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APPLICATION

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 Waterloo North Hydro 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 January 1, 2016.

(this "Application")

Applicant's Name Waterloo North Hydro Inc. (the "Applicant" or "WNH").

Background

1. The Applicant is a corporation incorporated pursuant to the *Business Corporations Act* (Ontario) with its head office at 526 Country Squire Road, P.O. Box 640, Waterloo, Ontario. The Applicant carries on the business of distributing electricity within the City of Waterloo, the Township of Wellesley and the Township of Woolwich.

2. The Application has been prepared pursuant to the OEB's Renewed Regulatory Framework for Electricity Distributors as detailed in the Report of the Board dated October 18, 2012 (the "RRFE").

3. Unless specifically stated otherwise in the Application, the Applicant followed Chapter 2 of the OEB's Filing Requirements for Electricity Distribution Rate Applications last revised on July 18, 2014 (the "Filing Requirements") in preparing the Application.

4. The Applicant has prepared a Consolidated Distribution System Plan ("DSP") in accordance with Chapter 5 of the OEB's Filing Requirements for Electricity Transmission and Distribution Applications.

5. The Applicant acknowledges that the OEB will publish an update to the Cost of Capital Parameters and that these matters will affect the Revenue Requirement that the Applicant has requested in this Application.

The Applicant's Address for Service

The Applicant:

Waterloo North Hydro Inc.
526 Country Squire Rd
Waterloo, ON
N2J 4A3

President and Chief Executive Officer:

Mr. Rene W. Gatien
Telephone: (519) 888-5544
Facsimile: (519) 886-8592
E-mail: rgatien@wnhydro.com

Vice President Finance and Chief Financial Officer:

Mr. Albert P. Singh
Telephone: (519) 888-5542
Facsimile: (519) 886-8592
E-mail: asingh@wnhydro.com

Primary Application Contact:

Mr. Albert P. Singh
Telephone: (519) 888-5542
Facsimile: (519) 886-8592
E-mail: asingh@wnhydro.com

The Applicant's Legal Representation:

Borden Ladner Gervais LLP
40 King Street West
40th Floor
Toronto, Ontario
M5H 3Y5

Primary Legal Contact:

John A.D. Vellone
Lawyer
Telephone: (416) 367-6730
Facsimile: (416) 361-2758
E-mail: jvellon@blg.com

List of Specific Approvals Requested

In this proceeding, WNH is requesting the following approvals:

1. Approval to charge distribution rates effective January 1, 2016 to recover a Service Revenue Requirement of $36,594,074 which includes a Revenue Deficiency of $4,154,517 as detailed in Exhibit 6. The schedule of Proposed Rates is set out in Exhibit 8.
2. Approval of the Distribution System Plan as outlined in Exhibit 2.
3. Approval of revised Low Voltage Rates as proposed and described in Exhibit 8.
4. Approval to adjust the Retail Transmission Rates – Network and Connection as detailed in Exhibit 8.
5. Approval to continue to charge Wholesale Market and Rural Rate Protection Charges approved in the Board Decision and Order in the matter of WNH's 2015 Distribution Rates (*EB-2014-0119*).
6. Approval to continue the Specific Service Charges and Transformer Allowance approved in the Board Decision and Order in the matter of WNH's 2015 Distribution Rates (*EB-2014-0119*).
7. Approval of the Proposed Loss Factors as detailed in Exhibit 8.
8. 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.
9. Approval of the Rate Riders for a one year period to dispose of the difference in 2015 Net Book Value of Property, Plant and Equipment, as a result of WNH's changes to depreciation rates and capitalization policy recorded in Account 1576, CGAAP Accounting Changes as explained in Exhibit 9.
10. Approval of the Rate Riders for a one year disposition of the Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA") for lost revenue from 2011 to 2013 resulting from 2011 to 2013 IESO (formerly the OPA) programs as detailed in Exhibit 4.

11. Approval of the Rate Riders to address the recovery of Stranded Meters over a three year period as outlined in Exhibit 2.

12. Approval of recovery of the Provincial Rate Protection Amount of $7,776 annually ($648 monthly) from the IESO as outlined in Exhibits 2 and 9.

Proposed Effective Date of Rate Order

1. The Applicant requests that the OEB make its Rate Order effective January 1, 2016 in accordance with the Filing Requirements.

2. In the event that the OEB is unable to provide a Decision and Order in this application for implementation by the Applicant as of January 1, 2016, the Applicant requests that the OEB declare its current rates interim, effective January 1, 2016, pending the implementation of the OEB's Rate Order for the 2016 rate year.

Form of Hearing the Applicant requests that this Application be disposed of by way of a written hearing.

Certification

I, Rene W. Gatien, President and Chief Executive Officer of Waterloo North Hydro Inc. certify that the evidence filed is accurate, consistent, and complete to the best of my knowledge.

_____

Rene W. Gatien, P. Eng., MBA

President and Chief Executive Officer

Publication Information

Residents, businesses and institutions in the City of Waterloo, the Township of Wellesley and the Township of Woolwich who receive electricity distribution services from WNH will be affected by the Application.

WNH proposes to publish the Notice of Application in The Record (Waterloo Region). The Record has the highest paid circulation in the WNH service territory.

The Application and related materials will be posted on the WNH website, and will be available for viewing at the following internet address: http://www.wnhydro.com/en/our-company/Rate_Application.asp.

The Applicant uses

Facebook:	https://www.facebook.com/wnhydro;
Twitter:	https://twitter.com/wnhydro; and
LinkedIn:	https://www.linkedin.com/company/waterloo-north-hydro-inc to communicate with its customers.

2.4.1 Management Discussion and Analysis

Introduction to Waterloo North Hydro Inc.

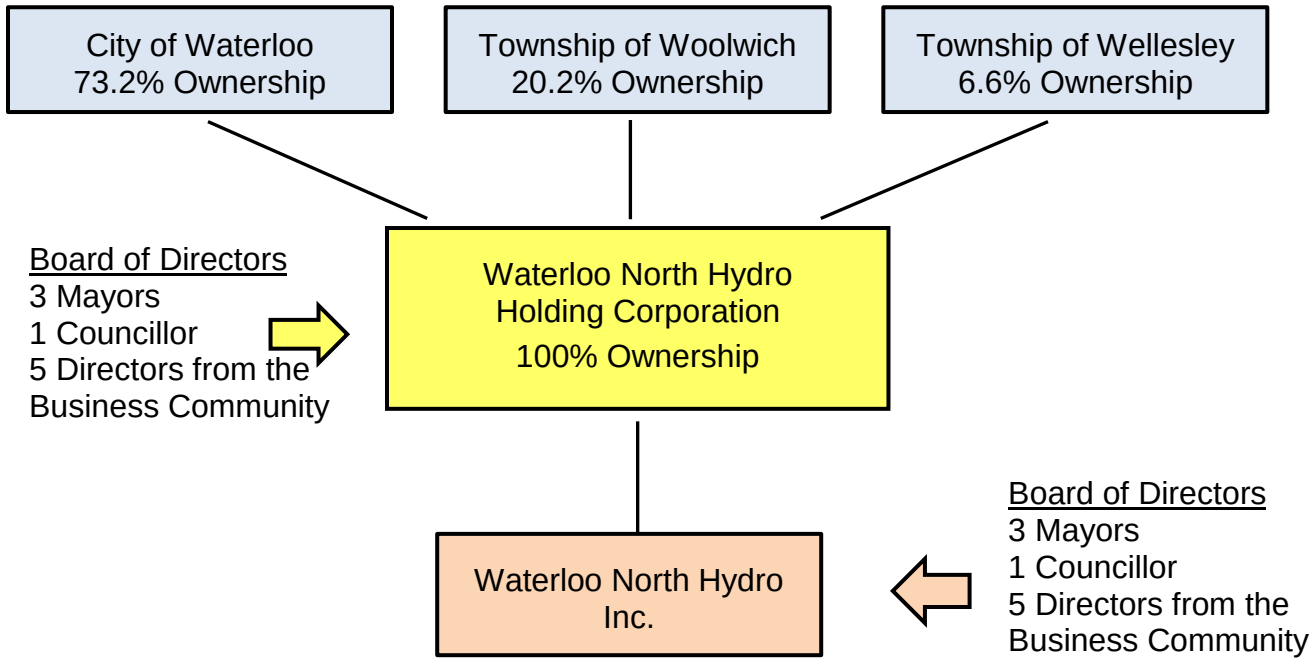
Waterloo North Hydro Inc. (WNH) is a medium sized Local Distribution Company (LDC) regulated and licensed by the Ontario Energy Board (OEB). With predecessors that date back to 1905, WNH was created in 1979 through Bill 55 as one of three regional electricity utilities. The amalgamation of Waterloo PUC with three other utilities and the Ontario Hydro area in between created a contiguous service territory that even today is still one of the largest contiguous LDCs in the province at 672 sq. km. Located completely within the Region of Waterloo (Region), WNH provides all regulated electricity distribution services to the City of Waterloo, the Township of Woolwich and the Township of Wellesley.

Waterloo North Hydro Holding Corporation, incorporated March 1, 2000, under the Business Corporation Act (Ontario) is the parent holding company of Waterloo North Hydro Inc. The City of Waterloo, the Township of Woolwich and the Township of Wellesley are the shareholders of Waterloo North Hydro Holding Corporation, with ownership interests of 73.2%, 20.2% and 6.6%, respectively.

The Municipal Shareholders appoint Directors to the Board of Waterloo North Hydro Holding Corporation. The Holding Corporation Board appoints Directors to the Waterloo North Hydro Inc. Board. Each Board consists of nine (9) Directors and the respective Board of Directors manages the business affairs of each corporation. Four of the five independent Directors are different for the two Boards to maintain independence between the Boards.

The net assets and all employees of the former Hydro-Electric Commission of Waterloo, Wellesley & Woolwich were transferred to Waterloo North Hydro Inc. upon incorporation March 1, 2000.

Figure 1-1: Corporate Entity Relationship Chart/WNH Ownership Structure



WNH's Mission, Vision, Corporate values and Strategic Imperatives define the organization and guide strategic planning:

Mission

- To create value for our customers and shareholders by providing safe and reliable electrical distribution services at competitive rates

Vision

- To be a key partner in contributing to community prosperity and success

Corporate Values

1. Respect - WNH is committed to treating others with respect and dignity
2. Commitment to Excellence - WNH strives for high reliability and quality through continuous improvement, leadership and excellence
3. Service - WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each
4. Teamwork and Collaboration - WNH willingly shares information and best practices
5. Safety and Environmental Stewardship - WNH is committed to its responsibility for the health and safety of employees, the protection of the public and safeguarding of the environment
6. Responsible and Accountable - WNH takes responsibility for the quality, reliability and timeliness of its work and the work of others

Strategic Imperatives

Each of the strategic imperatives is internally consistent with and contributes to achieving the corporate values outlined above.

1. Supply & Reliability
2. Health, Safety and Environment
3. Customer Service
4. Employee Relations and Development
5. Productivity and Cost Reduction
6. Organizational Effectiveness
7. Financial Performance
8. Shareholder and Community Relations
9. System Aesthetics

Below WNH describes the alignment between each of its strategic imperatives and the RRFE outcomes, together with a description of how WNH implements each of its strategic imperatives.

WNH has an additional challenge different from many LDCs. Within the 672 sq. km service area of WNH, only 10% of the area is urban and 90% is a rural component. A significant influence in the operation expense and capital investment planning for WNH is that the rural areas, the Townships of Woolwich and Wellesley, comprise 90% of WNH's total service area however account for only 23% of its customer base.

WNH needs to build a strong and reliable infrastructure covering a large service area with fewer customers per sq. km to bear the cost. We must look for efficient and resourceful ways to provide excellent service.

Home to two (2) prominent universities, a growing polytechnic college, many high-tech and knowledge based businesses, and a growing agri-food industry, WNH operates in a robust local economy. The size of WNH's customer base has experienced steady growth of 1.3% annually since 2011.

Key statistics on the WNH's Distribution System are shown in Table 1-1 below.

Table 1-1 WNH Key Distribution System Statistics

Key Distribution System Statistics (2014)	
Number of Customers	55,000
Energy Purchased	1,491 GWH
System Peak - All Time	294 MW
System Peak - 2014	262 MW
Service Territory	672 Sq. Kms
Service Territory - Rural %	90%
Circuit Kms	1,606 Kms
Number of Transformer Stations	3
Number of Distribution Stations	13
Control Room	24/7
Number of Poles	21,229
Fleet Vehicles	62

Providing Supply to our Customers

The WNH summer peak demand over the last 20 years grew at a rate over 2.5 times the provincial average. Due to the mix of the customer base, the system peak is affected to a higher degree by weather and local development conditions and to a lesser degree by provincial or global factors.

Since 1996 the electrical demand for WNH has been summer peaking and the winter peak demand has moderated considerably since 2004. WNH attributes the trend to increased prevalence of air conditioning in the summer and loss of traditional electrical loads, such as space and hot water heating, to natural gas.

The system peak demand for WNH has a tendency to rebound from recessions faster than other Ontario jurisdictions. Conservation and renewable power generation have recently slowed the growth down to 2%, still double the provincial average. WNH expects similar growth in electrical demand over the forecast period 2016 – 2020. In addition to a history of long-term sustained growth, WNH's customer base is also relatively diverse. The Government/Public Institutional sector which consists of four local municipal governments and three educational institutions contribute 18% of the system peak.

WNH believes that good planning and investment decisions require a thorough understanding of its customer base. The diverse nature of WNH's customer base indicates the LDC is at very low risk of its largest customers discontinuing operations and stranding assets. No single customer in business sectors outside of Government/ Public Institutional poses a material risk.

There are however cost challenges in that overall capital investment and O&M costs per MW of demand supplied are higher for the larger number of smaller customers. In addition, WNH has 371 Renewable Energy Generators totaling 8.2 MW connected to its distribution system, of which over 30% is from one generator. Distributed Generation (DG) penetration to date is not significant; however, we must plan for future increases in DG.

WNH is connected to the Hydro One (HO) Transmission System through four Transformer Stations (TS) connected to the grid at either 110 kV or 230 kV. WNH owns and operates three (3) of these stations (four from an asset point of view - one site has two full stations on the property). One (1) TS is owned and operated by HO and is embedded inside of WNH's service territory. Approximately 90% of the TS load is for WNH customers and the remaining load is for HO customers in nearby Wellington County. Although the end cost to the customer is less for an LDC owned TS vs. HO owned TS, WNH reflects additional costs in Distribution Rates whereas LDCs that do not own a TS show their costs in Transmission Rates (pass through). WNH incurs additional costs to operate a 24/7 Control Room as part of operating the TSs.

In addition to the grid connected Transformer Stations, WNH's distribution network consists of 13 urban Municipal Stations and rural Distribution Stations operating at under 50 kV. The distribution system to connect our more than 55,000 customers includes over 21,000 poles, 8,300 distribution transformers, overhead lines, underground lines, various switching and control equipment, secondary circuits, and 55,128 revenue meters.

Managing our Assets

Each year WNH maintains, refurbishes and replaces assets as they age, deteriorate or become obsolete and cannot perform their intended functions in a safe and reliable manner. WNH's proposed investments align with our strategic imperatives and with our Distribution System Plan (DSP) evaluation criteria of efficiency, customer value and reliability.

However, there is a balancing act that WNH must consider when planning for the future: system reliability and service versus the cost to customers. WNH follows guiding principles concerning capital investments and operating expenses.

- Support the growth and success of local business, the development community and the municipalities we serve
- Support our community by providing a safe and reliable infrastructure
- Implement intelligent technologies to minimize the impact and recovery time from electrical outages
- Support green energy initiatives, provide environmental stewardship and support a culture of conservation
- Train and equip our staff to work safely and efficiently
- Invest in systems that support our operating needs and improve our ability to communicate with customers

A part of WNH's submission in our past five years shows an increase in Rate Base from a few significant one-time investments. A new Service Centre and Administration Office that went into operation at the end of 2011 carries 50% of the investment into this Rate Application period. Rebuilding and upgrading grid-connected Transformer Station Equipment, deployment of Smart Meters and the associated communication systems, and significant relocation costs for a new Light Rail Transit system in the Region are all significant investments captured in this Rate Application.

Beyond these projects, the majority of capital investment is for system renewal. Every year our distribution system naturally ages and deteriorates. WNH must upgrade or replace the most vulnerable parts of the system before they present safety or reliability concerns to our customers and the public. Many of the lines that are the oldest and in poorest condition also operate at the 4.16 kV and 8.32 kV voltage levels. WNH upgrades system assets replaced as part of asset renewal plans, to higher and more efficient voltages such as 13.8 kV and 27.6 kV, which have less losses and higher load carrying capacity.

WNH believes in a proactive and consistent renewal approach to maintain system performance while keeping bill impacts to customers manageable. The methodologies used and prioritization of replacing assets is explained in detail in the DSP.

There are other influences on our system and our investments. WNH's distribution system is built to quickly restore power after the loss of one or two key components of the grid. However, what happens when there is a major disruption to the system?

In 2013 there were three Major Events resulting in 10 times the outage minutes for an average year. Industry analysis indicates that major storms are becoming more frequent. The recent increase in the severity and frequency of weather events is leading WNH to strengthen its distribution system. WNH is replacing the majority of rear-lot pole lines to decrease the number of overhead high voltage wires on private residential properties. In addition, we increased the frequency of trimming trees encroaching on overhead lines to reduce outages due to vegetation contact.

WNH is installing smart switches, remotely controlled from our office, to restore power quickly to as many customers as possible. We are adding to the number of interconnection lines between major points of supply to reduce the time to restore customers and increase the tie points available under major storm outages.

In 2014, WNH selected and began implementation of an Outage Management System to get faster updates on storm damage for internal and external use, and for faster dispatch of crews with the right materials to fix the problem. This system will be fully functional in 2015 and includes the deployment of a 24 X 7 ‘Customer Public Outage Map’.

Information systems need to evolve to meet the greater demands and expectations that WNH customers and other stakeholders place on today's modern electrical systems. WNH will install a current technology based Customer Information System designed for today’s advanced metering infrastructures that provides seamless integration with other key corporate systems. This new investment provides for the automation and streamlining of various billing and regulatory processes enabling the reduction of manual processes, the minimization of potential billing errors and related delays with a focus on long-term cost savings. Furthermore, this new solution deploys enterprise wide, web-based technology allowing for more effective field based processing with improved corporate wide visibility to ongoing activity. This results in better and timelier availability of information for the customers. The system will be operational in 2016.

WNH will also acquire and implement an Asset Management System that will improve our ability to track the current age and condition of all assets, in order to ensure that we replace the right assets at the right time.

Developing Staff for the Future

WNH’s staffing levels have increased over the last 5 years, primarily to hire replacement staff for upcoming retirements. Approximately 3-4% of employees retire in any given year; however, WNH’s workforce demographics resulted in more retirements in recent and upcoming years.

WNH hires apprentices approximately 3 years in advance of impending retirements of trades and technical staff in order to train and provide experience to new staff before existing staff leave. The continuity and transfer of knowledge does not entirely make up for the skills deficit WNH experiences when employees retire, but it does leave WNH able to carry on effective operations.

WNH has had little success finding experienced staff, and as a result generally hires into training positions and develops its own staff. To support this recruitment program, WNH hires co-op trades' apprentices and co-op engineering students for each 4-month term. These opportunities provide apprentices and engineering students with valuable work experience, return value to WNH for the work they perform, and provide WNH an opportunity to evaluate possible future employees.

WNH utilizes a mixture of permanent staff, part-time staff and contractor services to execute its investment plans in a cost effective manner.

Services to our Customers

Beyond construction and maintenance of the physical distribution system, WNH provides a number of other services to our customers. Some notables include:

- In 2011 WNH handled 6,412 underground cable locates for the safety of public and contractors, as well as prevention of outages. By 2014, requests for locates increased 58% to 10,138 locates
- Since 2011, WNH has connected 3,440 new services in a timely manner, including 360 FIT and MicroFIT connections to support renewable generation
- Of the approximately 43,000 telephone calls that were transferred to Customer Service in 2014, WNH employees answered 89% within 30 seconds

- And, for the next generation WNH conducted Electrical Safety Awareness presentations at 94% of the elementary schools in our service area to help grade 5 students recognize and respect electrical system hazards

Because of these and other activities, WNH received on the 2014 UtilityPULSE Customer Satisfaction Survey, a 96% Satisfaction Rating from our customers versus the 80% average for Ontario LDCs.

Conclusion

The Capital Investments for 2015 and 2016 reflect the priorities and needs required as per WNH's DSP. WNH believes that the key to maintaining system performance while keeping the bill impact to our customers manageable over the long term is a proactive and consistent renewal approach to managing assets.

On the operating side, WNH continues to apply pressure to reduce operating costs and reduce annual energy line losses. WNH looks to automate work processes to decrease manual tasks saving duplication and increasing efficiency. WNH continues working safely with zero lost time injuries in 2014. In addition, we seek to improve coordination and planning of capital projects with the municipalities, other utilities and other stakeholders.

We believe our application presents a well-balanced, well thought out proposal for sustaining and improving the WNH electricity distribution system.

Other Background Items

The Region of Waterloo is constructing a Light Rail Transit System. This is a multi-year project and represents the largest portion of relocation costs. WNH has statutory obligations to relocate portions of its electrical distribution system as part of this multi-year project. The work is in progress and various projects will be completed in 2015 and 2016. The value of WNH's work has been estimated at approximately $6.3M; approximately

60% of which WNH will recover from the Region, leaving approximately $2.5M in direct cost to WNH.

WNH stays current with all Regulatory Proceedings, including OEB, OPA, IESO, ESA and Ministry of Energy. It ensures that its practices and reporting are in compliance with the regulatory rules and participates in many proceedings and working groups.

On July 17, 2013 the Board issued a statement that changes to depreciation rates and capitalization policies that would have been implemented under International Financial Reporting Standards ("IFRS") could be made in 2012 under Canadian Generally Accepted Accounting Principles ("CGAAP") (i.e. effective January 1, 2012), and must be made no later than 2013 (i.e. effective January 1, 2013), regardless of whether the Canadian Accounting Standards Board (AcSB) permitted further deferrals beyond 2013 for the changeover to IFRS (Board Letter, July 17, 2013 *"Regulatory accounting policy direction regarding changes to depreciation expense and capitalization policies in 2013 and 2014"*). In 2013, WNH implemented the change to depreciation rates and capitalization policies which is explained in further detail in Exhibits 2 and 4. These changes have resulted in an increase in Operating & Maintenance (O&M) costs, a decrease in depreciation and a payable to the customers in the form of account 1576 Rate Riders. WNH wishes to note that the increase to O&M was quite significant, approximately $2.3M in the 2016 Test Year, as a result of this policy change. Thus, comparisons to the 2011 Board Approved amounts will reflect this difference.

It should be noted that no corporate objectives have changed recently or since undergoing this application process.

2.4.1.1 Renewed Regulatory Framework for Electricity Distributors

On October 18, 2012, the Board released its Report of the Board, Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach (the "RRFE Report"). The RRFE framework is a comprehensive performance-based approach to regulation that is based on the achievement of outcomes that ensure that Ontario's electricity system provides value for money for customers. The Board believes that emphasizing outcomes rather than activities, will better respond to customer preferences, enhance distributor productivity and promote innovation.

The Board has concluded that the following outcomes are appropriate for Distributors:

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

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

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

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

WNH is ever mindful that there is a balancing act that it must consider when planning for the future: system reliability versus costs to the customers, all while complying with Public Policy.

In connection with the RRFE outcomes, the Board issued a Scorecard to WNH on September 24, 2014, which is attached as Attachment 1-14.

WNH will demonstrate that this Application has been based on these Outcomes.

2.4.1.2 Strategic Imperatives Implementation

WNH's Strategic Imperatives have been demonstrated throughout its Application.

1. Supply and Reliability

This encompasses the Board's Outcomes of Customer Focus and Operational Effectiveness.

Waterloo Region has been and continues to be a growing community. Ensuring an adequate electrical supply in this growing economy is foremost. Local government and business leaders go to great lengths to attract business to the Region in what is a very competitive global economy. Opportunities lost due to inadequate supply do not only impact future WNH revenue opportunities but also community jobs, tax base and secondary development.

Reliability is a prominent consideration as it is the key measure of how well WNH is fulfilling its mandate to supply electricity to its customers. The importance of electrical supply reliability has been a consistent message from all stakeholders, through many consultations. It is the cornerstone of prosperity for the community we serve.

WNH has engaged with its customers in many ways which will be fully described later in this Exhibit. Feedback from these consultations includes:

- When it comes to replacing aging equipment, almost three-quarters (72%) feel WNH should invest what it feels is required to replace the system's aging infrastructure, even if it means a bill increase over the next few years (Source: Online Workbook conducted by Innovative Research Group, Inc. (Innovative), Attachment 1-8 in this Exhibit)

- A majority of Residential (85%) and GS<50 kW (76%) customers feel WNH should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases their monthly electricity bill over the next few years (Source: Random Telephone Surveys conducted by Innovative Research Group, Inc., Attachment 1-8 in this Exhibit)

To provide alignment with its corporate values and strategic imperatives, WNH manages its assets while recognizing realistic service and performance goals. Customer expectations for the delivery of safe, reliable electricity at a reasonable price have to be respected. The following considerations are critical to WNH's strategy:

- The activities should demonstrate good stewardship in the long term up-keep and growth of the distribution system
- Service delivery should be safe, fair and consistent within all customer groups
- The performance measures should demonstrate progress towards and/or achievement of the goals within reasonable budget considerations
- Maintenance plans should be consistent with good utility practice but capture specific items from the annual assessments and any specific customer needs
- Capital budgets should justify proposed expenditures and be flexible to respond to new priorities and extended life expectancies as defined in short and long term studies
- The strategy should create opportunities for improved efficiencies
- The asset management strategy should find the right balance between capital investments and O&M costs so that the total cost over the life of the asset is minimized
- Annual reviews of the strategies and procedures should be a priority

WNH is committed to maintaining distribution system reliability and quality to achieve or outperform the targets established by the OEB through the following objectives:

- Managing, maintaining and operating the distribution system in a manner that will, cost effectively, minimize: (i) the average number of hours that power to customers is interrupted; and (ii) the frequency of such interruptions. As demonstrated in the DSP in Exhibit 2, Attachment 2-1, Table 2-14, if WNH excludes Major Events its four year average is within WNH's Reliability Targets
- Managing and maintaining the distribution system to meet power quality standards in accordance with good utility practice, all applicable standards and guidelines and WNH's Conditions of Service. WNH endeavours to maintain steady state voltage limits, under normal operating conditions, at the Customer's delivery points, as specified in the latest edition of the Canadian Standards Association (CSA), C235
- As shown in Table 1-2, WNH has managed, maintained and operated the distribution system in a cost efficient manner and maintaining the average number of hours and times that power to a customer is interrupted within the acceptable targets, other than SAIDI for 2013 (EME)
- It can be seen from Table 1-2 the major impacts that Supply Reliability and Major Events have had on WNH's SAIDI and SAIFI performance from 2011-2014. Exclusive of Major Events and Supply Reliability, WNH's 4 year average is within the reliability target range. This is noteworthy as this represents the reliability of WNH's distribution system and events over which it has greatest control

Table 1-2 - WNH Reliability Performance and Targets

	2011	2012	2012 EME	2013	2013 EME	2014	WNH TARGETS
Exclusive of Supply							
SAIDI (Duration)	0.75	1.66	0.79	5.19	0.88	0.81	0.75-1.66
SAIFI (Frequency)	0.85	1.39	1.16	3.16	1.86	1.21	0.85-1.39
	2011	**2012**	**2012 EME**	**2013**	**2013 EME**	**2014**	**2014**
Inclusive of Supply							
SAIDI (Duration)	1.06	3.37	0.82	9.13	1.36	0.97	0.75-1.66
SAIFI (Frequency)	0.96	2.1	1.18	3.97	2.23	1.71	0.85-1.39
ME = Major Events			2 ME		3 ME		
EME = Excluding Major Events							

		4 Year Average Indices	
	WNH TARGETS	Excluding ME	Including ME
Exclusive of Supply			
SAIDI (Duration)	0.75-1.66	0.81	2.1
SAIFI (Frequency)	0.85-1.39	1.27	1.65
2014			
Inclusive of Supply			
SAIDI (Duration)	0.75-1.66	1.05	3.63
SAIFI (Frequency)	0.85-1.39	1.52	2.18

2. Health, Safety and Environment

This encompasses the Board's Outcomes of Public Policy Responsiveness, Organizational Effectiveness and Financial Performance.

WNH believes as a corporation it owes a legal and moral duty to carry out its business in a manner that is safe to its workers, customers and the general public. Safety has been and continues to be high on WNH's list of strategic imperatives. Loss prevention is about more than safety; it is also about loss in all areas of the business. This focus supports cost reduction and organizational effectiveness objectives.

WNH has increased public awareness in safe, economical and efficient uses of electricity through multiple public outreach events as summarized in the table in Attachment 1-6 and as described above in the Shareholder and Community Relations Strategic Imperative section. In order to achieve its targets, WNH has held public events and breakfast meetings thereby allowing customers to be better informed on programs such as Energy Conservation, Peaksaver PLUS and WNH Work Plans.

WNH has an excellent workplace safety record and remains committed to maintaining this with the following safety related objectives:

- Minimize lost time due to accidents involving WNH employees or contractors.
    - Target: Zero (0) lost time due to accidents involving WNH employees or contractors; Achieved 2014: Zero (0)
- Minimize public safety incidents caused by factors within WNH's control, such as equipment failure or work procedures
    - Target: Zero (0) public safety incidents caused by factors within WNH's control, such as equipment failure or work procedures. In 2014 there was one public safety incident caused by factors within WNH's control. WNH strives to prevent public safety incidents and undergoes a complete review of each and every incident that has the potential or causes actual personal injury or property damage. WNH assisted the Ministry of Labour with four incidents caused by third parties contacting WNH or private customer energized equipment, and assisted the police with a vehicle accident where a person was driving around the warning signs and through a work zone

- Maintain compliance with all relevant Electrical Safety Authority ("ESA") standards and guidelines
  - Targets for Audit Results:
    a) Zero (0) Non-Compliances in all sections; Achieved 2014: Zero (0), and
    b) One (1) or less Needs Improvements overall, Achieved 2014: Zero (0)
- Targets for Due Diligence Inspection Results:
    a) Zero (0) Imminent Fire/Shock/Explosion Hazards on all projects reviewed; Achieved 2014: Zero (0);
    b) Zero (0) Non-Compliances on all projects reviewed; Achieved 2014: Zero (0); and
    c) One (1) or less Need Improvements on each project reviewed; WNH received (5) five Need Improvements in total for all projects reviewed in 2014. The Observations under "Needs Improvements" have been addressed by WNH with a written response including an action plan and timelines and for correcting each point. Most of these have been due to field changes not being properly recorded on the As-built drawings. WNH is working to improve its performance in this area.

WNH understands that the ESA and the OEB are working to identify other potential performance measures related to safety. WNH will revise the above measures with a view to adopting those measures into its business strategy once released by the ESA and/or the OEB.

3. Customer Service

This encompasses the Board's Outcomes of Customer Focus, Operational Effectiveness and Financial Performance.

One of WNH's Corporate Values is '*Service – WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each*'. WNH has Customer Service level expectations and targets that are both adopted and imposed. There are many aspects to customer service and all strategic objectives can have positive or negative influences. These influences when rolled up into a single customer service objective provide better insight and balance to WNH investment decision making process.

WNH strongly believes in Customer Service and strives to always provide great service to the Customers. A comprehensive discussion of WNH's customer engagement efforts, the customer feedback and preferences identified as a result of these efforts, and the steps WNH is taking to ensure that customer preferences are being addressed as part of its business activities are included in a more comprehensive discussion in the Customer Engagement and Customer Focus section later in this exhibit.

A brief overview of feedback from Customers includes:

- WNH received 96% on the 2014 UtilityPULSE Customer Satisfaction Survey from our customers versus the 80% average for Ontario LDCs (Source 2014 UtilityPULSE Survey in Attachment 1-7.)
- The overwhelming majority (92%) of customers are satisfied with the service they receive from WNH. In fact one-half (49%) of respondents are Very Satisfied with the service they receive from WNH (Source Online Workbook Survey conducted by Innovative, Attachment 1-8)

- The use of social media not only allows WNH to provide its customers timely updates during outages and inform them of regular events and useful information, it allows the customers to provide feedback to WNH. WNH is grateful for the positive tweets that customers recognize and appreciate the hard work that its employees have provided. During the December 2013 Ice Storm WNH received tweets such as "@wnhydro thank you for all your communication and hard work today! So much appreciation to your teams out there!"

Firmly rooted in the local communities, WNH is well positioned to identify and respond to customer preferences through its business planning processes. WNH is committed to maintaining the following customer and community focus objectives:

- Assisting customers in becoming better informed about safe, economical and efficient uses of electricity.
- Maintaining service quality and customer satisfaction rates at or above industry targets.
    - Scheduled appointments Met on Time: *Target:* 90%; *Achieved 2014:* 99.9%
    - Target: 65% telephone calls answered on time. Achieved 2014: 88.8%
    - Target: 98% billing accuracy. Achieved 2014: 99.9%
    - Target: "A" rating on customer satisfaction survey results. Achieved 2014: "A" rating
- Facilitating local economic development by providing timely responses to new customer connection or service expansion requests.
    - Target: 90% of new residential/small business services connected on time. Achieved 2014: 100%
    - Target: 90% of low voltage customers (i.e. 750V or less) connected on time. Achieved 2014: 100%

- Target: 90% of high voltage customers (i.e. greater than 750V) connected on time. Achieved 2014: 100%
- Coordinating infrastructure replacement requirements with the Municipalities and the Region to minimize costly duplicative civil and construction work.

Customer Service Improvements

In addition to the above noted metrics, efficiency efforts will result in customer service improvements, including:

1. Continue to offer a web-based Customer Portal to enable customers to view their hourly electricity usage to help them better understand time of use consumption profiles and to quantify savings from conservation initiatives.

2. WNH offers an eBilling option to its customers. This has proven to be a popular and convenient service for customers to store information and review past consumption and costs at their leisure. Paperless billing together with the Customer Portal is leveraging existing technology on the website to make doing business easier for the customer. WNH has deployed to its customers several online 7 X 24 Customer facing applications which include 'Online Account Inquiry & eBill Presentment' (with automated eBill notification) as well as electricity consumption presentation. This has proven to be a popular and convenient service for customers for receiving their bills, reviewing their account payment activity and related costs and analyzing their past electricity consumption. Paperless billing together with the Customer Portal is leveraging web-based technology to provide the customer with a better experience when doing business with WNH.

3. WNH has redesigned its website with many built-in enhancements including 'My Account' which allows customers to access account information, review bills, and monitor consumption.

4. WNH uses social media extensively to keep its customers current. This is especially important during an outage, since ongoing information shared with the customers is very valuable. WNH has launched on Facebook and Twitter, and has a high number (5,000) of Twitter Followers.

5. Finally, based on feedback received from 2015 customer engagement processes, WNH will assist its customers in conservation education, be proactive in its communications during an outage and continue to provide high quality services. WNH will always review new technologies to find better ways to communicate with customers.

4. Employee Relations and Development

This encompasses the Board's Outcomes of Customer Focus and Operational Effectiveness.

Two of WNH's Corporate Values are '*Service – WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each*' and '*Safety and Environmental Stewardship - WNH is committed to its responsibility for the health and safety of employees, the protection of the public and safeguarding of the environment'*. WNH is committed to its employees and their development.

WNH's staffing levels have increased over the last five years, primarily to hire replacement staff for upcoming retirements. Approximately 3-4% of employees retire in any given year; however, WNH's workforce demographics resulted in more retirements in recent and upcoming years.

WNH hires apprentices approximately three years in advance of impending retirements of trades and technical staff in order to train and provide experience to new staff before existing staff leave. The continuity and transfer of knowledge does not entirely make up for the skills deficit WNH experiences when employees retire, but it does leave WNH able to carry on effective operations.

WNH has had little success finding experienced staff, and as a result generally hires into training positions and develops its own staff. To support this recruitment program, WNH hires co-op trades' apprentices and co-op engineering students for each 4-month term. These opportunities provide apprentices and engineering students with valuable work experience, return value to WNH for the work they perform, and provide WNH an opportunity to evaluate possible future employees.

WNH utilizes a mixture of permanent staff, part-time staff and contractor services to execute its investment plans in a cost effective manner.

WNH works hard to build a culture of continuous improvement, where employees feel valued, trusted, empowered and are a respected team member. These employees will then, in turn, look out for the needs of the business through a culture of continuous improvement. Examples of employee led and supported continuous improvement is detailed in the next section '5. Productivity and Cost Reduction'.

WNH's success in empowering their employees has resulted in performance and customer satisfaction improvements, an excellent employee safety record and a steady reduction of employee sick time.

5. Productivity and Cost Reduction

This encompasses the Board's Outcomes of Customer Focus, Operational Effectiveness and Financial Performance.

The Strategic Imperatives of Productivity and Cost Reduction, Organizational Effectiveness, and Customer Service are inextricably linked. Productivity and Cost Reductions are never static; WNH is constantly searching for ways to improve efficiency and productivity performance to provide better value service for its customer's money. Some efficiency improvements may lead to direct cost savings, other efficiency improvements may lead to a more effective utilization of resources, allowing WNH to do more with less.

WNH understands that its own success and that of its customers depends upon the affordability of the services it delivers. WNH actively investigates opportunities to improve value and lower the costs of its operations without sacrificing customer service levels. Although cost pressures such as labour and material inputs, regulatory requirements and service levels continue to increase, WNH continues to focus on improvements in these areas.

WNH will present its objectives below, along with customer feedback and examples of productivity and cost efficiencies it has implemented.

WNH is committed to continuously improving. WNH will work towards the following objectives:

- Identify and implement measures that will lead to sustainable long-term efficiencies that utilize resources more effectively
    - Target: Maintain in Group 3 or in an improved group ranking as determined using the PEG methodology. Achieved: Group 3 in most recent OEB Scorecard (2013)
- Actively monitoring and managing WNH's productivity performance
    - Target: Doing more (increased workload) with less by maintaining consistent staffing levels and managing and, to the extent practical, minimizing overtime and sick time levels. Achieved: Keeping absenteeism low, from 6.1 days in 2003 to 2.9 days in 2014

- Automating work processes to decrease timely manual tasks
- Working safely and continuous training for all employees
- Improving co-ordination and planning of capital projects

WNH has consulted on costs and rates with its customers for this filing. Results of this consultation include:

- At the end of the survey, 84% of Residential respondents give social permission for the proposed rate increase. Four-in-ten (40%) feel the rate increase is reasonable and they support it, and another 44% say they don't like it, but think the rate increase is necessary. Only 14% oppose the rate increase (Source Random Telephone Surveys conducted by Innovative Research, Attachment 1-8)
- A similar proportion, 86%, of GS<50 kW respondents are prepared to accept the proposed rate increase: 31% say it's reasonable and they support it, and another 55% say they don't like it but think it is necessary (Source Random Telephone Surveys conducted by Innovative Research, Attachment 1-8)

Productivity and Cost Reduction examples are provided below and demonstrate WNH's commitment to finding productivity and cost savings, as well as increasing service to its customers.

