holders Equity</b>		O- Share Capital	3005	(\$28,899,072)					
			3030	(\$13,032,554)					
			9996	\$0					
		O- Share Capital Total		(\$41,931,626)	\$0	(\$41,931,626)	(\$41,931,626)		(\$1)
		R- Retained Earning	3046	(\$13,892,403)					
		R- Retained Earning Total		(\$13,892,403)	\$0	(\$13,892,403)	(\$15,976,106)		\$2,083,703
<b>Income statement</b>	<b>01- Revenues and Flow Through Charges</b>	A- Flow Through Charges plus distribution revenues	4035	\$0					
			4080	(\$18,858,358)					
			4235	(\$15,926)					
			4324	\$0					
		A- Flow Through Charges plus distribution revenues Total		(\$18,874,285)	\$0	(\$18,874,285)	(\$18,874,274)		(\$11)
		B- Flow Through Costs of Energy	4006	(\$28,278,119)					
			4025	(\$882,160)					
			4030	(\$11,074)					
			4035	(\$49,189,952)					
			4055	(\$4,653,792)					
			4062	(\$5,019,416)					
			4066	(\$6,219,051)					
			4068	(\$4,091,903)					
			4076	(\$313,278)					
			4705	\$54,686,064					
			4707	\$28,329,043					
			4708	\$5,019,416					
			4714	\$6,219,051					
			4716	\$4,091,903					
			4751	\$313,278					
		B- Flow Through Costs of Energy Total		\$11	\$0	\$11	\$0		\$11
		B- Other Operation Revenue	4082	(\$33,540)					
			4084	(\$1,257)					
			4210	(\$490,736)					
			4220	(\$153,174)	(\$5,146)				
			4225	(\$287,463)					
			4235	(\$881,657)					
			4355	(\$2,742)					
			4360	(\$140,123)					
			4375	(\$89,914)					
			4385	\$0	(\$7,250)				
			4390	(\$16,563)					
			4405	(\$194,985)					
			5020	(\$18,956)					
			5315	(\$210)					
			5320	(\$11,275)					
			5415	\$0					
			5615	\$142,267					
			4080-02	(\$144,113)					
			4375-1	\$0	(\$2,018,989)				
			4375-3	\$0	(\$365,967)				
			4375-4	\$0	(\$6,646)				
		B- Other Operation Revenue Total		(\$2,324,440)	(\$2,403,993)	(\$4,728,434)	(\$4,728,434)		\$0

02- Expenses		C- Administration					
			4220	\$95,152			
			4235	\$486,423			
			4362	\$0			
			4380	(\$4,748)			
			5025	\$0			
			5310	\$263,137			
			5315	\$833,756			
			5320	\$405,185			
			5325	\$0			
			5335	\$120,074			
			5415	\$66,581			
			5515	\$90,338			
			5605	\$868,000			
			5615	\$767,005			
			5620	\$190,917			
			5630	\$158,740			
			5635	\$19,079			
			5640	\$101,183			
			5645	\$377,709			
		23	5655	\$210,589			
			5665	\$128,291			
			5670	\$247,528			
			5675	\$58,206			
			5695	\$0			
			5705	\$52,607			
			5715	\$3,616			
			6035	\$23,003			
			6205	\$24,800	\$14,103		
			5615	\$188,141			
		2	5620	\$30,787			
		2	5630	\$159			
		2	5670	\$9,200			
		2	5675	\$1,990			
		2	5705	\$1,413			
		17	4220	\$51,360			
		23/17	4380	\$4,748			
		17	5005	\$86,894			
		17	5105	\$138,830			
		17	5315	\$186,503			
		17	5320	\$66,865			
		17	5320	\$9,495			
		17	5615	\$110,251			
		17	5615	\$1,836			
		17	5615	\$10,302			
		17	5615	\$26,155			
		17	5615	\$52,086			
		17	5615	\$22,483			
		23	4380-3	(\$0)	\$375,715		
		23	4380-4	\$0	\$9,219		
		C- Administration Total		\$6,586,672	\$399,036	\$6,985,708	\$6,985,708
		D - Amortization	5705	\$2,915,697			
			5715	\$50,893			

	D - Amortization Total		\$2,966,590	\$0	\$2,966,590	\$2,966,590	(\$0)
	E - Operations Maintenance	4380	\$81,045				
		5005	\$378,269				
		5010	\$761,836				
		5017	\$594,777				
		5020	\$208,383				
		5025	\$548,093				
		5035	\$345,382				
		5040	\$46,153				
		5045	\$24,232				
		5055	\$213,981				
		5065	\$152,229				
		5070	\$0				
		5075	\$15,222				
		5105	\$604,360				
		5114	\$112,925				
		5120	\$84,761				
		5125	\$731,853				
		5130	\$555,346				
		5135	\$684,873				
		5145	\$9,525				
		5150	\$99,844				
		5155	\$238,458				
		5160	\$143,114				
		5170	\$0	\$4,668			
		5172	\$0	\$2,708			
		5175	\$42,818				
		5320	\$27,452				
		5420	\$7,631				
		5605	\$34,172				
		5615	\$152,711				
		5620	\$40,677				
		5630	\$15,700				
		5635	\$18,468				
		5640	\$117,459				
		5645	\$330,667				
		5665	\$4,286				
		5670	\$27,985				
		5675	\$16,583				
		5695	\$0				
		5705	\$69,263	\$11,324			
		6105	\$6,660				
	E - Operations Maintenance Total		\$7,547,195	\$18,700	\$7,565,895	\$7,565,895	(\$0)
	F - OPA Programs	4380-1	\$0	\$2,018,985			
	F - OPA Programs Total		\$0	\$2,018,985	\$2,018,985	\$2,018,985	(\$0)
	G - Gain / Loss of Disposal of FA	4360	\$190,628				
		5615	(\$142,267)				
	G - Gain / Loss of Disposal of FA Total		\$48,361	\$0	\$48,361	\$48,361	(\$0)

<b>03- Earnings before the following</b>		H- Interest on Capital Lease	6005	\$462,937					
		H- Interest on Capital Lease Total		\$462,937	\$0	\$462,937	\$462,937		(\$0)
		I - Carrying Charges on Reg Assets and Liabilities	4405	(\$106,191)					
			6035	\$147,605					
		I - Carrying Charges on Reg Assets and Liabilities Total		\$41,415	\$0	\$41,415	\$41,415		(\$1)
<b>04- Payment in Lieu of Corporate Income Taxes</b>		J - Income Tax Expense	6105	\$75,000					
		J - Income Tax Expense Total		\$75,000	\$0	\$75,000	\$75,000		\$0
		K - Future Tax Recoverable	6115	\$1,354,115					
		K - Future Tax Recoverable Total		\$1,354,115	\$0	\$1,354,115	\$1,354,115		\$0
<b>05 - Clearing</b>		Z - Clearing	4375-2	\$0	(\$168,364)				
			4380-2	\$0	\$168,364				
		Z - Clearing Total		\$0	\$0	\$0	\$0		\$0
<b>Grand Total</b>				- 0.00	- 0.00	- 0.00	0.00		

<b>Balance Sheet</b>						
		<b>Sum of 31-Dec-13</b>	<b>Non Wires</b>	<b>Consolidated</b>	<b>2013 AFS</b>	<b>Variance</b>
Assets	Current	\$29,511,030	(\$3,632,950)	\$29,511,030	\$29,577,027	(\$65,997)
	Other	\$6,269,460	\$0	\$6,269,460	\$6,203,463	\$65,997
	PP&E	\$83,019,516	\$3,632,950	\$86,652,466	\$86,652,464	\$2
	Regulatory	\$731,601	\$0	\$731,601	\$731,602	(\$1)
	<b>Total Assets</b>	<b>\$119,531,607</b>	<b>\$0</b>	<b>\$119,531,607</b>	<b>\$123,164,556</b>	<b>\$1</b>
Liabilities	Current	(\$18,006,210)	\$0	(\$18,006,210)	(\$20,087,728)	\$2,081,518
	Current Regulatory	(\$5,220,998)	\$0	(\$5,220,998)		
	Non-Current	(\$42,029,615)	\$0	(\$42,029,615)	(\$45,169,097)	(\$2,081,516)
Share Holders Equity	Share Holders Equity	(\$55,824,029)	\$0	(\$55,824,029)	(\$57,907,731)	\$2,083,702
	OCI					
	<b>Total Liabilities &amp; Share Holders E</b>	<b>(\$121,080,852)</b>	<b>\$0</b>	<b>(\$121,080,852)</b>	<b>(\$123,164,556)</b>	<b>\$2,083,704</b>
	Balance = SB 0	(\$1,549,246)			\$0	
<b>Income Statement</b>						
	Revenues	(\$21,198,714)	(\$2,403,993)	(\$23,602,708)	(\$24,294,606)	\$3,095,892
	Expenses	\$19,082,283	\$2,436,720	\$21,519,003	\$22,019,519	(\$2,937,236)
	<b>Total Comprehensive Income</b>	<b>(\$2,116,431)</b>	<b>\$32,727</b>	<b>(\$2,083,704)</b>	<b>(\$2,275,087)</b>	<b>\$158,656</b>
			0			
	SMDR Revenue			- 629,723.00		
	Carrying Charge Adjustment			- 21,793.00		
	<b>Net Earnings for year per OEB submission</b>			<b>(\$1,432,188)</b>		
				<b>BALANCES</b>		