- In 2011 IT developed an electronic logging system which allows WNH System Operators to log the details and cause of every power outage or major system event. This has allowed WNH to identify poor performing feeders and initiate corrective action to reduce customer outage minutes

- In 2013 and 2014 WNH installed Business Intelligence Software that allows this data to be mined with greater precision to identify trends and the need for additional preventative maintenance work on the distribution system to prevent future customer outage minutes
- In 2013 and 2014, WNH installed fault indicators on all of its 27.6 kV and 13.8 kV feeders. This has helped our crews locate the root cause of major system faults more efficiently which results in lower customer outage minutes and reduction in operating costs
- In 2014 WNH installed 20 pole mounted Electronic Vacuum Reclosers (EVR) on our distribution feeders. These are "smart switches" that communicate with our SCADA system. This technology allows WNH System Operators in the Control Room to identify the line segment that is affected by a temporary fault, isolate it remotely using the SCADA system and then restore power to the unaffected line section(s). This results in lower customer outage minutes and more efficient dispatching of trouble crew to the fault location. Savings related to automated switching and the avoided cost of sending trucks would be in the order of $20,000 annually. WNH expects this to grow as it deploys an additional 20 EVRs per year over the next 5 years
- In early 2014 WNH worked with its software vendors to enable its System Operators to initiate requests from the GIS system for immediate status information from individual smart meters in the field. The modifications allow the System Operators to verify if a specific meter location has voltage on the LDC supply side of the meter socket. This tool has helped the System Operators more efficiently verify where power has been restored and saved the cost of dispatching a trouble crew to do so. In early 2015 this functionality was enhanced by giving the tool the ability to return a status message, as well as the instantaneous voltage and current at a meter location. System Operators are able to confirm that a meter location has

acceptable voltage. They can also check meter locations at the end of feeders that have been abnormally configured as a result of planned maintenance or emergency switching to ensure the customers at the end of the line are receiving acceptable voltage and when they are not, to efficiently initiate other remedial actions

- In mid-2014 WNH selected an Outage Management System (OMS) and started the implementation process in July. This system will be fully functional in 2015. The OMS system will allow power outages that are detected by our Smart Meters to be automatically reported. The system will also accept manual inputs of reported outages via customer calls to its call centre. The OMS will use the location of reported outages and the connectivity model of WNH's electrical connectivity map to accurately predict the location of the outages as well as the common element of the WNH distribution system that has likely failed or opened. This will allow System Operators to dispatch the crews more accurately and efficiently, reducing cost and reducing customer outage minutes. In the second phase of the project, the OMS will allow WNH to display the location of outages on a public outage map via the internet. This will help improve communication with customers during major outages and more efficiently share with them the estimated time of restoration for most outages. We expect this phase of the project to be completed in late 2015
- Field patrols and inspections of WNH’s overhead lines and pad mounted transformers and switching equipment are being completed by Powerline Maintainers or qualified contractors with the results collected using tablet PCs. This information is then uploaded into an inspection database linked to WNH’s GIS. In 2013 and 2014 the GIS team enhanced this system by automating the process for the follow up work identified by these inspections to generate individual work packages by location. This has made the process of issuing work orders for the remedial work more timely and accurate. It is estimated the savings in this area to be approximately $15,000 annually

- In 2013 WNH started to convert small vehicles with high gasoline usage to dual fuel using propane and gasoline. In 2014 WNH reduced their total fuel bill by approximately $30,000 annually
- In 2012 WNH commenced purchasing bucket trucks with a hybrid electric system that allows the truck's boom to function on battery power when the engine is turned off. This reduces emissions and saves diesel fuel. Total fuel savings and reduced maintenance costs related to the truck's emission system from this technology for the 5 trucks WNH had by the end of 2014 is approximately $15,000 annually
- WNH staff moved into its new Service Centre and Administration Offices in December, 2011. This facility now has space to store all of WNH's major equipment and spare parts inventory. Previously some major equipment and spare parts were kept at multiple WNH owned locations throughout service territory. During 2012 and early 2013 all of the spare equipment and material was relocated to the warehouse and storage yard at the new Service Centre. This has resulted in saved time and transportation costs in accessing this equipment
- Continued asset renewal of the 4.16 kV lines in the City of Waterloo and Town of Elmira; and 8.32 kV lines in the rural area, along with the retirement of their associated transformer stations will maintain the reliability of supply to WNH customers and contribute to continued lowering of line losses. WNH has reduced line losses from 5.0% in 2006 to 3.4% in 2014 through these and other initiatives. This represents annual savings that flow directly to the benefit of the customers in the lower cost of power. Currently savings are estimated to be $2.4 million annually

- The retirement of WNH's last 5 operating 4.16 kV stations (MS1, 5, 22, 23, 24) and one 8.32 kV station between 2016 and 2020 will eliminate their associated O&M cost. This will also avoid the need for further capital renewal investments for buildings & equipment as these stations are past their useful life. Total annual savings in Stations O&M are estimated to average $100,000 annually
- The installation of distribution automation devices such as electronic line reclosers and fault sensors is anticipated to reduce man hours and truck times required to identify and locate the causes of power outages and will reduce customer restoration times due to the capability to operate more devices from the control room. Total annual savings in O&M by the end of 2016 are expected to average $12,000 annually. This will increase over the forecast period with investments proposed in the DSP, to approximately $40,000 annually
- In addition to WNH's direct savings in O&M, shorter restoration times reduce the customer's lost revenue associated with a loss of power event. WNH has not yet quantified these savings and intends to study how its customers quantitatively value loss of power events
- The change-over of revenue meters to smart meters for general service customers will provide customers the information needed to reduce or shift peak demand. Peak shifting can improve the overall efficiency of the distribution system and reduce stress on key components of the distribution and transmission system during times of peak load. Savings are dependent upon the customers' future response to the enhanced usage information. WNH has not yet been able to quantify these savings

- Implementation of asset management software along with the investments already made in GIS, ODS, and Cognos will allow WNH to have stronger and more efficient practices in its Asset management and Investment prioritization processes. Currently this is still a labour intensive process for WNH. Total annual savings in O&M by the end of 2016 are expected to average $90,000 annually
- The upgrading to higher operating voltages that comes with Renewal investments in overhead and underground lines reduces the requirement for 4.16 kV and 8.32 kV inventory materials. Total estimated savings in inventory costs of $112,000 are expected as the 4.16 kV distribution system is retired by 2018
- The renewal of assets past their useful life will result in less reactive based maintenance and lower risk of failure and safety issues. WNH has not yet quantified these expected savings
- Implementation of AMI Meter Management by Exception automatically monitors and reports on key AMI performance parameters. Based on performance rules and targets, exception reports are automatically generated allowing for more focused and timely resolution of performance issues. Annual savings in Metering O&M costs are estimated to be $12,500
- Utilizing its Operational Data Store (ODS) WNH automated and streamlined its processes for Exception Based TOU Interval Billing Quantities Preparation (i.e. Verification, Editing, Estimation & Billing Quantity Response Validation). This resulted in an estimated savings of 1 FTE
- Utilizing its ODS, WNH automated and streamlined its IESO '1598' Settlement Reporting for Generation. This resulted in an estimated savings of 2 days per month for the Billing Department, which saves approximately $10,000 annually

- WNH interfaced its ODS to its CIS Billing System and automated and streamlined preparation of generation data for administration of generator contract payments. This has resulted in estimated savings of 4 days a month for the Billing Department which equates to approximately $20,000 annually
- WNH launched its Canada Post 24 X 7 ePost 'eBill Presentment' which has resulted in an estimated savings of $8,000 annually. WNH has increased its target of the percentage of customers on e-bill and recognized the resulting savings in this Application. Details are provided in Exhibit 4
- WNH has outsourced to Canada Post its bill printing, enveloping and PDF creation of the bill which has resulted in an estimated savings of $4,000 annually
- WNH has implemented EFT payment process to reduce regular mailings of cheques for vendor invoices and microFit cheques which saves staff time and mailing costs and increases the efficiency of this process
- WNH has simplified the Retailer Settlement and IESO payments process which has saved staff time and increases the efficiency of this process
- WNH emails its Accounts Receivable Invoices instead of using regular mail which reduce postage and mailing costs
- WNH has implemented an accounting process whereby journal entries are uploaded via an import function saving duplication of manual work
- WNH has found environmental and cost savings through the new service centre. Water usage has decreased by 50% from the old service centre. Notable high efficiency features include motion sensor low-flow faucets, dual flush toilets, low flow urinals, and repurpose roof water collection for grey water use, accounting for 34% of the total water usage
- The offices employ advanced HVAC systems using variable flow refrigerant (VFR) technology with the heating and cooling component fed from a three acre geothermal field, supplying 70% of the required heat and 100% required cooling

- A combination of natural and efficient lighting has contributed to 60% energy savings – an annual cost savings of over $65,000
- Despite numerous regulatory obligations driving increasing workload, WNH has maintained the same number of FTE between 2013 and 2015 as shown in Table 1-3. WNH intends to maintain a consistent workforce in the 2016 Test Year. WNH has worked to implement efficiency measures to handle incremental workload as a result of customer demand and to respond to provincial policy initiatives while limiting its increase in employee complement

Table 1-3 - Number of Full-time Employees

Type	2011 Board Approved	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Bridge	2016 Test	2016 vs 2011 COS
Permanent FTE	120.05	114.32	114.26	119.20	117.98	122.81	123.87	3.82
Student/Contracts FTE	4.97	9.54	13.63	13.31	13.15	10.29	8.25	3.28
Total FTE	**125.02**	**123.86**	**127.88**	**132.50**	**131.12**	**133.11**	**132.12**	**7.10**

In the 2016 Test Year and future years, WNH will continue to make cost reduction and productivity improvement measures a priority.

6. Organizational Effectiveness

This encompasses the Board's Outcomes of Customer Focus, Operational Effectiveness and Financial Performance.

One of WNH's Corporate Values is *'Commitment to Excellence - WNH strives for high reliability and quality through continuous improvement, leadership and excellence'*.

WNH considers organization effectiveness as a key factor in supporting cost reduction; health, safety and environment; timeliness of service delivery; O&M execution and capital investment planning. WNH's organization effectiveness initiatives include projects and activities undertaken based on, among other factors, customers' preference, technology based opportunities and other innovative process, services, business models or technologies.

As demonstrated above in the Productivity and Cost Reduction Strategic Imperative section, WNH has implemented a number of efficiencies and cost saving measures. Many of these measures not only save costs, which ultimately reduce rates for WNH's customers, they increase WNH's level of service and some benefit the environment in emissions reductions.

The examples provided above are sustainable. These demonstrate WNH's commitment to Continuous Improvement in productivity and cost performance, they enhance WNH's system reliability and quality objectives.

WNH, in its consultation with customers on efficiencies and cost savings, had results as follows:

- Three quarters (74%) are satisfied (19% very, 55% somewhat) with the efforts WNH has made to find efficiencies and cost savings. Only 16% are dissatisfied, while the remaining 10% don't know (Source Online Workbook conducted by Innovative, Attachment 1-8)

7. Financial Performance

This encompasses the Board's Outcomes of Operational Effectiveness, Financial Performance, and Customer Focus.

WNH's Financial Performance Strategic Initiative focuses on three main areas, namely:

- WNH is always looking to manage its Controllable Costs and uses a number of measures including Cost per Customer, Cost per Km and Cost per MWh in its monitoring of the costs. As demonstrated in the Productivity and Cost Reduction Strategic Imperative section above, WNH has implemented a number of measures to reduce its cost and increase its efficiencies
- WNH's goal of earning the maximum allowable return allows it to use the funds to reinvest back into its distribution system. WNH is committed to providing its customers with a safe and reliable distribution system and prudent financial management is a key initiative in achieving this commitment
- WNH prudently manages its debt level to achieve WNH's financial objectives

WNH has strived to be financially responsible which includes providing its shareholder with a rate of return consistent with OEB's allowed return on equity, as provided in Table 1-4 below. Achieving this target also allows WNH to reinvest in its distribution system and provide safe and reliable electricity.

Table 1-4 - WNH Profitability: Regulatory Return on Equity

Year	2011	2012	2013	2014
Percentage of Profitability*	10.00%	7.40%	8.70%	7.24%
Percentage of Profitability	10.00%	7.40%	8.70%	4.18%
ROE Most Recent Application	9.58%	9.58%	9.58%	9.58%

** Before adjustment for Unrealized Loss from Financial Instrument Hedges and related Provision for Future Income Taxes*

In 2014 WNH is below the allowed dead band. The Company has entered into interest rate swap agreements with a high quality Canadian charter bank for the purpose of eliminating the risk of fluctuating interest rates and removing the economic impact of interest rate volatility on the majority of its long-term debt. Part V of the CPA Handbook requires the Company determine and record the fair value of its interest rate swap agreements on the balance sheet at the time of fiscal year-end, with changes in fair values being recorded in the income statement.

As a result, the Company has recorded a non-current derivative liability and a non-cash charge of $3,459,331. A future tax recovery of $916,723 was also recorded to reflect the future tax impact. There is no impact on current tax PILs payable. Over the term of the long-term debt, the non-cash charge and liability will reverse into income. The company issues 30 day banker's acceptances at a floating rate but pays interest at a fixed rate guaranteed by the interest rate swap. WNH has not budgeted any expense or income in the 2015 Bridge or 2016 Test Years as these balances fluctuate from year to year and are not known in advance.

8. Shareholder and Community Relations

This encompasses the Board's Outcomes of Customer Focus and Public Policy Responsiveness.

One of WNH's Corporate Values is '*Service - WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each'*.

WNH takes seriously their role within the community by allowing the customers the opportunity to engage with WNH. WNH has described its many ways of ongoing customer engagement and engagement specific to this Application throughout the Exhibits. WNH also participates in many community events, allowing it to hear and share with its customers. Examples include:

- WNH has conducted Customer Service Surveys for a number of years in order to determine its customers' preferences and incorporate the feedback into its business and operational plans as applicable
- WNH conducts Open Houses to inform its customers in areas that will be impacted by its work plans
- WNH believes that educating its next generation provides a valuable service to the community. WNH conducted Electrical Safety Awareness Presentations at 94% of the elementary schools in its service area to assist Grade 5 students recognize and respect electrical system hazards
- WNH actively participates in its local Chamber of Commerce, on the Board of Directors, on Committees, and supporting events allowing WNH to interact with local business persons, hear any of their electricity concerns and provide industry education

- WNH was a founding member of a local conservation organization, Sustainable Waterloo Region. WNH is committed to energy efficiency and conservation for its customers
- WNH participated in a local annual event 'Doors Open' in which members of the public are offered free access to architecturally and socially significant buildings in the area. WNH received much interest and participation from the community, over 300 people toured WNH's facilities.
- WNH regularly meets with its shareholders to discuss WNH's plans, rates and the impact on customers.
- WNH has detailed its extensive consultations with the local municipal planning and economic staff, from the three municipal shareholders of WNH's parent company, on page 73 below.

WNH is also committed to actively supporting provincial and local public policy objectives through the implementation of Smart Meters and Time-of-Use Pricing, meeting mandated Conservation and Demand Management Targets, enabling Renewable Generation, transitioning to IFRS accounting standards, the implementation of LEAP, and the implementation of the Ontario One Call system.

9. System Aesthetics

This encompasses the Board's Outcomes of Customer Focus and Operational Effectiveness.

WNH consults with various stakeholder groups in the community and has provided an opportunity for them to express their support for more aesthetically pleasing forms of distribution system construction. WNH adheres to service levels as prescribed in its Conditions of Service, overarching regulations, adopted standards and good utility practice. Although not ranked as high as other strategic objectives, aesthetics is taken into consideration on all projects and when balanced with other strategic objectives positive outcomes can be realized.

In addition to the above Strategic Imperatives, WNH conducts its business and has prepared this application with support of Public Policy in mind.

Public Policy Responsiveness

There have been a number of incremental obligations mandated through provincial policy or local policy objectives since WNH's last Cost of Service decision in 2011, including, but not limited to:

- The implementation of Smart Meters and Time-of-Use Pricing
- The obligation to achieve the policy outcomes set out in the RRFE
- The obligation to meet mandatory Conservation and Demand Management Targets
- Ongoing obligations under the *Green Energy and Green Economy Act, 2010* in respect of facilitating new renewable generation, meeting the obligation to connect to settle LDC connected FIT Contracts in accordance with the *Retail Settlement Code*

- Incremental transition of accounting standards towards IFRS, including the implementation of revised capitalization and depreciation policies, including estimated useful lives for depreciation
- The implementation of the Low-income Energy Assistance Program (LEAP) and associated reporting requirements
- The implementation of the Ontario Clean Energy Benefit (OCEB) and associated adjustments
- The implementation of Class "A" and Class "B" Global Adjustment changes pursuant to O. Reg. 429/04
- The implementation of Ontario One Call pursuant to the *Ontario Underground Infrastructure Notification System Act, 2013*
- Meeting revised Electricity Reporting and Recordkeeping Requirements
- Participating in new regional infrastructure planning initiatives
- Meeting new accessibility standards in accordance with the *Accessibility for Ontarians with Disabilities Act, 2005*
- Implementation of consumer protection provisions in the *Energy Consumer Protection Act, 2011*
- Compliance with Canada's new anti-spam and online fraud act (CASL)
- Compliance with Measurement Canada Bulletins GEN-25-E and GEN-31-E requiring that Ontario Regulation 275/04, Section 7 apply to TOU bills, including register reads

WNH has actively supported and met all of these public policy obligations. Specifically:

Smart Meters and Time-of-Use Pricing – WNH deployed smart meters in 2008 through 2011 and converted customers over to Time of Use Billing in June 2011. WNH was one of the few LDC's that did not request an extension to their Board approved cutover date to Time of Use Billing. WNH obtained Board Approval, *EB-2012-0166*, on October 4, 2012 (corrected October 12, 2012) for disposition and recovery of costs of its Smart Meter deployment at November 1, 2012.

RRFE outcomes – Exhibit 1 walks through each of the four RRFE outcomes and discusses in respect of each, what WNH has done to achieve these outcomes.

Conservation and Demand Management Targets – WNH will meet its 2011-2014 energy reduction target of 66 GWhs. In addition, WNH estimates that nearly $35M has been injected into the local economy as a result of energy conservation programs offered and the projects that have been implemented.

Facilitating new renewable generation – WNH's distribution system has been planned and proactively built and equipped to handle forecasted renewable generation. WNH has worked with many customers to develop renewable generation projects. WNH provides monthly settlement services to 371 FIT and microFIT projects. This is incremental workload completed by existing staff.

Transition to IFRS – The Accounting Standard 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 CGAAP were required to implement regulatory accounting changes for depreciation expenses and capitalization policies by January 1, 2013. WNH confirms the implementation of the regulatory accounting changes for depreciation in 2013 and overhead capitalization in fiscal 2013. WNH enlisted the services of KPMG to help assist in the project and to ensure all changes were in compliance. The conversion required significant incremental effort to retrieve historic data and perform the necessary analysis specifically related to the change in useful lives and componentization of PP&E. WNH projects the IFRS conversion to cost $108,816 as detailed in Board Approved Appendix 2-U.

Low-income Energy Assistance Program (LEAP) – WNH makes annual contributions in the amount of 0.12% of the approved distribution revenue in compliance with the Report of the Board: Low Income Energy Assistance Program ("LEAP"), issued in March 2010. WNH adheres to and complies with the LEAP Emergency Financial Assistance Program dated February 17, 2012 and works closely with the designated social service agency.

Ontario Clean Energy Benefit (OCEB) – WNH began implementation and notification of the OCEB in January 2011, with On-Bill messaging, and has had continuous on bill messaging since. WNH completed training sessions with customer account staff, and billing staff on the incorporation of the changes so they could ensure the accuracy of the bills and handle customer inquiries.

Global Adjustment Changes – WNH currently has one class A customer and does not foresee any future settlement issues.

Ontario One Call – WNH transitioned to the Ontario One Call for locates on January 14, 2013. This transition has increased the number of locate services that WNH provides and increased safety for its customers, contractors and the distribution system.

Electricity Reporting and Recordkeeping Requirements – WNH has met and will continue to meet all Electricity Reporting and Recordkeeping Requirements.

Regional Infrastructure Planning – In preparing its Distribution System Plan, WNH requested a letter from the IESO (formerly the OPA) confirming the status of regional planning for the Regional Planning areas of which WNH is a member. Hydro One provided an update on the status of Regional Planning on March 26, 2015. The IESO noted that "Waterloo North Hydro is part of "Group 1" and the Kitchener, Waterloo, Cambridge and Guelph ("KWCG") region for regional planning purposes. Waterloo North Hydro is one the 5 local distribution companies ("LDCs") serving the region and is part of the regional planning Working Group ("Working Group") for the Integrated Regional Resource Plan ("IRRP") that is underway in the area. This IRRP is to be finalized at the end of April, 2015 and is being led by the IESO in partnership with Hydro One Transmission, Hydro One Distribution, Kitchener-Wilmot Hydro Inc., Waterloo North Hydro Inc., Cambridge and North Dumfries Hydro Inc., and Guelph Hydro Electric Systems Inc. Since 2010, Waterloo North Hydro has been participating in ongoing planning meetings related to the IRRP and therefore consults regularly with the IESO, the other LDCs and Hydro One on electricity and regional planning related matters."

Based on these consultations, Waterloo North Hydro indicates that it is not planning any capital investments over the 5-year period (2015 to 2020), stating that an evaluation of its distribution system has shown it to have considerable capacity remaining to connect renewable energy generation, and that no distribution or grid constraints have been identified for this purpose.

Accessibility for Ontarians with Disabilities Act, 2005 - WNH is committed to taking all reasonable steps to sustain the health, safety and dignity of employees, workers and customers. Persons with disabilities will be given equal opportunity to obtain, use or benefit from the goods and services provided by and on behalf of WNH according to the *Accessibility for Ontarians with Disabilities Act 2002 (AODA)* and Ontario Regulation 429/07 (Accessibility Standards for Customer Service).

To meet this commitment, this document is supported by additional Work Instructions including:

i. Communication
ii. Service Disruption
iii. Service Aids (including Service Animals and Support Persons)
iv. Feedback

Energy Consumer Protection Act, 2011 – WNH is in compliance with the *Energy Consumer Protection Act, 2011,* that came into force on January 1, 2012. WNH reminds the customer who their retailer is, for instance, “Your current electricity supplier is Planet Energy (Ontario) Corp. 1-866-360-8569”, and as well WNH has distributed the inserts provided by the OEB.

Canada’s New Anti-Spam and Online Fraud Act (CASL) – WNH collects email addresses for direct communication through two methods. Method one is via the application process and forms, where the permission to use the email as a communication point is included in the process. The other method is for the customer portal where the email is required for e-billing and portal access. In both cases the customer gives explicit permission to contact them via their email. WNH does not collect or maintain a general interest/non-customer e-mail list, and therefore is not required to maintain opt-in or opt-out functionality. Since all email addresses in our CIS and e-billing have explicit permission to contact, WNH is in full compliance with current anti-spam (CASL) legislation.

Measurement Canada Bulletins GEN-25-E and GEN-31-E – This bulletin requires that Ontario Regulation 275/04, Section 7 apply to TOU bills. This includes the presentation of meter register reads on monthly electricity bills. WNH is in compliance with this regulation.

Expected Performance Targets

Provided the Board approves rates in the Test Year as forecasted in this Application, WNH expects to continue to achieve all of its performance targets in the Test Year.

WNH expects this notwithstanding the fact that WNH is expecting a turnover of 39% between 2015 and 2020; WNH has budgeted to proactively plan for these changes to ensure continued achievement of key performance targets.

2.4.2 Executive Summary

2.4.1.3 A. Revenue Requirement (Exhibit 6)

WNH is requesting the approval of its proposed service revenue requirement of $36,594,074, an increase of $7,448,458 or 25.6% compared with the 2011 approved service revenue requirement as shown in Table 1-5.

Table 1-5 - Service Revenue Requirement

Service Revenue Requirement	2011 Approved	2016 Proposed	2016 vs 2011 Approved
OM&A Before Overhead Capitalization Change	10,004,339	11,376,007	1,371,668
Overhead Capitalization Change	-	2,303,326	2,303,326
LEAP	34,944	42,000	7,056
Property Tax	-	489,734	489,734
Depreciation	7,749,422	8,151,672	402,251
Return on Rate Base	10,345,067	13,427,518	3,082,452
PILs	1,011,845	803,815	(208,029)
Total	**29,145,616**	**36,594,074**	**7,448,458**
Rate Base	**150,996,206**	**217,478,742**	**66,482,536**

There are two main contributors to the difference in Revenue Requirement between 2016 Proposed and 2011 Approved. The first major contributor is the cost increases in OM&A as a result of the Overhead Capitalization Change of $2,303,326 as detailed in Exhibit 4, Table 4-2 – Overall Cost Trends. These costs were previously capitalized, now they are required to be expensed in OM&A. The second major contributor is the increase of $3.1M in return on rate base resulting from approximately a $66.5M increase in Rate Base which is explained in Exhibit 2. In the past five years WNH shows an increase in Rate Base from a few significant one-time investments. A new Service Centre and Administration Office that went into operation at the end of 2011 carries 50% of the investment into this Rate Application period. Rebuilding and upgrading grid-connected Transformer Station Equipment, deployment of Smart Meters and the associated communication systems, and significant relocation costs for a new Light Rail Transit system in the Region are all significant investments captured in this Rate Application.

2.4.1.4 B. Budgeting and Accounting Assumptions

Developing WNH's budget is a key process as it identifies past successes as well as future initiatives and projections for capital and operating costs. Assumptions provided by the management team for the capital and operating budgets are tested to ensure they support WNH's strategic imperatives as well as being prudent and financially sustainable. Both the 2015 Bridge and 2016 Test Years have been compiled using the MIFRS method of presentation. Impacts flowing from changes to depreciation and overhead capitalization changes are required upon transition to MIFRS; however, these were already recognized in Revised CGAAP. The 2015 Bridge Year Forecast is based on forecasted balances. WNH provides detailed explanations in the applicable sections of the application for the major components of the budget: Revenue, OM&A and Capital.

Economic Overview

Assumptions and methods of calculation from these exhibits for the 2016 Test Year are as follows:

1. Revenue

a) The Total Customer/Connections are forecasted to slightly increase based on the forecast by rate classes which reflect current conditions in WNH's service area

b) Other revenues were viewed on an item-by-item basis and were either based on a historical indicator or on future strategic initiatives

2. Operating Maintenance and Administration Expenses

a) OM&A expenses have been developed based on each Supervisor and Manager's work plans using a bottom up approach. They must consider Senior Management's overall spending plan in an effort to contain costs, but still provide an acceptable level of service and reliability and be mindful of customer rate impacts

b) Staffing levels are based on the estimated time required to complete the work plans and hiring for future retirements. The 2016 Test Year employee complement is forecasted to decrease from the 2015 Bridge Year level of 133 by 1 employee

c) Union wage increases are based on the union contract which was effective April 1, 2013 and expires on March 31, 2016. Beyond March 31, 2016, we have provided for an inflationary increase in union wages that is indicative of current wage settlements. Non-union management wage increases considered similarly to the Union wage increases

d) Regulatory costs for this Application and other One-Time Costs have been normalized over the five year life of the application

e) WNH used an inflation rate of 2% for 2015 and 2016 where the expense increase could not be specifically identified

3. Amortization

a) Amortization has been calculated based on the revised useful lives and on a MIFRS basis

4. PILs

a) Regulatory PILS have been calculated using the Board Approved Model

b) PILS are forecasted to decrease mainly due to the decrease in depreciation as a result of the change in useful lives and an increase in capital cost allowance which is not affected by the change in useful lives

5. Capital

a) The Capital Budget was formulated on a project by project basis

b) Distribution asset related projects were prioritized based on multiple factors as explained in the Distribution System Plan

c) General Asset related projects were submitted by Supervisors and Department Managers based on a project by project basis. Major projects were based on a fleet replacement schedule, work equipment requirements, and IT assessments

2.4.1.5 C. Load Forecast Summary (Exhibit 3)

WNH's load forecast is weather normalized and considers factors such as historical power purchased load, weather, calendar related factors and local economic conditions. As outlined in Exhibit 3, WNH has used the same regression analysis methodology approved by the Board in its 2011 Cost of Service Application (*EB-2010-0144*). The regression analysis was conducted on historical electricity purchases to produce an equation that will predict weather normalized power purchases in 2016. The weather normalized purchased energy forecast is adjusted by a historical loss factor to produce a weather normalized billed energy forecast which is allocated to rate class using historical billing data by rate class.

Based on the load forecast methodology, the Total 2016 Test Year kWh forecast is 1,513,105,368 which is a 4.25% increase over the 2011 Board Approved kWh forecast of 1,451,447,141.

The forecast of customers by rate class was determined initially exploring a geometric mean analysis, however, past activity was not predictive of future activity and WNH had to adjust the results. An example is the Residential Rate Class, past customer additions exceed the slowing additions predicted for 2015 and 2016. Based upon the analysis, the expected number of Customers/Connections for the 2016 Test Year is 70,025 which is a 5.02% increase over the 2011 Board Approved Customers/Connections of 66,679.

2.4.1.6 D. Rate Base and Capital Plan (Exhibit 2)

Distribution System Plan

In creating the Distribution System Plan (the "DSP" as attached in Exhibit 2), WNH believes the objective and scope of this 2016 – 2020 investment plan speaks directly to all of WNH's strategic imperatives and also the OEB's DS Plan evaluation criteria of efficiency, customer value and reliability. The main drivers in the DSP are line extension to fulfil requests for new connections, relocation of plant, system renewal of overhead lines and underground lines, refurbishment of transformer station equipment, and investments in distribution automation. The DSP and WNH's Capital Expenditure Plan seeks to find the right balance between capital investments in new infrastructure, and operating and maintenance costs so that the combined total cost over the life of an asset is minimized.

As will be demonstrated in the DSP as well as the remainder of this summary, The proposed levels of capital investment, for each category and in total, are relatively consistent and constant over the forecast year. This is reflective of the WNH's belief that over the forecast period, investment drivers will remain characteristically similar to 2016 and that there are no foreseen extraordinary expenditures. These capital expenditures are spread out over four categories (as seen in Table 1-6 below): System Renewal (SR), System Access (SA), System Service (SS) and General Plant (GP).

Table 1-6- Proposed Capital Investments

OEB Investment Category	Forecast Period					Total	Average
	2016	2017	2018	2019	2020	2016 - 2020	2016 - 2020
System Access	$6,622,858	$5,892,104	$6,020,046	$5,946,859	$6,085,796	$30,567,663	$6,113,533
System Renewal	$8,181,031	$8,545,000	$9,438,200	$8,800,764	$8,975,779	$43,940,774	$8,788,155
System Service	$2,405,950	$1,680,000	$1,725,200	$1,175,404	$1,175,612	$8,162,166	$1,632,433
General Plant	$1,869,078	$2,813,765	$1,661,176	$1,670,309	$1,649,525	$9,663,853	$1,932,771
Totals	**$19,078,917**	**$18,930,869**	**$18,844,622**	**$17,593,336**	**$17,886,713**	**$92,334,457**	**$18,466,891**

Capital Expenditures for the 2016 Test Year

In the 2016 Test Year, there is a decreased forecast for total capital spending in comparison to the Historical and Bridge Years' and is stable in comparison to the forecasted years' 2017 - 2020. The decrease in 2016 Test from the 2015 Bridge Year is primarily driven by a decrease in the System Access investment required to service the relocation required for the Region of Waterloo's Light Rail Transit System. $4.1M is forecast to be spent in 2015; $2.1M is forecast to be spent in 2016.

As outlined in WNH's DSP in Exhibit 2, system renewal projects represent investments required due to assets reaching the end of their Typical Useful Life (TUL) or found to be in poor condition. The majority of this work for 2016 involves the replacement of wood poles and conductors as identified by WNH's Asset Management Plan. Generally the lines that are the oldest and in poorest condition, also operate at the 4.16 kV and 8.32 kV voltage levels. As part of WNH's asset renewal plans, the lower voltage assets when replaced are also upgraded to higher and more efficient voltages or capacities such as 13.8 kV and 27.6 kV. WNH forecasts $4.8M in major projects for renewal of overhead lines in 2016, and an additional $.8M to replace underground cables and submersible transformers that are more than 35 years old.

System Service expenditures include $.8M to address a localized Load Transfer Capability and $1.2M in required Distribution Automation expenditures.

WNH notes that the term 'Capital Expenditures' has been reflected as Capital Additions in this Application, Work in Process is not recorded in the year spent, it is recorded when the asset is in service.

Capital Expenditures for the Forecast Period

For the forecast period of 2017-2020, WNH does not have specific project listings. The Capital Expenditures for this period are anticipated to remain relatively consistent.

System Access investments over the forecast period represent the second largest group of investments. From **Table 4-12a&b** in Attachment 2-1, the DSP, in this Exhibit, it can be seen that investments are trending lower by an average of $1.65M annually. This is mainly due to the completion of a number of major roadway relocation projects, the largest being the LRT.

Table 4-11a&b in Attachment 2-1, the DSP, provides SA investments over the forecast period by WNH Project Groups. Major investments are expected to be customer centric and are based on historical levels and municipal and developer consultation outcomes.

System Renewal investments over the forecast period represent the largest group of investments. From **Table 4-12a&b** in Attachment 2-1, the DSP, it can be seen that average annual investments in system renewal and SS are trending higher by an average of $.24M annually from historical levels.

Table 4-11a&b in Attachment 2-1, the DSP, provides SR investments over the forecast period by WNH Project Groups. Major investments are expected in overhead line, underground line and transformer station renewal.

System Service investments over the forecast period represent the smallest group of investments over the forecast period. From **Table 4-12a&b** in Attachment 2-1, the DSP, it can be seen that average annual investments in SS are trending lower by an average of $.14M annually. **Table 4-11a&b** in Attachment 2-1, the DSP, provides SS investments over the forecast period by WNH Project Groups. The majority of the investments is reliability centric in Distribution Automation and remotely controlled switching and fault indicating devices. Building and property upgrades at the transformer stations are also expected.

General Plant investments over the forecast period represent the third largest group of investments over the forecast period. From **Table 4-12a&b** in Attachment 2-1, the DSP, it can be seen that average annual investments in GP are trending lower by an average of $.52M annually. **Table 4-11a&b** in Attachment 2-1, the DSP, provides GP investments over the forecast period by WNH Project Groups. By 2017, WNH will have upgraded or replaced a number of its major information systems such as CIS, ERP, SCADA; and

introduced enhanced software systems such as Outage Management, Asset Management, and Automated System Restoration. Major investments in 2017 - 2020 are expected to include fleet replacement, control room electronic wall projection system and building sanitary sewer connection.

Comparison to Board Approved Capital Expenditures 2011

As shown in Table 1-7, 2011 Board-Approved Capital Expenditures vs. 2016 Test Year Capital Expenditures below, WNH's Capital Expenditures for the 2016 Test Year are $26,580,497 lower than the 2011 Board-Approved Capital Expenditures.

Table 1-7- 2011 Board-Approved Capital Expenditures vs. 2016 Test Year Capital Expenditures

CATEGORY	2011 Board Approved	2016 Test Year	Variance
System Access	6,977,237	6,604,740	(372,497)
System Renewal	8,668,695	8,181,031	(487,664)
System Service	1,388,630	2,405,950	1,017,320
General Plant	28,606,734	1,869,078	(26,737,656)
Total	**45,641,296**	**19,060,799**	**(26,580,497)**

The primary driver of the variance between the 2016 Test Year and the 2011 Board Approved Amount is the new Service Centre and Administration Building and related equipment and furniture, which WNH had approved in its 2011 COS in the amount of $26.7M.

System Service expenditures include $.8M to address Load Transfer Capability (Contingency Enhancement) and $1.2M in required Distribution Automation expenditures which have increased the 2016 Test Year spending over the 2011 Board Approved Amount.

Each of the four categories identified above in Table 1-6 is further described below. Additionally 2016 Test Year Capital Expenditures are discussed above on page 54 and in Exhibit 2.

System Access Investments

System Access investments are anticipated to remain flat over the forecast period. WNH is currently experiencing no constraints on capacity and customer connections are done on an as requested basis.

System Access Investments include projects under the subcategories: Municipal Relocations, Light Rail Transit Relocations, Customer Connections, Expansions (Subdivisions), Expansions (Lines) and Retail Meters.

Road relocations are required projects driven by statutory obligations and are non-discretionary and are anticipated to continue throughout the forecast period at a similar level of investment to that which was experienced during the historical period.

Significant System Access capital projects for the 2016 Test Year include:

- $2.1M is forecast to be spent to service the relocations required by the Region of Waterloo's Light Rail Transit System
- Customer Connections requested are forecast at $2.3M
- Municipal Road Relocations are forecast at $.9M and
- Expansions for Subdivisions are forecast at $.6M

System Renewal Investments

System Renewal Investments include projects under the subcategories: Overhead Line Renewal, Underground Line Renewal, Overhead Line Renewal - Failing Conductor, Overhead Line Renewal (8kV), Overhead Line Renewal (4kV), Overhead Line Refurbishment (4kV), Reactive Renewal, Proactive Renewal and Station Breaker Renewal.

The majority of this work for 2016 involves the replacement of wood poles and conductors due to assets reaching the end of life or found to be in poor condition by WNH's Asset Management Plan. Much of these assets also operate at the 4.16 kV and 8.32 kV voltage levels and WNH will convert the assets to operate at the 13.8 kV and 27.6 kV. System Renewal investments represent the largest component (47.6%) of WNH's proposed investment plan from 2016 – 2020. In 2016 WNH proposes approximately $8.18M in System Renewal investments. This is typical of the level of investment proposed in the 2017 – 2020 forecast period.

The majority of System Renewal investments for the period of 2017 to 2020 will be informed by the asset condition assessment and the prioritization protocol.

Significant System Renewal capital projects for the 2016 Test Year include:

- Overhead line rebuilds consisting of approximately $4.2M for assets that are currently at or near end of life, and will convert 4.16 kV and 8.32 kV assets to higher voltages
- Replacement of Overhead Lines due to Failing Conductor of $1.1M
- Proactive Replacement of Depreciated Poles, Reinsulating Overhead Lines, Switch Cubicles and Underground Transformers of $.8M and
- Overhead and Underground Line Rebuilds of $1.2M

System Service Investments

System Service investments are typically driven by capacity constraints. WNH's System Service investments have historically included projects aimed at improving system operations, reliability and efficiencies through voltage upgrades, distribution automation, intelligent devices or equipment. These projects are all aimed at enhancing customer value and operational effectiveness. WNH anticipates this trend to continue during the forecast period. These projects include: System Enhancements for Load Transfer Capability and Distribution Automation, Stations Building Upgrades, Stations Equipment Upgrades, SCADA Upgrades and Wholesale Meters.

Significant System Service Capital Projects for the 2016 Test Year include:

- System Enhancements for Load Transfer Capability (Contingency Enhancement) of $.8M; and
- System Enhancements for Distribution Automation of $1.2M

General Plant Investments

In the category of General Plant, WNH anticipates the continued maintenance of historical levels of investment in the 2016 Test Year. In 2016, WNH will invest approximately $.62M as part of a continued investment into its motor fleet. Specifically, WNH has gone through a procurement process to replace a current large radial boom derrick truck, the replacement cost is forecast at $.45M. For the motor fleet, WNH has also scheduled the replacement of two small vehicles and to refurbish one trailer based on the age and condition of these assets. These determinations were made by WNH through reliance on inherent knowledge of its assets and a fleet replacement schedule.

In 2016 WNH has included $.27M for an Asset Management Software System and $.34M for a new Customer Information System (CIS). The Asset Management Software will provide accurate asset tracking history with predictive asset analysis based on established asset health indices. This will position WNH to further improve existing asset management practices based on reliable historical asset information. This investment supports WNH's efforts in operational efficiencies and improved asset investment planning.

The current CIS software purchased in 2000, is based on outdated technology, has significant restrictions and is costly to maintain. WNH has selected a new software product that provides many benefits which include lower annual maintenance fees, deployment of current software technology, functionality and design that meets the demands of new AMI infrastructures, improved customer service via a streamlined centralized hub of information, minimization of manual intervention resulting in improved organizational effectiveness, increased productivity and lower costs with a focus on reducing potential billing errors and related delays. Further details are provided in the DSP in Exhibit 2, Attachment 2-1.

The 2016 Test Year level of expenditures is consistent with the spending levels in 2018 through 2020, in 2017 the level has increased primarily due to $.46M forecast for an Enterprise Resource Planning System (ERP) to replace its legacy ERP system that was installed in 2005 and is based on outdated technology.

Rate Base

Table 1-8 shown below outlines the summary of rate base from 2011 OEB Approved to the 2016 test year.