Thunder Bay Hydro Reconciliation between Audited Financial Statement and Regulatory USOA								
			2017 Caseware	Caseware Mapping		Consolidated		
Statement	Financial Statement Category	Financial Statement Presentation	USOA Account	Balance As @ 31-Dec-14	Non Wires	Consolidated	2014 AFS	Variance
Balance sheet	01- Current Assets	A- Cash and cash equivalents	1005	\$3,230,496	(\$3,440,360)			
			1010	\$500				
		A- Cash and cash equivalents Total		\$3,230,996	(\$3,440,360)	(\$209,364)	\$3,230,996	(\$3,440,360)
		B- Investments	1070	\$32,025				
		B- Investments Total		\$32,025	\$0	\$32,025	\$32,025	\$0
		C- Accounts receivable	1100	\$11,547,143				
			1104	\$41,924				
			1110	\$783,015				
			1130	(\$371,196)				
			1140	\$4,478				
			1200	(\$36,887)				
		C- Accounts receivable Total		\$11,968,477	\$0	\$11,968,477	\$11,968,477	\$0
		D- Unbilled Revenue	1120	\$13,666,371				
		D- Unbilled Revenue Total		\$13,666,371	\$0	\$13,666,371	\$13,666,371	\$0
		E- PILS Receivable	2294	\$616,745				
	E- PILS Receivable Total		\$616,745	\$0	\$616,745	\$616,745	(\$0)	
	F- Due from related parties	1200	\$10,078					
		2205	\$36,887					
	F- Due from related parties Total		\$46,965	\$0	\$46,965	\$46,965	\$0	
	G- Finished goods inventory	1330	\$1,686,009					
	G- Finished goods inventory Total		\$1,686,009	\$0	\$1,686,009	\$1,686,009	\$0	
	H- Prepays	1180	\$373,670					
	H- Prepays Total		\$373,670	\$0	\$373,670	\$373,668	\$2	
	02- Other Assets	K- Intangibles	1609	\$1,272,321				
			1611	\$1,240,119				
			2120	(\$1,383,211)				
		K- Intangibles Total		\$1,129,228	\$0	\$1,129,228	\$1,129,229	(\$1)
		I- Regulatory Assets	1508	\$116,114				
			1518	\$183,746				
			1548	\$72,575				
			1551	(\$1,806)				
		1555	(\$48,956)					
		1568	(\$65,597)					
		1580	(\$1,019,189)					
		1584	(\$419,101)					
		1586	(\$994,976)					
		1588	(\$185,887)				\$0	
		1589	\$426,976				\$372,435 Long Term Asset	
		1592	(\$0)				(\$2,300,480) Current Liability	
	1595	(\$437,306)				(\$445,362) Long Term Liability		
I- Regulatory Assets Total		(\$2,373,407)	\$0	(\$2,373,407)	(\$2,373,407)	\$0		
M - Future Tax asset	2350	\$5,070,639						
M - Future Tax asset Total		\$5,070,639	\$0	\$5,070,639	\$5,070,639	\$0		
N - Long Term Account Receivable	1460	\$326,875						
N - Long Term Account Receivable Total		\$326,875	\$0	\$326,875	\$326,875	\$0		

<b>03- Property Plant &amp; Equipment</b>	O - PPE	1805	\$133,038				
		1808	\$7,211,448				
		1810	\$63,262				
		1820	\$8,310,045	\$5,288			
		1830	\$37,558,115				
		1835	\$36,316,005				
		1840	\$14,501,643				
		1845	\$20,088,339				
		1850	\$30,393,950				
		1855	\$22,172,737				
		1860	\$9,352,375				
		1915	\$1,489,847				
		1920	\$3,121,626				
		1930	\$7,550,944				
		1935	\$63,417				
		1940	\$2,701,190				
		1945	\$326,071				
		1950	\$215,882				
		1955	\$279,830				
		1980	\$362,898				
		1985	\$0	\$90,485			
		2075	(\$0)	\$3,679,113			
		2105	(\$101,374,974)	(\$45,673)			
		2180	(\$0)	(\$288,853)			
	O - PPE Total		\$100,837,688	\$3,440,360	\$104,278,048	\$104,278,048	(\$0)
	P- Contributions in Kind	1995	(\$16,113,860)				
	P- Contributions in Kind Total		(\$16,113,860)	\$0	(\$16,113,860)	(\$16,113,860)	(\$0)
	Q - Construction in Progress	2055	\$2,888,739				
	Q - Construction in Progress Total		\$2,888,739	\$0	\$2,888,739	\$2,888,739	\$0
<b>04- Current Liabilities</b>	A- Accounts Payable	2205	(\$12,648,283)				
		2220	(\$1,557,875)				
		2290	\$1,234,720				
		2292	(\$211,394)				
	A- Accounts Payable Total		(\$13,182,833)	\$0	(\$13,182,833)	(\$13,182,833)	\$0
	B- Debt Retirement Charges Payable	2250	(\$589,615)				
	B- Debt Retirement Charges Payable Total		(\$589,615)	\$0	(\$589,615)	(\$589,615)	\$0
	C- Deferred Revenue	2210	(\$114,439)				
		2320	(\$226,698)				
	C- Deferred Revenue Total		(\$341,137)	\$0	(\$341,137)	(\$341,137)	\$0
	D- Customer Deposits	2210	(\$2,207,563)				
	D- Customer Deposits Total		(\$2,207,563)	\$0	(\$2,207,563)	(\$2,207,563)	\$0
	F- Current Portion of Long Term Debt	2260	(\$696,277)				
	F- Current Portion of Long Term Debt Total		(\$696,277)	\$0	(\$696,277)	(\$696,277)	\$0
	I- Employee Future Benefits	2306	(\$2,767,678)				
	I- Employee Future Benefits Total		(\$2,767,678)	\$0	(\$2,767,678)	(\$2,767,678)	(\$0)
	L- ARO	2320	(\$89,637)				
	L- ARO Total		(\$89,637)	\$0	(\$89,637)	(\$89,636)	(\$1)
<b>05- Long -Term Liabilities</b>	J - Note Payable to the Corporation of the City of Thunder Bay	2550	(\$26,490,500)				
	J - Note Payable to the Corporation of the City of Thunder Bay Total		(\$26,490,500)	\$0	(\$26,490,500)	(\$26,490,500)	(\$0)
	K- Other Long Term Liabilities	2205	(\$105,467)				
	K- Other Long Term Liabilities Total		(\$105,467)	\$0	(\$105,467)	(\$105,467)	(\$0)
	M - Long Term Debt	2525	(\$16,905,724)				
	M - Long Term Debt Total		(\$16,905,724)	\$0	(\$16,905,724)	(\$16,905,724)	(\$0)
	N- Future Tax Liability	2350	(\$2,318,270)				
	N- Future Tax Liability Total		(\$2,318,270)	\$0	(\$2,318,270)	(\$2,318,271)	\$1

<b>06- Share Holders Equity</b>		O- Share Capital	3005	(\$28,899,072)				
			3030	(\$13,982,554)				
		O- Share Capital Total		(\$42,881,626)	\$0	(\$42,881,626)	(\$42,881,625)	(\$1)
		R- Retained Earning	3046	(\$15,976,107)				
		R- Retained Earning Total		(\$15,976,107)	\$0	(\$15,976,107)	(\$18,251,193)	\$2,275,086
<b>Income statement</b>	<b>01- Revenues and Flow Through Charges</b>	A- Flow Through Charges plus distribution re	4080	(\$19,281,889)				
			4235	(\$17,544)				
		A- Flow Through Charges plus distribution revenues Total		(\$19,299,433)	\$0	(\$19,299,433)	(\$19,299,433)	(\$0)
		B- Flow Through Costs of Energy	4006	(\$31,417,891)				
			4025	(\$903,798)				
			4030	(\$11,658)				
			4035	(\$49,682,925)				
			4055	(\$5,356,322)				
			4062	(\$4,712,759)				
			4066	(\$6,258,338)				
			4068	(\$4,297,875)				
			4076	(\$467,128)				
			4705	\$63,717,919				
			4707	\$23,654,674				
			4708	\$4,712,759				
			4714	\$6,258,338				
			4716	\$4,297,875				
			4751	\$467,128				
		B- Flow Through Costs of Energy Total		(\$0)	\$0	(\$0)	\$0	(\$0)
		B- Other Operation Revenue	4082	(\$28,944)				
			4084	(\$595)				
			4210	(\$503,294)				
			4220	(\$171,356)				
			4225	(\$329,078)				
			4235	(\$487,342)				
			4355	(\$1,137)				
			4360	(\$202,895)				
			4375	(\$122,458)				
			4385	\$0	(\$8,241)			
			4390	(\$13,298)				
			4405	(\$138,176)				
			5020	(\$6,555)				
			5315	(\$2,917)				
			5320	(\$11,850)				
			5415	(\$9,000)				
			5615	\$202,895				
			19 4380	(\$12,624)				
			4080-2	(\$143,536)				
			4375-1	\$0	(\$2,109,075)			
			4375-3	\$0	(\$889,110)			
			4375-4	\$0	(\$6,591)			
		B- Other Operation Revenue Total		(\$1,982,157)	(\$3,013,017)	(\$4,995,174)	(\$4,995,173)	(\$1)

02- Expenses		C - Administration							
			4220		\$116,587				
			4235		\$123,404				
			4362		\$213,755				
		26	4380		\$10,182				
			5025		\$0				
			5310		\$229,003				
			5315		\$871,645				
			5320		\$390,598				
			5325		\$410				
			5335		\$68,322				
			5415		\$76,281				
			5515		\$99,096				
			5605		\$909,146				
			5615		\$784,266				
			5620		\$179,243				
			5630		\$127,030				
			5635		\$10,042				
			5640		\$106,173				
			5645		\$378,642				
			5655		\$149,792				
		26	5665		\$125,341				
			5670		\$253,451				
			5675		\$66,146				
			5695		\$0				
			5705		\$51,519				
			5715		\$3,315				
			6035		\$23,843				
			6205		\$25,186	\$16,042			
		19	4380		\$4,307				
		19	5005		\$66,954				
		19	5105		\$181,768				
		19	5315		\$206,656				
		19	5320		\$63,270				
		19	5320		\$8,615				
		19	5615		\$120,624				
		19	5615		\$1,584				
		19	5615		\$9,947				
		19	5615		\$24,826				
		19	5615		\$18,755				
		19	5615		\$52,435				
		19	4220		\$46,967				
		1	5615		\$167,133				
		1	5620		\$13,517				
		1	5630		\$160				
		1	5645		\$23,713				
		1	5670		\$8,378				
		1	5675		\$1,000				
		1	5705		\$1,248				
			4380-3		\$0	\$502,192			
			4380-4		(\$0)	\$6,591			
			C - Administration Total		\$6,414,276	\$524,825	\$6,939,101	\$6,939,101	\$0
			D - Amortization		5705	\$2,908,062			
					5715	\$50,893			
			D - Amortization Total		\$2,958,955	\$0	\$2,958,955	\$2,958,955	(\$0)

	E - Operations Maintenance	4380	\$109,448				
		5005	\$283,074				
		5010	\$845,121				
		5017	\$542,416				
		5020	\$312,890				
		5025	\$597,893				
		5035	\$223,487				
		5040	\$5,610				
		5045	\$11,199				
		5055	\$130,116				
		5065	\$154,747				
		5070	\$1,744				
		5075	\$9,265				
		5105	\$768,496				
		5114	\$138,701				
		5120	\$131,315				
		5125	\$1,083,848				
		5130	\$593,940				
		5135	\$712,884				
		5145	\$23,999				
		5150	\$108,395				
		5155	\$206,838				
		5160	\$96,855				
		5170	\$0	\$6,717			
		5172	\$0	\$4,910			
		5175	\$99,931				
		5320	\$56,781				
		5420	\$14,193				
		5605	\$36,168				
		5615	\$151,728				
		5620	\$38,413				
		5630	\$23,230				
		5635	\$34,678				
		5640	\$130,278				
		5645	\$345,037				
		5665	\$484				
		5670	\$28,395				
		5675	\$23,379				
		5705	\$76,145	\$11,381			
		6105	\$6,693				
	E - Operations Maintenance Total		\$8,157,815	\$23,008	\$8,180,822	\$8,180,822	\$0
	F- OPA Programs	4380-1	(\$3,178)	\$2,109,075			
	F- OPA Programs Total		(\$3,178)	\$2,109,075	\$2,105,896	\$2,105,896	\$0
	G- Gain / Loss of Disposal of FA	4360	\$371,672				
		5615	(\$202,895)				
	G- Gain / Loss of Disposal of FA Total		\$168,777	\$0	\$168,777	\$168,777	(\$0)

<b>03- Earnings before the following</b>		H- Interest on Capital Lease	6005	\$669,144					
		H- Interest on Capital Lease Total		\$669,144	\$0	\$669,144	\$669,144		(\$0)
		I - Carrying Charges on Reg Assets and Liabi	4405	(\$41,892)					
			6035	\$120,779					
		I - Carrying Charges on Reg Assets and Liabilities Total		\$78,888	\$0	\$78,888	\$78,888		(\$0)
<b>04- Payment in Lieu of Corporate Income Taxes</b>		J - Income Tax Expense	6105	(\$144,343)					
		J - Income Tax Expense Total		(\$144,343)	\$0	(\$144,343)	(\$144,343)		\$0
		K - Future Tax Recoverable	6115	\$1,062,279					
		K - Future Tax Recoverable Total		\$1,062,279	\$0	\$1,062,279	\$1,062,279		\$0
<b>05 - Clearing</b>			4375-2	\$5,992	(\$174,176)				
			4380-2	(\$5,992)	\$174,176				
		Z - Clearing Total		(\$0)	\$0	\$0	\$0		\$0
<b>Grand Total</b>				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>0.00</b>

Balance Sheet						
		Balance As @ 31-Dec-14	Non Wires	Consolidated	2014 AFS	Variance
<b>Assets</b>	Current	\$31,621,259	(\$3,440,360)	\$31,621,259	\$31,621,256	\$3
	Other	\$6,526,742	\$0	\$6,526,742	\$6,526,743	(\$1)
	PP&E	\$87,612,567	\$3,440,360	\$91,052,927	\$91,052,927	(\$0)
	Regulatory	\$372,435	\$0	\$372,435	\$372,435	\$0
	<b>Total Assets</b>	<b>\$126,133,003</b>	<b>\$0</b>	<b>\$126,133,003</b>	<b>\$129,573,361</b>	<b>(\$3,440,358)</b>
<b>Liabilities</b>	Current	(\$17,017,424)	\$0	(\$17,017,424)	(\$19,317,905)	\$1
	Current Regulatory	(\$2,300,480)	\$0	(\$2,300,480)		
	Non-Current	(\$48,677,277)	\$0	(\$48,677,277)	(\$49,122,638)	(\$1)
	Regulatory	(\$445,362)	\$0	(\$445,362)		
	Share Holders Equity	(\$58,857,733)	\$0	(\$58,857,733)	(\$61,132,818)	\$2,275,085
<b>Share Holders Equity</b>	OCI			\$0		\$0
	<b>Total Liabilities &amp; Share Holders Equity</b>	<b>(\$127,298,276)</b>	<b>\$0</b>	<b>(\$127,298,276)</b>	<b>(\$129,573,361)</b>	
	Balance = SB 0	(\$1,165,272)			\$0	
<b>Income Statement</b>						
	Revenues	(\$21,281,590)	(\$3,013,017)	(\$24,294,607)	(\$24,294,606)	(\$1)
	Expenses	\$19,362,612	\$2,656,907	\$22,019,519	\$22,019,519	(\$0)
	<b>Total Comprehensive Income</b>	<b>(\$1,918,979)</b>	<b>(\$356,109)</b>	<b>(\$2,275,088)</b>	<b>(\$2,275,087)</b>	<b>(\$1)</b>
			(\$0)			
	SMDR Revenue				249,044.47	
	1589 GA - Interest Portion				9,522.66	
	<b>Net Earnings for year per OEB submission</b>				<b>(\$2,016,520)</b>	
					<b>BALANCES</b>	