Table 1-8 - Summary of Rate Base

Description	2011 Board Approved	2011	2012	2013	2014	2015	2016
Reporting Basis	**CGAAP**	**CGAAP**	**CGAAP**	**RCGAAP**	**MIFRS**	**MIFRS**	**MIFRS**
Gross Fixed Assets Opening Balance	222,256,275	220,796,326	265,545,785	288,113,454	305,994,618	316,996,025	332,747,684
Gross Fixed Assets Closing Balance	260,326,104	265,545,785	288,113,454	305,994,618	316,996,025	332,747,684	349,220,792
Average Gross Fixed Assets	**241,291,190**	**243,171,056**	**276,829,620**	**297,054,036**	**311,495,321**	**324,871,854**	**340,984,238**
Accumulated Depreciation Opening Balance	105,947,980	105,250,602	113,739,171	123,325,504	131,404,275	133,975,417	142,317,056
Accumulated Depreciation Closing Balance	112,600,734	113,739,171	123,325,504	131,404,275	133,975,417	142,317,056	150,917,658
Average Accumulated Depreciation	**109,274,357**	**109,494,887**	**118,532,338**	**127,364,890**	**132,689,846**	**138,146,237**	**146,617,357**
Average Net Book Value	**132,016,832**	**133,676,169**	**158,297,282**	**169,689,146**	**178,805,475**	**186,725,617**	**194,366,880**
Working Capital	126,529,154	134,678,193	144,794,492	159,632,515	169,005,182	178,648,140	177,783,549
Working Capital Allowance (%)	15%	15%	15%	15%	15%	15%	13%
Working Capital	**18,979,373**	**20,201,729**	**21,719,174**	**23,944,877**	**25,350,777**	**26,797,221**	**23,111,861**
Rate Base	**150,996,206**	**153,877,898**	**180,016,456**	**193,634,023**	**204,156,252**	**213,522,838**	**217,478,742**

As shown in Table 1-8, the 2016 Test Year Rate Base is $217,478,742. When this is compared to the 2011 OEB Approved Rate Base of $150,996,206, the 2016 test year rate base is $66.5M or 44% higher which is detailed in Exhibit 2.

WNH notes that included in the increase in Rate Base is the full cost of its Service Centre and Administration Building, Land Furniture and Equipment which was a 2011 Addition. In the 2011 COS only one-half of its projected costs, which was $13.37M, was included in Rate Base, the balance of the $13.37M cost is reflected in this COS Application. Also included in Rate Base in this Application is an increase of $9.5M in Approved Smart Meter Deployment Costs and the associated Communication Systems, Rebuilding and Upgrading Grid-Connected Transformer Station Equipment and significant relocation costs for a new Light Rail Transit system in the Region of Waterloo. All of these significant investments are captured in this Rate Application.

Renewable Energy Connections and Regional Planning

WNH uses a comprehensive approach to its Distribution System Planning which includes all categories of investments including System Renewal and expansion, Renewable Generation Connection, and Regional Planning as required. This comprehensive approach ensures the investments made by WNH are efficient and that they support the goals identified by the Board in the Filing Requirements.

Renewable Energy Investments

WNH's distribution system has been planned and proactively built and equipped to handle forecasted renewable generation. As part of the DSP, WNH prepared a Renewable Energy Generation Investments Plan and has submitted this plan to the IESO (formerly the OPA). Based on the evaluation of the distribution system to accept green energy generation connections, no constraints have been identified in the system, preventing the connection of renewable energy generation installations. On this basis, WNH is not proposing any capital investments for capacity upgrades on its distribution system to accommodate the applications for the connection of any REG plant over the forecast period of the DSP. WNH had one eligible expansion connecting qualifying generation facility investment in 2013 of $117,320. The details are provided in Exhibit 2.

WNH has been involved in meetings with the other LDCs and Hydro One on Regional Supply Planning for many years prior to the process being formalized into the IRRP.

IESO's (formerly the OPA) response to WNH's Renewable Energy Generation Investments Plan is in Appendix A in the DSP in Attachment 2-1 of Exhibit 2.

2.4.1.7 E. Operations, Maintenance and Administration Expense (Exhibit 4)

WNH is proposing through distribution rates the recovery of $13,679,333 in Operating, Maintenance and Administration (OM&A) costs for the 2016 Test Year.

OM&A expenditures in the 2016 Test Year of $13,679,333 represents an increase of $3,640,052 or 36% over the 2011 Board Approved OM&A expenditures of $10,039,282 adjusted for $34,944 of LEAP. The following Table 1-9 summarizes the changes.

Table 1-9- OM&A for 2011 Board Approved and 2016 Test Year

Item	$ Amount	Reference
2011 Board Approved OM&A (excluding LEAP)	10,039,282	
2016 Overhead Capitalization Change Impact to OM&A, Previously Capitalized	2,303,326	All
Remove 2016 Salary Costs in Overhead Change as included in Change Operating Portion of Salary/Wages	(1,640,792)	All
Increase in Operating Portion of Salary/Wages	1,182,422	All
Increase in Operating Portion of Benefits	455,115	All
Inflation on Non-Labour Items	673,371	All
Other Changes (net)	425,606	All
Property Taxes moved from Departments to Taxes Other than Income	(489,724)	7
Prudential Expense in Recoverable Expenses, in Interest in 2011 COS	111,208	7
Increase in Meter Reading Costs - Smart Meter Fees	207,336	3, 7, PP
Increase in Billing/Collection/Collection Revenue for Implementation of Monthly Billing	314,644	3, 7, PP
IT Expenses Charged to CDM	(59,259)	6, 7
Post Employment Benefits All Expensed in 2016/Previous Years' in Payroll Burden (Capital/OM&A/Recoverable)	156,800	All
2016 Test Year OM&A	**13,679,333**	

(PP - Public Policy Responsiveness)

The proposed OM&A expenditures for the 2016 Test Year have been derived through a detailed budgeting and business planning process aligned to meet WNH's Strategic Imperatives. These expenditures are required to allow WNH to maintain the distribution business service quality and reliability standards in compliance with the Distribution System Code and other regulatory bodies (IESO (formerly the OPA), Ministry of Energy, ESA, etc.). The OM&A costs in the 2016 Test Year reflect the resourcing mix and investments required to meet customer and broader public policy. Without this resourcing and investments, WNH will struggle to meet the 2016 and future workloads.

WNH used an inflation rate of 2% in 2015 and 2016 where the expense increase could not be specifically identified for non-wage related expenses, which is within the range of rates set out in Toronto Dominion Bank's October 2014 quarterly economic forecast. Inflationary impacts are not material enough to be identified separately.

The main drivers for increased OM&A Costs include:

- WNH adopted the accounting changes for depreciation and capitalization policies in accordance with the Board's letter dated July 17, 2013. This change in overheads which were previously capitalized, and now expensed, has resulted in increased OM&A expenses. WNH adopted the changes effective 2013. The increase in OM&A Costs as a result of the Overhead Capitalization Policy is shown in Table 1-10. The 2016 estimate of the increase is $2,303,326.

Table 1-10 - OM&A Increase as Result of Overhead Capitalization Change

Department	2013 Actual	2014 Actual	2015 Forecast	2016 Forecast
Engineering	1,226,152	1,100,602	1,026,570	1,025,099
Operations Administration	387,707	428,679	476,545	486,588
Purchasing & Inventory/Stores	299,596	217,948	349,835	336,732
Fleet	355,047	186,412	185,476	187,487
Health, Safety and Environment	231,566	271,010	276,511	267,420
Remove Tax Portion of 2013 WIP CGAAP Overhead Difference Reference EB-2012-0161	(41,910)	-	-	-
Total Charges to OM&A due to MIFRS Requirements	**2,458,160**	**2,204,651**	**2,314,937**	**2,303,326**

- Increased salaries, wages and benefit costs charged to OM&A. Wages for staff have been trending upwards at 2.75% per year on average. Benefit costs have increased in particular as a result of significantly higher OMERS pension costs. In total, compensation charged to OM&A has increased by $1,637,537 or 24.7% from the 2011 Board Approved amount of $6,635,180
- Inflation on Non-Labour items of $647,245, details and rates are provided in Exhibit 4
- Increased costs to implement Monthly Billing for WNH's Residential and General Service < 50 kW Class. The net change in the Billing, Collecting, Bad Debts and Collection Charges Revenue is forecast at $314,644 in 2016. Details are provided in Exhibit 4
- New Meter Reading Costs for Smart Meters which are paid to the Smart Meter Provider are forecast at $207,336 in 2016
- Net decreases due to change in the accounting recording of expenses (Property Taxes, Prudential Expense and Post-Retirement Benefits) of ($221,716)

2.4.1.8 F. Cost of Capital (Exhibit 5)

WNH has prepared its Application in accordance with the Board's guidelines provided in the Report of the Board on Cost of Capital for Ontario's Regulated Utilities (the "2010 Report") issued on December 11, 2010. For the purposes of preparing this Application, WNH has used the Cost of Capital Parameters issued by the Board on November 20, 2014 for 2015 Cost of Service Rate Applications for rates with effective dates in 2015. WNH will update the return on equity to reflect future Board issued cost of capital parameters for rates with effective dates in 2016 prior to the issuance of the Board's decision for its Application. WNH proposes no deviations from the Board's Cost of Capital Methodology.

2.4.1.9 G. Cost Allocation and Rate Design (Exhibit 7 and 8)

WNH has not deviated from the Board's Cost Allocation and Rate Design methodology. In addition, there are no significant changes proposed to Revenue-to-Cost Ratios and Fixed/Variable splits.

WNH notes that it has not directly allocated its Embedded Distributor rate class costs, it has maintained the same methodology it employed in its 2011 COS Cost Allocation Study. As WNH does not have any capital costs assigned to this rate class, there are only operating costs, thus, WNH's Cost Allocation allocated costs in the same manner as all other classes. As detailed in Exhibit 7, HONI is agreeable to this methodology.

Cost Allocation

The data used in the updated cost allocation study is consistent with WNH's cost data that supports the proposed 2016 revenue requirement outlined in this Application. The breakout of Assets, Capital Contributions, Depreciation, Accumulated Depreciation, Customer Data and Load Data by Primary, Line Transformer and Secondary categories were developed from the best data available to WNH, its Engineering Records, and its Customer and Financial Information Systems.

In accordance with the Report of the Board "Review of Electricity Distribution Cost Allocation Policy, dated March 31, 2012", whereby the Board stated that "default weighting factors should now be utilized only in exceptional circumstances", WNH has developed and utilized its own weighting factors for the purposes of preparing the Cost Allocation Model. The 2016 Cost Allocation Study has resulted in a change in the cost allocations by rate class using WNH's weighting factors.

As shown in Table 1-11, the resulting 2016 Cost Allocation Study indicates the Revenue to Cost Ratios for Unmetered Scattered Load and Large User are outside the Board's range. For 2016, it is proposed these ratios be brought within the Board's range and the Residential and General Service < 50 kW rate classes be adjusted downward to maintain revenue neutrality.

The Board has not included the Embedded Distributor Rate Class in the Board's ranges. WNH employed the same methodology that it had in its Approved 2011 COS, whereby the Revenue to Cost Ratio has been adjusted to 100%. The proposed annual Distribution Revenue is $1,500 for the Embedded Distributor rate class.

Table 1-11 Revenue to Cost Ratios

Rate Class	2016 Updated Cost Allocation Study	2016 Proposed Ratios	Board Targets	
			Min	Max
Residential	104.68%	104.63%	85%	115%
GS < 50 kW	104.23%	104.23%	80%	120%
GS > 50 kW	91.84%	91.84%	80%	120%
Large Use	76.65%	85.00%	85%	115%
Street Lighting	78.76%	78.76%	70%	120%
Unmetered Scattered Load	192.69%	120.00%	80%	120%
Embedded Distributor	71.42%	100.00%	n/a	n/a

Rate Design

WNH is proposing that it is appropriate to maintain the same proportion of Fixed and Variable revenues reflected in the Current 2015 Distribution Rates to design the Proposed 2016 Monthly Service Charges and Distribution Volumetric Charge. Table 1-12 outlines a comparison of the 2015 Current to the 2016 Proposed Distribution Rates.

Table 1-12 - Distribution Charges

Rate Class	Monthly Service Charge			Unit of Measure	Distribution Volumetric Charge Including Transformer Allowance		
	2015 Current*	2016 Proposed	% Difference		2015 Current*	2016 Proposed	% Difference
Residential	$ 15.20	$ 17.21	13.2%	kWh	$ 0.0192	$ 0.0217	13.2%
GS < 50 kW	$ 31.96	$ 36.21	13.3%	kWh	$ 0.0143	$ 0.0161	12.9%
GS > 50 kW	$ 119.38	$ 135.25	13.3%	kW	$ 4.7395	$ 5.3209	12.3%
Large Use	$ 6,975.72	$ 8,781.61	25.9%	kW	$ 3.3375	$ 4.2015	25.9%
Street Lighting	$ 0.33	$ 0.37	13.3%	kW	$ 8.6832	$ 9.8373	13.3%
Unmetered Scattered Load	$ 15.98	$ 11.15	-30.3%	kWh	$ 0.0199	$ 0.0139	-30.3%
Embedded Distributor	$ -	$ -	0.0%	kWh	$ 0.0126	$ 0.0201	59.6%
Transformer Allowance				kW	$ (0.60)	$ (0.60)	0.0%

** Approved by Board March 19, 2015 EB-2014-0119 Effective May 1, 2015*

The percentage change for General Service < 50 kW and General Service > 50 kW are not the same for the Monthly Service Charge and the Distribution Volumetric Charge as it is in the other classes. This results from the Distribution Volumetric Charges being impacted by the Transformer Allowance adjustment which has remained the same from current to proposed rates.

2.4.1.10 H. Deferral and Variance Accounts (Exhibit 9)

As outlined in Exhibit 9, WNH is requesting approval for the disposition of Group 1, Group 2 and Other Deferral and Variance Accounts in the amount of $4,481,710 owing from customers. This includes an RSVA – Global Adjustment amount of $2,333,935 being owed to WNH by Non-RPP customers only. The remaining amount of $2,147,775 is owed from all customers. WNH is proposing a one year disposition period for all Deferral and Variance Accounts and is not requesting any new Deferral and Variance Accounts.

2.4.1.11 I. Bill Impacts

In preparing this application, WNH has considered the impacts on its customers, with a goal of minimizing those impacts. Based upon the customer bill impacts, as summarized in Table 1-13 below under Bill Impacts, WNH is not proposing rate mitigation. Table 1-13A provides the required Distribution Bill Impact from Board Appendix 2-W, for a Residential Customer with monthly consumption of 800 kWh and a General Service < 50 kW Customer with monthly consumption of 2,000 kWh.

The Consumption Levels highlighted in each rate class is for a Typical Customer and this displays their rate impacts.

WNH consulted the customers on the preliminary estimated rate impacts of this Application, details are provided in its Customer Engagement section starting on page 70.

Results of this consultation include:

- Having gone through the workbook, respondents are then asked how they feel about the rate increase associated with WNH's investment plan. Overall, three quarters (76%) accept the rate increase with one-in-five (21%) saying the increase is reasonable and the support it, and an additional 55% saying they don't like it, but think the rate increase is necessary. Fewer than one-in-five (18%) say the rate increase is unacceptable and they oppose it (Source: Innovative Online Workbook Survey, in Attachment 1-8)
- At the end of the survey, 84% of Residential respondents give social permission for the proposed rate increase. Four-in-ten (40%) feel the rate increase is reasonable and they support it, and another 44% say they don't like it, but think the rate increase is necessary. Only 14% oppose the rate increase. A similar proportion (86%) of GS<50 kW respondents are prepared to accept the proposed rate increase: 31% say it's reasonable and they support it, and another 55% say they don't like it but think it is necessary (Source: Innovative Random Telephone Survey, in Attachment 1-8)

Table 1-13 – Total Bill Impacts

Rate Class	kWh	kW	# of Connections	2015 Bill $	2016 Bill $	$ Difference	Total Bill Impact %	Distribution Bill Impact %
Residential	100			32.89	33.82	0.93	2.83%	3.51%
Time-of-Use	250			54.23	55.84	1.62	2.98%	4.42%
	500			89.78	92.53	2.75	3.07%	5.49%
	800			132.46	136.57	4.11	3.11%	6.37%
	1,000			160.91	165.92	5.01	3.11%	6.80%
	1,500			232.03	239.31	7.28	3.14%	7.56%
	2,000			303.16	312.70	9.54	3.15%	8.06%
GS < 50 kW	1,000			175.53	180.10	4.57	2.61%	3.62%
Time-of-Use	2,000			311.89	320.91	9.02	2.89%	5.49%
	5,000			720.97	743.35	22.38	3.10%	8.16%
	10,000			1,402.78	1,447.39	44.61	3.18%	9.79%
	15,000			2,084.58	2,151.44	66.86	3.21%	10.50%
GS 50-4,999 kW	20,000	60		3,201.14	3,407.75	206.60	6.45%	11.65%
	40,000	100		6,084.94	6,414.77	329.83	5.42%	11.43%
	100,000	250		15,009.57	15,807.25	797.68	5.31%	11.18%
	200,000	500		29,883.96	31,461.38	1,577.42	5.28%	11.07%
	400,000	1,000		57,056.35	60,193.25	3,136.91	5.50%	11.02%
Large Use	8,000,000	14,500		1,104,488.41	1,139,997.71	35,509.30	3.21%	16.46%
USL	150		1	186.70	180.59	(6.11)	-3.27%	-30.62%
Street Lighting	150	1	1	32.17	35.61	3.44	10.71%	11.11%
	50	0.14	1	8.72	9.23	0.51	5.81%	11.13%
Embedded Distributor	2,615,000	6,000		318,739.22	331,224.37	12,485.15	3.92%	-1999.19%

Typical customer monthly consumption levels are highlighted for each rate class above.

Table 1-13A Monthly Distribution Rate Impacts on Typical Residential and GS < 50 kW Customer

Rate Class	kWh	2015 Bill $	2016 Bill $	$ Difference	Total Bill Impact %	Distribution Bill Impact %
Residential	800	$132.46	$136.57	$ 4.11	3.11%	6.37%
GS < 50 kW	2,000	$311.89	$320.91	$ 9.02	2.89%	5.49%

Incorporated in the Total Monthly Bill Impact is the effect of the following major components of the electricity bill:

- Distribution Rates (Monthly Service Charge and Volumetric Rates)
- Disposition of Deferral and Variance Accounts
- Revised Retail Transmission Rates
- Wholesale Market Service Rates
- Loss Factors

2.4.3 Customer Engagement

This Section details the activities WNH has taken in regards to Customer Engagement.

Customer engagement has always been important to the success of Waterloo North Hydro (WNH). One of WNH's leading Corporate Values is "Service" in which WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each. WNH engages its customers through day-to-day contact and regular business activities. WNH has differentiated Customer Engagement into three categories: Ongoing Communications, Consultations Specific to the Application and Future Activities. A list of Customer Engagement Activities can be found in Appendix 2-AC.

On-Going Communications

Some of the ways that WNH is connecting with customers through ongoing communications in 2014 are:

- 42,782 inbound phone calls were answered by WNH Customer Service Staff on many different topics of concern to customers including account information, services such as e-Billing, TOU rates, outages, conservation programs, payment, bill components, etc.
- 2,512 inbound written enquires were responded to by WNH in 2014. The majority of the topics included in these enquires were similar to those listed above
- 81 elementary school Electrical Safety Awareness presentations, reaching 94% of the schools, to help students recognize and respect electrical system hazards
- 10,138 locates were completed to allow customers to safely build on their property without danger of electrical contact
- Many customers have requested paperless electricity bills and 3,879 customers had signed up for e-Billing which represents 7% of WNH's customers. WNH has proposed in this Application to increase this to 15% of its customers and has recognized the resulting savings. These savings are discussed in Exhibit 4
- Many customers have expressed an interest in reviewing their electricity consumption and 4,674 have signed up to use a web portal to look at TOU data
- Through WNH's Conservation efforts since 2011 WNH has helped 350 business customers reduce consumption resulting in savings of $3.8 Million to their bottom line, with incentives of $3.5 Million
- Bill inserts, brochure handouts and traditional marketing channels were utilized about topics of interest and relevance to customers. For example, a recent bill insert included the HVAC Incentives consumer conservation program and newspaper and radio advertisements on Appliance Retirement and Conservation Coupon Booklet Initiatives

- Customers are contacted each year to discuss vegetation management activities that will be performed on their property

Construction Projects

WNH follows three main processes for consulting with our customers on major construction projects:

- Individual Line Rebuild process
- Area Plan Development process
- Line Relocation process

For the Individual Line Rebuild process, customers abutting the project area are contacted at the start of design to inform them of our plans to rebuild the line (Pre-Design notice) as well as to solicit information about any concerns that should be incorporated into our design. The draft design is completed based on project needs informed by the customer input. If this design differs significantly from what's existing (for example, line is proposed to be on the opposite side of the road, additional circuits are proposed, poles are planned to be more than 5ft taller than existing, or submersible transformers are planned to be changed with pad mounted type), the customers are contacted again to describe the differences in design, the reasons for it, and asked for comments (Preliminary Design Complete notice). Once input is received, design is finalized, and a Pre-Construction notification is sent to the customers notifying them of the construction timelines and details. If design does not differ substantially from what's already in place, only the Pre-Design and Pre-Construction notifications are issued.

Area Plan Development process applies only where WNH plans to rebuild a number of lines within a neighborhood and the rebuild plans would result in significant changes (ex. a back-lot supplied subdivision or an old neighborhood with short poles). In this case, WNH notifies customers of the commencement of the Area Plan Development, seeks input regarding concerns to be addressed, develops options, communicates those options to entire neighborhood (usually at an Open House), incorporates feedback, finalizes the desired approach, and notifies all customers via Area Plan Development Complete letter. From that point on, individual line sections get scheduled for rebuild and further customer consultation happens according to Individual Line Rebuild process as described above.

For Line Relocation projects, the municipality communicates to the customers throughout their design and consultation process if relocation of hydro plant will be required. WNH works closely with the municipality to minimize relocation impact and communicates the final outcome to the customers via Pre-Construction notification sent prior to start of our work.

High Consumption Energy Users

WNH has also made significant efforts to engage the largest energy consumers in the City of Waterloo, Townships of Wellesley and Woolwich to work on issues of importance to them. These engagement issues include electricity rates and pricing, billing inquiries, electrical supply concerns, demand response, energy conservation, metering and sub-metering, monitoring and changing electricity demands. WNH's experience with this approach is that larger electricity consumers are very busy with their core responsibilities and they have a tolerance for the right amount of engagement that benefits their business.

Municipal Government Consultations

WNH regularly consults with local municipal planning and economic development staff from the City of Waterloo, Township of Woolwich, Township of Wellesley and the Region of Waterloo. The purposes of the consultations are to share planning and development information that will aid in the timely, coordinated and cost effective delivery of services for both WNH and the municipalities. The value of the information may be immediate and considered in current design or construction decisions or longer term to be used in system planning. These consultations can be initiated by either party and vary in format and timing.

Some examples are:

a) With 4 municipal planning departments with which to interact, WNH receives development information to be reviewed and taken into consideration on a regular basis. A portion of these transmittals require WNH to respond with comment or action. Some develop into further discussions and meetings. These consultations have their greatest impact on current and following year investments

b) On a monthly basis WNH participates in the City of Waterloo Utilities Coordinating Committee, this is a standing committee that meets to discuss local development and includes other stakeholders such as the Region of Waterloo, Bell, Rogers, and Union Gas. These consultations have their greatest impact on current and following years' investments

c) The municipalities and WNH initiate ad hoc consultations normally regarding larger and longer term commercial and residential developments. These consultations can be as brief as one meeting or can last months to several years depending on the timing and scale of development. There also may be other participants such as customers, developers, and other agencies. These consultations can have an impact on WNH's DSP

d) On an annual basis WNH consults with economic development and planning departments regarding larger and longer term development. This information is taken into consideration in the development of WNH's annual budgets, long term load forecast and 5 year capital forecast. These consultations have their greatest impact on WNH's DSP

Development Community

a) On an ad hoc basis and during the normal course of business WNH Engineering Staff consult with Builders, Developers and Real Estate companies. WNH uses these opportunities to gather information on the trends and timing of development. These consultations are initiated by both parties as the need arises

b) On an annual basis WNH solicits information from the development community to feed into WNH's annual budget, long term load forecast and 5 year capital forecast. These consultations have an impact on the current year and WNH's DS plan.

IESO (formerly the OPA)

WNH has been undergoing long term consultations with the IESO (formerly the OPA) in two areas:

1) Regional Infrastructure Planning (RIP)

2) Conservation and Demand Management (CDM)

Regional Infrastructure Planning

Regional Infrastructure Planning has been addressed above on page 51.

Conservation and Demand Management (CDM)

WNH has been offering IESO (formerly the OPA) Province-Wide Conservation and Demand Management (CDM) programs from 2011 through 2014. Engagement and consultation with stakeholders including the IESO (formerly the OPA), customers, trade allies, associations, government and non-government organizations have occurred frequently and on an ongoing basis as part of engagement, promotion, and delivery of the CDM programs. The 2011 to 2014 Province-Wide CDM programs were funded directly from the Ontario Power Authority and had no direct impact on rates. WNH is now preparing to transition to the new 2015 to 2020 Conservation First Framework. As per the Minister of Energy's directive on Conservation and Demand Management dated March 31, 2014, WNH will continue to engage and consult with its stakeholders. WNH will work together with its regional LDCs to develop a refined delivery model that best suits regional needs. In addition, consultation with regional local distribution companies is continuous and ongoing and used to identify and pursue opportunities for regional collaboration on design and implementation of programs that satisfy regional needs and requirements. Furthermore, consultation and collaboration with natural gas and water utilities has increased. Engagement and consultation will continue and will increase, as it will be a key component for market research, program design and development, and implementation of individual and regional CDM programs.

Transmitter (Hydro One)

WNH owns and operates grid connected transformer stations connected to Hydro One Networks (HONI) 115kV and 230 kV transmission lines. HONI is WNH's only transmitter. WNH regularly consults with Hydro One to share planning and operational information that will aid in the timely, coordinated and cost effective delivery of services for both parties. The value of the information may be immediate and considered in current design, construction or operational decisions or longer term to be used in system planning. These consultations can be initiated by either party and vary in format and timing. Most of WNH's engagement with HONI will be over operational issues; especially supply point reliability.

Some examples are:

a) On a regular basis WNH operations and stations staff and their HONI counterparts communicate and coordinate over daily operations, planned and emergency maintenance. These communications can be initiated by either party

b) On an as needed basis, WNH senior engineering and operations staff initiate consultations with more senior HONI staff, mainly over supply point reliability concerns. Transmission reliability has been and will continue to be a concern over the forecast period

c) On an annual basis WNH meets with HONI senior staff at a Large Customer Conference hosted by HONI. Both parties use this opportunity to share information, concerns and challenges on transmission supply and reliability issues. This information is taken into consideration in the development of WNH's annual budgets and 5 year capital forecast

d) Regional Infrastructure Planning (RIP) - WNH belongs to the "KWCG Region" which is in Group 1 of HONI's Regional Infrastructure Groups. Since 2010, Hydro One along with WNH has been active participants in the IESO's (formerly the OPA) IRRP process currently under way

Independent Electricity System Operator (IESO)

WNH owns its grid connected Transformer Stations, has all its metered points of supply registered in the wholesale market and is also a registered Wholesale Meter Service Provider. This results in various and frequent consultations with the IESO on matters of operations, planning and settlement.

Embedded Distributors

Hydro One Networks (HONI) is registered as an Embedded Distributor to WNH on the Elmira TS M2 feeder; however HONI has no distribution assets within WNH's Service area. WNH consulted with HONI regarding any forecast impacts by load or Renewable Energy Generation connections on the M2 feeder from Elmira TS. Hydro One responded by saying that each connection request will be assessed individually as per the established process.

UtilityPULSE Customer Satisfaction Survey

WNH has engaged UtilityPULSE, Simul Corporation to perform Electric Utility Customer Satisfaction Surveys (EUCSS) to obtain actionable and measureable feedback from WNH customers. The survey has been performed every 3 years (which will be done every 2 years in the future) as part of WNH's overall commitment to Continuous Improvement. The UtilityPULSE survey reviewed responses from households and small businesses that pay or look after the electricity bills from WNH. WNH had achieved an "A" rating in customer satisfaction as shown in Table 1-14. Among other criterion, the UtilityPULSE Customer Satisfaction Survey measured WNH's customer satisfaction level based on the customer care provided and WNH's company image and management operations. A copy of the UtilityPULSE Customer Satisfaction Survey is included at Attachment 1-7.

Table 1-14 Performance Results of UtilityPULSE Survey

Waterloo North Hydro's UtilityPULSE Report Card®				
Performance				
	CATEGORY	Waterloo North Hydro	National	Ontario
1	**Customer Care**	**B+**	**B+**	**B**
	Price and Value	B	B	C+
	Customer Service	A	B+	B
2	**Company Image**	**A**	**B+**	**B+**
	Company Leadership	A	B+	B+
	Corporate Stewardship	A	A	B+
3	**Management Operations**	**A**	**A**	**A**
	Operational Effectiveness	A	A	B+
	Power Quality and Reliability	A	A	A
	OVERALL	**A**	**B+**	**B+**

Overall, WNH was at or above Ontario industry results on customer service metrics.

Results of the survey include:

- When asked about customer satisfaction 96% of respondents answered either very satisfied or fairly satisfied
- 84% of the respondents agreed that WNH is a trusted and trustworthy company
- 91% of the surveyed customers reported that WNH provides consistent and reliable electricity
- 89% reported that WNH conducts accurate billings
- 88% reported that WNH dealt professionally with customers' problems
- 87% reported that WNH delivers on its service commitments to customers

WNH customers reported that WNH's priority investments should include the following items as "high priority":

- 79% reducing the time needed to restore power
- 78% maintaining and upgrading equipment
- 74% investing more in the grid to reduce the number of outages
- 71% educating customers about energy conservation

As the results indicate WNH's commitment to customer service has been recognized and WNH will continue this service. WNH is also mindful of the customers' preferences for WNH's priority investments in its ongoing investment plan.

Consultations Specific to the Application

In response to the Board's Filing Requirements to engage customers on the specific proposals contained in this Application, in January 2015 WNH retained Innovative Research Group, Inc. ("Innovative") to design, collect feedback and document its customer engagement and consultation process as part of the development of this Application. WNH asked that customers be engaged on both WNH's capital infrastructure and operational plans.

A complete copy of the Innovative Customer Engagement Report is attached as Attachment 1-8.

In general, the consultation encompassed four core elements of customer engagement.

1. **Online Workbook**: The online workbook was promoted through traditional print advertising, social media, email blasts to customers for whom email addresses were available, as well as WNH's website. This first phase of the consultation was available to any WNH customer who wanted to participate

2. **General Service and Residential Consultation Focus Groups:** Similar to the online workbook, this qualitative phase of the consultation was designed to educate customers, assess their preferences and priorities, gauge reaction to proposed rate changes, and ultimately inform the quantitative phases of the consultation. The customer focus groups were randomly recruited and held at WNH's offices. A workbook was used to provide the participants with core information about the provincial and local electricity system, WNH's proposed capital investment and operating spend to maintain system reliability, as well as the rate impact for each respective rate class. Participants were provided incentives in recognition of their time commitment and to help ensure diverse participation among WNH's customers

3. **Mid-Market & Large Business Workshop**: General Service customers over 50 kW (GS > 50kW) were engaged through a WNH organized breakfast meeting workshop. This workshop included a presentation delivered by WNH's CEO on the utility's proposed capital and operating plans, its DSP and rate implication for this rate class, a Q&A session with WNH senior management, and the administration of an Innovative survey to collect customer preferences and needs as related to WNH's proposed plans, DSP and rate implications

4. **Random Telephone Surveys**: Innovative conducted telephone surveys among Residential and General Service (GS < 50 kW) customers to provide a generalizable assessment of WNH's system plan and rate implications. Customers were randomly selected by Innovative from lists provided by WNH The outcome of the consultations resulted in findings on the needs and the preferences of WNH's Residential, General Service <50 kW and General Service > 50 kW customer base. The overview includes feedback from customers who participated in the *qualitative stage* of the consultation where Innovative explored the range of issues related to WNH's rate application, as well as feedback from another 700 customers who responded to the quantitative stage where Innovative documented the incidence of *needs* and *preferences* across the customer population. Some of the highlights from each segment are presented below with direct customer comments in quotations.

Online Workbook

WNH and Innovative collaborated in early 2015 on the development of a workbook that would be used in the customer consultations and that would serve as the basis of the online workbook phase of the customer engagement program.

The objective of the workbook was to provide customers with information about the provincial electricity system, WNH's role within it, and the OEB rate application process. The workbook also included information on cost drivers, and WNH's response to these drivers, their investment plan for the next five years, the impact this investment would have on customer rates. Survey questions embedded in the workbook allowed us to identify customer preferences and priorities, seek customer feedback on rate increases, and to inform the subsequent telephone survey phase of the consultation.

The Online Workbook was accessible to all WNH customers from March 13th to April 1st 2015. WNH promoted the online workbook consultation to its customers in a number of ways:

- Ads were run in two local newspapers – The Record and The Woolwich Observer – both in print and as banners in the online versions
- E-mails were sent to 14,990 WNH customers for whom email addresses were available
- Details and a link to the consultation website were provided on the WNH website and via Twitter and Facebook

The breakdown of Online Workbook responses are as follows:

- 3,062 unique visitors came to the landing page
- 1,533 customers (including 11 business respondents) completed the entire Online Workbook

The results of the Online Workbook include:

- The overwhelming majority (92%) of customers are satisfied with the service they receive from WNH. In fact, one-half (49%) are very satisfied
- Overall satisfaction levels are consistently high regardless of type of residence or size of household, but those living in a two-person household are most likely to be very satisfied (52%)
- Asked if there is anything WNH can do to improve its service, one-in-five (19%) residential customers say “nothing/satisfied”. “Lower rates/prices/fees” follows close behind at 17%, followed by “reduce/stop power outages” at 13%. There is a wide range of other suggestions that are mentioned by 5% or fewer respondents. Notably, only 657 – or 43% – of respondents provided feedback to this question, suggesting that most customers either didn’t feel like giving a response or had no specific issues to report

When it came to System Investments and Outages, customers responses were:

- When it comes to replacing aging equipment, almost three-quarters (72%) feel WNH should invest what it feels is required to replace the system's aging infrastructure, even if it means a bill increase over the next few years
- More than half (54%) feel WNH should spend what is needed to maintain the current level of unexpected outages. Just over one-in-four (27%) would prefer that they spend what is needed to reduce the number of unexpected outages, while only one-in-ten (11%) would be willing to accept more outages in order to keep customer costs from rising
- When it comes to how best to address the length of time customers are without power, half (50%) would like to see WNH spend what is needed to maintain the current length of unexpected power outages. One third (34%) would prefer that WNH spend what is needed to reduce the length, while only one-in-ten (9%) are prepared to accept longer power outages if it will keep customer costs from rising

When asked about efficiencies and costs savings, the results were:

- Three quarters (74%) are satisfied (19% very, 55% somewhat) with the efforts WNH has made to find efficiencies and cost savings. Only 16% are dissatisfied, while the remaining 10% don't know
- Those who feel the plan is heading in the right direction say WNH is "proactively investing in the system/necessary" (42%), or that it is "good plan/reasonable/forward thinking" (13%). Conversely, those who feel the plan is going in the wrong direction say that "costs are rising faster than inflation" (31%) and "need to cut administration costs/salaries" (9%)

Having gone through the workbook, respondents are then asked how they feel about the rate increase associated with WNH's investment plan. The results show:

- Overall, three quarters (76%) accept the rate increase with one-in-five (21%) saying the increase is reasonable and the support it, and an additional 55% saying they don't like it, but think the rate increase is necessary. Fewer than one-in-five (18%) say the rate increase is unacceptable and they oppose it
- The primary reason for supporting the rate increase is that it is "difficult but necessary" (59%), followed by "increase is not much/reasonable" (12%) and "cost of everything increases" (8%)
- Among those who don't like the increase but find it necessary, three-in-ten (31%) say it is "difficult but necessary". Others are unhappy because they are "on a fixed/limited income" (9%), they think "rates are too high already" (8%), and that their "income isn't increasing" (8%)
- Those opposed to the rate increase feel that "rates are too high already" (18%), more work should be done to "eliminate waste in spending/administration" (12%) and "more research on cost savings" (12%)

General Service and Residential Consultation Focus Groups

Innovative conducted focus groups with Residential and General Service under 50 kW customers. The purpose of these focus groups was to provide customers with some education about their local distribution system, and then to garner their feedback on WNH's proposed investments for the next five years.

The consultation sessions were held in Waterloo on February 25th, 2015. A total of 20 General Service < 50 kW and Residential Customers participated in these consultation sessions which were separate for each rate class.

General Service under 50 kW Rate Class	9 participants
Residential Rate Class	11 participants

All customer recruitment lists were randomly generated and provided to Innovative by WNH. Customers were then contacted by telephone and screened to determine whether or not they were appropriate participants for the research.

Responses from customers included:

- Overall, customers were generally satisfied with the service they received from WNH
- Many customers responded positively to WNH's customer service track record

As expected, customers immediately pointed to rates as an area that WNH could improve upon. Feedback included:

- In spite of overall satisfaction, customers are unhappy with rates, which continue to rise
- Distribution rates were not viewed as being separate from the overall energy bill, and as such, many customers were frustrated with their overall bill continuing to rise
- For many customers it is becoming increasingly difficult to keep up with the rising cost of living, and electricity bills are becoming a major source of these costs

Customer feedback on reliability included:

- The majority of customers in both rate classes feel that WNH's supply is highly reliable
- While most customers have experienced an outage in the past year outside of extreme weather, recovery time was generally seen to be adequate
- Both short and sustained outages can negatively affect a business' bottom line. For some customers, a short outage or "flicker" can cause an inconvenience, such as having to restart computer systems; while more sustained outages can present more severe impact
- The residential customers (who had reported experiencing an outage in the past 12 months) said that they were not severely affected. In fact, most customers report only minor inconveniences like having to re-set alarms and appliances

When asked how do you think WNH should address the number of customer unexpected power outages 16 out of 20 (80%) responded either ‘spend what is needed to reduce the number of unexpected power outages’ or ‘spend what is needed to maintain the current level of unexpected outages’. The remaining four customers replied either ‘don’t know’ or left the response blank. No customer answered ‘accept more unexpected power outages in order to help keep customer costs from rising’.

Customer feedback on communication included:

- For many customers, beyond rates, WNH could improve communication, especially during outages. Many small business owners want to receive critical information regarding outages, in order to make the appropriate decisions quickly (i.e. should they shut down, or remain open)

In addition to improvements related to rates, communication and outage responses, several customers pointed to the current billing and payment system. Discussions here focused on four areas; overall bill understanding, credit card payments, student tenants and consolidated bills including:

- While satisfaction was generally high, customers often requested information regarding WNH’s CDM initiatives. Many customers felt that despite their best efforts to conserve electricity, their bills remained high. Not aware that the service is already in place, customers requested a service where they could monitor their usage to help reduce their overall bills
- In addition to providing usage tracking online, customers expressed interest in a tracking app, as well as an email service that sends a notification when usage is surpassing typical household use. It seems as if customers are hungry for ways to help conserve, and they generally don’t feel as if they are being given the necessary information to do so

Conclusion:

In general, the proposed rate increase generated little push-back. That being said, customers continuously focused on the desire to conserve electricity and reduce overall rate impacts. Many customers think that WNH should be doing more to promote and encourage customers to take advantage of its CDM programs. Again, the proposed rate increase was generally seen as reasonable, but customers still want to find ways to reduce their overall bill.

Mid-Market & Large Business Workshops

Innovative conducted a survey of Mid-Market and Large Business Customers (General Service over 50 kW) following a presentation by WNH to this customer group. The purpose of this presentation and survey was to provide these customers with some education about their local distribution system, and then to gather their feedback on WNH's proposed investments in the Application.

The presentation was held in Waterloo on February 26th, 2015. A total of 24 customers attended this consultation session.

In the presentation to Mid-Market Large Business customers, WNH projected a 9.3% increase to the distribution portion and 5.76% to the total bill, of the electricity bill based on its investment plans in the 2016 Application. While larger general service customers may not like the increase, most (14 of 24) of the customers who participated in the consultation are prepared to accept it as necessary, and an additional six deem the increase reasonable and support it.

The vast majority of customers at the consultation were satisfied with the service they receive from WNH, and when asked what WNH might do to improve their service to Mid-Market and Large Business customers, most cited concerns regarding outages (frequency and duration), with only two participants mentioning cost as an area for improvement. The stated reasons for supporting the rate increase suggest that this customer group understands the balance between keeping the system reliable while keeping costs down.

Not surprisingly, these customers don't like rate increases because it impacts their bottom line, and some feel the 9.3% figure seems high, but they also acknowledge that it costs money to keep the system functioning reliably and that the cost to do so must be borne.

As previously stated, 14 of the 24 participants don't like the rate increase but feel it is necessary, and another six feel the increase is reasonable and they support it. Only two feel the rate increase is unreasonable and oppose it.

Random Telephone Surveys

Innovative conducted two random-digit dialing customer telephone surveys for WNH:

- A Residential Customer (RS) Survey was conducted among 500 respondents between March 25 and April 1, 2015. Respondents were randomly selected from a customer list provided by WNH (37,589 Residential records). A sample of 500 residential customers is considered accurate to within ±4.4 percentage points, 19 times out of 20
- A General Service Customer (GS < 50 kW) Survey was conducted among 200 respondents between March 25 and April 2, 2015. Respondents were randomly selected from a customer list provided by WNH (3,238 GS records). A sample of 200 GS<50 kW customers is considered accurate to within ±6.9 percentage points, 19 times out of 20

The Residential and GS<50 kW questionnaires were designed to simulate the journey that respondents to the online workbook and participants in the Customer Consultation Focus Groups experienced.

Results of the Telephone Surveys include:

- At the end of the survey, 84% of Residential respondents give social permission for the proposed rate increase. Four-in-ten (40%) feel the rate increase is reasonable and they support it, and another 44% say they don't like it, but think the rate increase is necessary. Only 14% oppose the rate increase
- A similar proportion (86%) of GS<50 kW respondents are prepared to accept the proposed rate increase: 31% say it's reasonable and they support it, and another 55% say they don't like it but think it is necessary
- Residential (94%) and GS<50 kW (93%) customers are both highly satisfied with the job WNH is doing running their electricity distribution system. Among both customer groups, there is only a small gap between those who are very satisfied (45% RS; 44% GS<50 kW) and those who are only somewhat satisfied (40% RS; 50% GS<50 kW)
- One fifth (22%) of Residential customers and one third (34%) of GS<50 kW customers did not have any suggestions for improvement. The main suggestion respondents did provide on how WNH could improve their service was "lower/reduce rates" (24% RS; 31% GS<50 kW). This is followed distantly by "reduce/fewer power outages" (8% RS; 7% GS<50 kW)
- A majority of Residential (85%) and GS<50 kW (76%) customers feel WNH should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases their monthly electricity bill over the next few years
- Half of Residential customers and 61% of GS<50 kW customers experienced power outages due to the ice storm in December of 2013. Whether they were impacted or not, a strong majority (89% RS; 91% GS<50 kW) were satisfied with how WNH responded to the ice storm

- Aside from the ice storm, most Residential (69%) and GS<50 kW (59%) customers had experienced at least one outage in the 12 months leading up to the survey, with most outages lasting less than an hour, and most being only a minor inconvenience
- When it comes to addressing the number of power outages, both Residential (65%) and GS<50 kW (68%) customers want WNH to spend what is needed to maintain the current number of outages
- Similarly, both respondent groups want WNH to spend what is needed to maintain the current length of outages (67% Residential; 66% GS<50 kW)
- Both groups agree that greater priority should be given to reducing the length of outages (53% Residential; 50% GS<50 kW)
- Just under two thirds in both groups (63% Residential; 63% GS<50 kW) think the benefits of new technology are important enough to be a priority for WNH. Even more (70% Residential; 73% GS<50 kW) feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably

Summary

Based on all of the elements of customer consultation there were five primary areas of concern and/or preference for customers:

1. Affordable electricity costs
2. Reliability of Service – reduce or maintain current level of outages
3. Assistance to reduce consumption and thereby costs
4. Proactive communication when there are unplanned outages
5. Continued delivery of high quality service

WNH's Response to Customer Preferences

Through its comprehensive customer engagement activities which are summarized above, WNH has identified five key customer preferences. Below WNH has summarized how it takes each of those preferences into account in the operation of its business.

1. *Affordable Electricity Costs*

WNH regularly hears from its customers about the importance of affordable electricity. At the same time customers also ask for services and have an expectation that when they touch a switch the lights will come on.

When it comes to the impact on household finances and the bottom line, a number of customers indicate that their electricity bill has a significant impact:

- 49% of Residential customers agree that "The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities"
- While 69% of GS customers agree that "The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off"

Yet, at the same time, most claim to be able to pay more for electricity but have concerns about the impact a rate increase will have on others.

- 68% of Residential and 72% of GS customers agree that "I [my organization] can personally afford to pay more for electricity, but I am worried about the impact this will have on others [some of my suppliers and customers]"

Finally, when it comes to legacy issues, a large majority support spending more to maintain the local distribution system for future generations.

- 85% of Residential and 96% of GS customers agree that “Nobody likes to pay more for electricity, but I think we have an obligation to maintain the reliability of our local electrical system for future generations”

WNH is proposing a Cost of Service Application that balances the needs for Customer Focus, Operational Effectiveness (safety and reliability), Public Policy Responsiveness and solid Financial Performance. The rate impact on the customer was always considered when budgeting future plans in order to be affordable for its customers while at the same time having the ability to provide a reliable distribution system and excellent customer service.

Over the timeframe covered by this Application the average Residential customer would see the following changes to WNH’s component of delivery costs on their monthly bill. The following estimated bill impacts were reviewed in the focus groups and the online survey held by Innovative as part of their research. It should be noted that these preliminary estimated bill impacts were shared prior to Application finalization, and as a result there are differences between the estimated bill impacts shared during the consultation and the actual bill impacts resulting from this Application.

Table 1-15 - Bill Impacts Used for Customer Consultations – Residential and <50 kW

Rate Class	kWh	2015 Bill $	2016 Bill $	$ Difference	Total Bill Impact %	Total Distribution Impact %
Residential	800	$ 132.46	$ 135.85	$ 3.39	2.56%	2.90%
GS < 50 kW	2,000	$ 311.89	$ 320.48	$ 8.59	2.75%	3.98%

Although there are changes year over year, the average monthly impact for a Residential customer was an estimated increase of $3.39 on a Total Bill of $136 (2.56%) and $8.59 on a total bill of $320 (2.75%) for a GS <50 kW customer which are included in Table 1-15.

WNH is also actively looking for ways to find efficiencies and cost savings including automating work processes to decrease manual tasks, improving coordination and planning of capital projects and being prudent with staffing levels.

WNH is proposing stable capital and operating expenditures in this Application. This helps to smooth rates and avoid significant year over year changes.

2. *Reliability of Service - Reduce or Maintain Current Level of Outages*

When it comes to addressing power outages, a majority of Residential and GS customers want to see continued spending on upgrades and maintenance.

Feedback regarding the Spending on the Number of Power Outages:

- 1-in-5 (20%) Residential respondents think WNH should spend what is needed to reduce the number of power outages, while 2-in-3 (65%) think they should spend what is needed to maintain the current level. Only 10% state that WNH should accept more power outages in order to keep customer costs from rising
- General Service customers respond similarly on how to address the number of outages: 21% think that WNH should spend what is needed to reduce the number of power outages and 68% say they should spend what is needed to maintain the current level. Again, only a small minority (7%) believe that WNH should accept more power outages in order to keep customer costs from rising.

Feedback regarding Spending and the Length of Power Outages:

- Over 8-in-10 (83%) of Residential respondents think WNH should spend what is needed to either reduce (16%) or maintain (67%) the length of power outages. Only 13% think that WNH should accept longer power outages to help minimize customer costs from rising.
- Similar proportions of General Service respondents think that WNH should spend what is needed to reduce (15%) or maintain (66%) the length of power outages. 17% think that WNH should accept longer power outages to help minimize customer costs from rising.

It is clear from the results of WNH's customer consultations that cost and reliability are foremost in the customer's mind. These customer priorities have been directly addressed in WNH's Distribution System Plan (DSP). WNH is investing in maintaining reliability of the system whether it is by renewal of deteriorating assets before they impact customer reliability or by smart technologies to more quickly identify outages, isolate the fault and restore power to affected areas. WNH continuously monitors and analyses reliability data for worst performing feeders. Geospatial analysis of fault location and cause identification allow investments, whether they are O&M or capital, to be focused directly on the problem areas.

WNH is investing in technologies such as Asset Management along with the increased use of Health Indices in order to provide more quantitative analysis in its planning and investment decision process.

WNH is also investing in new CIS and ERP software along with 24x7 web presentment tools to better communicate with our customers on ways to conserve electricity, understand their bill and save on their total bill.

All of these investments are focused on providing better service and controlling distribution costs.

3. *Assistance to Reduce Consumption and thereby Costs*

WNH has actively supported and delivered Conservation Programs to its customers during third tranche programs and subsequently through provincial programs between 2011 and 2014. Some of the highlights of accomplishments between 2011 and 2014 include:

- 1,008 Appliance Retirements
- 1,528 Residential Demand Response Projects
- 722 Residential Energy Audits
- 4,954 Residential Heating and Cooling Upgrades
- 55,942 Coupons Redeemed
- 558 Small Business Lighting Retrofits
- 398 Larger Business Retrofits

The results show a high level of participation from both Residential and Non-Residential customer segments. Much of the success attained was due to actively promoting programs, engaging both Residential and Non-Residential customer segments, educating, and engaging the channel partner network. By working closely with suppliers, distributors, contractors, and consultants as well as with neighbouring Local Distribution Companies Cambridge and North Dumfries Hydro and Kitchener-Wilmot Hydro; WNH has been able to identify projects and engage key decision makers in order to help them evaluate opportunities and ultimately select more efficient technology. This approach has allowed customers to not only “buy” into conservation programs, but also embrace them and build them into their internal project identification and development processes.

WNH will be close to achieving the 2011-2014 energy target of 66 GWh's. Based on 2014 Allocated Quantity of Energy Withdrawn (AQEW), this represents decreased electricity consumption of 4.7% or $7.26M. In addition, WNH estimates that nearly $35M has been injected into the local economy as a result of energy conservation programs offered and the projects that have been implemented.

Business Community

WNH has learned that customers do not necessarily think of energy conservation when undertaking projects to improve their facility or upgrade their process equipment. In addition, customers will not participate in conservation programs without significant education, guidance and support. Small business customers particularly lack resources and energy management expertise. WNH has therefore made the Small Business Lighting Program turnkey so that customers simply agree to participate, while all other activities including procurement, installation and proper disposal are taken care of.

Larger business customers require a higher level of support and engagement. The support varies based on the type of business, the customer's resources, expertise, and the customer's willingness to participate. WNH uses the following strategies when working with all business customers:

1. Providing walk through energy assessments and technical guidance to identify and develop opportunities
2. Channel partner involvement and engagement to provide equipment and system specific evaluations, recommendations and implementation
3. Utilizing roving energy managers and energy advisors to support retrofit projects
4. Streamlined incentive application process management by WNH
5. Offering measurement equipment like power meters to verify the operating efficiency of existing and retrofitted equipment and systems

6. Presenting findings and solutions to Senior Executives, Board of Directors, and other key decision makers
7. Providing ongoing project management and energy management resources and guidance
8. Recognizing local businesses for their conservation efforts through public relations campaigns
9. Conducting on-going educational and awareness campaigns through marketing and engagement sessions

Residential Consumers:

Residential customers are also active and equally interested in reducing costs and require substantial education and information on conservation programs and how to manage costs around time-of-use rates. Additional programs will be required to continue to engage and assist this customer segment but WNH has been active in delivering several key initiatives including the Heating and Cooling Program, the Home Assistance Program and Residential Demand Response Program.

The Heating and Cooling Initiative provides Residential customers incentives for the purchase and installation of high efficiency central air conditioning systems and blower motors. WNH provided 4,954 incentives over the period of 2011 - 2014. The program has not only assisted Residential customers in reducing their energy usage and costs but has also helped foster relationships with local heating and cooling distributors and contractors.

The Home Assistance program has targeted over 722 residential customers in 2013 and 2014. The program includes a detailed in-home energy assessment, professional installation of energy-saving measures and advice on steps that can be taken to save even more energy to income qualified home-owners and tenants. Measures installed include compact fluorescent light bulbs, power bars, programmable thermostats, low flow shower heads, sink aerators, fridge/freezer replacement, weather stripping around doors and windows, attic, wall, and basement insulation. WNH developed strong partnerships with community organizations such as REEP Green Solutions, the Region of Waterloo Social Housing; Ontario Disability Support Program; as well as many cooperative housing groups to ensure optimal market uptake and penetration. This program has been extremely effective in helping vulnerable customers reduce costs.

The Residential Demand Response Program has been offered to customers in WNH's service territory since 2007, and is primarily designed to provide homeowners with central air conditioning and/or electric hot water heaters with the ability to participate in provincial demand response events. In 2013, the program saw the addition of In Home Energy Displays (IHD's), which provide home-owners with the added benefit of seeing their energy usage in real-time, in both units of energy and dollars and cents. More specifically, the energy display shows the amount of electricity being consumed at any particular time, the difference in electricity consumption caused by turning various appliances on and off, and the amount of money that homeowners are spending on electricity consumption, based on current rates. Homeowners with a central air conditioner would qualify for the program. Overall, the program has been successful and deployment will continue.

Customer awareness and education is also a critical component of conservation and WNH engaged Residential customers at over 200 community and retail events. At these events, customers were educated about the benefits of energy conservation, ways to save energy and reduce costs and about the conservation programs offered, specifically the COUPON, Heating and Cooling, Residential Demand Response, Appliance Exchange, and Appliance Retirement programs.

WNH will continue with its conservation efforts and helping customers reduce costs through an aggressive integrated sales and marketing strategy focused on engaging residential and non-residential customers in energy conservation. In addition, support on energy management functions such as project identification, equipment metering, business case development, execution, and on-going support will continue. WNH will maintain its reputation for being a trustworthy, reliable and dependable organization that can be called upon as a resource to provide honest advice, guidance and support whenever electricity costs are of concern.

4. *Proactive Communications when there are Unplanned Outages*

Customers rated WNH generally at, or slightly above, Ontario averages in communication effectiveness during power outages. WNH recognized before this Application that improvements in this area were warranted. In 2014 WNH made investments in a number of areas including the rollout of Social Media (Twitter and Facebook) and the acquisition and implementation of an integrated Outage Management System (OMS) with a 'Customer Public Outage Map' and enhanced Interactive Voice Response (IVR). This technology investment is customer centric and will provide our Customers with 24x7 improvements in both telephone response to outage inquiries as well as timely status updates on unplanned (and planned) outages with estimated restoration times on their smart phones. The benefits of these investments will be realized once these improvements are fully operational in 2015.

In addition WNH will continue to use existing channels to advise customers on system status including phone, radio and newspaper (print and electronic).

5. *Continued Delivery of High Quality Services*

The UtilityPULSE Survey in June 2014 stated "Almost all WNH customers are satisfied with the job the utility is doing at running the electricity distribution system. This pattern was consistent across all rate classes in all phases of the customer consultation." WNH works hard every day to provide high quality services that ensure the safe, reliable and affordable provision of electricity distribution services.

WNH benchmarks very well against Ontario averages on key customer service quality metrics:

	WNH	**Ontario**
Deals professionally with customer problems	88%	78%
Pro-active in communicating changes and issues affecting customers	81%	73%
Quickly deals with issues that affect customers	85%	74%
Customer-focused and treats customers as if they are valued	83%	72%
Is WNH a company that is easy to do business with	87%	75%
Delivers on its service commitments to customers	87%	82%

Although WNH is not planning to add costs to increase the current level of service, WNH does not want to reduce or weaken the level of service provided to customers.

Future Activities

Many steps have been taken to create the foundation for future customer engagement particularly on the role of WNH serving its customers and the broader community.

The Innovative Report in Attachment 1-8 stated that customers "generally felt positive regarding the consultation process. Customers generally agreed that they learned valuable information regarding the services that WNH offers." This feedback is important for WNH and will continue to provide ongoing engagement to better inform customers of its plans.

On-bill messaging, bill inserts, television advertising, re-formatting the bill and general radio and newspaper advertising will continue to be utilized to assist with the education process and to address top customer priorities.

WNH will continue its ongoing customer engagement activities and will continue to take customer preferences into consideration in its business planning.

Customer engagement and satisfaction will continue to be a top priority for WNH.

2.4.4 Financial Information

Audited Financial Statements

Copies of WNH's 2013 and 2014 Audited Financial Statements are provided in Attachments 1-9 and 1-10.

Reconciliation between Audited Financial Statements and Regulatory Accounting

Reconciliations of WNH's Audited Financial Statements to the annual RRR Trial Balance for 2012, 2013 and 2014 are provided as Attachment 1-11.

Existing/Proposed Accounting Orders

The Accounting Standard Board ("AcSB") deferred mandatory adoption of IFRS for qualifying rate-regulated entities to January 1, 2016. However, per the Board's letter of July 17, 2013, electricity distributors electing to remain on CGAAP were required to implement regulatory accounting changes for depreciation expenses and capitalization policies by January 1, 2013. WNH confirms it implemented the regulatory accounting changes for depreciation and overhead capitalization in 2013. The 2016 Cost of Service Application is to be filed on a MIFRS accounting basis, as such, WNH has prepared its application on an MIFRS basis.

Accounting Standards used in Application

In accordance with the Filing Requirements, WNH has provided information for the historic years using the CGAAP method of presentation. As directed by the Board, WNH has provided the 2013 to 2016 Years on both a CGAAP basis and a MIFRS basis, this can be found in Exhibit 9.

WNH has made the required changes to its overhead capitalization policy, details with respect to these changes are provided in Exhibits 2 and 4. Details with respect to the new useful lives applied to Capital Assets and the resulting impact on depreciation, are provided in Exhibit 4.

WNH is also required to make changes related to Employee Future Benefits (EFB) for 2015 and 2016. All of the EFB expense must be recorded in OM&A in USoA 5645 Employee Pension and Benefits. In the Historical Years this cost had gone to the Payroll Burden Account and charged to Capital, OM&A and Recoverable. Please refer to the Compensation Section of Exhibit 4 for more information.

WNH presents the impact on the 2016 Revenue Requirement related to these depreciation and overhead capitalization changes in Board Approved Appendix 2-Y attached as Table 1-16. This table is in the format of the Board's Appendix 2-X.

Table 1-16 – Summary of Impacts to Revenue Requirement from Transition to MIFRS – Board Appendix 2-X

	"New"	"Old"		
Revenue Requirement Component	**2016 MIFRS**	**2016 CGAAP without policy changes**	**Difference**	**Reasons why the revenue requirement component is different under**
Closing NBV 2015	$ 190,430,627	$ 189,626,815	$ 803,813	Depreciation Decreased in 'New' - Componentization/Useful Life Changes; Overhead in OM&A in 'New', in Capital in 'Old', Difference = 1576 Balance in 2015
Closing NBV 2016	$ 198,303,133	$ 197,479,553	$ 823,580	Depreciation Decreased in 'New' - Componentization/Useful Life Changes; Overhead in OM&A in 'New', in Capital in 'Old'
Average NBV	$ 194,366,880	$ 193,553,184	$ 813,696	
Working Capital	$ 23,111,861	$ 22,812,429	$ 299,432	Overhead Capitalization Difference in OM&A 'New', Capital in 'Old'
Rate Base	$ 217,478,742	$ 216,365,613	$ 1,113,129	
Return on Rate Base	$ 13,427,518	$ 13,358,792	$ 68,727	Impact of Depreciation and Overhead Changes on Rate Base/Return
			$ -	
OM&A	$ 14,211,068	$ 11,907,741	$ 2,303,326	Overhead Capitalization Difference in OM&A in 'New', Capital in 'Old'
Depreciation	$ 8,151,672	$ 10,474,766	-$ 2,323,094	Depreciation Change $2,323,094 - Added to 'Old'
PILs or Income Taxes	$ 803,815	$ 1,356,216	-$ 552,400	Old' requires adding back Overhead Capitalization Difference to Taxable Income, Calculating CCA on Overhead now Capitalized
			$ -	
Less: Revenue Offsets	(1,181,606)	-$ 1,181,606	$ -	
			$ -	
			$ -	
			$ -	
			$ -	
Total Base Revenue Requirement	**$ 35,412,468**	**$ 35,915,909**	**-$ 503,441**	

Compliance with the Uniform System of Accounts

WNH has followed the accounting principles and main categories of accounts as stated in the Board's Accounting Procedures Handbook (the "APH") and the Uniform System of Accounts ("USoA") in the preparation of this Application.

Accounting Treatment of Non-Utility Businesses

WNH is engaged in the delivery of the Ontario Power Authority's Conservation and Demand Management Programs and providing Street Light Maintenance and Construction Services. The accounting for these activities is segregated from WNH's rate regulated activities in accordance with the Board's Accounting Procedures Handbook for Electricity Distributors.

Annual Report and MD&A for Parent Company

Waterloo North Hydro Holding Corporation does not publish an annual report or an MD&A. As a result, this requirement is not applicable.

Rating Agency Reports

Not applicable. WNH has never produced a Rating Agency report.

Prospectus or Information Circulars

Not applicable.

Changes in Tax Status

WNH is a corporation incorporated pursuant to the Ontario Business Corporations Act and has not had a change in tax status since its last Cost of Service Application.

2.4.5 Materiality Thresholds

Chapter 2 of the Filing Requirements for Transmission and Distribution Applications issued by the Board on July 18, 2014 sets out the materiality levels based on the magnitude of the revenue requirement. WNH's revenue requirement is greater than $10 million and less than $200 million, therefore its materiality level is 0.5% of distribution revenue requirement. WNH's materiality threshold for the 2016 Test Year is $177,062 as provided in Table 1-17 below. WNH has used a threshold of $175,000 for assessing materiality for the purposes of this Application.

Table 1-17 - WNH's Materiality threshold for 2016 Test Year

Description	2016 Test Year
Base Revenue Requirement	35,412,468
Materiality Threshold .5%	177,062
Materiality Used	**175,000**

2.4.6 Administration

Statement of Deviations

WNH has not, to the best of its knowledge, deviated from the final Board's Filing Requirements for Electricity Distribution Rate Applications, issued July 18, 2014.

Statement of Changes to Methodologies

The pro-forma projections for the 2016 Test Year have been prepared in accordance with WNH's usual process, with the following exceptions:

1. Rates for distribution and sales of electricity are assumed to be constant for the entire 2016 Test Year
2. Regulatory costs have been normalized over the five year application period.

Identification of Board Directives from Previous Board Decisions

2011 COS – EB-2010-0144 – Settlement Agreement

WNH had four approved items in its 2011 COS that requires follow up in this Application, which includes:

- Whether WNH's Building included in the 2011 COS was in service by the end of 2011
- A Variance Account capturing the difference between the OMERS increase included in 2011 rates and the actual increase
- A Variance Account capturing the difference between 75% of the estimated Capital Gain on the disposition of WNH's 'old' building paid out to customers via a Rate Rider and 75% of the Actual Capital Gain; *and*
- WNH would reduce the Service Charge and correspondingly increase the Distribution Variable Charge of the GS > 50 kW Rate Class in accordance with an agreed upon formula in 2012 and 2013.

Building

On pages 11 and 12 in WNH's 2011 COS Settlement Agreement it states:

> In 2007, after almost 20 years of customer growth without a major expansion to the WNH Service Centre and Administration Building, WNH staff recognized that a significant shortage of building space in all parts of the business needed to be addressed. In 2010, WNH commenced constructing a new building/service centre, with a completion date in 2011. In WNH's Approved 2011 Cost of Service (COS) Settlement Agreement Item 2.1 it stated:
>
> *"The parties have agreed to establish a variance account in respect of WNH's new Administrative Building and Service Centre ("Building"). The Building is included in WNH's 2011 Revenue Requirement; however, if the building is not in service by the end of 2011, any over-collection of the amount that is included in the 2011 revenue requirement for the building will be placed into a variance account. The variance is only to capture any over-collection in the 2011 rate year and would only be applicable if the building is not in service in 2011."*

WNH's building was in service by December 5, 2011, thus, the variance account was not required to be set up.

OMERS Increase Variance

In Exhibit 9, page 35, WNH has addressed the OMERS Increase Variance issue.

In WNH's 2011 COS Settlement Agreement, page 21 of 77, it states:

> *"Increase in OMERS Costs of $126,250, from the $85,000 included in the Application, to $211,250 in order to provide for normalized OMERS increases for 2011-2014. The Parties have agreed that a variance account will be established and any differences between the amount paid by WNH and the annualized amount of $211,250 will be disposed of by way of payments by, or refunds to, WNH's customers at the next Cost of Service Filing"*

WNH has calculated the variance as detailed in Table 9-24. In addition, WNH has provided the calculations that determined the OMERS cost in the 2011 Revenue Requirement. A variance of $74,677 has been recorded and the resultant Proposed Rate Riders are detailed in Exhibit 9. Full details are provided in Exhibit 9.

Capital Gains Variance

In Exhibit 9, pages 33 and 34, WNH has addressed the OMERS Increase Variance issue.

In WNH's 2011 COS Settlement Agreement, pages 36 and 39 of 77, it states:

"WNH will be disposing of its existing Administration Building and Service Centre on Northfield Drive in Waterloo. It is anticipated that disposition will occur in 2012. The parties have agreed for the purposes of settlement that WNH's customers will receive 75% of the Net after Tax Gain on the sale of this property, and WNH will retain the remaining 25%. While the property is not expected to be sold until 2012 or later, the Parties have agreed that payments to WNH's customers will begin May 1, 2011, and that this will mitigate impacts to customers of WNH regarding collection of amounts owing in the Deferral and Variance Accounts as noted in Section 9.2 on the following basis:

a) The payments will be in the form of a rate rider (please see Appendix N), and will be spread equally over three years commencing May 1, 2011, to align with the disposition of Deferral and Variance Accounts in Section 9.2;

b) The value of the payment to be made by way of the rate rider will be based on the estimate of the net after tax gain set out in the following table; and

Estimate for Purposes of this Settlement	
Estimated Fair Market Value	$ 7,300,000
Estimated Selling Costs (real estate, legal, cleanup costs)	(900,000)
Estimated Net Book Value of Land and Building	(3,600,000)
Estimated Taxes	(800,000)
Estimated Gain on Sale	$ 2,000,000
75% of Estimated Gain on Sale	**$ 1,500,000**
Rate Rider Annually, Paid for Three Years	**$ 500,000**

c) A variance account will be created to track the difference between 75% of the Actual Net after Tax Gain and the payout of the 75% of the Estimated Net after Tax Gain that is included in this Settlement. The variance will be paid to customers or collected from customers at the time of WNH's next rebasing."

WNH provided its details of the Variance Account in Table 9-23. The building was sold on June 27, 2013.

75% of the Actual Capital Gain was calculated at $1,146,614, Payments to WNH's customers via a Capital Gain Rate Rider were $1,579,471, thus, resulting in an amount owing to WNH of $432,857. The resultant Proposed Rate Riders are detailed in Exhibit 9. Full details are provided in Exhibit 9.

Change to GS > 50 Distribution Rates

On page 31 of WNH's Settlement Agreement it states:

> *"The customer charges in Appendix L for the General Service Greater than 50 kW rate class reflect a one-third reduction between the current monthly customer charge of $187.01 and the ceiling of $114.22 as calculated in Sheet O2 of the Cost Allocation Model, resulting in a monthly customer charge of $162.75 for the 2011 rate year. The Parties agree that in 2012 and 2013, further reductions will occur as follows: Any (GDP-IPI – X) increases or decreases under the IRM plan will be applied to the ceiling from Sheet O2 of the Cost Allocation Model, the difference between the May 1, 2010 rate ($187.01) and the 2012 Adjusted Ceiling will be multiplied by 2/3 and subtracted from the May 1, 2010 rate to obtain the 2012 customer charge. In 2013, any (GDP-IPI – X) increases or decreases under the IRM plan are applied to the 2012 adjusted ceiling and the resulting 2013 Adjusted Ceiling will become the 2013 Customer Charge for this rate class. For each of 2012 and 2013, the rate design model will be re-run using the adjusted fixed charge for the General Service Greater than 50 kW class, and the consumption agreed upon in this Agreement, in order to establish the variable charge ("re-calculated variable charge") for that class for the corresponding year. The re-calculated variable charge will then have any (GDP-IPI – X) increases or decreases under the IRM plan applied. In 2012 the applicable 2012 (GDP-IPI – X) increase or decrease will be applied to the re-calculated 2012 variable charge. In 2013 the applicable 2012 and 2013 (GDP-IPI – X) increases or decreases will be applied to the re-calculated 2013 variable charge. Two illustrative examples are provided …"*

WNH recalculated the 2012 and 2013 Distribution Service Charges and Distribution Variable Charges in accordance with the agreed upon formula and the resultant rates were approved by Board Decisions on April 4, 2012, *EB-2011-0201* and on April 4, 2013, *EB-2012-0172*.

Disposition of Smart Meters EB-2012-0266

In the Board's Decision of October 4, 2012 (corrected October 12, 2012), page 9, the Board stated:

> *"In its Application, WNH proposed not to dispose of stranded meters at this time, but to deal with disposition in its next rebasing application, scheduled for 2015 rates."*

WNH subsequent applied for, and was granted, an extension to file for 2016 rates.

In Exhibit 2, in the Treatment of Stranded Assets Related to Smart Meter Deployment Section commencing on page 52, WNH seeks disposition of its Stranded Meter Costs as at December 31, 2015 in the amount of $1,301,593. This represents the amount of the pooled residual NBV of the meters removed from service, less any Net Proceeds from sales of the meters at December 31, 2015. Full details and the resultant Proposed Rate Riders are provided in Exhibit 2.

Statement Regarding Conditions of Service

The current version of WNH's Condition of Service is publically available (to be posted May 1/15) for on-line viewing, printing and downloading from WNH's website www.wnhydro.com.

Bill Impacts

Please refer to “Bill Impacts” in the Executive Summary section of Exhibit 1 of this Application.

2.4.7 Applicant Overview

The Applicant is Waterloo North Hydro Inc. and is a corporation incorporated pursuant to the *Business Corporations* Act (Ontario) with its head office at 526 Country Squire Road, P.O. Box 640, Waterloo, ON. The Applicant carries on the business of distributing electricity within the City of Waterloo, the Township of Wellesley and the Township of Woolwich.

Service Area	**Description of the Applicant:**
COMMUNITY SERVED:	City of Waterloo, Township of Wellesley, Township of Woolwich
TOTAL SERVICE AREA:	672 sq. km
RURAL SERVICE AREA:	607 sq. km (90%)
DISTRIBUTION TYPE:	Electricity Distribution
SERVICE AREA POPULATION:	131,370
MUNICIPAL POPULATION:	131,370
BOUNDARIES:	West: Hydro One North: Hydro One East: Hydro One South: Hydro One, Cambridge & North Dumfries Hydro Inc. and Kitchener-Wilmot Hydro

A map of WNH’s distribution service territory is provided in Attachment 1-12.

List of Neighbouring Utilities

WNH has provided its neighbouring utilities above when providing the Boundary LDCs.

Identification of Embedded or Host Utilities

WNH became a Host Distributor on May 1, 2006 and Hydro One Networks Inc. (HONI) became embedded to WNH at the Elmira Transformer Station. Prior to this date, WNH was embedded to HONI at this metering point. HONI owns and operates the Elmira TS which is located inside the service area of WNH. WNH established an Embedded Distributor Class in its 2011 COS. HONI owns the circuits that cross into WNH's service territory and resides on WNH's poles. WNH receives pole rental revenue from HONI. WNH does not have any capital costs invested in its Embedded Distributor rate class, WNH only has operating costs. Proposed Costs assigned to this rate class in this Application are $1,436. WNH has included the Embedded Distributor in its Proposed Rate Order, the Distribution Variable only Rate is based on the $1,436 of costs.

Waterloo North Hydro is embedded to Kitchener-Wilmot Hydro Inc., Cambridge & North Dumfries Inc. and Hydro One Networks Inc., and has included in its Distribution Rates Low Voltage Charges since May 1, 2006. WNH respectfully requests the continuation of Low Voltage Charges in its Distribution Rates as detailed in Exhibit 8, pages 12 to 14.

2.4.8 Corporate Governance

Corporate Organization Structure

Waterloo North Hydro Holding Corporation, incorporated March 1, 2000 under the Business Corporation Act (Ontario), is the parent holding company of Waterloo North Hydro Inc. The City of Waterloo, the Township of Woolwich and the Township of Wellesley are the shareholders of Waterloo North Hydro Holding Corporation, with ownership interests of 73.2%, 20.2% and 6.6%, respectively.

The municipal Shareholders appoint directors to the Board of Directors for Waterloo North Hydro Holding Corporation. The Holding Corporation Board appoints the directors to the Waterloo North Hydro Inc. Board of Directors. Each Board consists of nine (9) Directors and the respective Board of Directors manages the business affairs of each corporation. Four of the five independent directors from the business community are different for the two Boards to maintain independence between the Boards. Figure 1-2 and Figure 1-3 demonstrate reporting relationships between management and the parent company.

Figure 1-2: WNH Ownership Structure

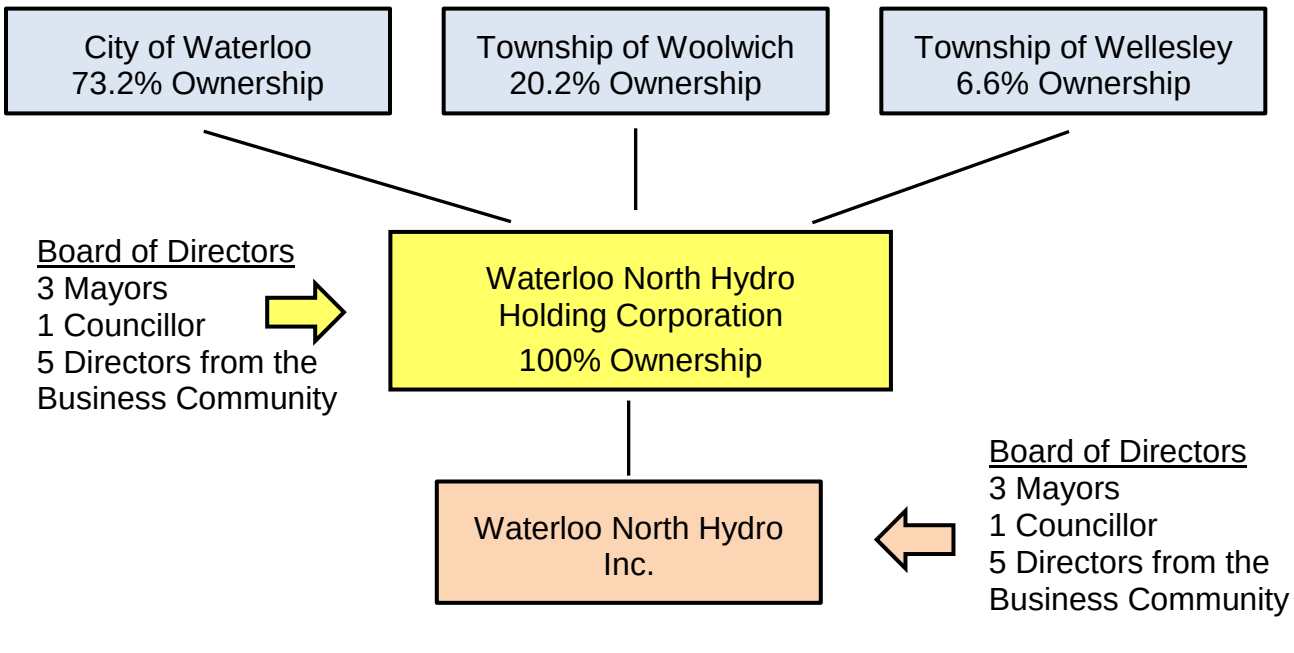
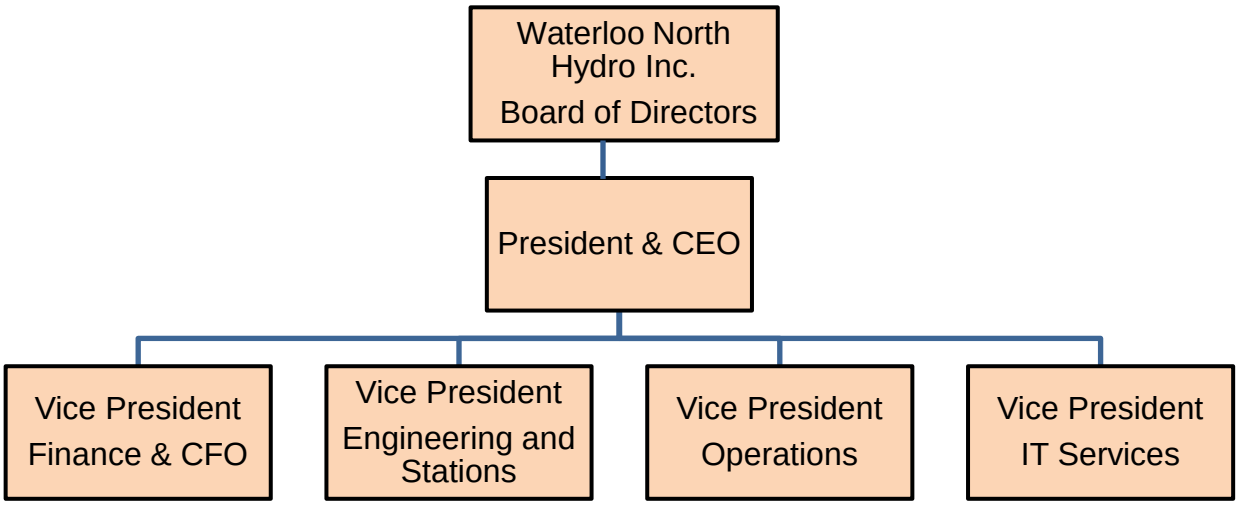


Figure 1-3: High Level Utility Organization Chart for Waterloo North Hydro Inc.



Corporate Governance Practices

Board of Directors

Waterloo North Hydro Holding Corporation has a nine (9) member Board of Directors in accordance with the Shareholders Agreement. The Board is comprised of the Mayors of the City of Waterloo, and the Townships of Wellesley and Woolwich, a Councillor from the City of Waterloo (the Chair of the Financial and Strategic Planning Committee), and five (5) other independent members from the business and academic communities.

WNH Inc. also has a nine (9) member Board of Directors. The Board is comprised of the Mayors of the City of Waterloo, and the Townships of Wellesley and Woolwich, a Councillor from the City of Waterloo (the Chair of the Financial and Strategic Planning Committee), and five (5) other independent members from the business and academic communities. Four of the five independent directors are different from the directors on the Holding Corporation Board to maintain independence between the Boards.

The Boards maintain a structure with independent Board members as a majority of Directors. The Boards each elect the Chair and Vice-Chair positions for its Board and per the Shareholders Agreement, the Chair and Vice-Chair shall not be members of the Council of any of the Shareholders.

The Board exercises independent judgment by having its Chair and Vice-Chair not be members of Council. Additionally its political members declare a conflict of interest and do not vote on matters that may be perceived as benefitting the shareholders.

Board Mandate

WNH provides the most recent version of the Board Mandate in Attachment 1-1 to this Exhibit. The Governance and Nominating Committee reviews the Board Mandate and recommends the mandate or revised mandate to the Board of Directors of WNH Holding Corporation for approval. Members of the Governance and Nominating Committee are independent Directors with experience in Governance.

Board Meetings

The Board of Directors set a schedule of meetings for the upcoming fiscal year. Shown below is the 2015 schedule.