02- Non Current Assets Total			\$100,598,280	\$3,249,080	\$103,847,360	\$103,847,358	\$2	(\$36,088)	\$103,811,270
03- Regulatory Assets		K. Regulatory Deferral	1508	\$127,066	\$127,066				\$0
			1518	\$235,457	\$235,457				\$0
			1532	\$12,376	\$12,376				\$0
			1533	(\$48,782)	(\$48,782)				\$0
			1548	\$82,689	\$82,689				\$0
			1551	(\$4,375)	(\$4,375)				\$0
			1555	(\$49,698)	(\$49,698)				\$0
			1568	(\$66,379)	(\$66,379)				\$0
			1575	\$280,386	\$280,386				\$0
			1580	(\$2,029,307)	(\$2,029,307)				\$0
			1584	(\$459,173)	(\$459,173)				\$0
			1586	(\$664,308)	(\$664,308)				\$0
			1588	(\$92,359)	(\$92,359)				\$0
			1589	\$2,502,991	\$2,502,991				\$0
			1595	(\$980,723)	(\$980,723)	\$533,314	Regulatory Debit Asset		\$533,314
			2350	(\$161,525)	(\$161,525)	(\$1,820,869)	Regulatory Credit Liabilities		(\$1,820,869)
		K. Regulatory Deferral Total		(\$1,315,664)	\$0	(\$1,315,664)	(\$1,287,555)	(\$28,109)	(\$143,800)
03- Regulatory Assets Total				(\$1,315,664)	\$0	(\$1,315,664)	(\$1,287,555)	(\$28,109)	(\$143,800)
04- Current Liabilities		A. Accounts Payable Accrued Liabilities	2205	(\$16,946,334)	(\$16,946,334)				\$0
			2220	(\$1,681,795)	(\$1,681,795)				\$0
			2290	\$1,117,859	\$1,117,859				\$0
			2292	(\$214,587)	(\$214,587)				\$0
		A. Accounts Payable Accrued Liabilities Total		(\$17,724,856)	\$0	(\$17,724,856)	(\$17,724,858)	\$2	(\$17,724,858)
		B. Customer Deposits and Deferred Contributions	2210	(\$3,349,063)	(\$3,349,063)				\$0
		B. Customer Deposits and Deferred Contributions Total		(\$3,349,063)	\$0	(\$3,349,063)	(\$3,349,063)	(\$0)	(\$3,349,063)
		C. Debt Retirement Charges Payable	2250	(\$555,932)	(\$555,932)				\$0
		C. Debt Retirement Charges Payable Total		(\$555,932)	\$0	(\$555,932)	(\$555,932)	\$0	(\$555,932)
		D. Deferred Revenue	2210	(\$107,009)	(\$107,009)				\$0
		D. Deferred Revenue Total		(\$107,009)	\$0	(\$107,009)	(\$107,009)	\$0	(\$107,009)
		E. Current Portion of Long term Debt	2260	(\$767,529)	(\$767,529)				\$0
		E. Current Portion of Long term Debt Total		(\$767,529)	\$0	(\$767,529)	(\$767,529)	\$0	(\$767,529)
04- Current Liabilities Total				(\$22,504,389)	\$0	(\$22,504,389)	(\$22,504,391)	\$2	\$0

<b>05- Non Current Liabilities</b>		F. Contributions in Aid of Constructions	1995	(\$4,023,632)		(\$4,023,632)				\$0
		F. Contributions in Aid of Constructions Total		(\$4,023,632)	\$0	(\$4,023,632)	(\$4,023,633)	\$1		(\$4,023,633)
		G. Note Payable to City	2550	(\$26,490,500)		(\$26,490,500)				\$0
		G. Note Payable to City Total		(\$26,490,500)	\$0	(\$26,490,500)	(\$26,490,500)	(\$0)		(\$26,490,500)
		H. Employee future benefits	2306	(\$2,415,257)		(\$2,415,257)				\$0
		H. Employee future benefits Total		(\$2,415,257)	\$0	(\$2,415,257)	(\$2,415,256)	(\$1)	(\$280,395)	(\$2,695,651)
		I. Other Long Term Liabilities	2205	(\$108,695)		(\$108,695)				\$0
		I. Other Long Term Liabilities Total		(\$108,695)	\$0	(\$108,695)	(\$108,695)	(\$0)		(\$108,695)
		J. ARO	2320	(\$274,300)		(\$274,300)				\$0
		J. ARO Total		(\$274,300)	\$0	(\$274,300)	(\$274,300)	\$0	\$231,674	(\$42,626)
		K. Long Term Debt	2525	(\$20,138,196)		(\$20,138,196)				\$0
		K. Long Term Debt Total		(\$20,138,196)	\$0	(\$20,138,196)	(\$20,138,196)	\$0		(\$20,138,196)
		L. Deferred Taxes	2350	(\$31,688)		(\$31,688)				\$0
		L. Deferred Taxes Total		(\$31,688)	\$0	(\$31,688)	(\$31,688)	\$0		(\$31,688)
<b>05- Non Current Liabilities Total</b>				(\$53,482,267)	\$0	(\$53,482,267)	(\$53,482,268)	\$1	(\$48,721)	(\$53,530,989)
<b>06- Shareholders Equity</b>		M. Share Capital	3005	(\$28,899,072)		(\$28,899,072)				\$0
			3030	(\$13,982,554)		(\$13,982,554)				\$0
		M. Share Capital Total		(\$42,881,626)	\$0	(\$42,881,626)	(\$42,881,625)	(\$1)		(\$42,881,625)
		O. Retained Earnings	3046	(\$18,124,185)		(\$18,124,185)				\$0
		O. Retained Earnings Total		(\$18,124,185)	\$0	(\$18,124,185)	(\$20,023,496)	\$1,899,311	\$240,417	(\$19,783,079)
<b>06- Shareholders Equity Total</b>				(\$61,005,811)	\$0	(\$61,005,811)	(\$62,905,121)	\$1,899,310	\$240,417	(\$62,664,704)
<b>Income statement 08 - Revenue</b>		A. Electricity Revenue	4006	(\$33,171,904)		(\$33,171,904)				\$0
			4025	(\$892,081)		(\$892,081)				\$0
			4030	(\$10,782)		(\$10,782)				\$0
			4035	(\$57,138,817)		(\$57,138,817)				\$0
			4055	(\$4,645,168)		(\$4,645,168)				\$0
			4062	(\$5,528,060)		(\$5,528,060)				\$0
			4066	(\$6,321,894)		(\$6,321,894)				\$0
			4068	(\$4,457,831)		(\$4,457,831)				\$0
			4076	(\$475,067)		(\$475,067)				\$0
			4080	(\$19,368,912)		(\$19,368,912)				\$0
			4235	(\$13,893)		(\$13,893)				\$0
		A. Electricity Revenue Total		(\$132,024,407)	\$0	(\$132,024,407)	(\$132,024,407)	(\$0)		(\$132,024,407)
		B. Other Revenue	4082	(\$24,849)		(\$24,849)				\$0
			4084	(\$705)		(\$705)				\$0
			4210	(\$501,360)		(\$501,360)				\$0
			4220	(\$191,068)		(\$191,068)				\$0
			4225	(\$326,892)		(\$326,892)				\$0
			4235	(\$1,520,899)		(\$1,520,899)				\$0
			4355	(\$250)		(\$250)				\$0
			4375	(\$119,936)		(\$119,935)				\$0
			4385	(\$0)	(\$10,338)	(\$10,338)				\$0
			4390	\$11,983		\$11,983				\$0
			4405	(\$62,933)		(\$62,933)				\$0
			5315	(\$60)		(\$60)				\$0
			5320	(\$10,300)		(\$10,300)				\$0
			5415	(\$500)		(\$500)				\$0
			5705	(\$71,801)		(\$71,801)				\$0
			4220	(\$15,699)		(\$15,699)				\$0
			4080	(\$146,592)		(\$146,592)				\$0
			4375-1	\$0	(\$6,502,216)	(\$6,502,216)				\$0
			4375-3	\$0	(\$739,461)	(\$739,461)				\$0
			4375-4	\$0	(\$6,538)	(\$6,538)				\$0
		B. Other Revenue Total		(\$2,981,860)	(\$7,258,553)	(\$10,240,414)	(\$10,240,413)	(\$1)		(\$10,240,413)
<b>08 - Revenue Total</b>				(\$135,006,268)	(\$7,258,553)	(\$142,264,821)	(\$142,264,820)	(\$1)	\$0	(\$142,264,820)