Thursday, February 19, 2015
Thursday, April 16, 2015
Thursday, May 21, 2015
Thursday, June 18, 2015
Thursday, September 17, 2015
Thursday, November 19, 2015

Orientation and Continuing Education

WNH provides new Directors with an orientation program that includes written information about the structure of the industry, the ownership structure of the corporations of WNH, the business of the company, the duties and obligations of Directors, and background on the other Board members and the senior management team.

The Chair of the Board and the President & CEO jointly facilitate an orientation meeting to discuss the written information, review documents from recent Board meetings, provide an opportunity for discussion with senior management and other Directors as appropriate, as well as tour the Corporation's facilities.

The Chair and the President tailor the orientation to reflect the needs, experience, and areas of interest of the new Director. A Board member orientation includes information on Board operations, Shareholder/Board/Management relations, Regulatory legislation and requirements, and current industry issues.

WNH provides Directors with various opportunities for continuing education. Discussion in Board meetings and management presentations cover topics on regulatory legislation and requirements, energy policy, technology trends, customer engagement, Board operations, and Shareholder/Board/Management relations. In 2014, WNH became a member of the Institute of Corporate Directors (ICD), providing Board members with an additional forum on Director Education. Access includes Directors forums, discussions on current topics and appropriate workshops from ICD.

Ethical Business Conduct

The Board of Directors of WNH Holding Corporation adopted a written Code of Conduct for Directors that applies to Directors of Waterloo North Hydro Inc. and Directors of Waterloo North Hydro Holding Corporation. The Code of Conduct is in Attachment 1-2.

The Board is a self-monitoring body that is accountable to the shareholder. Any infractions would be dealt with by the Chair.

Nomination of Directors

The Board established a Governance and Nominating Committee. The Committee establishes qualifications for directors and advertises for the recruitment of new directors. The Committee also interviews and recommends new nominees to the Board and shareholder for approval.

Board Committees

The Board of WNH Holding Corporation established the following Committees relating to the business of WNH Inc.

- Audit Committee
- Compensation and Human Resources Committee
- Governance and Nominating Committee

The Board Committee member appointments are from the independent directors on both the Waterloo North Hydro Holding Corporation Board and the WNH Inc. Board of Directors. The members of the Audit Committee are required to be financially literate. The Committees have the ability and authority to engage external experts to assist them in conducting their fiduciary duty, subject to approval by the Board of Directors.
WNH provides the Mandates of the above committees in Attachments 1-3 to 1-5.

2.4.9 Letters of Comment

No letters of comment have been filed with the Board during the course of this proceeding.

ATTACHMENTS

2.4.1.12 Attachment 1-1 – Board Mandate

BOARD MANDATE FOR
WATERLOO NORTH HYDRO INC.

Background:

The business of Waterloo North Hydro Inc. (WNH) is integral to the well-being and the infrastructure of the City of Waterloo, the Township of Wellesley and the Township of Woolwich. It is in the best interests of the Community of Customers and the Residents of Waterloo, Wellesley and Woolwich, whom the business affects, that WNH conducts its affairs on a commercially prudent and sustaining basis.

Waterloo North Hydro Inc. will provide a reliable, safe and efficient electricity distribution system.

Distribution rates will be set by the Ontario Energy Board and according to the rules of the Ontario Energy Board. The Board of Directors of WNH will be apprised of rate applications and provide guidance to Management.

WNH is at all times subject to such licences, codes, policies, rules, orders, interim orders, approvals, consents and other actions of any regulator.

WNH will provide its services with regard for customer satisfaction, energy conservation and environmental responsibility.

Board Mandate:

The Board of Directors is responsible for ensuring WNH conduct its affairs in accordance with the above and all legal requirements.

The Shareholders' Agreement in effect from time to time between the Corporation of the City of Waterloo ("City of Waterloo"), the Corporation of the Township of Woolwich ("Township of Woolwich"), the Corporation of the Township of Wellesley (“Township of Wellesley”) and Waterloo North Hydro Holding Corporation, outlines in broad terms the expectations of the Shareholders relating to the principles of corporate governance and the management of the business and affairs of Waterloo North Hydro Holding Corporation.

Waterloo North Hydro Inc. as a subsidiary and the Board of Directors of WNH Inc. are one-step removed from the Municipal Shareholders, however many of the expectations of the Shareholders’ Agreement apply to WNH Inc.

In accordance with direction to the Board of Waterloo North Hydro Holding Corporation from time to time, the Shareholders expect that WNH, through the Board of Directors and senior management for Waterloo North Hydro Inc. will:

1. Establish policies to develop and maintain a balanced financial and capitalization structure while maintaining just and reasonable rates for customers in a manner consistent with the policies established by the Shareholders
2. Provide the Shareholder with the maximum Rate of Return permitted pursuant to energy legislation in accordance with the financial performance objectives of the Shareholders
3. Manage all risks related to the business through the adoption of appropriate risk management strategies and internal controls
4. Develop a long range Strategic Plan, consistent with the maintenance of a viable, competitive business and preservation of the value of the business

5. Develop a Dividend Guideline consistent with sound financial principles, with the intention of providing the Shareholders with the maximum rate of return permitted under energy legislation and applicable orders, rules, and regulations
6. Declare any dividend or distribution of capital
7. Recognize that the Board's role is to:
    a. Establish governance structures and committees required by the Shareholders agreement and other committees as deemed appropriate by the Board from time to time;
    b. Hire and assess the President & CEO's performance and delegate accountability to the President & CEO;
    c. Set corporate goals/strategic direction and monitor alignment of operations;
    d. Approve the Business Plan, Budget and Annual Report; and
    e. Take corrective action as necessary.

2.4.1.13 Attachment 1-2 – Code of Conduct

CODE OF CONDUCT FOR DIRECTORS of
WATERLOO NORTH HYDRO INC., and
WATERLOO NORTH HYDRO HOLDING CORPORATION

This document is applicable to Directors of Waterloo North Hydro Holding Corporation and Directors of Waterloo North Hydro Inc. (collectively "Waterloo North Hydro").

To enhance teamwork and effective governance among Board members, we publicly commit ourselves, collectively and individually, to the following protocols.

1. To represent and support the needs and interests of the organization
2. To operate with honesty and integrity, including compliance with Board Policy on Confidentiality and Conflict of Interest
3. To set clear goals for ourselves
4. To communicate accurate and complete information at all times in our discussions and deliberations as we conduct Board business. This includes keeping the Board appropriately informed of knowledge or issues that could impact the operations of the organization or the Board
5. To refer public inquiries to the President & CEO and/or the CFO, or the Board Chair
6. To understand individual Board members do not have authority; only the Board as a whole has authority, with the understanding that the Board Chair and/or President & CEO will communicate the position(s) of the Board on controversial or sensitive issues. When the Board delegates specific authority to a committee or individuals, the committee or individual is responsible to keep the Board appropriately informed in a timely manner
7. To disclose Board or organizational information only in accordance with the Policy on Confidentiality and Conflict of Interest

8. In the release of any information referred to in (7) above, to follow any Board protocols, including the recognition of the Board Chair and the President & CEO, as appropriate, as the spokespersons for the organization
9. To seek to understand concerns/issues or differences of opinion and constructively and professionally provide feedback or recommendations for resolution while keeping Board meetings efficient and effective
10. To agree to ask the Board Chair or the President & CEO to place an item on the agenda instead of bringing it up unexpectedly at the meeting, ultimately keeping surprises to other Board members or to the President & CEO as the exception, not the rule
11. To recognize that the Board's role is to:
    - Establish governance structures
    - Hire and assess the President & CEO's performance and delegate accountability to the President & CEO
    - Set corporate goals/strategic direction and monitor alignment of operations;
    - Approve the Business Plan, Budget and Annual Report and
    - Take corrective action as necessary

We recognize that it may put the organization, the Board of Directors, or individual Directors at risk if we do not follow the principles inherent in this protocol and attached Confidentiality and Conflict of Interest Policy. The risks may include, but are not limited to:

- Loss of reputation or constituent support
- Legal liability or regulatory non-compliance and
- Threats to ongoing viability.

I, individually as a Director, acknowledge that failure to comply with this protocol may result in sanctions by the Board.

Signature of Director _____ Date _____

2.4.1.14 Attachment 1-3 – Audit Committee Mandate

Audit Committee Mandate

Purpose:

This is a joint Committee of the Boards of WNH Inc. and WNH Holding Corporation. The Committee shall consist of no less than three Board members from the independent Directors on the two Boards. The majority of the Committee will be WNH Inc. Board Members and at least one Board Member from WNH Holding Corporation.

The purpose of the Audit Committee is to oversee the work of the Auditors. The Audit Committee should be composed of independent directors. All members of the Committee should be financially literate and at least one member should have accounting or related financial expertise. The external auditors will report to the Boards of WNH Inc. and WNH Holding Corporation through the Audit Committee.

The role of the Audit Committee includes:

1. Recommend the appointment of external auditors to the Boards of WNH Inc. and WNH Holding Corporation, and to the Shareholders.
2. Consult with the Auditors (both with and without the presence of management) with regard to the audit plans, the adequacy of the internal accounting controls and similar matters, and review management responses.
3. Review any “Management Letter” sent by the external auditor to the corporations.
4. Review the audited financial statements of the corporations with both management and external auditors; recommend approval of the statements to the Board of Directors of each corporation.
5. Monitor compliance and ensure the corporations keep appropriate records in accordance with IFRS (International Financial Reporting Standards), and with all relevant laws and regulations governing the prudent financial operation of the corporations.

6. Recommend to the Board of WNH Inc., the dividend amount to pay to WNH Holding Corporation in accordance with the current dividend guidelines.
7. A quorum of the Audit Committee shall be a simple majority of the Committee members.

2.4.1.15 Attachment 1-4 – Compensation and Human Resources Mandate

Compensation and Human Resources Mandate

Purpose:

This is a joint Committee of the Boards of WNH Inc. and WNH Holding Corporation. The Committee shall consist of no less than three Board members from the independent Directors on the two Boards. The majority of the Committee will be WNH Inc. Board Members and at least one Board Member from WNH Holding Corporation.

The Role of this Committee is to review the remuneration packages for the President & CEO and Senior Management of the Corporation, and to ensure that WNH's remuneration policies and practices are consistent with WNH's Strategic Goals.

Some of the Committee functions would be as follows:

1. Review and recommend to the full Board of WNH Inc. the salary, bonus and other benefits, direct and indirect, of the President & CEO.
2. Recommend salary guidelines for management from time-to-time;
3. Review the Corporation's policies in the area of management benefits and perquisites from time-to-time.
4. Review and recommend to both Boards the appropriate remuneration for Board members from time-to-time.
5. Initiate with the Board when required, the process to replace the President & CEO and the need to strike an Executive Search Committee.

2.4.1.16 Attachment 1-5 – Governance Committee Mandate

Governance Committee Mandate

Purpose:

This is a Committee of the Board of WNH Holding Corporation. The Committee shall consist of no less than three (3) Board members from the independent Directors on the Board.

The Role of this Committee is to develop and implement corporate governance policies from time-to-time.

This Committee is also responsible to ensure that the Boards of Waterloo North Hydro Inc. and Waterloo North Hydro Holding Corporation are comprised of individuals who possess the skills, qualifications and experience to collectively contribute to effective Board governance, and to assist the Board in identifying qualified individuals to become Board members.

Roles and Responsibilities:

- Review and monitor industry best practices regarding corporate and regulatory governance standards and practices applicable to the Corporation and make recommendations to the Board as appropriate from time to time
- Monitor the effectiveness of the Board's governance practices and recommend to the Board appropriate policy changes
- Annually review Board committee structure, and ensure it is appropriate
- Recommend to the Board the Directors to appoint to Chair and Vice-Chair
- Recommend to the Board the allocation of Directors to the Board committees
- Annually review the current service of the independent Directors to plan retirements of existing Board members at staggered intervals for Board continuity
- Initiate a recruiting committee when required to fill a vacancy

- Recommend nominees to the Board of Directors of WNH Holding Corporation for appointment to the Board of Directors of WNH Inc.

ATTACHMENT 1 – 6

WNH CUSTOMER ENGAGEMENT EVENT SUMMARY 2011 – 2015

BOARD APPENDIX 2 - AC

Attachment 1-6 WNH Customer Engagement Event Summary 2011 – 2015 – Board Appendix 2-AC

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.
Approximately 5,000-10,000 customer walk ins per year to office for service	Need to explain the bill, need to make payment arrangements, account balances, billing inquiries, services such as e-Billing, TOU rates, outages, conservation programs, bill components	Maintain this service option including an ability to make payment in-person. Trained all front office staff to handle majority of issues
42,782 Inbound phone calls to WNH in 2014	Need to explain the bill, need to make payment arrangements, account balances, billing inquiries, services such as e-Billing, TOU rates, outages, conservation programs, bill components	Trained all front office staff to handle inquiries
2,512 inbound written enquires were responded to by WNH in 2014	Need to explain the bill, need to make payment arrangements, account balances, billing inquiries, services such as e-Billing, TOU rates, outages, conservation programs, bill components	Trained all front office staff to handle inquiries
Annual vegetation control program	Need to confirm scope of work on each property to safely establish right of way	Notices of Annual Tree Trimming to all customers in the area with an explanation as to why this work is necessary. If customers have further inquiries they are directed to call the operations department at WNH
Approximately 100 Forestry Customer Calls in 2014	Requests to cut back trees interfering with power lines	Customers required to sign off on work consent before work begins. WNH will continue to investigate all customer requests.
Locating electrical infrastructure, approximately 10,000 requests per year	Need to build new infrastructure requires electrical plant to be safely located so construction can proceed	Locates are all now scheduled through On1Call as mandated by the Government of Ontario. On1Call then contacts WNH to set up appointment

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.
Participation in conservation programs - Residents	Bill inserts, brochure handouts and traditional marketing channels were utilized about topics of interest and relevance to customers	Provide all OPA programs in demand with local resources
Roving Energy Managers	Need for technical expertise to identify and implement complex industrial conservation projects	Continued utilization of roving energy manager and energy advisors to support retrofit projects
UtilityPulse Customer Satisfaction Survey 2014	Customers want low price and high value, customer service, company leadership, the business to be a good corporate steward, operational effectiveness and power quality/reliability. Customers require various communication channels to be kept informed	Working on a communication plan as to how we can better inform our customers on information that is important to them. i.e. current usage, energy savings, and outage information
Innovative Research - Customer Consultation Winter 2015	Customers want continued delivery of high quality services, reliability of service, affordable electricity costs, assistance to reduce consumption and thereby costs, as well as better information when outages occur.	Refer to Exhibit 1 - WNH's Response to Customer Preferences
Conducts Open House meetings	Customers are informed of engineering design changes planned in their community and how they will be impacted.	WNH takes customer feedback into account when finalizing designs if practical.
Chamber of Commerce events	WNH actively participates in its local Chamber of Commerce both on the Board of Directors and at events to interact with local business persons	WNH staff are able to hear their electricity concerns, provide industry education and assistance where needed.
Sustainable Waterloo Region	WNH was a founding member of a local carbon reduction and energy conservation organization, Sustainable Waterloo Region. WNH is committed to conservation for its customers and organizations.	WNH continues to demonstrate its role as a leader in environmental stewardship by committing to reduce its carbon footprint in the community.
Doors Open Waterloo Event	WNH participated in a local annual event 'Doors Open' in which members of the public tour local area businesses. WNH received much interest and participation from the community, over 300 people toured WNH 's facilities.	Management was on hand to meet with WNH customers and discussed electricity concerns and electricity conservation practices
Shareholder Meetings	WNH regulary meets with its shareholders to discuss WNH's plans, rates and the impact on customers.	WNH takes shareholder feedback and integrates into strategic planning

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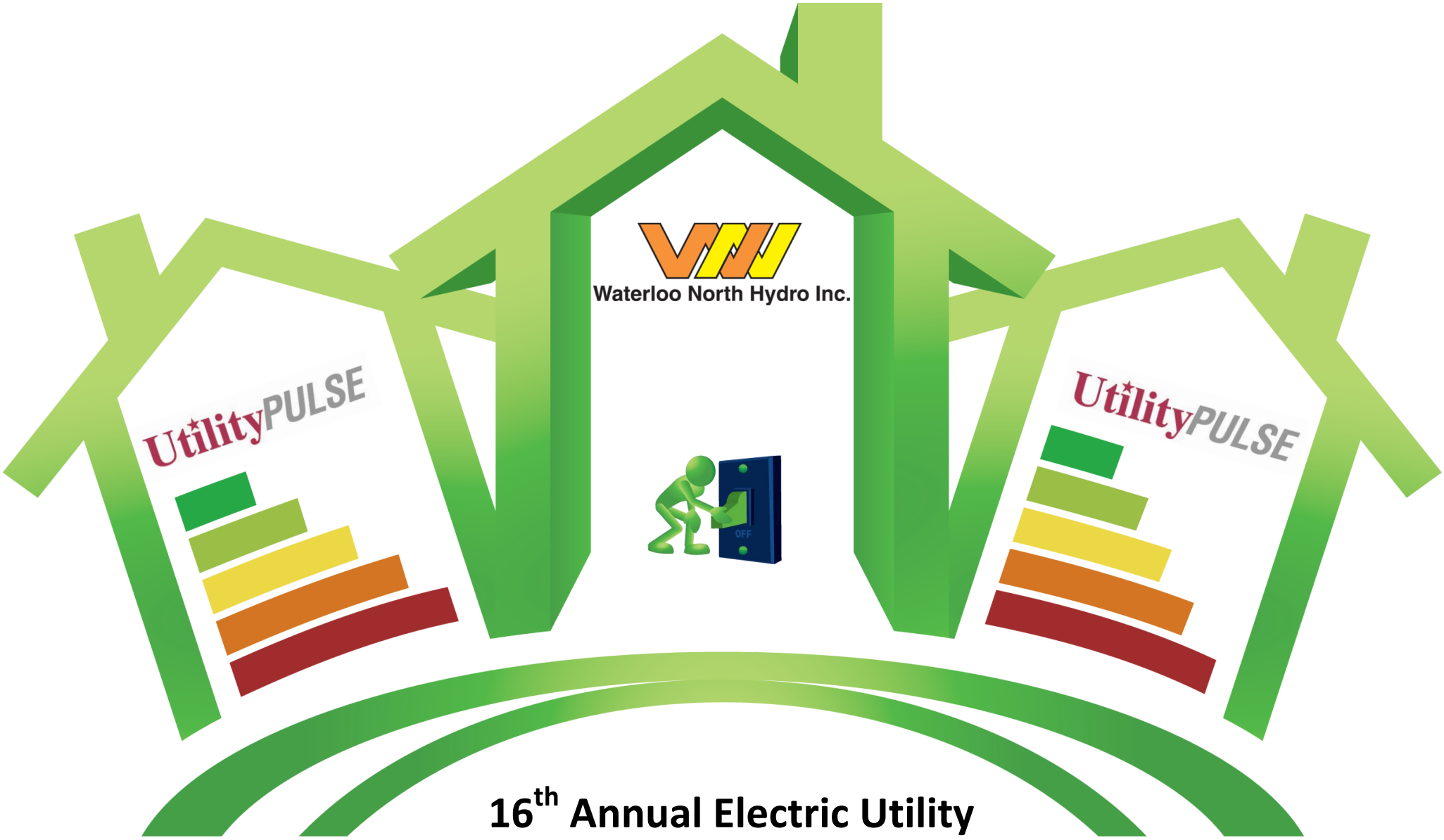
ATTACHMENT 1-7

UTILITY PULSE CUSTOMER SATISFACTION SURVEY

Waterloo North Hydro Inc.



16th Annual Electric Utility Customer Satisfaction Survey

The purpose of this report is to profile the connection between Waterloo North 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® 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.

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 or sridgley@simulcorp.com

Executive summary

Rosemarie LeClair, Chair of the Ontario Energy Board, in a recent presentation (Ontario Energy Network, April 28, 2014) said the OEB's consumer centric regulatory framework defines the utility's obligation for planning, obligations for customer engagement and its responsibilities for monitoring and measuring performance results.

EB-2010-0379 Report of the Board: Scorecard Approach (ROB-SA) (March 5, 2014)

Throughout this report are connections to the OEB's Report of the Board. Where possible we have addressed the specifics in the document and, the "spirit" of the Scorecard Approach.

We believe that the data from interviewing over 10,000 electric utility customers so far, in 2014, supports 3 main conclusions:

1- Customers, almost universally, are concerned about the cost of electricity

2- Customers are resilient and can adapt to adversity, in fact, they are very tolerant when a utility goes through a very difficult situation

3- In a utility world that is used to "pushing information out", it has to invest in and hone its competencies in having 2-way interactions with customers.

Reasonable costs

9,943 Ontario survey respondents were asked if they agree or disagree with the following statement *"The cost of electricity is reasonable when compared to other utilities".* 50% agree in 2014, and 62% agreed in 2010. Satisfaction with the utility is about the same in those respective years.

We can also say that issues in the electricity industry, as a whole, show that satisfaction ratings and other important measures are lower in 2014 than they were in 2013. A customer may be upset with the amount that electricity costs, or what is going on in the industry, but that may not translate to being upset with their own local utility.

Data from the 2014 survey shows that respondents who give their utilities high marks for respect, trust, and social responsibility also give their utilities high marks for providing high quality services, and better marks for both cost efficiency and reasonableness of costs.

The attributes which help an LDC to be seen as trusted and highly credible are: knowledge, integrity, involvement and trust. On demonstrating Credibility and Trust, Waterloo North Hydro has done well. Overall, Waterloo North Hydro 84% [Ontario 77%; National 80%].

EB-2010-0379 ROB-SA: Comparability

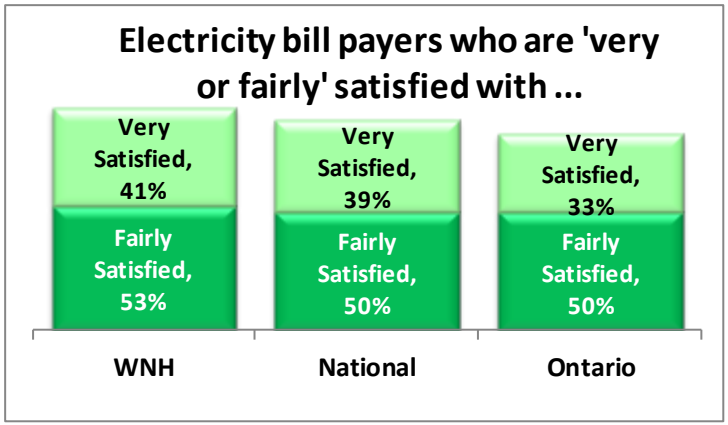
Your 2014 report contains data comparisons to:

- An Ontario-wide LDC benchmark
- A National LDC benchmark
- Previous year's ratings (where available)

- Ontario LDCs participating in the 2014 survey
- UtilityPULSE database

EB-2010-0379 ROB-SA: Customer Focus

There are 2 identified Performance Categories in the OEB Report, they are Customer Satisfaction & Service Quality. Performance measurements for these areas range from *'relatively easy to attain production statistics'* to '*harder to define and measure qualitative items'*. None-the-less this survey provides you with insights about how customers perceive performance of the utility.



Base: total respondents

EB-2010-0379 ROB-SA: Customer Focus - Customer Satisfaction - Satisfaction Survey Results

Customer satisfaction is one of the measures in the consumer centric regulatory framework. This rating is known as an effectiveness rating as it represents a sum total of perceptions and expectations that a customer has about their utility. Those expectations go far beyond "keeping the lights on", "billing me properly", and "restoring power quickly".

WNH SATISFACTION SCORES – Electricity customers' satisfaction					
Top 2 Boxes: 'very + fairly satisfied'	**2014**	**2013**	**2012**	**2011**	**2010**
PRE: Initial Satisfaction Scores	95%	-	-	94%	-
POST: End of Interview	96%	-	-	95%	-

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

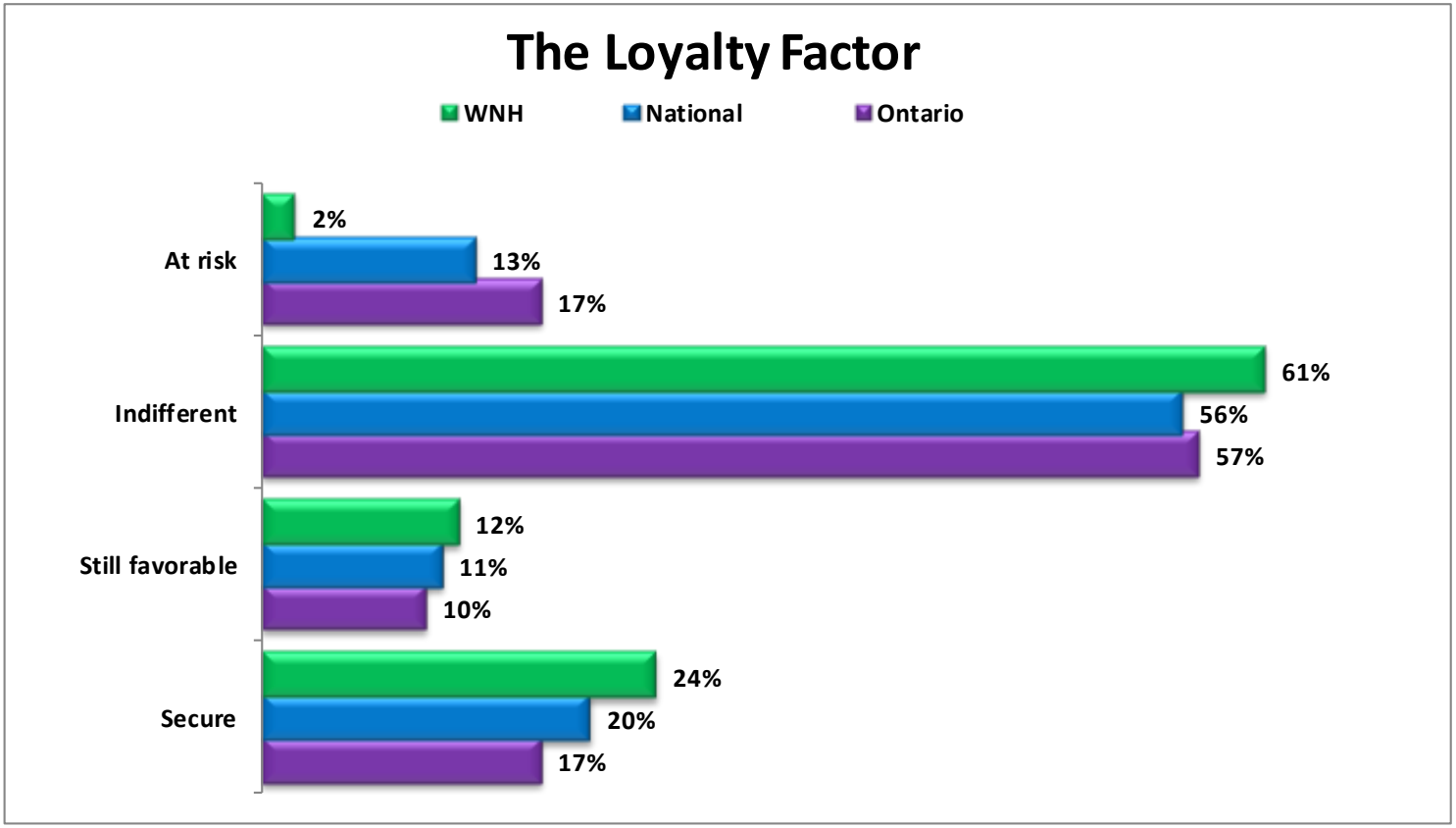
- ***Satisfaction*** *happens when utility core services meet or exceed customer's needs, wants, or expectations.*
- ***Loyalty*** *(Affinity) occurs when a customer makes an emotional connection with their electric utility on a diverse range of expectations beyond core services.*

Customer Affinity

Loyalty, for private industry, is a behaviourial metric. Loyalty, for natural monopolies (like LDCs) is an attitudinal metric.

Customer Loyalty Groups				
	Secure	**Favorable**	**Indifferent**	**At Risk**
		WNH		
2014	24%	12%	61%	2%
2013	-	-	-	-
2012	-	-	-	-
2011	32%	15%	49%	3%
2010	-	-	-	-

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



Base: total respondents

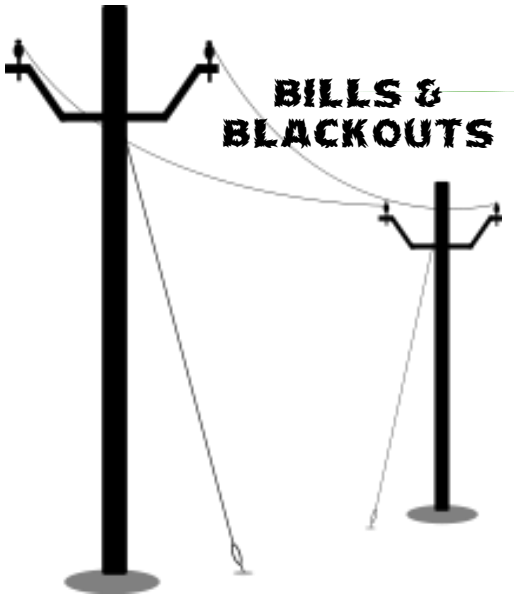
Utilities benefit from a trusted relationship with their empowered Customers. Higher levels of trust are the hallmarks of Secure customers. When people interact, either face-to-face, by telephone or on-line, if people do not trust each other, the interaction is not going to be efficient. Trust improves 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.

None-the-less problems will happen.

The Killer B's (Blackouts and Bills)

It is inevitable that there will be blackouts/power outages – the key is how a utility anticipates outages and more importantly, how it deals with them. It should also be noted that there is a disconnect between what a utility might call a "billing problem" and what a customer defines as a "billing problem". Though both viewpoints are valid, employees need to be trained to answer those which cause the most concern with customers.



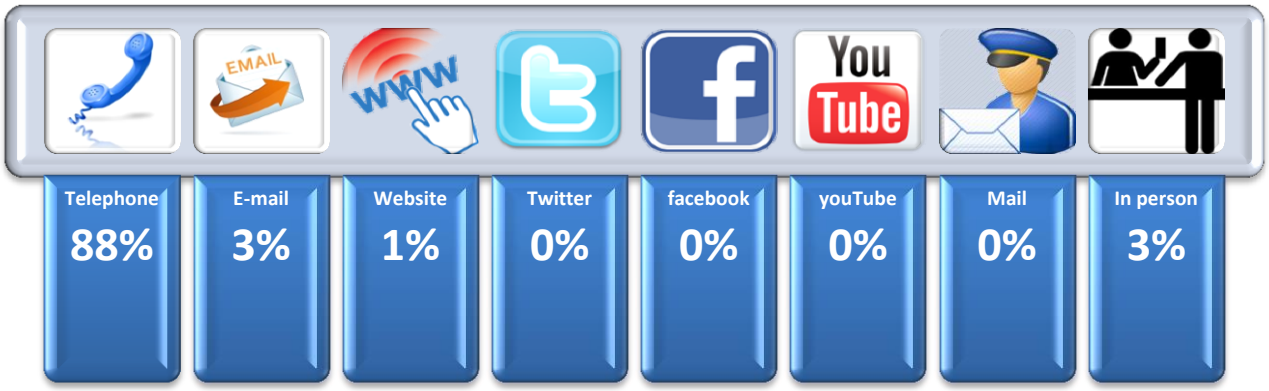
Percentage of Respondents indicating that they had a Blackout or Outage problem in the last 12 months			
	WNH	National	Ontario
2014	46%	47%	49%
2013	-	41%	35%
2012	-	44%	46%
2011	25%	43%	43%
2010	-	45%	41%

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

Percentage of Respondents indicating that they had a Billing problem in the last 12 months			
	WNH	National	Ontario
2014	9%	16%	25%
2013	-	8%	10%
2012	-	12%	13%
2011	4%	10%	16%
2010	-	10%	12%

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

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



Base: data from the full 2014 database

Customers may prefer a particular communication channel today (i.e., 88% telephone), however, that does not mean the customer who prefers the telephone will not want, or eventually want another channel for communications. In addition, there could be variances in preferences based on the type of issue or transaction.

EB-2010-0379 ROB-SA: Customer Focus – Customer Satisfaction – Billing Accuracy

There is a difference between what a customer believes is a billing problem versus a technical or production level measurement. Without the benefit of production level numbers, 89% of respondents 'agree strongly + somewhat' that the utility has "accurate billing". The Ontario benchmark rating is 77%.

EB-2010-0379 ROB-SA: Customer Focus – Customer Satisfaction – First Contact Resolution

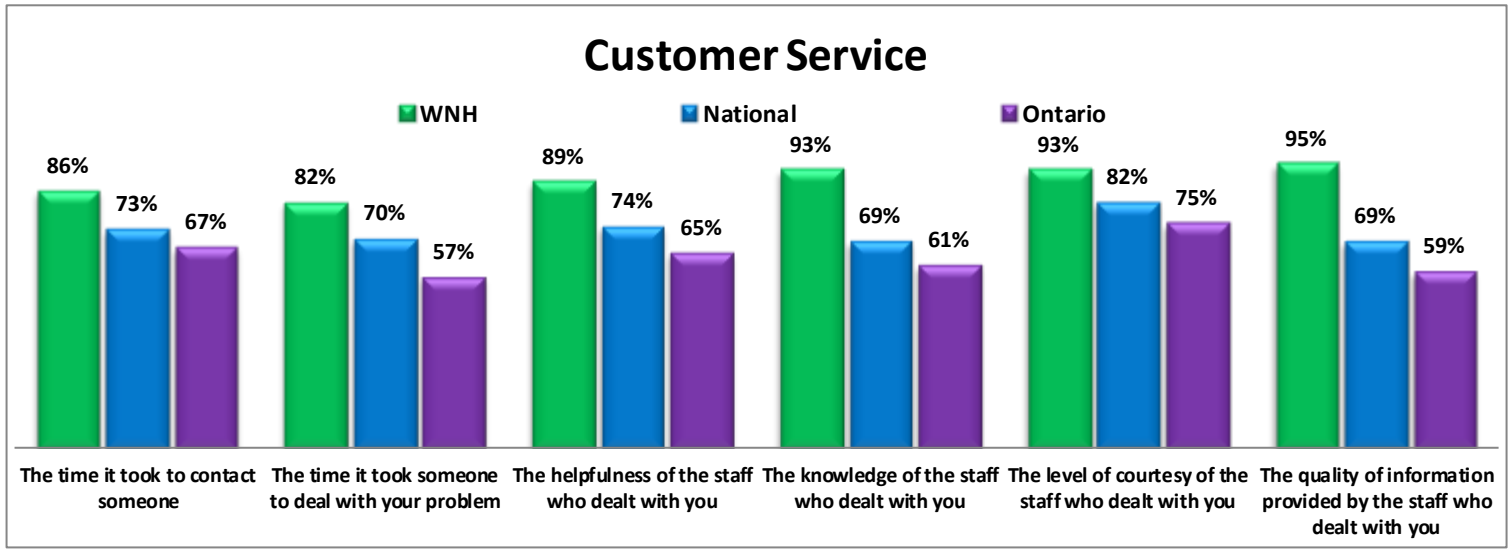
This performance measure is not defined in the EB-2010-0379 ROB-SA March 5, 2014 document. First contact resolution is an outcome base measurement which is affected by: type of problem, competency levels of staff, empowerment levels of staff, and organization culture to name a few.

Your 2014 survey gives you the following information from respondents:

1- Satisfaction with the contact experience
2- A problem solved rating
3- A Customer Experience Performance rating (CEPr)

Satisfaction with the contact experience

When there are problems, how they are handled can validate or invalidate a customer's perception about the utility's competency in handling the problem, and in running the operation. Here is how Customers, who contacted your LDC, rated their one-on-one transaction.



Base: total respondents who contacted the utility

Customer expectations are on the rise and continue to change. Customers expect their utility to have customer care practices and services that are in-line with any other organization that is important to their everyday life. Setting realistic expectations and consistently delivering to those expectations are keys to higher levels of Customer satisfaction. The setting of customer expectations is tough, but the harder part is to deliver consistency.

Overall satisfaction with most recent experience			
	WNH	National	Ontario
Top 2 Boxes: 'very + fairly satisfied'	92%	75%	62%

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?" 82% of your LDC's respondents said the problem was solved. The Ontario benchmark rating is 61%.

Customer Experience Performance rating (CEPr)

What do customers anticipate contact will be with their local utility when they have a problem? Will it be adversarial, or cooperative, or pleasant, etc. High numbers in CEPr indicate that a large majority of customers would agree that their next contact will be a good or positive one.

Customer Experience Performance rating (CEPr)			
	WNH	National	Ontario
CEPr: all respondents	86%	82%	79%

Base: total respondents

EB-2010-0379 ROB-SA: Customer Focus – Service Quality

The three performance measures identified are all time based measures. They 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. In addition to time, there are other dimensions of Service Quality that Customers value.

Customer Service Quality			
Top 2 boxes, 'strongly + somewhat agree'	**WNH**	**National**	**Ontario**
Deals professionally with customers' problems	88%	82%	78%
Pro-active in communicating changes and issues affecting Customers	81%	74%	73%
Quickly deals with issues that affect customers	85%	79%	74%
Customer-focused and treats customers as if they're valued	83%	74%	72%
Is a company that is 'easy to do business with'	87%	79%	75%
Cost of electricity is reasonable when compared to other utilities	66%	60%	55%
Provides good value for money	76%	67%	63%
Delivers on its service commitments to customers	87%	84%	82%

Base: total respondents with an opinion

EB-2010-0379 ROB-SA: Operational Effectiveness

With the exception of the Public Safety measure, which is yet to be defined, performance measures would typically take the form of a monitoring and measuring (quantitative) rating. Though customers may not have the benefit of numbers, they do have a perception.

Management Operations			
Top 2 boxes, 'strongly + somewhat agree'	**WNH**	**National**	**Ontario**
Provides consistent, reliable electricity	91%	89%	86%
Quickly handles outages and restores power	87%	86%	83%
Makes electricity safety a top priority for employees and contractors	89%	89%	87%
Operates a cost effective electricity system	77%	69%	62%
Overall the utility provides excellent quality services	87%	83%	80%

Base: total respondents with an opinion

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.

Waterloo North Hydro's UtilityPULSE Report Card®

Performance

	CATEGORY	Waterloo North Hydro	National	Ontario
1	**Customer Care**	**B+**	**B+**	**B**
	Price and Value	B	B	C+
	Customer Service	A	B+	B
2	**Company Image**	**A**	**B+**	**B+**
	Company Leadership	A	B+	B+
	Corporate Stewardship	A	A	B+
3	**Management Operations**	**A**	**A**	**A**
	Operational Effectiveness	A	A	B+
	Power Quality and Reliability	A	A	A
	OVERALL	**A**	**B+**	**B+**

Base: total respondents

Corporate Image

Reputation, image, brand have to be actively managed. Positive impressions beget positive perceptions. Marketing communication includes positioning the utility in a way that makes customers want your utility and its services. Every utility has a brand, why not have the brand you want?

Attributes strongly linked to a hydro utility's image			
	WNH	National	Ontario
Is a respected company in the community	88%	81%	78%
A leader in promoting energy conservation	82%	78%	77%
Keeps its promises to customers and the community	86%	79%	76%
Is a socially responsible company	84%	78%	77%
Is a trusted and trustworthy company	88%	82%	77%
Adapts well to changes in customer expectations	77%	71%	68%
Is 'easy to do business with'	87%	79%	75%
Provides good value for your money	76%	67%	63%
Overall the utility provides excellent quality services	87%	83%	80%
Operates a cost effective hydro-electric system	77%	69%	62%

Base: total respondents with an opinion

Customers, as human beings, are both rational and emotional. The rational side of the customer holds the LDC accountable for doing its job (as contracted), thereby fulfilling the customer's basic needs. The emotional side of the customer is about fulfilling expectations. Meeting rational needs – at best – gets the customer to a neutral state and at worst creates dissatisfaction. Emotional needs, when met, assuming base level rational needs are met, can move a customer from neutral to higher levels of satisfaction. The

industry is obsessed with rational concerns about customer behaviour, but the real motivation for customer behaviour is emotional, not rational.

What do customers think about electricity costs?