09- Expenses		C. Purchased Power								
		4705	\$59,920,075			\$59,920,075				\$0
		4707	\$36,971,178			\$36,971,178				\$0
		4708	\$3,697,283			\$3,697,283				\$0
		4714	\$6,109,286			\$6,109,286				\$0
		4716	\$4,236,428			\$4,236,428				\$0
		4751	\$469,927			\$469,927				\$0
		<b>C. Purchased Power Total</b>	<b>\$111,404,176</b>	<b>\$0</b>		<b>\$111,404,176</b>	<b>\$111,404,176</b>	<b>\$0</b>		<b>\$111,404,176</b>
		D. Administration								
		4220	\$93,428			\$93,428				\$0
		5025	\$1,065,862			\$1,065,862				\$0
		5310	\$202,651			\$202,651				\$0
		5315	\$870,561			\$870,561				\$0
		5320	\$376,173			\$376,173				\$0
		5335	\$233,191			\$233,191				\$0
		5415	\$76,216			\$76,216				\$0
		5515	\$91,635			\$91,635				\$0
		5605	\$935,114			\$935,114				\$0
		5615	\$891,050			\$891,050				\$0
		5620	\$190,739			\$190,739				\$0
		5630	\$153,213			\$153,213				\$0
		5635	\$435			\$435				\$0
		5640	\$91,970			\$91,970				\$0
		5645	\$427,309			\$427,309				\$0
		5655	\$159,173			\$159,173				\$0
		11	5665	\$119,881		\$119,881				\$0
			5670	\$255,986		\$255,986				\$0
			5675	\$63,880		\$63,880				\$0
			5705	\$37,388		\$37,388				\$0
			6035	\$23,762		\$23,762				\$0
			6205	\$25,186	\$19,940	\$45,126				\$0
		59/1	5615	\$177,628		\$177,628				\$0
		1	5620	\$24,783		\$24,783				\$0
		1	5630	\$159		\$159				\$0
		1	5645	\$27,237		\$27,237				\$0
		1	5670	\$9,983		\$9,983				\$0
		1	5675	\$1,359		\$1,359				\$0
		1	5705	\$1,465		\$1,465				\$0
		12	4220	\$98,798		\$98,798				\$0
		12	4380	\$6,447		\$6,447				\$0
		12	5005	\$88,347		\$88,347				\$0
		12	5105	\$217,871		\$217,871				\$0
		12	5315	\$241,751		\$241,751				\$0
		12	5320	\$74,137		\$74,137				\$0
		12	5320	\$12,893		\$12,893				\$0
		12	5615	\$54,797		\$54,797				\$0
		12	5615	\$8,596		\$8,596				\$0
		12	5615	\$17,191		\$17,191				\$0
		12	5615	\$25,787		\$25,787				\$0
		12	5615	\$35,457		\$35,457				\$0
		12	5615	\$19,340		\$19,340				\$0
		60	5615	(\$2,623)		(\$2,623)				\$0
		11&12	4380-3	\$0	\$453,444	\$453,444				\$0
		12	4380-4	(\$0)	\$6,528	\$6,528				\$0
		11	4220	\$5,028		\$5,028				\$0
		11	4380	\$10,056		\$10,056				\$0
		<b>D. Administration Total</b>	<b>\$7,541,286</b>	<b>\$479,912</b>		<b>\$8,021,198</b>	<b>\$8,021,198</b>	<b>(\$0)</b>	<b>(\$7,456)</b>	<b>\$8,013,742</b>

	E. Operations & Maintenance	4380	\$105,584		\$105,584				\$0
		5005	\$344,097		\$344,097				\$0
		5010	\$855,833		\$855,833				\$0
		5017	\$516,529		\$516,529				\$0
		5020	\$168,049		\$168,049				\$0
		5025	\$514,006		\$514,006				\$0
		5035	\$271,830		\$271,830				\$0
		5040	\$30,102		\$30,102				\$0
		5045	\$15,630		\$15,630				\$0
		5055	\$185,859		\$185,859				\$0
		5065	\$157,825		\$157,825				\$0
		5070	\$850		\$850				\$0
		5075	\$18,852		\$18,852				\$0
		5105	\$848,573		\$848,573				\$0
		5114	\$127,196		\$127,196				\$0
		5120	\$212,727		\$212,727				\$0
		5125	\$1,069,987		\$1,069,987				\$0
		5130	\$555,884		\$555,884				\$0
		5135	\$764,196		\$764,196				\$0
		5145	\$39,165		\$39,165				\$0
		5150	\$94,519		\$94,519				\$0
		5155	\$195,996		\$195,996				\$0
		5160	\$72,267		\$72,267				\$0
		5170	\$0	\$11,790	\$11,790				\$0
		5172	\$0	\$7,823	\$7,823				\$0
		5175	\$75,697		\$75,697				\$0
		5320	\$65,385		\$65,385				\$0
		5420	\$12,624		\$12,624				\$0
		5605	\$35,570		\$35,570				\$0
		5615	\$155,092		\$155,092				\$0
		5620	\$42,831		\$42,831				\$0
		5630	\$38,863		\$38,863				\$0
		5635	\$36,039		\$36,039				\$0
		5640	\$150,597		\$150,597				\$0
		5645	\$373,317		\$373,317				\$0
		5665	\$1,597		\$1,597				\$0
		5670	\$28,679		\$28,679				\$0
		5675	\$31,119		\$31,119				\$0
		5705	\$96,483	\$11,373	\$107,856				\$0
		6105	\$5,207		\$5,207				\$0
	E. Operations & Maintenance Total		\$8,314,655	\$30,986	\$8,345,641	\$8,345,641	\$0	(\$37,949)	\$8,307,692
	F. Amortization	5705	\$3,102,428		\$3,102,428				\$0
		5715	\$50,893		\$50,893				\$0
	F. Amortization Total		\$3,153,321	\$0	\$3,153,321	\$3,153,321	(\$0)		\$3,153,321
	G. IESO Programs	4380		\$6,502,216	\$6,502,216	\$6,502,216			\$0
	G. IESO Programs Total		\$0	\$6,502,216	\$6,502,216	\$6,502,216	\$0		\$6,502,216
	H. Loss on Disposal	4355	(\$15,102)		(\$15,102)				\$0
		4360	\$263,183	\$2,664	\$265,847				\$0
	H. Loss on Disposal Total		\$248,081	\$2,664	\$250,745	\$250,745	(\$0)		\$250,745

09- Expenses Total			\$130,661,518	\$7,015,778	\$137,677,297	\$137,677,297	(\$0)	(\$45,405)	\$137,631,892
<b>10- Income from Operating Activities</b>		4405	(\$83,664)		(\$83,664)				\$0
	I. Finance Income								
	I. Finance Income Total		(\$83,664)	\$0	(\$83,664)	(\$83,664)	(\$0)		(\$83,664)
	J - Finance Cost	6005	\$811,303		\$811,303				\$0
	J - Finance Cost Total		\$811,303	\$0	\$811,303	\$811,303	\$0		\$811,303
10- Income from Operating Activities Total			\$727,639	\$0	\$727,639	\$727,639	\$0	\$0	\$727,639
<b>11- Provision for Recovery of PILS of taxes</b>		6105	(\$116,300)		(\$116,300)				\$0
	K. Current PILS								
	K. Current PILS Total		(\$116,300)	\$0	(\$116,300)	(\$116,300)	\$0		(\$116,300)
	L. DEF PILS	6115	\$919,943		\$919,943				\$0
	L. DEF PILS Total		\$919,943	\$0	\$919,943	\$919,943	\$0		\$919,943
11- Provision for Recovery of PILS of taxes Total			\$803,643	\$0	\$803,643	\$803,643	\$0	\$0	\$803,643
<b>12- Net Movement in Regulatory Deferral</b>		4062	\$1,830,777		\$1,830,777				\$0
	M. Net movement in Regulatory Deferral								
		4066	\$212,608		\$212,608				\$0
		4068	\$221,402		\$221,402				\$0
		4076	\$5,140		\$5,140				\$0
		4405	(\$30,911)		(\$30,911)				\$0
		4705	(\$106,683)		(\$106,683)				\$0
		4707	(\$925,818)		(\$925,818)				\$0
		5075	(\$655)		(\$655)				\$0
		5315	(\$47,553)		(\$47,553)				\$0
		5615	(\$984)		(\$984)				\$0
		6035	\$61,315		\$61,315				\$0
	M. Net movement in Regulatory Deferral Total		\$1,218,638	\$0	\$1,218,638	\$1,218,638	(\$0)	(\$18,882)	\$1,199,756
12- Net Movement in Regulatory Deferral Total			\$1,218,638	\$0	\$1,218,638	\$1,218,638	(\$0)	(\$18,882)	\$1,199,756
<b>13- O C I</b>		7010	(\$403,607)		(\$403,607)				\$0
	N. O C I								
	N. O C I Total		(\$403,607)	\$0	(\$403,607)	(\$403,607)	\$0	\$403,607	\$0
13- O C I Total			(\$403,607)	\$0	(\$403,607)	(\$403,607)	\$0	\$403,607	\$0
<b>99- Clearing</b>		4235	\$1,065,862		\$1,065,862				\$0
	Z - CLEARING								
		5025	(\$1,065,862)		(\$1,065,862)				\$0
		4375-2		(\$168,775)	(\$168,775)				\$0
		4380-2		\$168,775	\$168,775				\$0
	Z - CLEARING Total		\$1	\$0	\$1				\$0
99- Clearing Total			\$1	\$0	\$1				\$0
<b>Grand Total</b>	<b>Balancing</b>		(\$0)	(\$0)	(\$0)	\$0	\$0		\$0

		Balance As @ 31-Dec-15	Non-Wires Business	Consolidated	Consolidated Audited Financial Statements	Variance	IFRS Adjustment	OEB CGAAP 2015
<b>Balance Sheet</b>								
<b>Assets</b>	Current	\$39,951,060	(\$3,249,080)	\$36,701,980	\$36,701,982	(\$2)	(\$11,808)	\$36,690,174
	PP&E	\$100,598,280	\$3,249,080	\$103,847,360	\$103,847,358	\$2	(\$36,088)	\$103,811,270
	Regulatory	\$505,205	\$0	\$505,205	\$533,314	(\$28,109)	\$1,677,069	\$2,210,383
	Total Assets	\$141,054,544	\$0	\$141,054,544	\$141,082,654	(\$28,110)	\$1,629,173	\$142,711,827
<b>Liabilities</b>	Current	(\$22,504,389)	\$0	(\$22,504,389)	(\$22,504,391)	\$2	\$0	(\$22,504,391)
	Non-Current	(\$53,482,267)	\$0	(\$53,482,267)	(\$53,482,267)	(\$0)	(\$48,721)	(\$53,530,988)
	Regulatory	(\$1,820,869)	\$0	(\$1,820,869)	(\$1,820,869)	\$0	(\$1,820,869)	(\$3,641,738)
<b>Share Holders Equity</b>	Share Holders Equity	(\$61,005,811)	\$0	(\$61,005,811)	(\$63,275,127)	\$2,269,316	\$240,417	(\$62,664,704)
	OCI	\$370,006	\$0	\$370,006	\$370,006	\$0		(\$370,006)
	Total Liabilities & Share Holders Equity	(\$138,443,330)	\$0	(\$138,443,330)	(\$140,712,648)	\$2,269,318	(\$1,629,173)	(\$142,711,827)
	Balance = SB 0	\$2,611,214	\$0	\$2,611,214	\$370,006	\$2,241,208	\$0	\$0
<b>Income Statement</b>								
	Revenues	(\$135,006,268)	(\$7,258,553)	(\$142,264,821)	(\$142,264,820)	(\$1)	\$0	(\$142,264,820)
	Expenses	\$133,007,832	\$7,015,778	\$140,023,610	\$140,023,610	\$0	\$339,320	\$140,362,930
	Total Comprehensive Income	(\$1,998,436)	(\$242,775)	(\$2,241,211)	(\$2,241,210)	(\$1)	\$339,320	(\$1,901,890)
							\$0.00	Check SB = 0
			0.00	Check SB = 0	339,320.00	IFRS ADJUSTMENTS		
					(\$1,901,890)			
					(\$9,523)	589 Global Adjustment		\$9,523
					(\$1,911,413)			(\$1,911,413)
					BALANCES			BALANCES

# **ATTACHMENT 1 – O**

Board Appendix 2-Y

Summary of Impacts to Revenue Requirement from  
Transition to MIFRS

**Appendix 2-Y  
 Summary of Impacts to Revenue Requirement  
 from Transition to MIFRS**

Revenue Requirement Component	2017 MIFRS	2017 CGAAP <sup>1</sup>	Difference	Reasons why the revenue requirement component is different under MIFRS
Closing NBV 2016	\$100,794,145	\$100,763,063	\$31,082	Amortization of future employee benefit gains.
Closing NBV 2017	\$110,444,640	\$110,412,304	\$32,336	Amortization of future employee benefit gains.
Average NBV	\$105,619,393	\$105,587,684	\$31,709	Amortization of future employee benefit gains.
Working Capital	\$10,076,230	\$10,071,449	\$4,781	Amortization of future employee benefit gains.
Rate Base	\$115,695,623	\$115,659,133	\$36,490	Amortization of future employee benefit gains.
<b>Return on Rate Base</b>			\$ -	
			\$ -	
OM&A			\$ -	
Depreciation			\$ -	
PILs or Income Taxes			\$ -	
			\$ -	
Less: Revenue Offsets			\$ -	
			\$ -	
			\$ -	
			\$ -	
Insert description of additional item(s)			\$ -	
<b>Total Base Revenue Requirement</b>	\$ -	\$ -	\$ -	

# **ATTACHMENT 1 – P**

Board Appendix 2-A

Requested Approvals

## Appendix 2-A List of Requested Approvals

The distributor must fill out the following sheet with the complete list of specific approvals requested and relevant section(s) of the legislation must be provided. All approvals, including accounting orders (deferral and variance accounts) new rate classes, revised specific service charges or retail service charges which the applicant is seeking, must be separately identified, as well being clearly documented in the appropriate sections of the application.

Additional requests may be added by copying and pasting blank input rows, as needed.

If additional requests arise, or requested approvals are removed, during the processing of the application, the distributor should update this list.

**Thunder Bay Hydro Electricity Distribution Inc. is seeking the following approvals in this application:**

1	1	Approval to charge distribution rates effective May 1, 2017 to recover a service revenue requirement of \$25,243,526 which includes a Revenue Deficiency of \$4,160,021 as detailed in Exhibit 6. The schedule of proposed rates is set out in Exhibit 8
2	1	Approval of the DSP as outlined in Exhibit 2, Attachment 2-B.
3	1	Approval to adjust the Retail Transmission Rates – Network and Connection as detailed in Exhibit 8.
4	1	Approval to continue to charge Wholesale Market, Ontario Electricity Support Program and Rural Rate Protection Charges approved in the Board Decision and Order in the matter of Thunder Bay Hydro's 2016 Distribution Rates (EB-2015-0103).
5	1	Approval to continue the Specific Service Charges and Transformer Allowance approved in the Board Decision and Order in the matter of Thunder Bay Hydro's 2016 Distribution Rates (EB-2015-0103).
6	1	Approval of the proposed loss factors as detailed in Exhibit 8.
7	1	Approval of the rate riders for a one year disposition of the Group 1 and Group 2 and Other Deferral and Variance Accounts as detailed in Exhibit 9.
8	1	Approval of the rate riders for a one year period to dispose of Constructive Obligation and Actuarial Valuations due to the adoption of IFRS as detailed in Exhibit 9.
9	1	Approval of the rate riders for a one year disposition of the Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA") and Lost Revenue Adjustment Mechanism ("LRAM") for lost revenue for the 2011-2014 program years, with persistence from January 1, 2011 to December 31, 2014. For additional information, please refer to Exhibit 4.
10	1	Approval of the rate riders for a one year period to dispose of the remaining difference in incremental ITCs received on distribution revenue requirement items that were previously subject to PST and became subject to HST.

# **ATTACHMENT 1 – R**

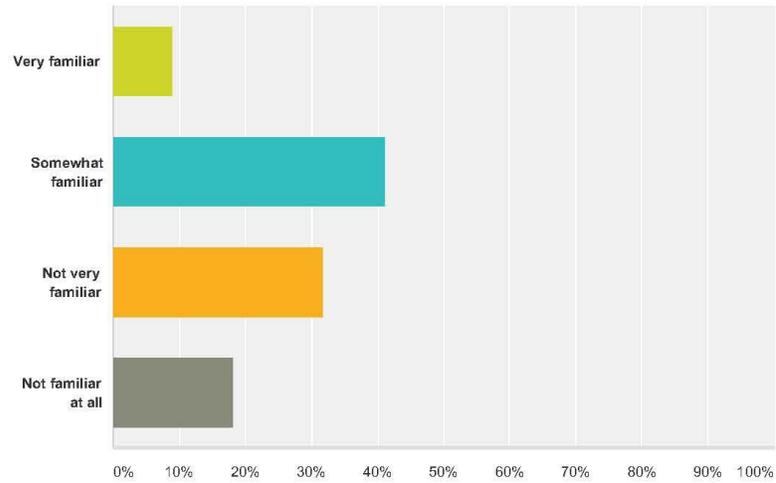
Bill Impact Survey



Customer Survey - 2017 Distribution Rate Application

**Q1 How familiar are you with the local electricity distribution system?**

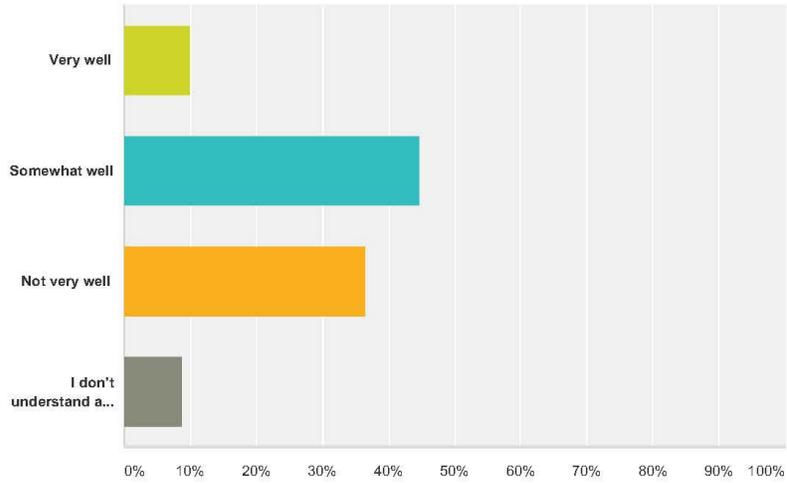
Answered: 1,123 Skipped: 0



Answer Choices	Responses	
Very familiar	8.90%	100
Somewhat familiar	41.23%	463
Not very familiar	31.79%	357
Not familiar at all	18.08%	203
<b>Total</b>		<b>1,123</b>

**Q2 Given what you know and what you have read so far, how well do you feel you understand the parts of the Ontario electricity system, how they work together and which services Thunder Bay Hydro is responsible for?**