Ask a utility customer – anywhere in the province of Ontario – what do they think about electricity, there is a very high probability they will say electricity costs are too high or too expensive. For customers who said that they had a billing problem in the last 12 months, and stated that the problem was "high bills" or "high rates or charges", there was very little variability between customers who could be called Secure, Favourable, Indifferent or At Risk. There was also very little variability between age groupings or income groupings.

Our survey database shows 50% more customers in 2014 citing complaints with "high bills" or "high rates or charges" than in 2010. There is a growing concern over electricity costs, especially as it relates to its portion of a household budget. This means the industry needs to monitor "ability to pay".

Is paying for electricity a worry or major problem …			
	WNH	**National**	**Ontario**
Not really a worry	69%	69%	59%
Sometimes I worry	19%	20%	26%
Often it is a major problem	5%	7%	11%
Depends	5%	3%	2%

Base: total respondents

Supplemental Insights

Recognizing that customers' interests and needs continue to shift, we have provided data and insights, on a number of subjects such as e-care, e-billing, conservation and more.

Electric Industry Knowledge & SMART Grid

Beyond knowing that they need electricity to maintain their day to day activities, does the average person feel that they are actually knowledgeable about the electric utility industry?

Knowledge level about the electric utility industry	
	Ontario
Extremely knowledgeable	2%
Very knowledgeable	11%
Moderately knowledgeable	47%
Slightly knowledgeable	26%
Not very knowledgeable	14%
Don't know	1%

Base: total respondents in the Ontario Benchmark survey

Two-thirds (60%) of those polled in the Ontario Benchmark survey considered themselves moderately to extremely knowledgeable about the electric industry.

While it is evident that the SMART grid is still not a much talked about concept, only 34% have a basic or good understanding of what it is, oddly enough, 60% still think that it is important to pursue SMART grid implementation. It is also clear that the majority of respondents are very + somewhat supportive of the utility working with neighbouring utilities on SMART grid initiatives.

Level of knowledge about the SMART Grid	
	Ontario
I have a fairly good understanding of what it is and how it might benefit homes and businesses	9%
I have a basic understanding of what it is and how it might work	25%
I've heard of the term, but don't know much about it	36%
I have not heard of the term	29%
Don't know	1%

Base: total respondents in the Ontario Benchmark survey

Efforts to reduce energy consumption

Do customers believe there is a real pay-off for trying to reduce their energy consumption? Does this impact overall efforts to reduce consumption? Respondents were asked *"How active have you been in trying to reduce your electricity consumption?"* (Base: total respondents in the Ontario Benchmark survey)

- 94% feel they are "very + somewhat active" in trying to reduce electricity consumption, and
- 81% of those do believe their efforts have resulted in reduced energy consumption, of which
- 44% estimate that they were able to offset an energy consumption reduction of more than 10%, and
- 72% believe that these efforts translated to savings on their electricity bills.

Level of Activity in trying to reduce electricity consumption	
	Ontario
Very active	52%
Somewhat active	42%
Neither proactive or inactive	0%
Not active	2%
Not very active	3%

Base: total respondents in the Ontario Benchmark survey

Estimate of percentage reduction in consumption	
	Ontario
1 – 2 %	5%
3 – 5 %	10%
6 – 8 %	4%
9 – 10 %	15%
More than 10%	44%
Don't know	21%

Base: total respondents in the Ontario Benchmark survey whose active efforts have reduced consumption

Active efforts have reduced energy consumption

81%

16%

Base: total respondents in the Ontario Benchmark survey who have been active in trying to reduce energy consumption

Efforts to conserve have translated into savings on your electricity bill

72%

24%

Base: total respondents in the Ontario Benchmark survey whose active efforts have reduced consumption

Energy Conservation & Efficiency

Energy efficiency can be broken down into two areas: *better use of energy through improved energy-efficient technologies;* and *energy saving through changes in customer awareness and behaviour.*

Efforts to conserve energy				
Ontario LDCs	**Yes**	**No**	**Already Done**	**Don't Know**
Install energy-efficient light bulbs or lighting equipment	19%	9%	70%	1%
Install timers on lights or equipment	12%	50%	35%	2%
Shift use of electricity to lower cost periods	22%	17%	58%	3%
Install window blinds or awnings	12%	27%	60%	2%
Install a programmable thermostat	13%	25%	60%	2%
Have an energy expert conduct an energy audit	9%	71%	16%	4%
Removing old refrigerator or freezer for free	14%	44%	38%	4%
Join the peaksaverPLUS™ program	15%	49%	21%	16%
Replacing furnace with a high efficiency model	12%	33%	52%	4%
Replacing air-conditioner with a high efficiency model	14%	38%	44%	4%
Use a coupon to purchase qualified energy saving products	35%	39%	22%	5%

Base: An aggregate of respondents from 2014 participating LDCs

E-care and E-billing

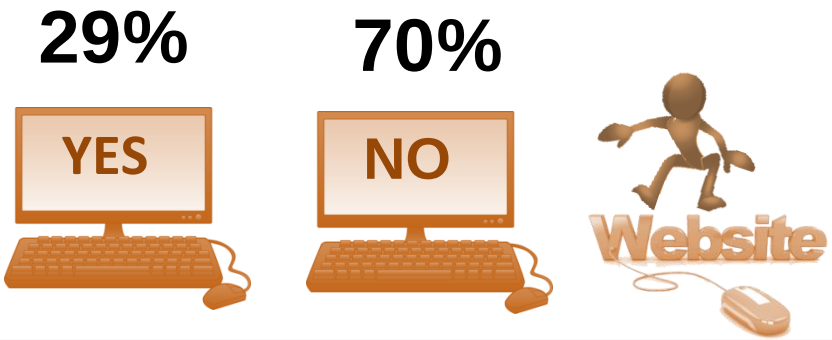
Technology – specifically the internet—has allowed people access to far more information than ever before and the ability to do more than ever before.

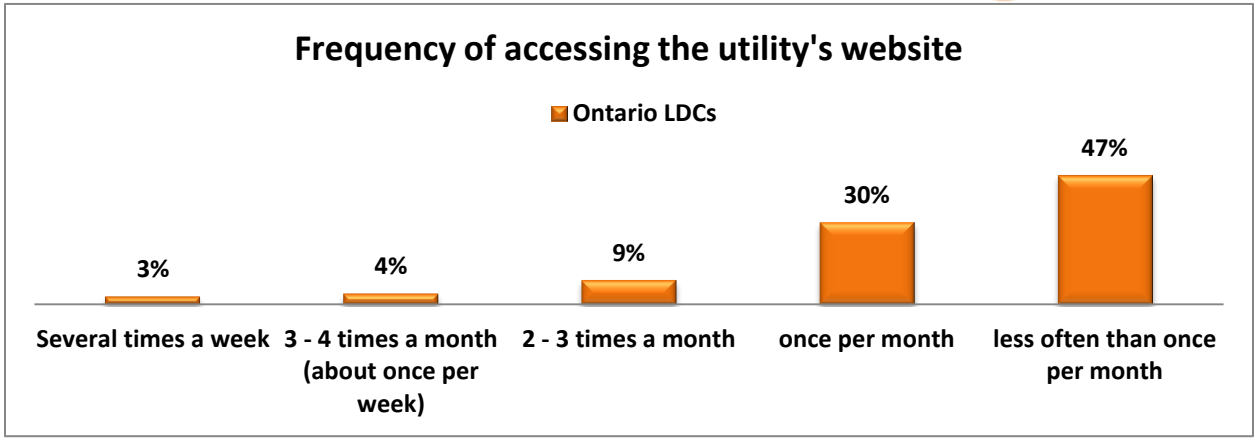
Do you have access to the internet?	
	Ontario LDCs
Yes	87%
No	13%

Base: An aggregate of respondents from 2014 participating LDCs

Over the past six months have you accessed your local utility website?

Base: An aggregate of respondents from 2014 participating LDCs





Base: An aggregate of respondents from 2014 participating LDCs

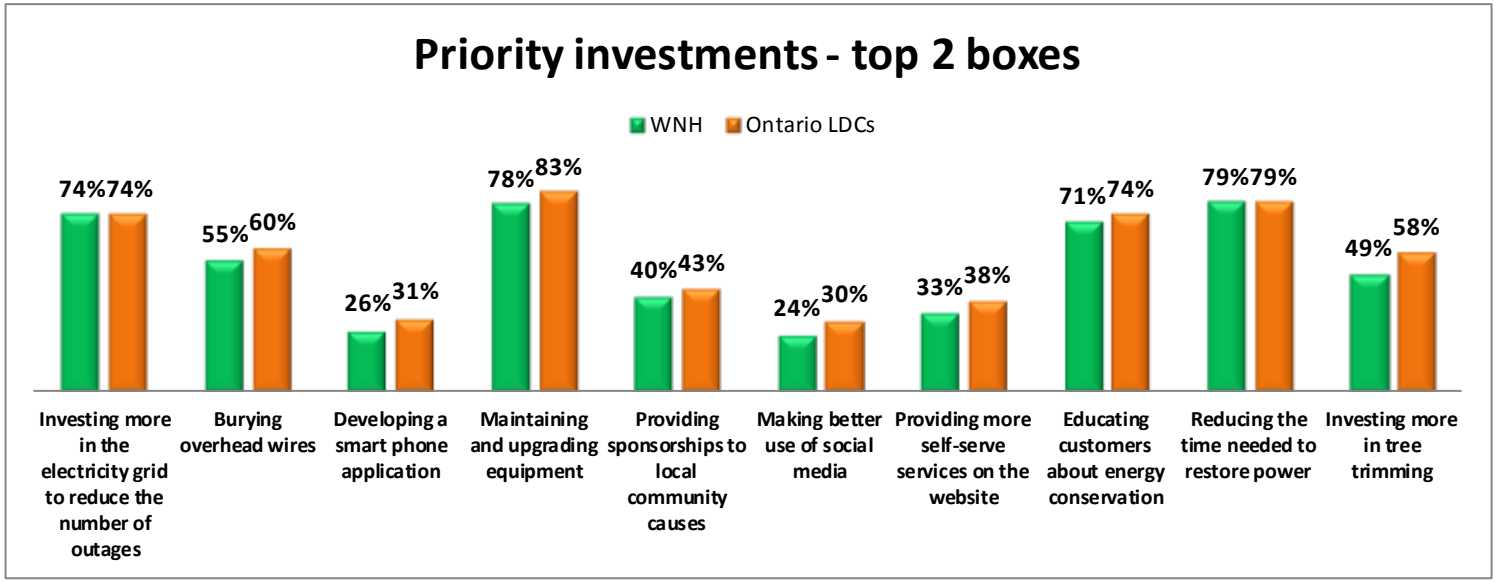
Likelihood of using the internet for future customer care needs for things such as:	
Top 2 Boxes: 'very + somewhat likely'	**Ontario LDCs**
Setting up a new account	31%
Arranging a move	38%
Accessing information about your bill	55%
Accessing information about your electricity usage	54%
Accessing energy saving tips and advice	45%
Accessing information about Time Of Use rates	51%
Maintaining information about your account or preferences	51%
Paying your bill through the utility's website	32%
Getting information about power outages	47%
Arranging for service	40%

Base: An aggregate of respondents from 2014 participating LDCs

As society becomes increasingly more familiar with technology it will become a more popular medium for giving and receiving information. One could also say, demographics will also put more pressure on the technology channels. Unfortunately, customers adopt technology on their own timetable. This causes the utility to continue to improve existing channels while building the technological channels wanted by some today, but by the year 2020, demanded by many. Will your utility be ready?

Priority Investments

While regulation and reliability are top concerns in the utility industry, aging infrastructure is now a top operational concern. Customers agree with industry insiders that infrastructure renewal is a high priority. This year, respondents were asked for their views about prioritizing investments.



Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local

Some findings shown above correlate with some of the suggestions made by respondents on things the utility could do to improve. Percentage of comments received from all Ontario respondents were:

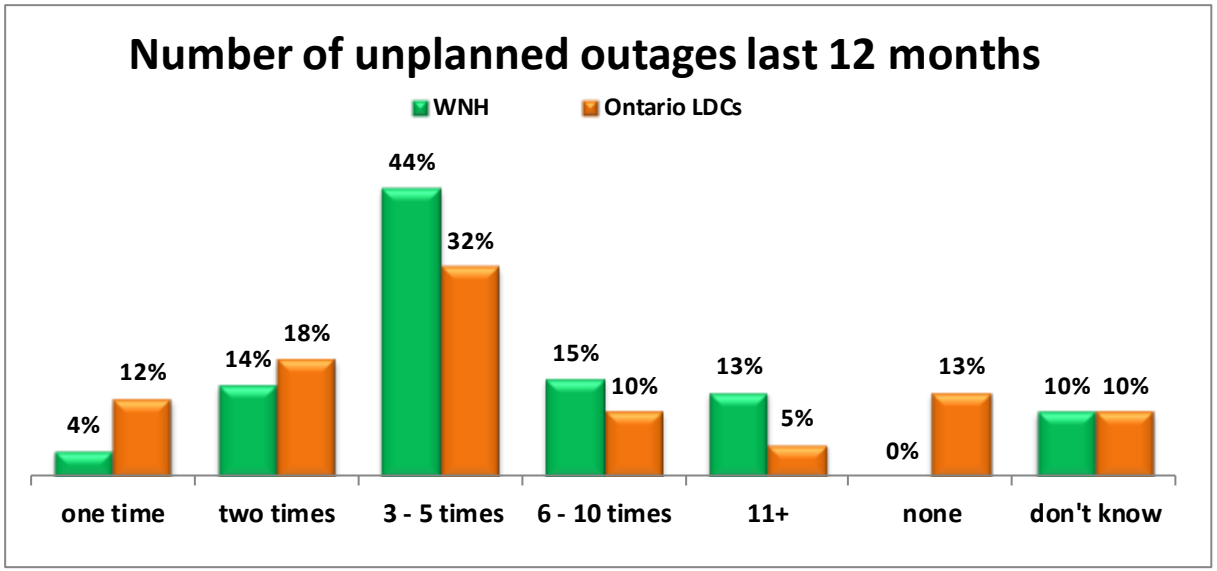
- 14% improve reliability (10% in 2010)
- 11% better maintenance (3% in 2010)

- 10% better communication (7% in 2010)

Outage Management

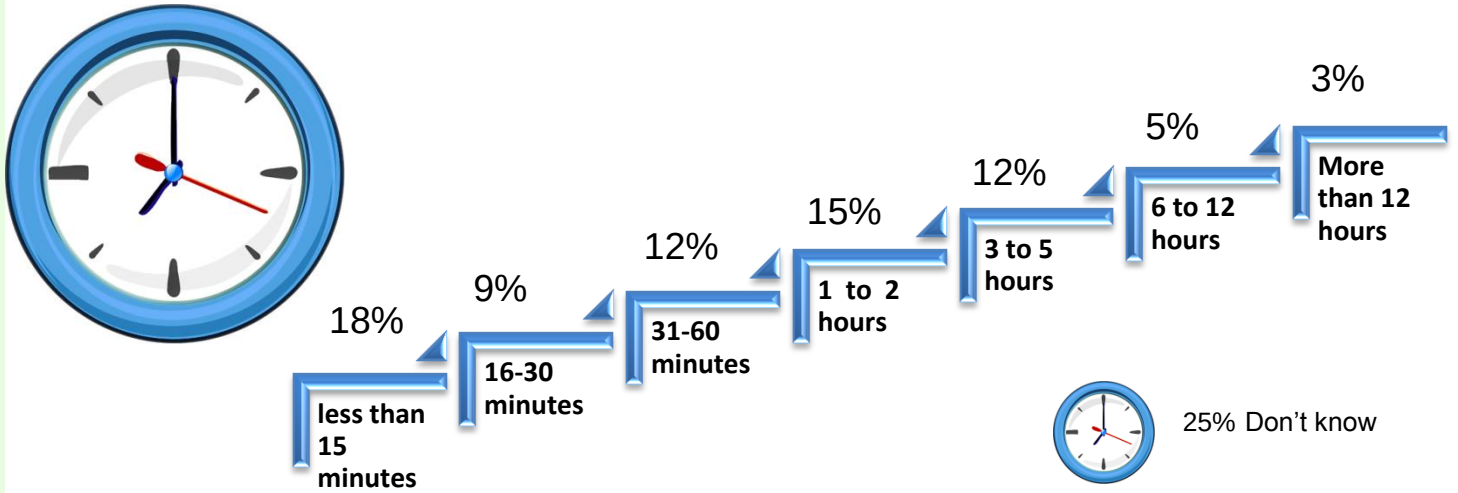
Whether an outage is planned or unplanned, the reality is that it is going to cause disruption and inconvenience under best case scenario and under worst case scenarios there could be safety and financial consequences.

However, one thing for certain, no matter what the scenario happens to be, customers are expecting their utility to keep them continually updated on the status of outages. Most importantly, and top priority, is to know the estimated restoration time. They also want to know the cause of the outage because they do not want to be a frequent outage customer.



Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local utility

When an unplanned outage occurs, how long, on average, is the outage?



Base: 90% of total respondents from the local utility

How a utility chooses to handle, manage and communicate with customers during an outage situation does affect customers' satisfaction with their utility. Customers want timely, accurate and relevant information about an outage and customers expect a utility to use various communication channels to ensure their message is getting out there. This means not only obtaining information via the call centre and IVR but customers have increasing expectations for proactive two-way communication through social media, utility websites and modern communication devices (e.g. tablets, smartphones) and apps.

Inability to provide the above information accurately and in a timely manner will result in customer complaints, increased call volumes to your call centres, create unwanted public and media attention, and negatively impact customer satisfaction.

Utility's effectiveness during an unplanned outage		
Top 2 Boxes: 'very + somewhat effective'	**Ontario LDCs**	**WNH**
Responding to questions	61%	62%
Providing a reason for the outage	61%	63%
Providing an estimate when power will be restored	60%	66%
Responding to the power outage	81%	83%
Restoring power quickly	85%	86%
Communicating updates periodically	64%	68%
Posting information to the website	35%	34%
Using media channels for providing updates	53%	60%

Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local utility

On December 20, 2013, a severe ice storm struck the central and eastern portions of Canada and the northeastern United States. The storm's devastation caused major damage to utility distribution lines, towers, transformers, poles and entire substations and resulted in large scale outages and blackouts

for long periods of time. The data suggests that customers are both tolerant and understanding when major outages take place.

Did you have a power outage during the ice storm in December 2013?

Base: total respondents

59%

29%

Percentage of Respondents who contacted their utility about the ice storm power outage	
	WNH
Yes	13%
No	85%

Base: total respondents affected by the ice storm

WNH Length of outage (during Ice Storm 2013)							
Less than 2 hours	2 – 4 hours	4+ hours or ½ day	12-18 hours or ½ - ¾ day	19-24 hours or 1 day	1 to 1.5 days	1.6 to 2 days	More than 2 days
14%	16%	32%	8%	4%	5%	1%	2%

Base: total respondents affected by the ice storm

Using social media and multi-channel communication modes still appear to be the exception when it comes to customers contacting their utilities. Results from this year's survey indicate that the telephone is still the most used and the preferred method of contact. Overall, 87% of all Ontario respondents affected by the ice storm who informed their local utility they were experiencing a power outage did so via telephone.

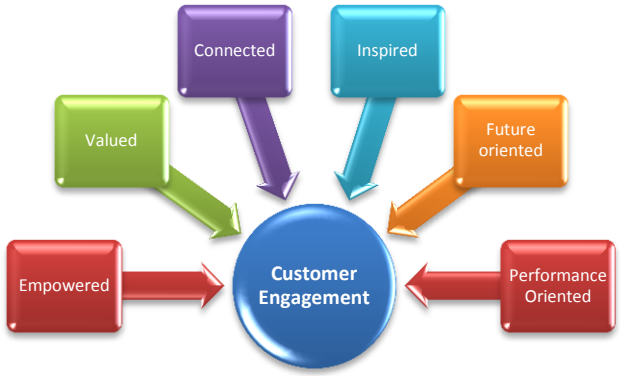
In your view, what is an acceptable period of time to go without electricity in situations like the ice storm?

Base: total respondents affected by the ice storm

•None (the power shouldn't be going out)	5%
•Less than 2 hours	6%
•2 - 4 hours	17%
•4+ hours or 1/2 day	22%
•12 - 18 hours or 1/2 day to 3/4 day	12%
•19 - 24 hours or 1 day	11%
•1 to 1.5 days	4%
•1 .6 to 2 days	3%
•More than 2 days	2%

Customer Centric Engagement Index (CCEI)

The EB-2010-0379 ROB-SA report includes the following: "better engage with their customers to better understand and respond to their needs…" Conducting surveys (like this one), holding town hall meetings, focus groups, etc. are examples of engaging your customers. We call this an activity based definition of engagement. Asking 100 people to complete a survey is an engagement activity. 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 suggests that there is a high level of goodwill amongst your customers – this is important for two reasons. First when something goes awry for the utility, goodwill helps the utility to be resilient. Second, goodwill encourages active participation in requests to participate in engagement activities or program offerings from the utility.

Utility Customer Centric Engagement Index (CCEI)			
	WNH	**National**	**Ontario**
CCEI	83%	79%	76%

Base: total respondents

In a world of chaos and confusion what will a customer do? Find someone to help. In the electricity industry, the vast majority of customers turn to, and rely on, their local utility. Knowing that customers will turn to their electric utility requires utilities to really know their customers. Not easy when customer expectations continue to shift.

The shift is on. 15 years ago a utility could think about their customers in terms of usage, now they have to think about them in terms of personas (i.e., customer type). Currently, customer segmentation, for most utilities, consists of a number of "personas". While this may be adequate today, in order to achieve high customer participation in programs and to optimize business processes there will be a need for granular targeting of communications.

Most utilities are quite comfortable “pushing” out communications in a one-way world. However, the shift is on because the new channels are 2-way; even without the new channels customers are expecting 2-way dialogue. The impact on a utility’s marketing-communications is significant.

Value is what a customer perceives they get in exchange for what they give up. The real challenge is educating customers on the value they receive. In the absence of a value proposition the primary thing people will talk about is cost.

We recommend having meaningful two-way dialogue with employees (and others) to leverage the results from your 2014 customer satisfaction survey derived from speaking with 407 Waterloo North Hydro customers [April 28 - April 30, 2014]. The electric utility business has demanding customers with high expectations.

UtilityPULSE
Sid Ridgley
Simul/UtilityPULSE
Email: sidridgley@utilitypulse.com or sridgley@simulcorp.com
June, 2014

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Satisfaction (pre & post)

Customer Satisfaction is an intangible as it is the sum total of real experience, or perceptions of what an experience may be like when a customer is dealing with their LDC. Satisfaction is not a program, it is an outcome. Satisfaction, as a measurement, is a part of the Ontario Energy Board's Performance Measurement for Electricity Distributors: A Scorecard Approach (Ontario Energy Board, EB-2010-0379, March 5, 2014).

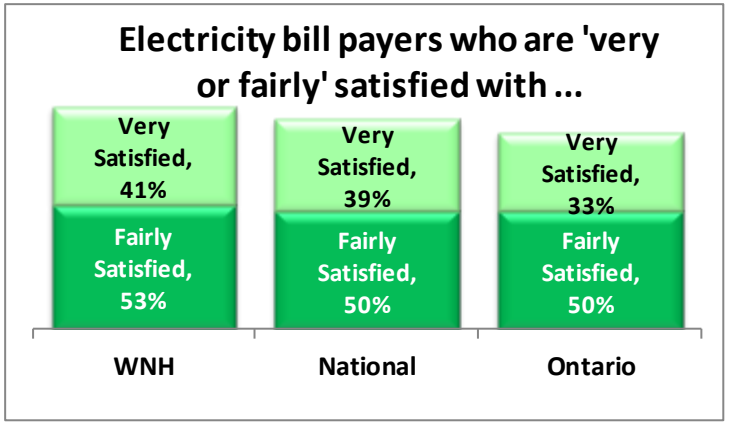
Satisfaction is an effectiveness rating of whether the objectives of process(s), service(s) or activities have been achieved. This makes Satisfaction, as a Scorecard measure, a rating that prompts discussion, planning, investing, and being connected to the Customer in order to effect an improved rating.

"Telephone calls answered on time" is an efficiency rating or a rating to assist in determining whether the right amount of resources have been used to deliver a process, service or activity. ***Efficiency*** *is about achieving objectives with the minimum amount of people, time, money and other resources.* For utilities reducing costs of delivering, supporting or maintaining a service is often the main driver for improving operational efficiency. While being obsessed with costs is important, the customer is also obsessed with quality. Finding the right balance between efficiency and effectiveness measures is difficult.

Effectiveness *ratings are measures that keep the organization and its people more future focused than efficiency ratings.* This is not to say that efficiency ratings are not important, they are. The customer does care that their problem was solved and that the telephone was answered in less than 30 seconds. After 16 years of continued research with electric utility customers, expectations of their electric utility go far beyond "keeping the lights on", "billing me properly", and "restoring power quickly". However, acting quickly, yet not dealing with the customer concern, ultimately translates into a poor experience.

- **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…					
	2014	2013	2012	2011	2010
WNH	95%	-	-	94%	-
National	89%	90%	88%	89%	86%
Ontario	83%	90%	86%	84%	80%

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

As noted in previous reports:

Our research has found that in the utility industry environment, especially in Ontario, where most utilities are municipally owned, satisfaction is a strong driver of customer trust which in turn can impact employee engagement. The satisfaction of public customers/citizens both improves employee engagement and is improved by it.

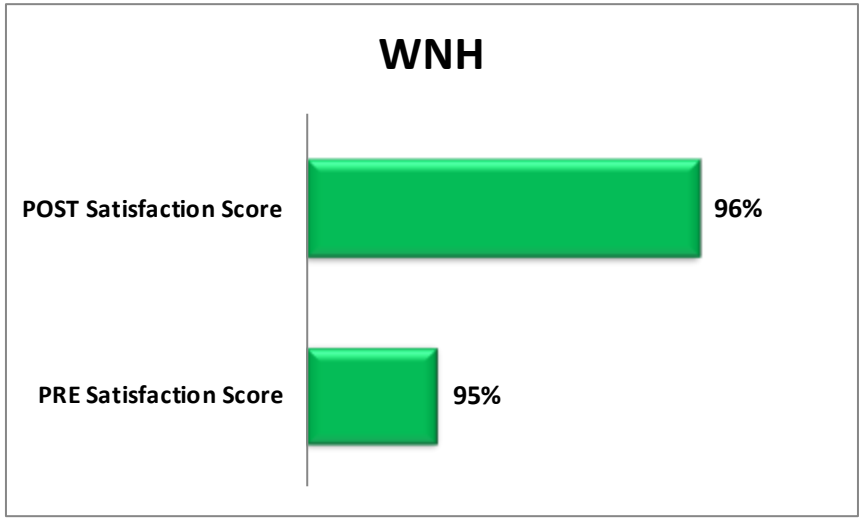
The synergy which exists between customer satisfaction and employee engagement has enormous implications for the performance of those who make up a utility's workforce. Many service personnel

are motivated by their desire to help others; succeeding at this task (and having clear evidence that they have satisfied their “customers”) can help keep them motivated and engaged.

Satisfied employees, who are working in an organizational culture which promotes service excellence is critical, too. Many companies make the mistake of measuring only customer satisfaction. Measuring organizational culture is the key because employees play an integral role in the customer relationship. Employees do more than deliver customer service – they personalize the relationship between customer and the utility.

Creating loyal customers and loyal employees go hand in hand and it is the leaders of organizations that must create this alignment. Implementing service excellence works best when its principles are well understood and widespread collaboration is encouraged by management’s visible actions. In our experience, this is best achieved by driving change from the ‘top down’ at the same time as inspiring and fully engaging employees from the ‘bottom up’.

In the Simul/UtilityPULSE Customer Satisfaction survey, the overall satisfaction question is asked both at the beginning (PRE) and the end (POST).



Base: total respondents

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.

SATISFACTION SCORES – Electricity customers' satisfaction			
Top 2 Boxes: 'very + fairly satisfied'	**WNH**	**National**	**Ontario**
PRE: Initial Satisfaction Scores	95%	89%	83%
POST: End of Interview	96%	87%	80%

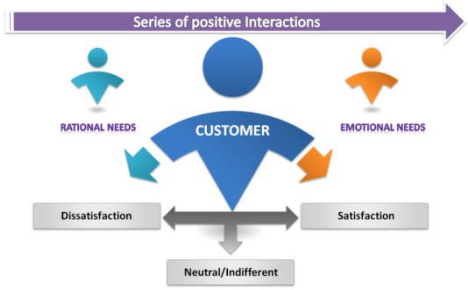
Base: total respondents

SATISFACTION SCORES – Electricity customers' satisfaction					
Top 2 Boxes: 'very + fairly satisfied'	**2014**	**2013**	**2012**	**2011**	**2010**
PRE: Initial Satisfaction Scores	95%	-	-	94%	-
POST: End of Interview	96%	-	-	95%	-

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 (as contracted), thereby fulfilling the customer's basic needs. The emotional side of the customer is about fulfilling expectations. Meeting rational needs – at best –

gets the customer to a neutral state and at worst creates dissatisfaction. Emotional needs, when met, (assuming base level rational needs are met), can move a customer from neutral to higher levels of satisfaction.



Attributes strongly linked to a hydro utility's image			
	WNH	National	Ontario
RATIONAL NEEDS			
Provides consistent, reliable electricity	91%	89%	86%
Quickly handles outages	87%	86%	83%
Accurate billing	89%	83%	77%
Provides good value for money	76%	67%	63%
Is 'easy to do business' with	87%	79%	75%
Operates a cost effective hydro-electric system	77%	69%	62%
EMOTIONAL NEEDS			
Deals professionally with customers' problems	88%	82%	78%
Provides information to help customers reduce electricity costs	82%	77%	75%
Pro-active in communicating changes	81%	74%	73%
Quickly deals with issues that affect customers	85%	79%	74%
Adapts well to changes in customer expectations	77%	71%	68%
Overall the utility provides excellent quality services	87%	83%	80%

Base: total respondents with an opinion

Customer Service

Customer service is a series of activities grouped in processes designed to provide customers and other stakeholders with information or assistance which address customers' needs. Those needs are far more diverse than they have ever been thereby, compelling customer service to change in response to increasing customer demands. Given the increase in fragmentation of customer type and customer problems, the need for building a customer-centric culture in line with customers' needs, preferences and expectations is important when customer satisfaction is important to the organization.

Customers don't want to be passed from CSR to CSR, unnecessary bureaucracy, to keep repeating why they are calling, to duplicate information already given, or to have to understand the inner workings of the utility organization. Customers are expecting an intelligent and personalized experience.

Respondents, who contacted their utility via the telephone or in-person, were asked about six aspects of their most recent experience with a representative from Waterloo North 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

Base: total respondents who contacted the utility

Satisfaction with Customer Service			
Top 2 Boxes: 'very + fairly satisfied'	**WNH**	**National**	**Ontario**
The time it took to contact someone	86%	73%	67%
The time it took someone to deal with your problem	82%	70%	57%
The helpfulness of the staff who dealt with you	89%	74%	65%
The knowledge of the staff who dealt with you	93%	69%	61%
The level of courtesy of the staff who dealt with you	93%	82%	75%
The quality of information provided by the staff who dealt with you	95%	69%	59%

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.

Satisfaction with Customer Service via electronic means	
Top 2 Boxes: 'very + fairly satisfied'	**Overall**
The timeliness of response	68%
The quality of information provided	65%
The helpfulness of the information	63%
The level of professionalism	72%

Base: data from the full 2014 database

The customer service representative's role is essential to effectively handling customer issues/incidents/problems/requests. Having a skilled, trained representative is vital for a positive customer experience when a customer decides to make contact. Respondents who did have contact with a utility representative within the last 12 months were asked about their overall satisfaction with *that* experience.

Overall satisfaction with most recent experience – Telephone & In-person			
	WNH	**National**	**Ontario**
Top 2 Boxes: 'very + fairly satisfied'	92%	75%	62%

Base: total respondents who contacted the utility

Overall satisfaction with most recent experience – Electronic means	
	Overall
Top 2 Boxes: 'very + fairly satisfied'	68%

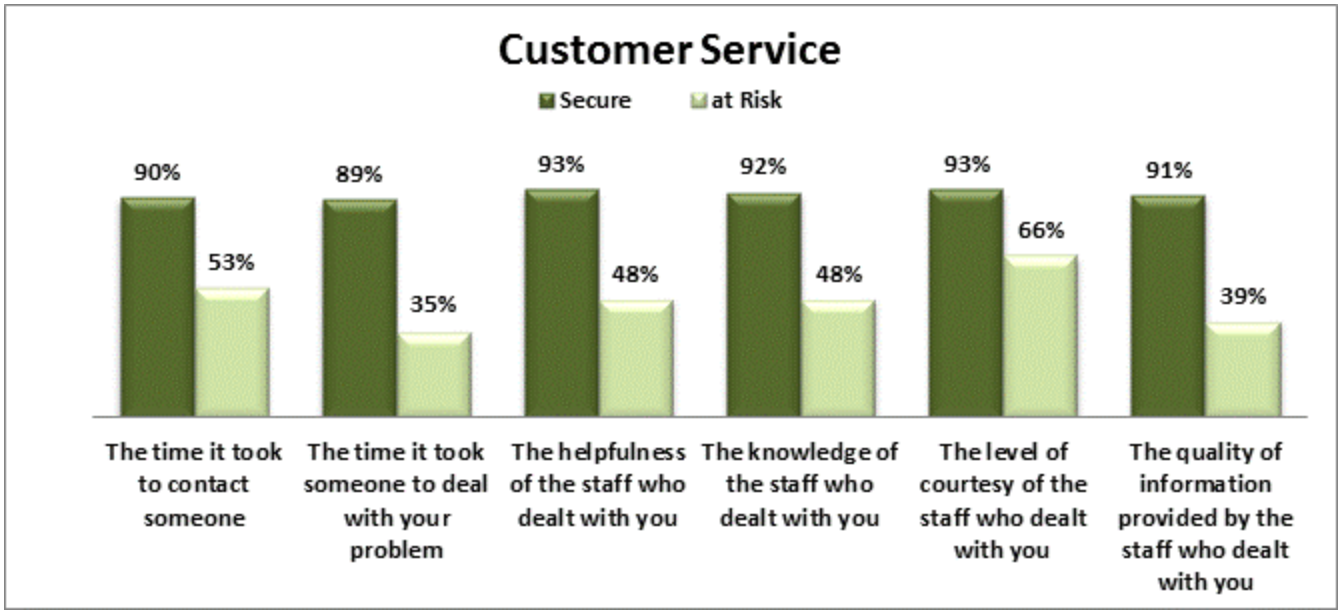
Base: data from the full 2014 database

Customers value speed and responsiveness especially as it relates to solving problems. The more flexibility you're able to offer and the more empowerment given to employees, the better able employees will be to meet those "speed" and "responsiveness" requirements. Customers benefit, too, when employees are able to resolve problem issues "on the spot" instead of having to "talk to my manager."

SATISFACTION SCORES – Electricity customers' satisfaction			
	Overall	**Problems Solved**	**Problems Not Solved**
Top 2 Boxes: 'very + fairly satisfied'	90%	90%	60%
Bottom 2 Boxes: 'fairly + very dissatisfied'	7%	7%	35%

Base: data from the full 2014 database

Empowerment is the backbone of the service recovery principle. In the face of error or problems, acting quickly and decisively, being empowered and turning a dissatisfied customer into a satisfied one tends to have a positive impact.



Base: data from the full 2014 database

Satisfaction with Customer Service			
Top 2 Boxes: 'very + fairly satisfied'	**Overall**	**Recent Experience Satisfied**	**Recent Experience Dissatisfied**
The time it took to contact someone	75%	86%	43%
The time it took someone to deal with your problem	68%	85%	19%
The helpfulness of the staff who dealt with you	76%	90%	33%
The knowledge of the staff who dealt with you	73%	88%	32%
The level of courtesy of the staff who dealt with you	82%	92%	56%
The quality of information provided by the staff who dealt with you	71%	88%	21%

Base: data from the full 2014 database

The service experience has a profound impact on customer service scores. The data shows a direct correlation between a satisfied customer experience and the ratings given across all six measures of person-to-person customer service. While there are a lot of things utilities cannot control, one thing they can control is the quality of service they provide.

Important attributes which shape perceptions about service quality			
	WNH	National	Ontario
Deals professionally with customers' problems	88%	82%	78%
Is pro-active in communicating changes and issues which may affect customers	81%	74%	73%
Quickly deals with issues that affect customers	85%	79%	74%
Customer-focused and treats customers as if they're valued	83%	74%	72%
Is a company that is 'easy to do business with'	87%	79%	75%
Cost of electricity is reasonable when compared to other utilities	66%	60%	55%
Provides good value for money	76%	67%	63%
Delivers on its service commitments to customers	87%	84%	82%
Trusted and trustworthy company	88%	82%	77%
Respected company in the community	88%	81%	78%
Provides information and tools to help manage electricity consumption	81%	77%	75%
Adapts well to changes in customer expectations	77%	71%	68%

Base: total respondents with an opinion

ICE STORM 2013

On December 20, 2013, a severe ice storm struck the central and eastern portions of Canada and the northeastern United States. The storm's devastation caused major damage to utility distribution lines, towers, transformers, poles and entire substations and resulted in large scale outages and blackouts for long periods of time. The data suggests that customers are both tolerant and understanding when major outages take place.

Did you have a power outage during the ice storm in December 2013?

59%

29%

Base: total respondents

Days after the storm passed through, thousands were left without power as crews worked around the clock in the affected areas, but difficult weather conditions -- including more snow and continued freezing temperatures -- was making power restoration a challenge.

WNH
Length of outage (during Ice Storm 2013)

Less than 2 hours	2 – 4 hours	4+ hours or ½ day	12-18 hours or ½ - ¾ day	19-24 hours or 1 day	1 to 1.5 days	1.6 to 2 days	More than 2 days
14%	16%	32%	8%	4%	5%	1%	2%

Base: total respondents affected by the ice storm

A common communication channel used by customers is their website. Most utilities use their website to publish outage information to customers; timely information posted to your website could reduce the impact on other utility resources.

Percentage of Respondents who contacted their utility about the ice storm power outage	
	WNH
Yes	13%
No	85%

Base: total respondents affected by the ice storm who contacted the utility about the outage during the storm

Some utilities websites provide customers with the start time of the outage, the number of customers impacted by the outage, and an outage map. Storm Centre landing pages on the utilities' websites have become a best practice where outage information is consolidated in one easy to access location. Social media will become increasingly important depending upon the severity of the outage. The reality is social media adoption rates are growing, which means, in time, these channels will become an additional means for providing information.




Using social media and multi-channel communication modes still appear to be the exception when it comes to customers contacting their utilities. Results from this year's survey indicate that the telephone is still the most used and the preferred method of contact. Overall, 87% of all Ontario respondents affected by the ice storm who informed their local utility they were experiencing a power outage did so via telephone.

In your view, what is an acceptable period of time to go without electricity in situations like the ice storm?