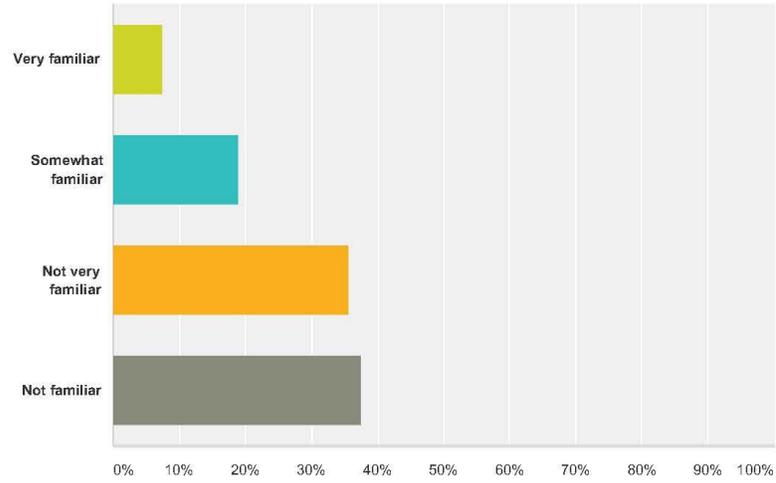
Answered: 1,123 Skipped: 0



Answer Choices	Responses	
Very well	10.06%	113
Somewhat well	44.70%	502
Not very well	36.51%	410
I don't understand at all	8.73%	98
<b>Total</b>		<b>1,123</b>

**Q3 Before this survey, how familiar were you with the amount of your electricity bill that went to Thunder Bay Hydro?**

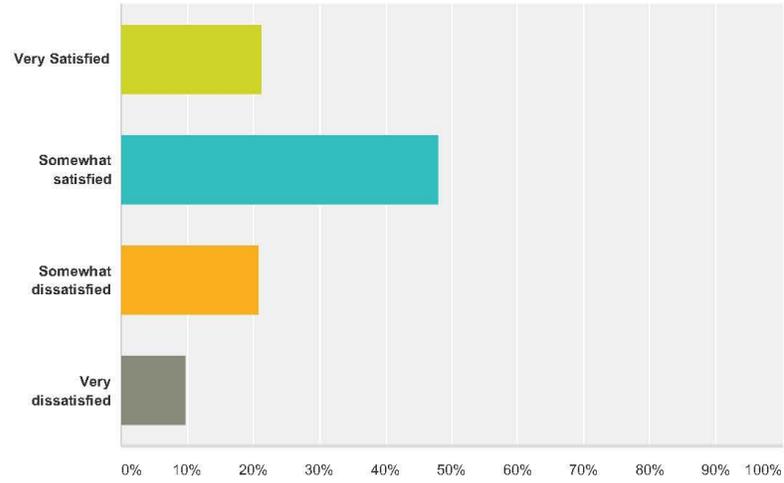
Answered: 1,123 Skipped: 0



Answer Choices	Responses	
Very familiar	7.57%	85
Somewhat familiar	19.06%	214
Not very familiar	35.80%	402
Not familiar	37.58%	422
<b>Total</b>		<b>1,123</b>

**Q4 Generally, do you feel that you receive value for the portion of money (16% of your total bill) you pay Thunder Bay Hydro?**

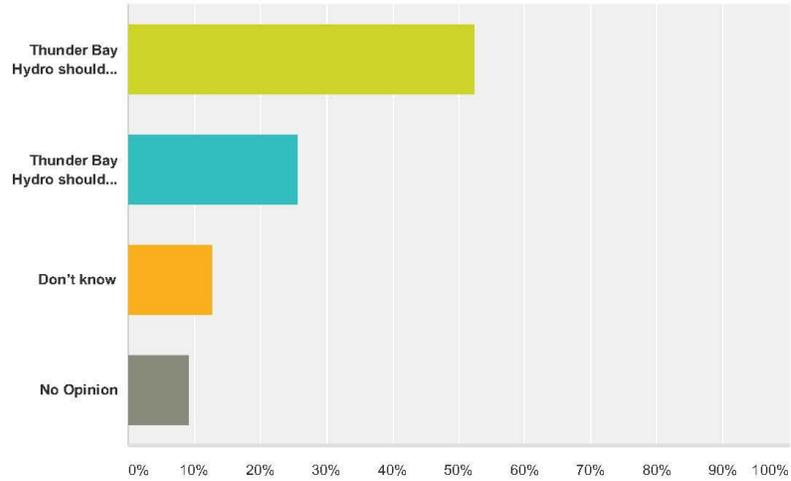
Answered: 1,123 Skipped: 0



Answer Choices	Responses	
Very Satisfied	21.19%	238
Somewhat satisfied	48.09%	540
Somewhat dissatisfied	20.84%	234
Very dissatisfied	9.88%	111
<b>Total</b>		<b>1,123</b>

**Q5 With regards to projects focused on replacing aging equipment in poor conditions, which of the following statements best represents your point of view?**

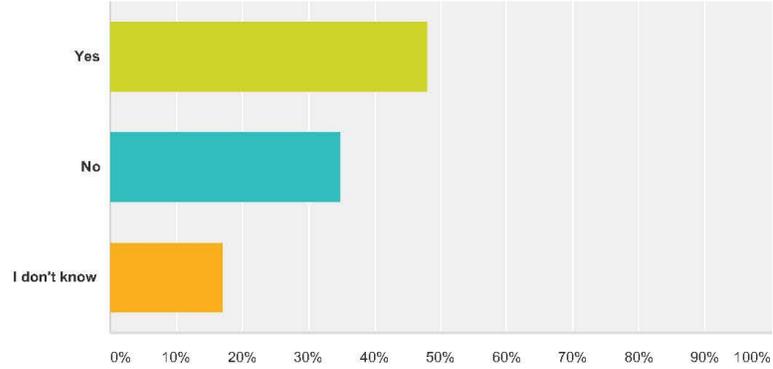
Answered: 1,054 Skipped: 69



Answer Choices	Responses
Thunder Bay Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if that increases my monthly electricity bill by a few dollars over the next few years.	52.37% 552
Thunder Bay Hydro should lower its investment in renewing the system's aging infrastructure to lessen the impact of any bill increase, even if that means more or longer power outages.	25.71% 271
Don't know	12.71% 134
No Opinion	9.20% 97
<b>Total</b>	<b>1,054</b>

**Q6 Now that you have a better sense of the operations of Thunder Bay Hydro, including the cost drivers, do you feel the proposed operating budget is reasonable?**

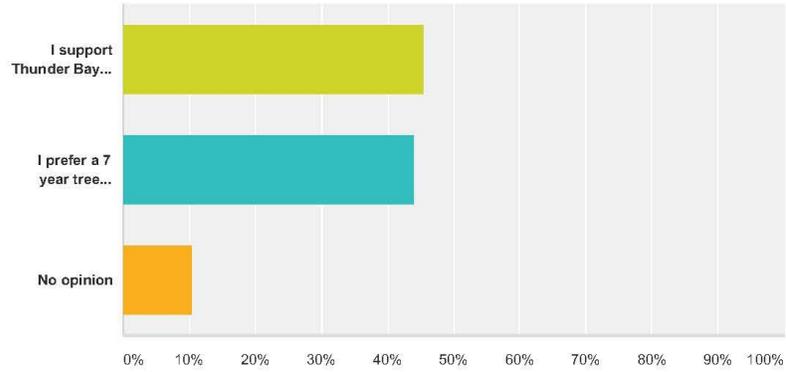
Answered: 970 Skipped: 153



Answer Choices	Responses	
Yes	47.94%	465
No	34.85%	338
I don't know	17.22%	167
<b>Total</b>		<b>970</b>

**Q7 Would you like to see the tree trimming program done over five years, as proposed, or over seven years?**

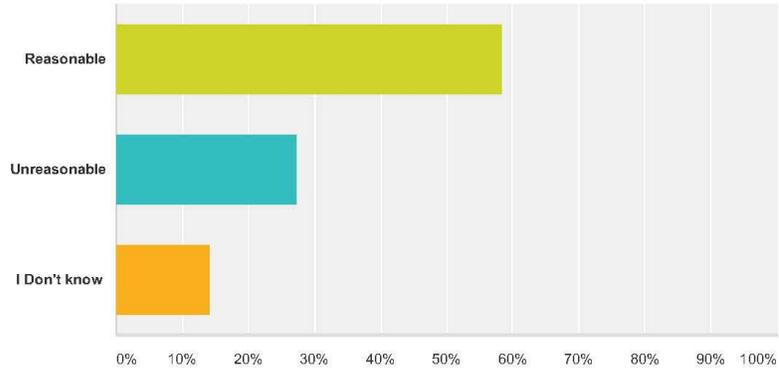
Answered: 950 Skipped: 173



Answer Choices	Responses
I support Thunder Bay Hydro's proposed 5 year tree trimming program	<b>45.47%</b> 432
I prefer a 7 year tree trimming program, which will help lower my rates, but could result in increased outages due to foreign interferences and tree contacts in my service area	<b>44.11%</b> 419
No opinion	<b>10.42%</b> 99
<b>Total</b>	<b>950</b>

**Q8 The remaining \$0.22 per customer per month represents normal inflationary costs for things like trucking, IT equipment and other administrative costs. Do you feel that this increase is:**

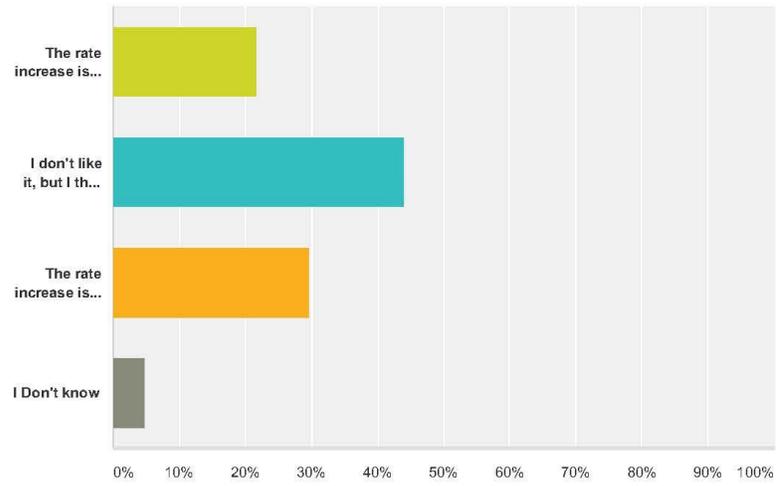
Answered: 970 Skipped: 153



Answer Choices	Responses	
Reasonable	58.45%	567
Unreasonable	27.42%	266
I Don't know	14.12%	137
<b>Total</b>		<b>970</b>

**Q9 Considering the costs of Thunder Bay Hydro's application, would you say**

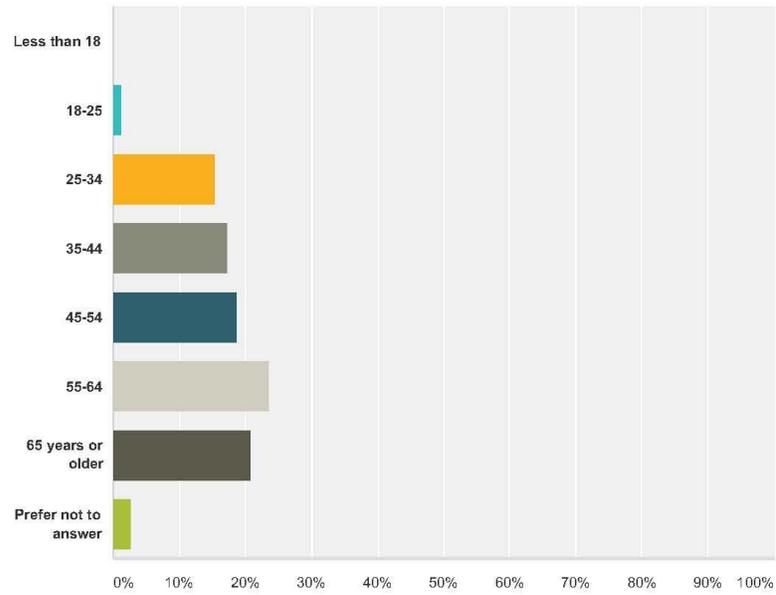
Answered: 970 Skipped: 153



Answer Choices	Responses	
The rate increase is reasonable	21.65%	210
I don't like it, but I think the rate increase is necessary	44.02%	427
The rate increase is unreasonable	29.59%	287
I Don't know	4.74%	46
<b>Total</b>		<b>970</b>

**Q10 AGE: Can you tell me what age category do you fall into?**

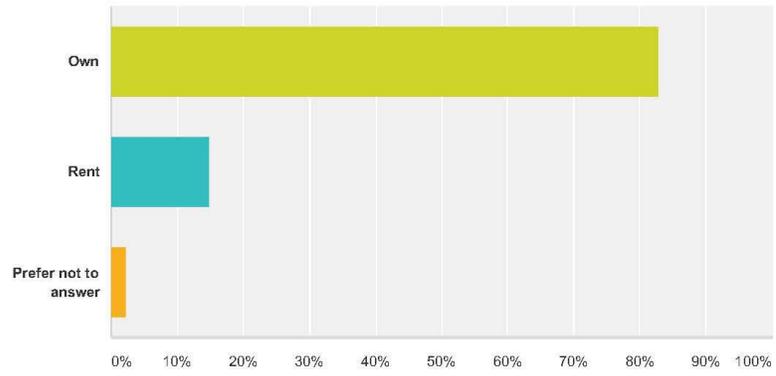
Answered: 899 Skipped: 224



Answer Choices	Responses	Count
Less than 18	0.00%	0
18-25	1.33%	12
25-34	15.46%	139
35-44	17.24%	155
45-54	18.80%	169
55-64	23.58%	212
65 years or older	20.80%	187
Prefer not to answer	2.78%	25
<b>Total</b>		<b>899</b>

### Q11 Do you own or rent your home?

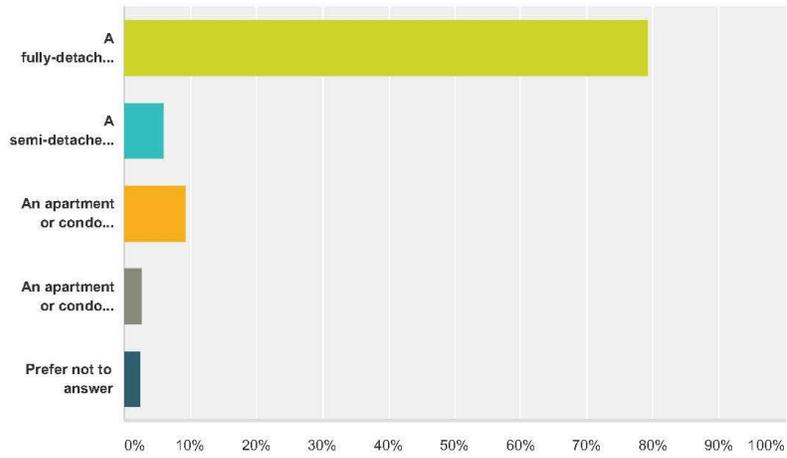
Answered: 899 Skipped: 224



Answer Choices	Responses	
Own	82.87%	745
Rent	14.91%	134
Prefer not to answer	2.22%	20
<b>Total</b>		<b>899</b>

**Q12 How would you describe your primary residence? Would you say you live in**

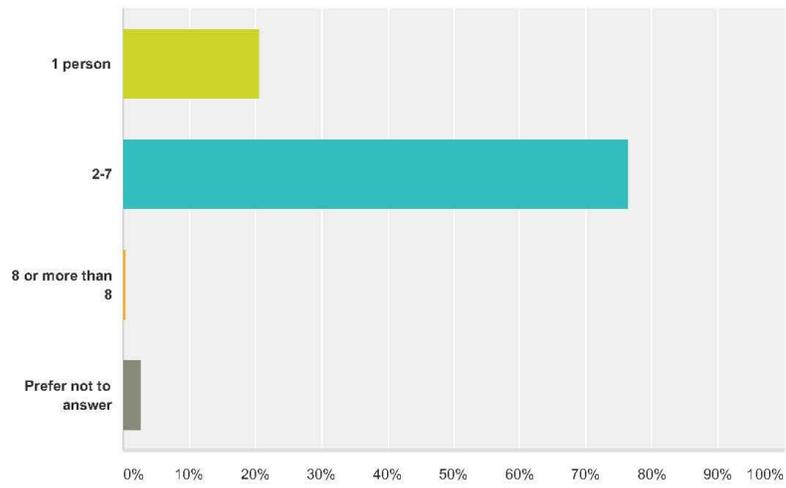
Answered: 899 Skipped: 224



Answer Choices	Responses	
A fully-detached home	79.31%	713
A semi-detached home	6.01%	54
An apartment or condo building less than 5 stories	9.34%	84
An apartment or condo building 5 stories or higher	2.78%	25
Prefer not to answer	2.56%	23
<b>Total</b>		<b>899</b>

### Q13 Counting yourself, how many people live in your household?

Answered: 899 Skipped: 224



Answer Choices	Responses	
1 person	20.58%	185
2-7	76.31%	686
8 or more than 8	0.44%	4
Prefer not to answer	2.67%	24
<b>Total</b>		<b>899</b>

**Q14 What is your service address with Hydro?**

Answered: 899 Skipped: 224

Answer Choices	Responses	
Street	98.22%	883
Postal Code	96.44%	867