Base: total respondents affected by the ice storm

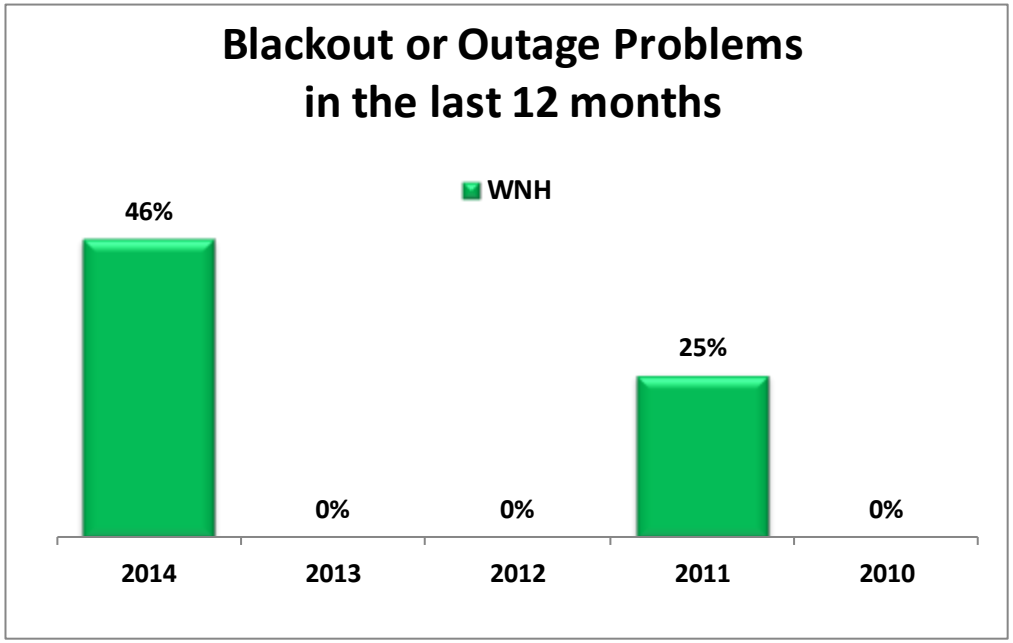
•None (the power shouldn't be going out)	5%
•Less than 2 hours	6%
•2 - 4 hours	17%
•4+ hours or 1/2 day	22%
•12 - 18 hours or 1/2 day to 3/4 day	12%
•19 - 24 hours or 1 day	11%
•1 to 1.5 days	4%
•1 .6 to 2 days	3%
•More than 2 days	2%

During any outage (planned or unplanned) restoring power quickly and safely is a top priority. Consistent and effective communication will drive the customer experience during an outage. If the customer starts to get mixed messages i.e. website versus radio and television news versus public service announcements are not in sync, then a customer could potentially perceive the situation as being not in order and therefore could also question safe and quick restoration. The more disarray the customer senses from mixed communication messages, the more intolerant they will become of the duration of the outage. Consistent updates across all channels will at least provide a sense of security – that the utility is on top of it and working to get things back up and running.

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.

At one time, if the power went off for a few minutes, it was considered annoying and inconvenient. However, with so many devices hooked into the electricity system, even a small power outage can be truly aggravating. 87% of respondents with an opinion agree (top 2 boxes) Waterloo North Hydro "quickly handles outages and restores power".



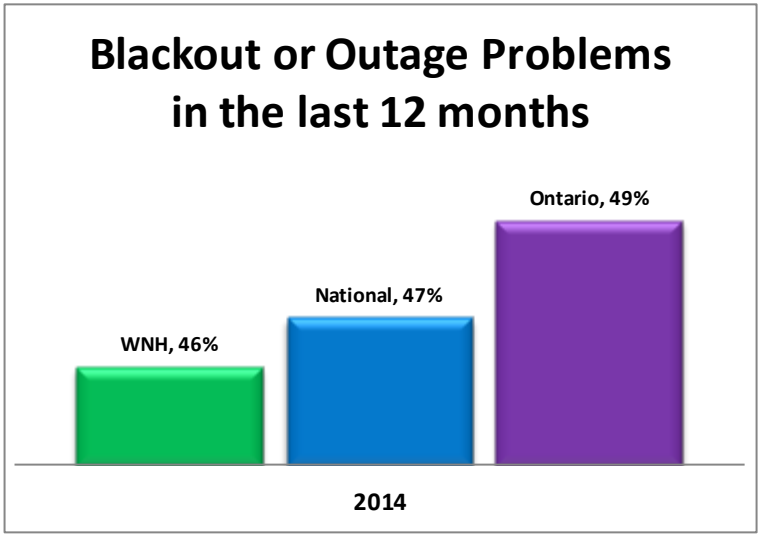
Base: total respondents / (-) not a participant of the survey year

Ideally, no one wants to go without electricity, however it is an inevitability that at some point the power will go out, especially during severe weather related events. During these instances, most customers will be somewhat flexible in their expectation for quick restoration. However, as an outage prolongs and impacts daily routines and when there is an uncertainty as to the expected restoration time, customers begin to become less understanding and more demanding.

Despite a utility's best efforts, there will be times when the power goes off.

Percentage of Respondents indicating that they had a Blackout or Outage problem in the last 12 months			
	WNH	**National**	**Ontario**
2014	46%	47%	49%
2013	-	41%	35%
2012	-	44%	46%
2011	25%	43%	43%
2010	-	45%	41%

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

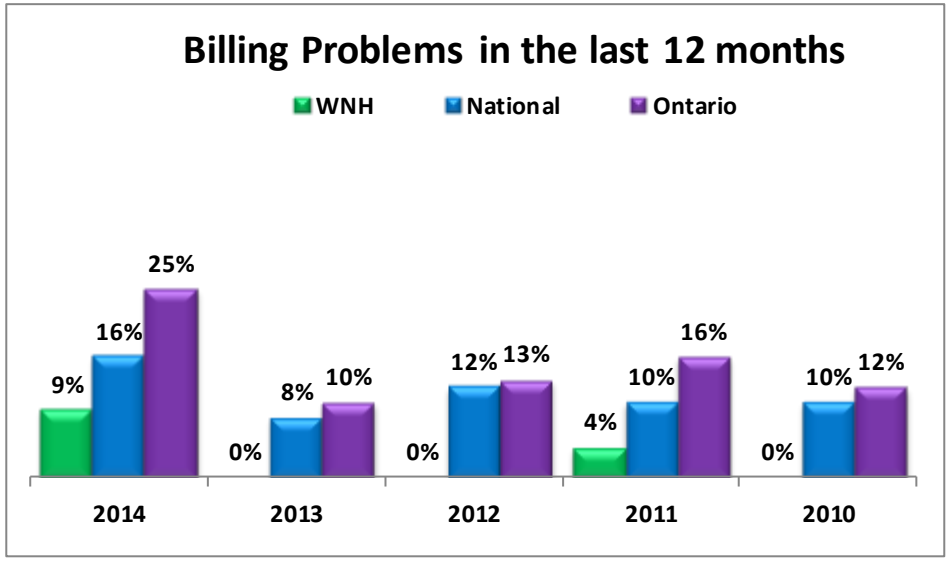


Base: total respondents

For most customers, their bill is the only thing they see (or pay attention to) from their utility provider. It not only tells them how much to pay, it documents their service usage, breaks down the various charges and provides

contact information for customer service. As the principal form of communication between a utility and its customers, utilities cannot underestimate the importance of billing.

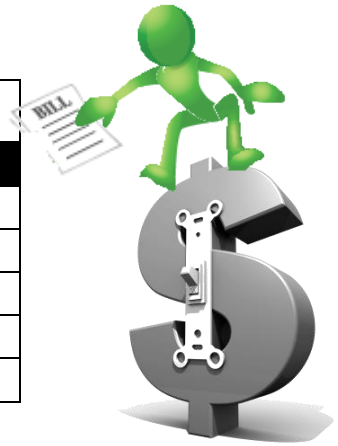
When it comes to billing, customers expect zero-defect delivery. Customers expect timely and accurate billings which they understand. Incorrect information, miscalculated balances, bills that are too difficult to understand result in time logged by your CSR's as well as dissatisfied customers. Improving billing activities has an immediate impact on the revenue streams of a utility in terms of costs associated with managing call center applications.



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

Percentage of Respondents indicating that they had a Billing problem in the last 12 months			
	WNH	National	Ontario
2014	9%	16%	25%
2013	-	8%	10%
2012	-	12%	13%
2011	4%	10%	16%
2010	-	10%	12%

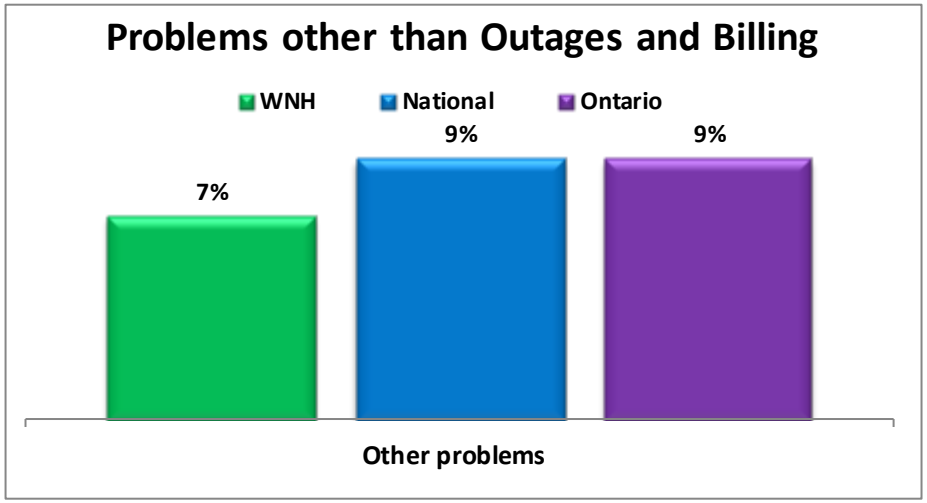
Base: total respondents / (-) not a participant of the survey year



Types of Billing Problems	
	WNH
The amount owed was too high	62%
Complaint about rates or charges	14%
The bill was difficult to understand	8%
The payment made was recorded incorrectly	5%

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, SMART meters and energy conservation are issues which also contribute to inbound call-centre calls.



Base: total respondents

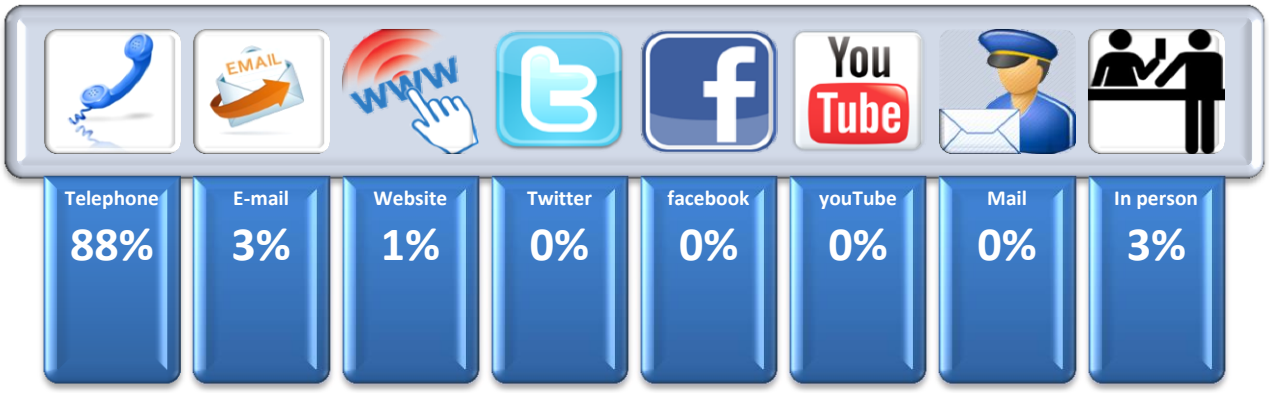
Percentage of Respondents with problems other than billing or power outages in the last 12 months			
	WNH	**National**	**Ontario**
Yes	7%	9%	9%
No	90%	90%	90%

Base: total respondents

The reality is, there will be outages, there will be billing issues and there will be other problems. The key is how the customer is looked after when the problem(s) arises. By understanding the complaint process and customer complaint behaviour, a utility can learn how to reduce the impact of an unfavourable service experience or complaint.

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

Base: data from the full 2014 database



Customers care more about getting their problem solved than they do about following or using the utilities processes. Solving the customer's problem with the first interaction (often called first call resolution) is a driver of perception. Customers want to deal with someone who understands what they are calling about, they want to have access to the correct person to talk to and they expect this person to have the ability to inform and or make decisions to work through the customer's concern. The reality is that customers know we do not live in a perfect world and problems will arise. What customers want however, is to ultimately have their problem solved. When the problem is solved the utility benefits.

Percentage of Respondents who contacted their utility and had their problem solved in the last 12 months			
	WNH	**National**	**Ontario**
Yes	82%	69%	61%
No	15%	26%	36%

Base: total respondents

Attributes describing operational effectiveness			
	Overall Score	Problem Solved	Problem Not Solved
Provides consistent, reliable electricity	90%	88%	82%
Delivers on its service commitments to customers	86%	86%	71%
Accurate billing	85%	83%	66%
Quickly handles outages and restores power	87%	84%	80%
Makes electricity safety a top priority	88%	88%	86%
Uses responsible environmental practices when completing work	85%	85%	75%
Is efficient at managing the hydro-electric system	82%	80%	65%
Is a company that is 'easy to do business with'	85%	83%	64%
Operates a cost effective hydro-electric system	73%	72%	54%
Overall the utility provides excellent quality services	85%	84%	70%

Base: data from the full 2014 database from those respondents with an opinion

Technology is considered by many in the electricity utility industry to be both a blessing and a curse. On one hand, the LDC (and other service providers) can benefit from embracing technology to reduce costs and hopefully improve service thereby, putting control into the hands of the customer. However, technology can enable the customer's dissatisfaction to go viral.

Loyalty levels of customers (i.e., Secure, Favorable, Indifferent, At Risk) do have a different “recall” as it relates to problems encountered.

Bill payers recalling a power failure or outage				
	Secure	**Favorable**	**Indifferent**	**At Risk**
Yes	31%	35%	46%	48%
No	68%	64%	52%	51%

Base: data from the full 2014 database

Bill payers recalling a billing problem				
	Secure	**Favorable**	**Indifferent**	**At Risk**
Yes	4%	6%	15%	46%
No	95%	93%	83%	51%

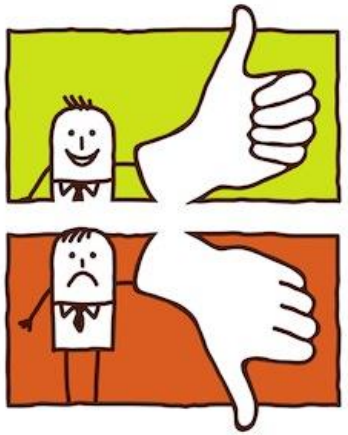
Base: data from the full 2014 database

Bill payers who said their problem was solved				
	Secure	**Favorable**	**Indifferent**	**At Risk**
Yes	92%	79%	73%	35%
No	7%	17%	22%	59%

Base: data from the full 2014 database

Customer Experience Performance rating (CEPr)

Every touch point with customers on the phone, website or in-person influences what customers think and feel about the organization. The key is handling every individual element of an interaction with a customer so that he/she feels good at the end of the whole interaction and the utility achieves its business objectives.



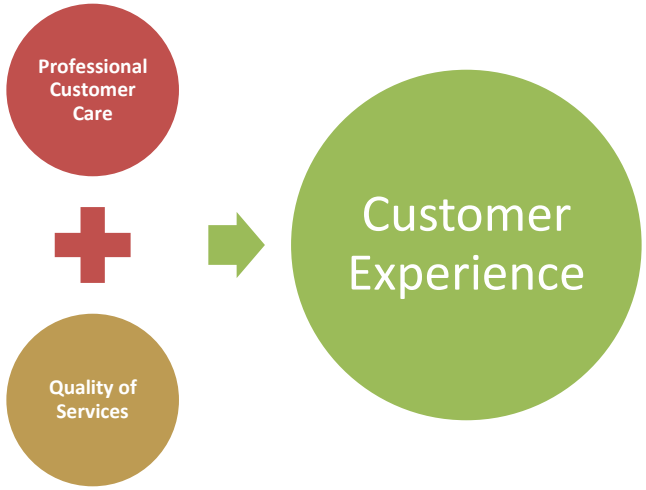
Great experiences occur when all functions of the organization align with one another to achieve the outcomes your customers seek. A good customer experience starts with understanding what your customers care about most and understanding which promises are most important to your customers.

At the heart of the CEPr are 4 central questions:

- Are interactions with the organization professional and productive?
- Is the organization 'easy to deal with'?
- Does the organization effectively meet your needs?
- Does the organization provide high quality services?

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

- Delivering accessible and consistent customer service
- 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)			
	WNH	**National**	**Ontario**
CEPr: all respondents	86%	82%	79%

Base: total respondents

The CEPr (all respondents) for Waterloo North 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 a Waterloo North Hydro professional. However, the balance of respondents is not anticipating a good to excellent experience, and as such could be more challenging to serve.

The CEPr score is what we refer to as an effectiveness rating and is affected by many dimensions of service. While an excellent transaction today creates a positive experience today, the perception created is that future transactions will be excellent too, which is how you want your customers to feel. Of course a negative transaction creates the perception that future transactions will be negative. The key then is to emphasize problem resolution with a "one call" mindset.

The impact of Satisfied or Dissatisfied experiences on some operational attributes			
	WNH	**Recent Experience Satisfied**	**Recent Experience Dissatisfied**
Provides consistent, reliable electricity	91%	91%	83%
Delivers on its service commitments to customers	87%	85%	75%
Accurate billing	89%	89%	67%
Quickly handles outages and restores power	87%	84%	83%
Makes electricity safety a top priority	89%	92%	67%
Uses responsible environmental practices when completing work	87%	90%	75%
Is efficient at managing the hydro-electric system	84%	80%	50%
Overall the utility provides excellent quality services	87%	88%	75%

Base: respondents who have contacted the utility

Customer Centric Engagement Index (CCEI)

The EB-2010-0379 ROB-SA report includes the following: “better engage with their customers to better understand and respond to their needs…” Conducting surveys (like this one), holding town hall meetings, focus groups, etc. are examples of engaging your customers. We call this an activity based definition of engagement. Asking 100 people to complete a survey is an engagement activity.

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 suggests that there is a high level of goodwill amongst your customers – this is important for two reasons. First when something goes awry for the utility, goodwill helps the utility to be resilient. Second, goodwill encourages active participation in requests to participate in engagement activities or program offerings from the utility.

The UtilityPULSE Customer Engagement Index (CCEI) is a metric designed to get a more in-depth look at the attachment a customer has with your LDC and its brand.

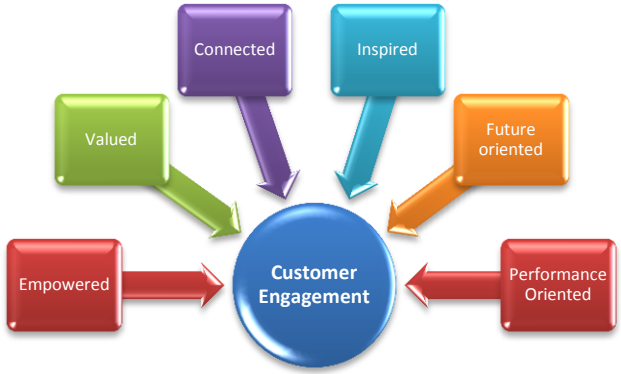
Your Annual UtilityPULSE survey tracks a customer's willingness to continue to do business, and willingness to recommend their local utility. Through a combination of calculations the end result is a Customer Loyalty index. That is, the number of customers that are: At risk, Indifferent, Favourable, Secure. The goal of every enterprise ought to be the creation of more Secure and Favourable customers. We believe that high levels of customer engagement correlate strongly to high levels of Secure and Favourable customer numbers.

We believe that a customer-centric definition of engagement is valuable to individuals, teams and executives in an LDC for determining what needs to be done to ensure that the organization is successful today and successful again tomorrow – in a changed world.

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.

What does customer centric engagement look like?

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



They include:

- Does the utility allow their customers to feel ***empowered*** about their interactions with the company and decisions affecting their electricity usage
- Does the utility give customers the sense of being ***valued***
- Does the utility act in ways which allows customers to stay ***connected***
- Do customers get ***inspired*** by the way the utility conducts business
- Is the utility forward thinking enabling customers to be ***future oriented***
- Does the utility conduct operations in such a way that customers believe that they are truly ***performance oriented*** in achieving goals and results

Utility Customer Centric Engagement Index (CCEI)			
	WNH	**National**	**Ontario**
CCEI	83%	79%	76%

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 concerned about costs than customers who are highly engaged. Customers who are highly engaged are more inclined to look past costs and money issues and use thoughtful analysis to make values-based decisions.

UtilityPULSE Report Card®

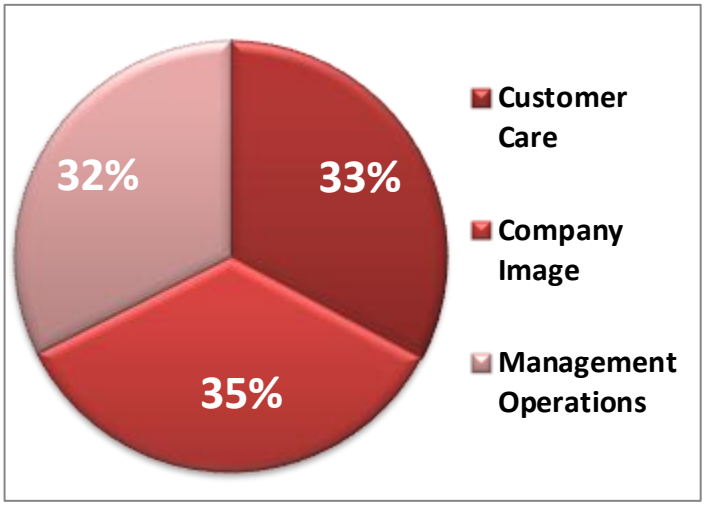
Simul's UtilityPULSE Report Card® is based on tens of thousands of customer interviews gathered over sixteen years. The purpose of the UtilityPULSE Report Card® is to provide electric utilities with a snapshot of performance – on the things that customers deem to be important. Research has identified 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® 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®. 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 Waterloo North Hydro



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.

Waterloo North Hydro's UtilityPULSE Report Card®

Performance

	CATEGORY	Waterloo North Hydro	National	Ontario
1	**Customer Care**	**B+**	**B+**	**B**
	Price and Value	B	B	C+
	Customer Service	A	B+	B
2	**Company Image**	**A**	**B+**	**B+**
	Company Leadership	A	B+	B+
	Corporate Stewardship	A	A	B+
3	**Management Operations**	**A**	**A**	**A**
	Operational Effectiveness	A	A	B+
	Power Quality and Reliability	A	A	A
	OVERALL	**A**	**B+**	**B+**

Base: total respondents

As the UtilityPULSE Report Card® 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.

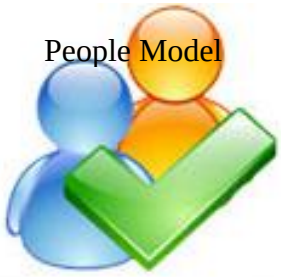
It's the small things done consistently that matter: Things like greeting every customer, whether on the phone or in person, in a friendly and helpful manner. Things like listening to the customer's needs, providing solutions to their problems and showing appreciation to the customer for their business.

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:



- **Empowered**
- **Valued**
- **Connected**
- **Inspired**
- **Growing**
- **Performance oriented**

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.

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?).

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

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.

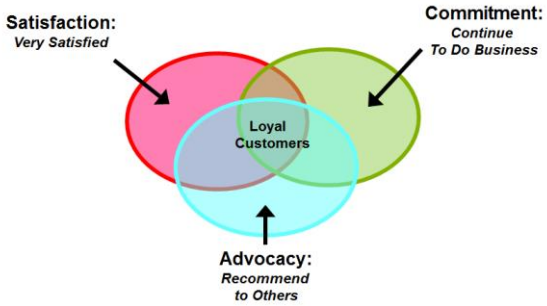
Still favorable customers are "very satisfied" overall, "definitely" or "probably" would recommend their local utility and not switch if they could.

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

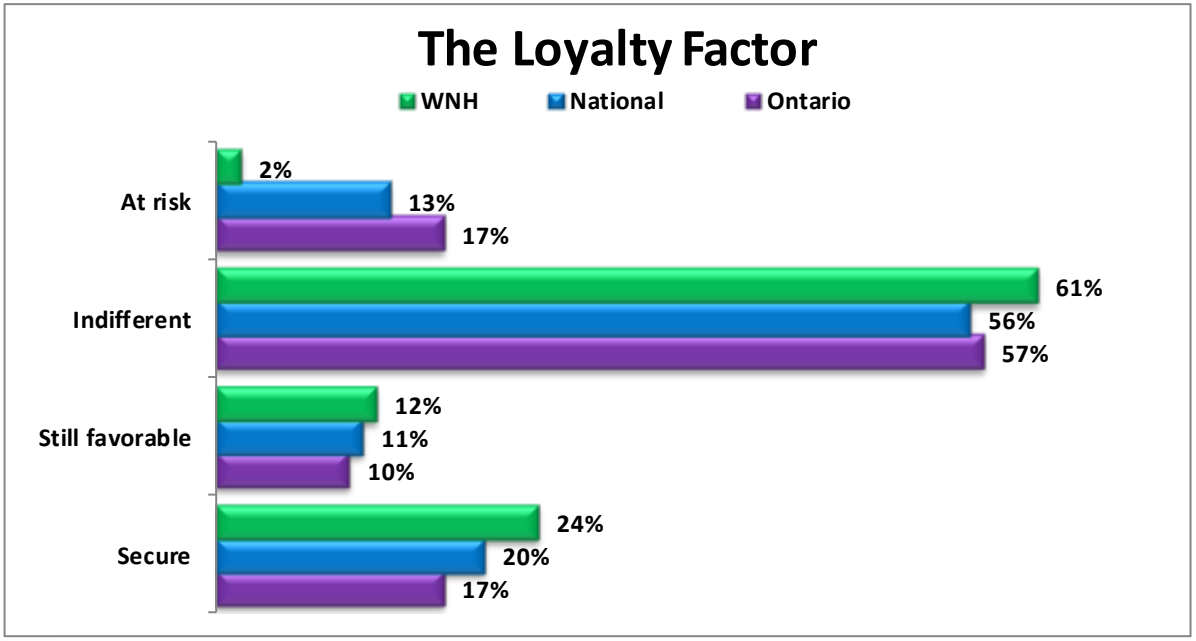


Loyalty is based on likelihood to:

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

Customer Loyalty Groups				
	Secure	Favorable	Indifferent	At Risk
		WNH		
2014	24%	12%	61%	2%
2013	-	-	-	-
2012	-	-	-	-
2011	32%	15%	49%	3%
2010	-	-	-	-

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



Customer Loyalty Groups				
	Secure	**Favorable**	**Indifferent**	**At Risk**
Ontario				
2014	17%	10%	57%	17%
2013	24%	15%	51%	11%
2012	20%	13%	53%	14%
2011	17%	13%	54%	16%
2010	21%	12%	52%	15%
National				
2014	20%	11%	56%	13%
2013	26%	17%	47%	10%
2012	30%	13%	46%	11%
2011	28%	14%	46%	12%
2010	17%	14%	60%	9%

Base: total respondents

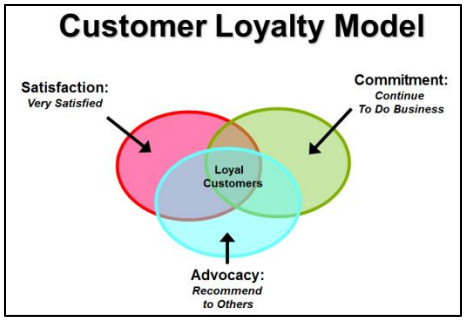
Secure customers' experiences and perceptions are distinct from those of Indifferent customers. There is yet an even greater gap between those identified as Secure versus At Risk.

- 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.

Important attributes which shape perceptions about customer affinity			
	Overall	**Secure**	**At Risk**
Customer focused and treats customers as if they're valued	80%	95%	49%
Is pro-active in communicating changes and issues which may affect customers	79%	93%	56%
Deals professionally with customers' problems	85%	96%	61%
Provides information to help customers reduce their electricity costs	79%	92%	55%
Quickly deals with issues that affect customers	82%	95%	56%
Delivers on its service commitments to customers	86%	97%	67%
Provides information and tools to help manage electricity consumption	79%	92%	56%
Is 'easy to do business with'	85%	98%	55%
Adapts well to changes in customer expectations	75%	90%	45%
The cost of electricity is reasonable when compared to other utilities	62%	79%	37%
Provides good value for your money	70%	89%	38%
Provides consistent reliable electricity	90%	99%	77%
Operates a cost effective hydro-electric system	73%	91%	41%
Overall the utility provides excellent quality services	85%	98%	62%

Base:data from the full 2014 database from those respondents with an opinion

Customer commitment



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.**

Customer commitment to the local electricity supplier 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 3rd 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.

Electricity customers' loyalty – … Is a company that you would like to continue to do business with			
	WNH	**National**	**Ontario**
Top 2 Boxes: 'Definitely + Probably' would continue	86%	74%	72%
Definitely would continue	49%	41%	35%
Probably would continue	37%	32%	37%
Might or might not continue	5%	8%	7%
Probably would not continue	2%	4%	5%
Definitely would not continue	1%	8%	10%

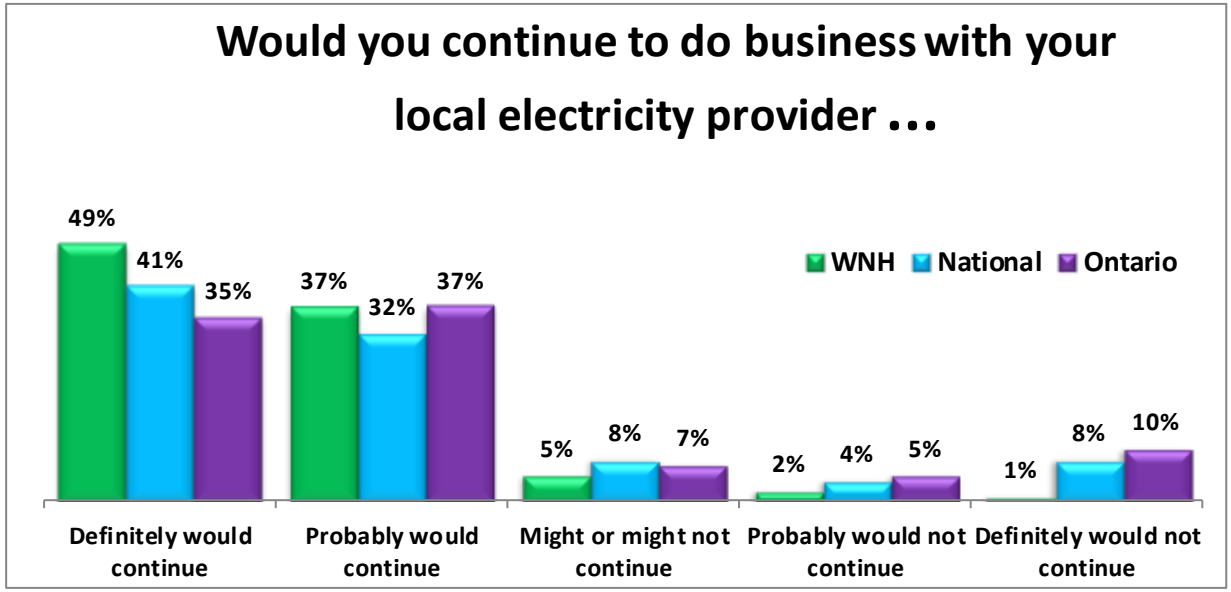
Base: total respondents

Electricity customers' loyalty – … Is a company that you would like to continue to do business with				
WNH's	**<$40K**	**$70K+**	**18-34**	**55+**
Top 2 Boxes: 'Definitely + Probably' would continue	85%	87%	93%	84%

Base: total respondents

Electricity customers' loyalty – Is a company that you would like to continue to do business with					
WNH's	**2014**	**2013**	**2012**	**2011**	**2010**
Top 2 boxes: 'Definitely + Probably' would continue	86%	-	-	87%	-

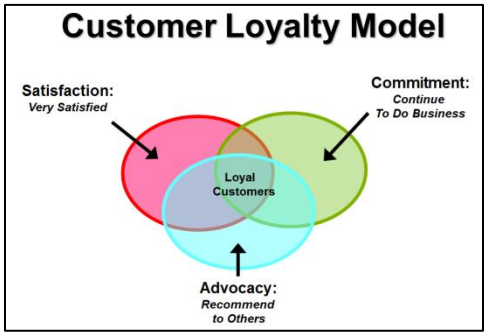
Base: total respondents / (-) not a participant of the survey year



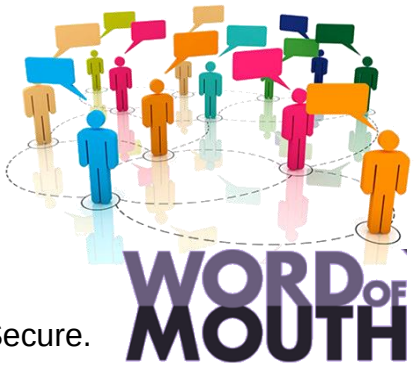
Base: total respondents

Word of mouth

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.



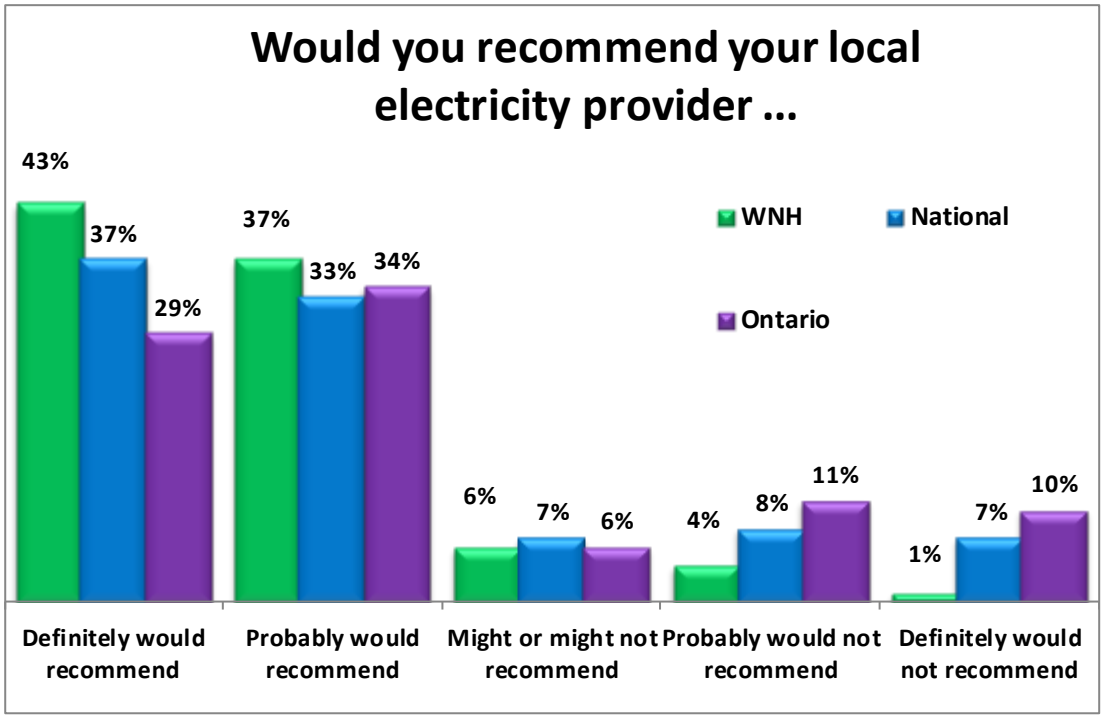
There are two forms of word of mouth which utilities need to understand. The first is Experience-based word of mouth which is the most common and most powerful form. It results from a customer's direct experience with the utility or the re-statement of a direct experience from a trusted source.

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 will 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 serviced 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*

Would you tell me if you agree or disagree with the following statement? WNH 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.

Electricity customers' loyalty – … is a company that you would recommend to a friend or colleague			
	WNH	National	Ontario
Top 2 boxes: 'Definitely + Probably' would recommend	80%	69%	63%
Definitely would recommend	43%	37%	29%
Probably would recommend	37%	33%	34%
Might or might not recommend	6%	7%	6%
Probably would not recommend	4%	8%	11%
Definitely would not recommend	1%	7%	10%

Base: total respondents

Electricity customers' loyalty – is a company that you would recommend to a friend or colleague				
WNH's	<$40K	$70K+	18-34	55+
Top 2 boxes: 'Definitely + Probably' would recommend	80%	81%	87%	77%

Base: total respondents

Electricity customers' loyalty – is a company that you would recommend to a friend or colleague					
WNH's	2014	2013	2012	2011	2010
Top 2 boxes: 'Definitely + Probably' would recommend	80%	-	-	83%	-

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

Corporate image

Customers may dislike what is going on in the electricity industry and they may have an intense dislike for the amount that they have to pay – but they may not dislike their local utility. We hear comments in the interviews such as: *"I hate how much electricity costs, but my utility does a good job."; "Electricity is so expensive these days and it keeps going up and up, but thank goodness for XYZ hydro."* Customers who are connected to the brand, respect the brand, are more likely to look favourably on their utility. The opposite is also true, customers who do not connect or respect the brand and who are upset with the industry produce very challenging customers when things go wrong.

Corporate Image/Brand, as a factor for influencing a customer's perception about their utility has grown significantly in importance to customers. In 2006, Corporate Image/Brand had about an 18% weighting, Customer care had about a 26% weighting and Management operations had about a 56% weighting as it relates to affecting customer's perceptions. Today, in 2014 all three areas are about equal in weighting.

Data from the 2014 survey show that respondents who give their utilities high marks for respect, trust, and social responsibility also give their utilities high marks for providing high quality services, and better marks for both cost efficiency and reasonableness of costs.

Reputation, image, brand has to be actively managed. Nothing is private anymore. Positive impressions beget positive perceptions. Below are some of the attributes measured in the annual UtilityPULSE survey which are strongly linked to a utility's image.

Attributes strongly linked to a hydro utility's image			
	WNH	**National**	**Ontario**
Is a respected company in the community	88%	81%	78%
A leader in promoting energy conservation	82%	78%	77%
Keeps its promises to customers and the community	86%	79%	76%
Is a socially responsible company	84%	78%	77%
Is a trusted and trustworthy company	88%	82%	77%
Adapts well to changes in customer expectations	77%	71%	68%
Is 'easy to do business with'	87%	79%	75%
Provides good value for your money	76%	67%	63%
Overall the utility provides excellent quality services	87%	83%	80%
Operates a cost effective hydro-electric system	77%	69%	62%

Base: total respondents with an opinion

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. Providing consistent reliable electricity while being seen as 'easy to do business with', along with providing

information and support for customers to use electricity more efficiently are core components of a successful relationship with customers. The reality is, every utility has an image – why not have the image you want? While keeping the lights on builds a customer's belief that their utility is competent at what it does, image is about building a customer's belief that they can be confident that their utility is successful today and will be successful again tomorrow.

Marketing – Communications			
	WNH	National	Ontario
Topics that require more pro-active communication			
Cost of electricity is reasonable when compared to other utilities	66%	60%	55%
Provides information to help customers reduce electricity costs	82%	77%	75%
Adapts well to changes in customer expectations	77%	71%	68%
Operates a cost effective hydro-electric system	77%	69%	62%
Provides good value for money	76%	67%	63%
Topics that your utility scores very well on			
Is a trusted and trustworthy company	88%	82%	77%
Respected company in the community	88%	81%	78%
Accurate billing	89%	83%	77%
Overall the utility provides excellent quality services	87%	83%	80%
Provides consistent, reliable energy	91%	89%	86%

Base: total respondents with an opinion

Corporate Credibility & Trust

The foundation of every relationship is trust. Without it, engaging customers becomes a large challenge and when trust is low, or non-existent, feedback may not be truthful. Recognizing the myriad of events that have taken place in the industry, it has become increasingly important for a utility to be credible and trusted.

Establishing trust and credibility, whether with business partners, customers or regulators, is not achieved overnight. 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.

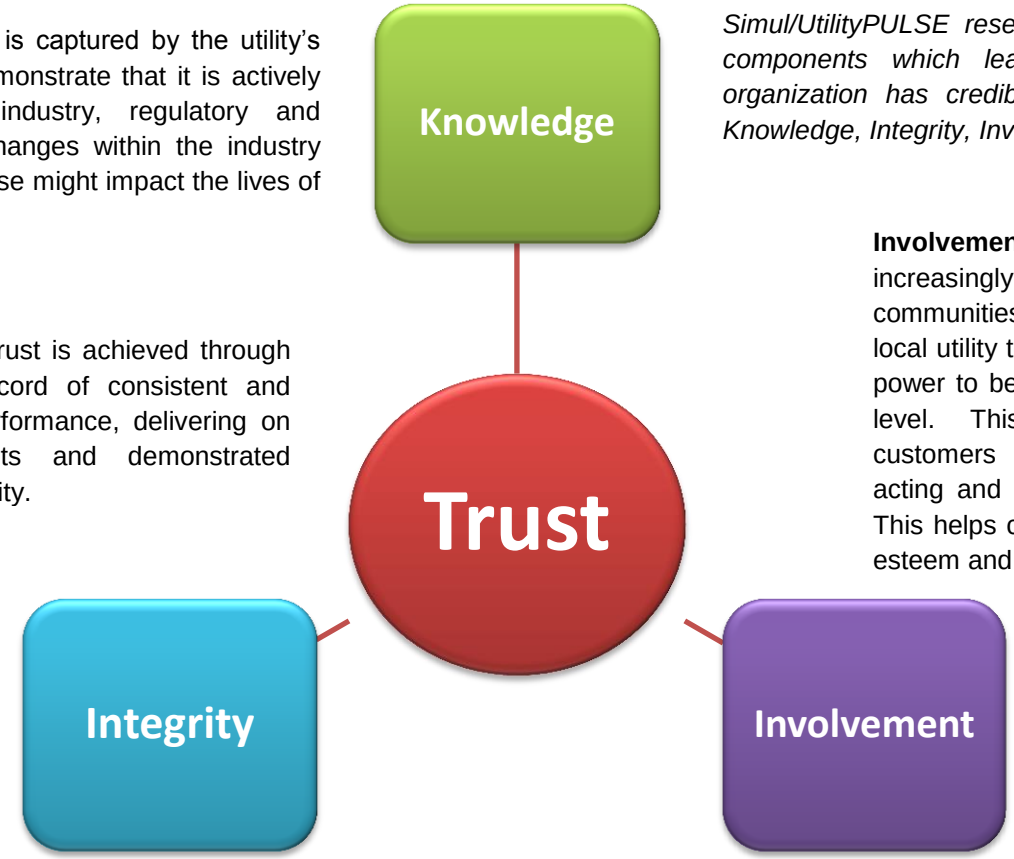
Attributes strongly linked to Credibility & Trust			
	WNH	National	Ontario
Overall the utility provides excellent quality services	87%	83%	80%
Keeps its promises to customers and the community	86%	79%	76%
Customer-focused and treats customers as if they're valued	83%	74%	72%
Is a trusted and trustworthy company	88%	82%	77%

Base: total respondents with an opinion

Public trust in their local utility is the degree to which the public believes that the utility will act in a particular manner because the utility has incorporated the public's interest into its own. Utilities benefit from a trusted relationship with their empowered Customers. Trust and credibility can be thought of as 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.

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.



Trust — Trust is achieved through a track record of consistent and reliable performance, delivering on commitments and demonstrated accountability.

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.

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.

Using the four components of demonstrating Credibility and Trust, the resultant index shows that LDCs enjoy a high level of credibility and trust. "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently." [Warren Buffet]

Credibility and Trust Index
Knowledge The utility is seen as being knowledgeable about the services it provides, about what is happening in the industry, and how customers can reduce costs or create more value.
Integrity The utility 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.
Involvement The utility is actively involved in the industry, in the community and in things that affect the customer.
Trust The utility is an organization that can be trusted and is worthy of respect.
Overall Waterloo North Hydro 84% [Ontario 77%; National 80%]

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 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 big issues in the world 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 two priorities for improvement to their local utility's service.

For 2014 there is heightened awareness for the need to maintain equipment, keep things up to date, improve reliability, and communicate effectively.

And we are interested in knowing what you think are the one or two most important things Waterloo North Hydro could do to improve service to their customers?

One or two most important things 'your local utility' could do to improve service	
WNH's	**% of all suggestions**
Better prices/lower rates	32%
Improve reliability of power	24%
Better online presence	17%
Better maintenance	15%
Better communication with customers	10%
Improve/simplify/clarify billing	9%
Be more efficient	9%
Information & incentives on energy conservation	6%
Remove hidden costs on bills	4%
Eliminate SMART meters	3%
Staff related concerns	3%
Don't charge for previous debt	2%
Extend service hours/availability of hydro representative	1%

Base: total respondents with suggestions

What do customers think about electricity costs?

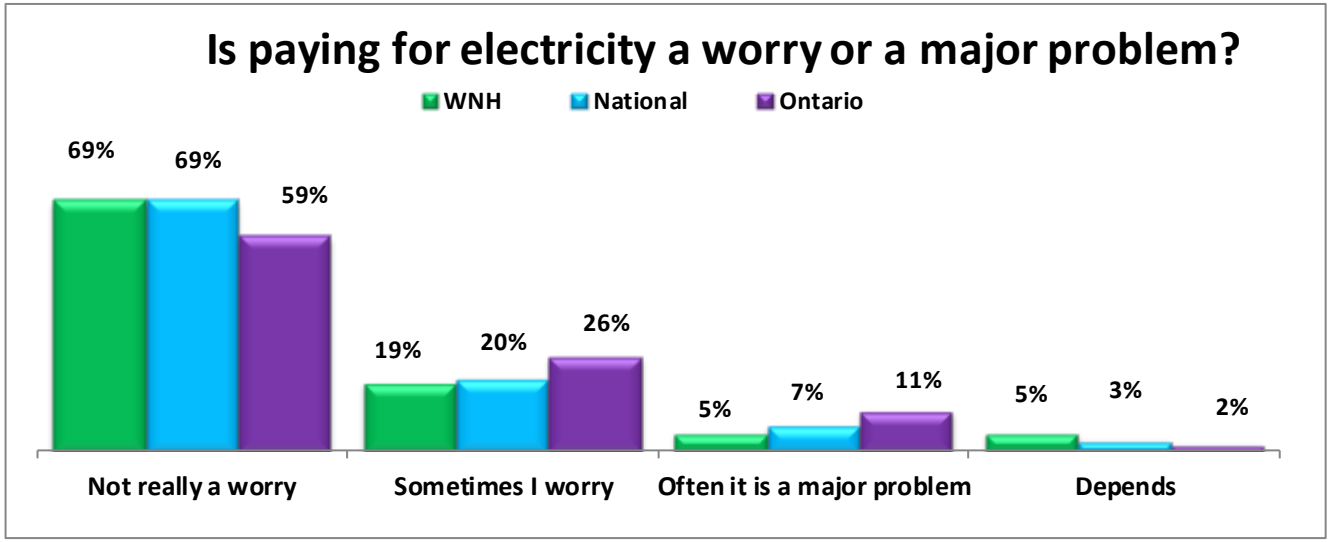
Ask a utility customer – anywhere in the province of Ontario – what do they think about electricity, there is a very high probability that they will say that electricity costs are too high or too expensive. For customers who said that they had a billing problem in the last 12 months, and stated that the problem was “high bills” or “high rates or charges”, there was very little variability between customers who could be called Secure, Favourable, Indifferent or At Risk. There was also very little variability between age groupings or income groupings.

In 2010, 44% of customers who said they had a billing problem cited “high bills” or “high rates or charges” as being the culprit. Our survey database for 2014 tells us the comparable number is 68%. In 5 years there has been much shift towards the issue being high bills and/or high rates. There is a growing concern over costs, which means that the industry needs to monitor “ability to pay”.

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
	WNH			
2014	69%	19%	5%	5%
2013	-	-	-	-
2012	-	-	-	-
2011	71%	20%	4%	3%
2010	-	-	-	-

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



Base: total respondents

Is paying for electricity a worry or a major problem?				
	Not a worry	Sometimes	Often	Depends
		WNH		
<$40,000	52%	36%	8%	3%
$40<$70,000	70%	21%	3%	3%
$70,000+	80%	12%	3%	4%

Base: total respondents

The UtilityPULSE database for 2014 shows respondents who have an income less than $40,000 have almost 2X more billing problems than those who have income in excess of $70K per year. 20% of customers <40K said they had a billing problem compared to 11% of respondents who had income over $70K. However respondents in the lower income bracket are more likely to shift use of their electricity to lower cost periods.

Our data also shows that lower income customers are less likely to utilize energy conservations methods that cost money. More important however is the difference the <$40K respondents vs the >$70K as it relates to taking action or who have “already done” a conservation action. Installed a programmable thermostat? 44% “Done” <$40K, 70% “Done” ?$70K. Installed timers: 26% vs 38% “Done”. Replaced Furnace: 43% vs 57% “Done”. Replaced air-conditioner: 35% vs 49%.

Ability to pay then has an impact on conservation.

Is paying for electricity a worry or a major problem?				
	Not a worry	**Sometimes**	**Often**	**Depends**
		Ontario		
2014	59%	26%	11%	2%
2013	66%	21%	11%	1%
2012	59%	27%	11%	2%
2011	52%	31%	13%	3%
2010	67%	23%	8%	2%
		National		
2013	69%	20%	7%	3%
2013	70%	18%	8%	2%
2012	67%	22%	8%	2%
2011	63%	25%	8%	2%
2010	71%	20%	6%	1%

Base: 2014 Ontario and National benchmark surveys

What do small commercial customers think?

Residential and small business customers create the bulk of a utility's service transactions every day—and account for more than half of the energy consumed — understanding their needs and expectations is becoming more important than ever before.

Interestingly the definition for small commercial customers is defined based on usage. While this definition is used for regulatory purposes, the reality is small commercial customers have many "personas". Unfortunately customer information on small commercial customers rarely contains enough data to truly develop targeted communications.

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

Data from the 2014 full database shows small commercial customers with higher satisfaction and having less outages than residential customers. However commercial customers are 2X more likely to contact their utility when the power goes off or when there is a billing problem.

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 2014 discussions with small commercial and residential customers.

Satisfaction: Pre & Post		
Satisfaction (Top 2 Boxes: 'very + somewhat satisfied')	**Residential**	**Commercial**
Initially	89%	91%
End of Interview	90%	93%

Base: total respondents from the full 2014 database

As it relates to the six attributes associated with customer service:

Very or fairly satisfied with…	Residential	Commercial
The time it took to contact someone	73%	78%
The time it took someone to deal with your problem	66%	76%
The helpfulness of the staff who dealt with your problem	74%	83%
The knowledge of the staff who dealt with your problem	71%	82%
The level of courtesy of the staff who dealt with your problem	81%	89%
The quality of information provided by the staff member	70%	79%

Base: total respondents from the full 2014 database

Commercial respondents had higher satisfaction levels with customer service versus Residential respondents.

Overall satisfaction with most recent experience		
	Residential	Commercial
Top 2 Boxes: 'very + somewhat satisfied'	73%	79%
Bottom 2 Boxes: 'somewhat + very dissatisfied'	24%	19%

Base: total respondents from the full 2014 database

Comparisons between Residential and Commercial		
Loyalty Groups	**Residential**	**Commercial**
Secure	22%	26%
Still Favourable	10%	12%
Indifferent	60%	55%
At risk	7%	7%

Base: total respondents from the full 2014 database

Loyalty Model Factors	***Residential***	***Commercial***
Very/somewhat satisfied	89%	91%
Definitely/probably would continue	82%	84%
Definitely/probably would recommend	75%	77%

Base: total respondents from the full 2014 database

Outages & Bill problems	Residential	Commercial
Respondents with outage problems	43%	28%
Respondents with billing problems	14%	13%

Base: total respondents from the full 2014 database

Attempts to contact local utility…	Residential	Commercial
Respondents with outage problems	18%	33%
Respondents with billing problems	31%	63%

Base: total respondents from the full 2014 database

Residential respondents reported a considerably higher incidence of outages.

Commercial respondents were more likely to call in about billing and outage problems.

Important attributes which describe operational effectiveness		
	Residential	Commercial
Provides consistent, reliable electricity	90%	91%
Delivers on its service commitments to customers	86%	87%
Accurate billing	85%	86%
Quickly handles outages and restores power	87%	88%
Makes electrical safety a top priority	88%	90%
Uses responsible environmental practices when completing work	85%	88%
Is efficient at managing the hydro-electric system	81%	83%
Is a company that is 'easy to do business with'	84%	85%
Operates a cost effective hydro-electric system	73%	74%

Base: total respondents with an opinion from the full 2014 database

Important attributes which shape perceptions about corporate image		
	Residential	Commercial
Is a respected company in the community	86%	87%
Maintains high standards of business ethics	84%	85%
A leader in promoting energy conservation	81%	83%
Keeps its promises to customers and the community	83%	84%
Is a socially responsible company	84%	85%
Is a trusted and trustworthy company	85%	86%
Adapts well to changes in customer expectations	75%	77%
Overall the utility provides excellent quality services	85%	86%

Base: total respondents with an opinion from the full 2014 database

Important attributes which shape perceptions about service quality and value		
	Residential	Commercial
Is pro-active in communicating changes and issues which may affect customers	79%	83%
Provides good value for money	70%	71%
Customer-focused and treats customers as if they're valued	79%	81%
Deals professionally with customers' problems	85%	86%
Quickly deals with issues that affect customers	82%	84%
Provides information and tools to help manage electricity consumption	80%	79%
Provides information to help customers reduce their electricity costs	79%	71%
The cost of electricity is reasonable when compared to other utilities	62%	64%

Base: total respondents with an opinion from the full 2014 database

Is paying for electricity a worry or a major problem?		
	Residential	Commercial
Not really a worry	66%	67%
Sometimes I worry	22%	21%
Often it is a major problem	7%	8%
Depends	2%	2%

Base: total respondents from the full 2014 database

When a weather related event occurs there is no distinction as to whom it will target – basically all those in its path will be affected. As it relates to the Ice Storm of 2013, the following are responses taken from all residential and commercial respondents who said they were affected by the storm.

Percentage of Respondents who contacted their utility about the ice storm power outage		
	Residential	Commercial
Yes	17%	22%
No	82%	75%

Base: total respondents from the full 2014 database who were affected by the ice storm

Length of outage (during Ice Storm 2013)								
	Less than 2 hours	2 – 4 hours	4+ hours or ½ day	12-18 hours or ½ - ¾ day	19-24 hours or 1 day	1 to 1.5 days	1.6 to 2 days	More than 2 days
Residential	21%	19%	21%	8%	5%	5%	4%	7%
Commercial	17%	20%	15%	7%	6%	4%	4%	9%

Base: total respondents from the full 2014 database who were affected by the ice storm

While technology has provided various channels for communications, the telephone remains the predominant means of communication at this point in time.

What method did you use to contact your electric utility about the outage during Ice Storm 2013?		
	Residential	Commercial
Telephone	86%	94%
E-mail	1%	1%
Social media - Twitter	1%	0%
In person	1%	0%
Other	2%	2%
Don't know	3%	2%

Base: total respondents from the full 2014 database who were affected by the ice storm

While there is no doubt a power outage will cause disruption in day to day events, the tolerance level in the wake of an outage is related to the amount of dependency on electricity in day to day workings. Regardless, respondents in this year's survey be they residential or commercial shared a common tolerance level for the length of time to go without electricity during an extreme event or situation.

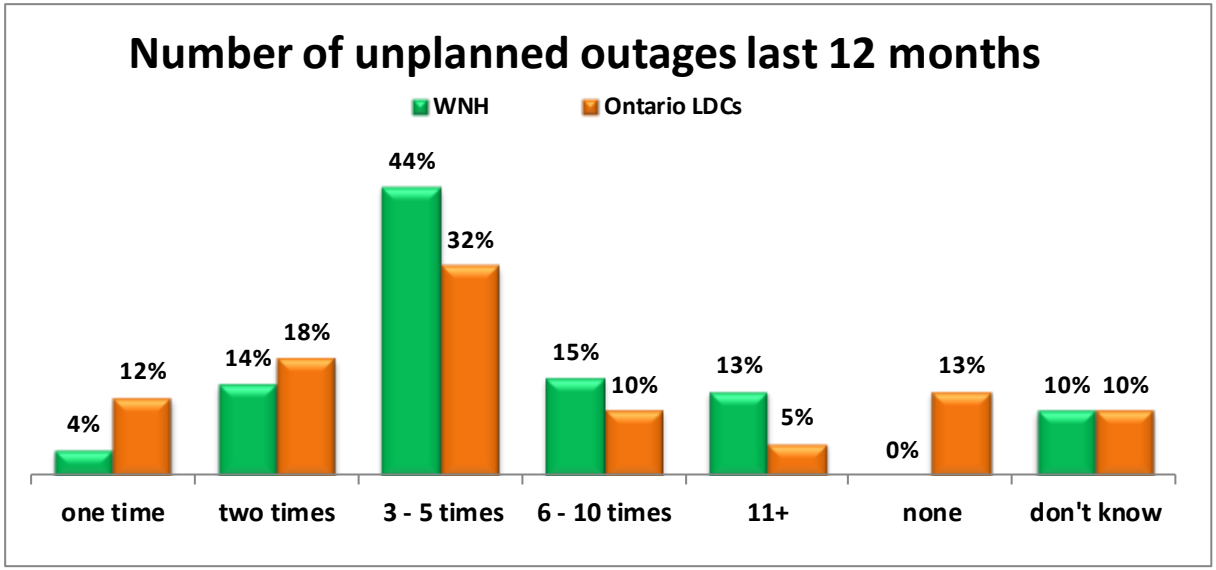
In your view, what is an acceptable period of time to go without electricity in situations like Ice Storm 2013?		
	Residential	**Commercial**
None (the power shouldn't be going out)	7%	8%
Less than 2 hours	11%	12%
2-4 hours	17%	17%
4+ hours or ½ day	16%	14%
12 – 18 hours or ½ day to ¾ day	8%	6%
19 – 24 hours or 1 day	10%	10%
1 to 1.5 days	5%	4%
1.6 to 2 days	5%	7%
More than 2 days	4%	4%
Other	2%	1%
Don't know	14%	17%

Base: total respondents from the full 2014 database who were affected by the ice storm

SUPPLEMENTAL QUESTIONS

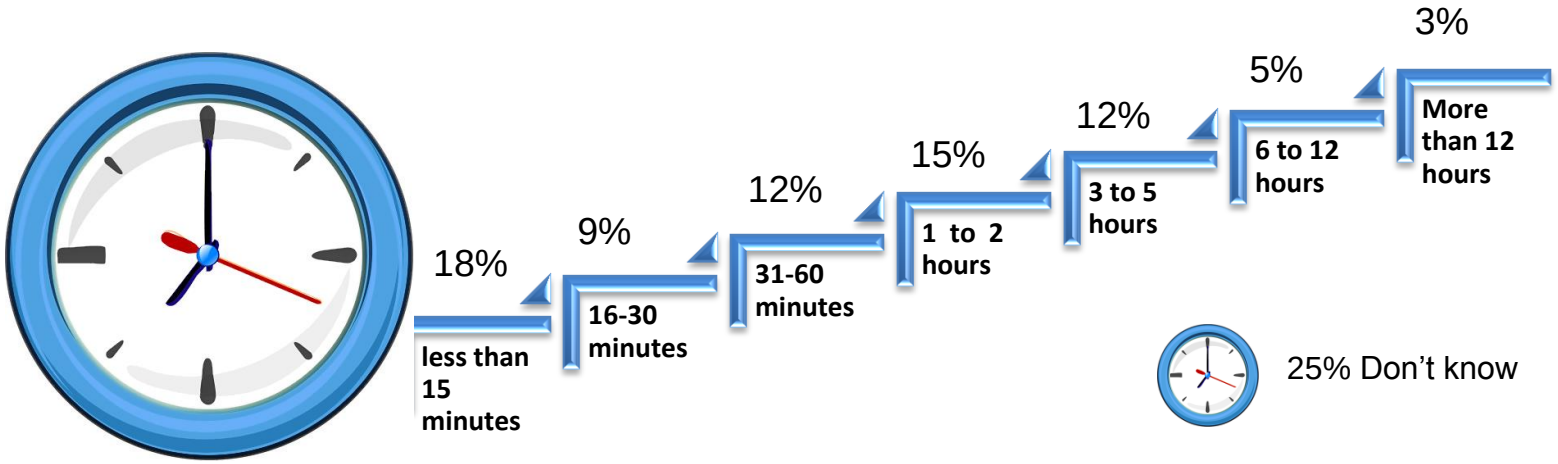
Outage Communications

Whether an outage is planned or unplanned, the reality is that it is going to cause disruption and inconvenience under best case scenarios and under worst case scenarios there could be safety and financial consequences. The impact of severe weather such as storms and other outage events are causing longer duration and more frequent outages.



Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local utility

When an unplanned outage occurs, how long, on average, is the outage?



Base: 90% of total respondents from the local utility

However, one thing for certain, no matter what the scenario happens to be, customers are expecting their utility to keep them continually updated on the status of outages. Most importantly, and top priority, is to know the estimated restoration time. They also want to know the cause of the outage because they do not want to be a frequent outage customer.

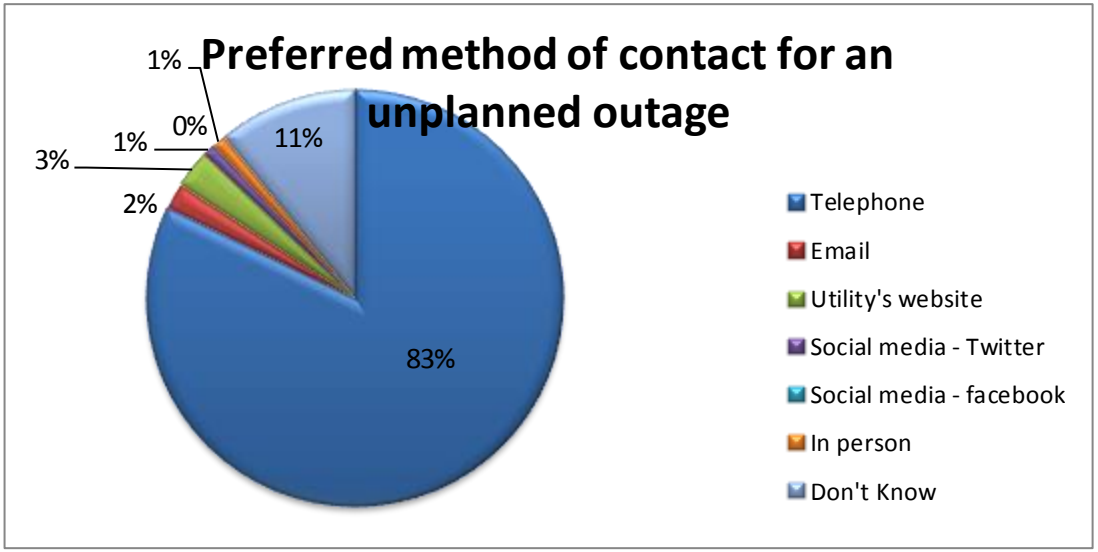
How a utility chooses to handle, manage and communicate with customers during an outage situation does affect customers' satisfaction with their utility. Customers want timely, accurate and relevant information about an outage and customers expect a utility various communication channels to ensure their message is getting out there. This means not only obtaining information via the call centre and IVR but customers have increasing

expectations for proactive two-way communication through social media, utility websites and modern communication devices (e.g. tablets, smartphones) and apps.

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?

Inability to provide the above information accurately and in a timely manner will result in customer complaints, increased call volumes to your call centres, create unwanted public and media attention, and negatively impact customer satisfaction.



Base: 90% of total respondents from the local utility

Utility's effectiveness during an unplanned outage		
Top 2 Boxes: 'very + somewhat effective'	**Ontario LDCs**	**WNH**
Responding to questions	61%	62%
Providing a reason for the outage	61%	63%
Providing an estimate when power will be restored	60%	66%
Responding to the power outage	81%	83%
Restoring power quickly	85%	86%
Communicating updates periodically	64%	68%
Posting information to the website	35%	34%
Using media channels for providing updates	53%	60%

Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local utility

Customer expectations during an unplanned (and even planned) outage event:

- Communication about when they can expect their power to be restored
- Detailed information about what is happening in their community or service area
- Easy access to information – ideally from a familiar source

Keeping customers in the loop will help ease tensions during an outage event. An informed customer will be a less angry customer.

Priority Investments

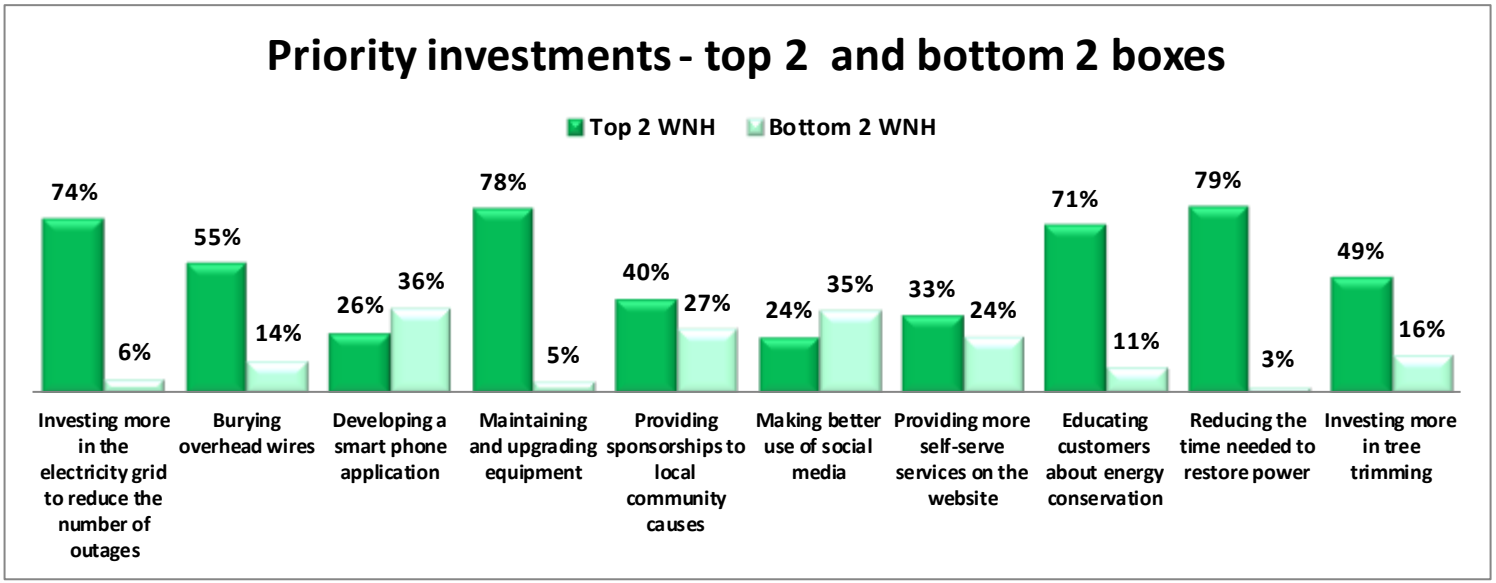
While regulation and reliability are top concerns in the utility industry, aging infrastructure is now a top operational concern. Major issues around electricity are that generation investment has been deferred and major improvements are needed in distribution and transmission. Customers agree with industry insiders that infrastructure renewal is a high priority.

When most people turn on a light, they rarely give much thought to the vast networks and complex systems behind them. Electricity networks are aging. A significant rise in the level of upgrades and renewals of network infrastructure is needed so that the infrastructure will be fit for its current and future purposes. The costs of the components of providing electricity – generation, transmission, distribution and retail – are all increasing, adding upward pressure on utility rates. Canadians are noticing infrastructure more than usual, and at least some are trying to think about it—because when it fails, it has disturbing consequences.

This year, respondents were asked for their views about prioritizing investments and activities since ensuring sustainability of infrastructure and maintaining affordable electricity costs is becoming more of a challenge.

Priority Investments		
Top 2 Boxes: 'Very high priority + High priority'	**Ontario LDCs**	**WNH**
Investing more in the electricity grid to reduce the number of outages	74%	74%
Burying overhead wires	60%	55%
Developing a smart phone application	31%	26%
Maintaining and upgrading equipment	83%	78%
Providing sponsorships to local community causes	43%	40%
Making better use of social media	30%	24%
Providing more self-serve services on the website	38%	33%
Educating customers about energy conservation	74%	71%
Reducing the time needed to restore power	79%	79%
Investing more in tree trimming	58%	49%

Base: An aggregate of respondents from 2014 participating LDCs / 90% of total respondents from the local utility



Energy Conservation & Efficiency

Addressing homeowner and small business energy conservation behaviours is a vital part of the success or failure of this country's energy future. Local utilities play an important role for shaping energy efficiency and energy conservation behaviours.

Attributes linked to energy conservation		
Top 2 Boxes: 'agree + strongly agree'	**Ontario LDCs**	**WNH**
Provides information to help customers reduce electricity costs	79%	82%
Provides information and tools to help manage electricity consumption	79%	81%
A leader in promoting energy conservation	81%	82%

Base: total respondents with an opinion

With arguably more responsibility for energy use and energy conservation falling to consumers, two questions arise: (1) What factors affect whether individuals decide to conserve energy? (2) How might the knowledge of these factors be used to impact energy conservation decision-making processes to convince consumers to adopt energy conservation behaviours?

Individual choices to conserve are constrained by individual factors including technological availability, financial resources, and individual knowledge and abilities. The critical factor in the creation of comprehensive energy conservation education programs is the recognition that the consumer's culture, attitudes, and household demographics are driving forces behind consumer actions.

Efforts to conserve energy				
Ontario LDCs	**Yes**	**No**	**Already Done**	**Don't Know**
Install energy-efficient light bulbs or lighting equipment	19%	9%	70%	1%
Install timers on lights or equipment	12%	50%	35%	2%
Shift use of electricity to lower cost periods	22%	17%	58%	3%
Install window blinds or awnings	12%	27%	60%	2%
Install a programmable thermostat	13%	25%	60%	2%
Have an energy expert conduct an energy audit	9%	71%	16%	4%
Removing old refrigerator or freezer for free	14%	44%	38%	4%
Join the peaksaverPLUS™ program	15%	49%	21%	16%
Replacing furnace with a high efficiency model	12%	33%	52%	4%
Replacing air-conditioner with a high efficiency model	14%	38%	44%	4%
Use a coupon to purchase qualified energy saving products	35%	39%	22%	5%

Base: An aggregate of respondents from 2014 participating LDCs

Since conservation usually implies inconvenience or sacrifice ie. an individual must use less energy, change a pattern of the time certain chores are done, a motivational factor needs to exist to really incite a change in behaviour i.e. a self-interest or social responsibility or monetary gain.

But focusing on the "vital few" changes you're asking for has to be coupled with immediate and obvious feedback on the effects of change – especially at the start. If neither the dollar impact nor the environmental impact is significant at the level of individual change *and* the behaviour requires inconvenience or loss—it is unlikely that people will make the change.

As Rosemarie LeClaire stated in a presentation to the Ontario Energy Network (April 28, 2014), the industry has changed from a static energy system with largely passive and powerless consumers to one where customers want to be, expected to be, and should be more active in their energy use. Control has shifted from the utility to the customer. Like any major change there are early adopters, i.e., people who want to be proactive in the managing and monitoring of electricity use, and very late adopters i.e., people who resist having to actively manage their electricity use.

However there is a growing skepticism amongst customers who have made some energy conservation changes because they haven't seen a decline in their utility bills. The danger of encouraging someone to make a behaviour change with no real resultant reward for the change, the unintended consequence is what is called "learned helplessness". In other words, when people take action to solve a problem that fails, they almost always end up concluding that they have no control.

What is important then is to:

- Communicate effectively and realistically (it isn't all about saving money)
- Demonstrate the ease by which individuals can participate in various energy efficiency or energy conservation activities
- Provide testimonials from real people who have made changes
- Educate, educate, educate
- Address the biggest barrier to energy conservation efforts i.e., the costs involved in making a change, with financial incentives.

E-care

As customers pursue new, technology-enabled experiences with other service providers in the retail, telecommunications, and banking industries, they will expect the same from their utility.

Technology – specifically the internet—has allowed people access to far more information than ever before and the ability to do more than ever before: receive and pay bills on the internet, sign up for and change their services using the internet, find answers to their questions online about their accounts, i.e. statements, payments, balances and learn about products, services and topics, i.e., green energy, electricity pricing, etc.

Do you have access to the internet?	
	Ontario LDCs
Yes	87%
No	13%

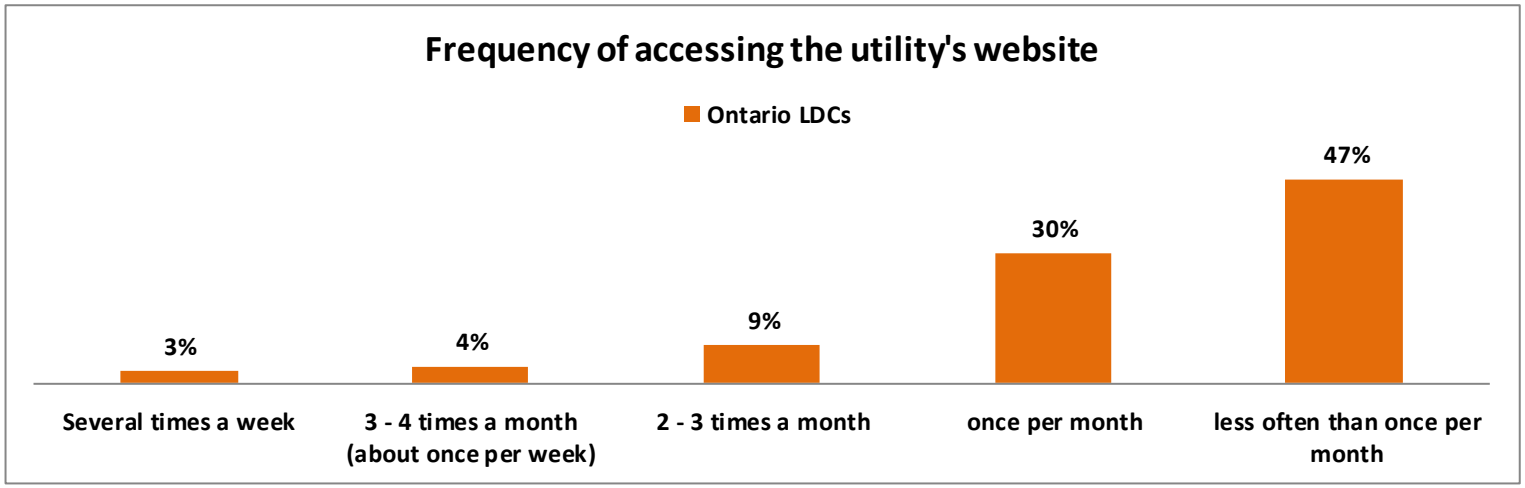
Base: An aggregate of respondents from 2014 participating LDCs

Utilities that provide their customers with access to information and empowerment tools will likely be better positioned to remain relevant and in touch with their customers. A challenge facing utilities right now is determining which tools and information delivery capabilities to build, and how to do so in a cost effective manner.

We asked respondents who were currently connected or had access to the internet if they in fact visited their local utility website.

Over the past six months have you accessed your local utility website?

Base: An aggregate of respondents from 2014 participating LDCs



Base: An aggregate of respondents from 2014 participating LDCs

The convenience and capability brought on by the internet allows customers to be empowered. Customers have the tools and knowledge to manage energy usage at their disposal. Empowerment also implies self-service and instant access to information.

Likelihood of using the internet for future customer care needs for things such as:	
Top 2 Boxes: 'very + somewhat likely'	**Ontario LDCs**
Setting up a new account	31%
Arranging a move	38%
Accessing information about your bill	55%
Accessing information about your electricity usage	54%
Accessing energy saving tips and advice	45%
Accessing information about Time Of Use rates	51%
Maintaining information about your account or preferences	51%
Paying your bill through the utility's website	32%
Getting information about power outages	47%
Arranging for service	40%

Base: An aggregate of respondents from 2014 participating LDCs

To keep up, utilities should develop a better understanding of their future customer, focus on the overall customer, stay current with the latest trends and technologies, and use information to create a more personalized, one-to-one experience.

Electric Utility Industry Knowledge & SMART Grid

Beyond knowing that electricity is needed to maintain their day to day activities, does the average person feel that they are actually knowledgeable about the electric utility industry?

Knowledge level about the electric utility industry	
	Ontario
Extremely knowledgeable	2%
Very knowledgeable	11%
Moderately knowledgeable	47%
Slightly knowledgeable	26%
Not very knowledgeable	14%
Don't know	1%

Base: total respondents in the Ontario Benchmark survey

Two-thirds (60%) of those polled considered themselves moderately to extremely knowledgeable about the electric industry.

In recent years, the concept of the “SMART Grid” has emerged—first using information technology as a means of improving electricity reliability—and then more recently—to improve efficiency, reduce pollution, and to incorporate more renewable and sustainable sources of generation. A smarter grid will become the SMART Grid over time, as new technologies bring us more benefits. However, what is the “SMART Grid” knowledge level held by consumers currently?

Once again, this year’s survey probed around the concept of SMART Grid. While it is evident that the SMART Grid is still not a much talked about concept, only 34% have a basic or good understanding of what it is, oddly enough, 60% still think that it is important to pursue SMART Grid implementation. It is also clear that the majority of respondents (78%) are ‘very + somewhat supportive' of the utility working with neighbouring utilities on SMART Grid initiatives.

Level of knowledge about the SMART Grid	
	Ontario
I have a fairly good understanding of what it is and how it might benefit homes and businesses	9%
I have a basic understanding of what it is and how it might work	25%
I’ve heard of the term, but don’t know much about it	36%
I have not heard of the term	29%
Don’t know	1%

Base: total respondents in the Ontario Benchmark survey

Importance of pursuing implementation of the SMART Grid	
	Ontario
Very important	26%
Somewhat important	34%
Neither important or unimportant	6%
Somewhat unimportant	5%
Unimportant	8%
Don't know	21%

Base: total respondents in the Ontario Benchmark survey

Support towards working with neighbouring utilities on SMART Grid initiatives	
	Ontario
Very supportive	41%
Somewhat supportive	37%
Neither supportive or unsupportive	4%
Somewhat unsupportive	4%
Unsupportive	4%
Don't know	10%

Base: total respondents in the Ontario Benchmark survey

Consumer Energy Use Behaviour

Canadian consumers, like people throughout the rest of the world, have faced rapidly rising energy prices during the past decade, and they have had to become more focused on energy conservation and efficiency. The cost of heating and cooling homes, along with negative fallout from an economic recession, has forced individuals to focus on their energy use and expenditures.

Do customers believe there is a real pay-off for trying to reduce their energy consumption? Does this impact overall efforts to reduce consumption? Respondents were asked *"How active have you been in trying to reduce your electricity consumption?"*

- 94% feel they are "very + somewhat active" in trying to reduce electricity consumption, and
- 81% of those do believe their efforts have resulted in reduced energy consumption, of which
- 44% estimate that they were able to offset an energy consumption reduction of more than 10%, and
- 72% believe that these efforts translated to saving on their electricity bills.

Of course, there are a number of factors (external environment, individual attitudes, household demographics, and consumer choice) which contribute to consumer energy use behaviours and consequences. Identifying these factors which contribute to consumer energy conservation practices and using these factors to tailor energy conservation education programs to change consumer energy use attitudes and behaviours is one essential step to reduce overall energy use and expenditures.

Level of Activity in trying to reduce electricity consumption	
	Ontario
Very active	52%
Somewhat active	42%
Neither proactive or inactive	0%
Not active	2%
Not very active	3%

Base: total respondents in the Ontario Benchmark survey

Estimate of percentage reduction in consumption	
	Ontario
1 – 2 %	5%
3 – 5 %	10%
6 – 8 %	4%
9 – 10 %	15%
More than 10%	44%
Don't know	21%

Base: total respondents in the Ontario Benchmark survey whose active efforts have reduced consumption

Active efforts have reduced energy consumption

81%

16%

Base: total respondents in the Ontario Benchmark survey who have been active in trying to reduce energy consumption

Efforts to conserve have translated into savings on your electricity bill

72%

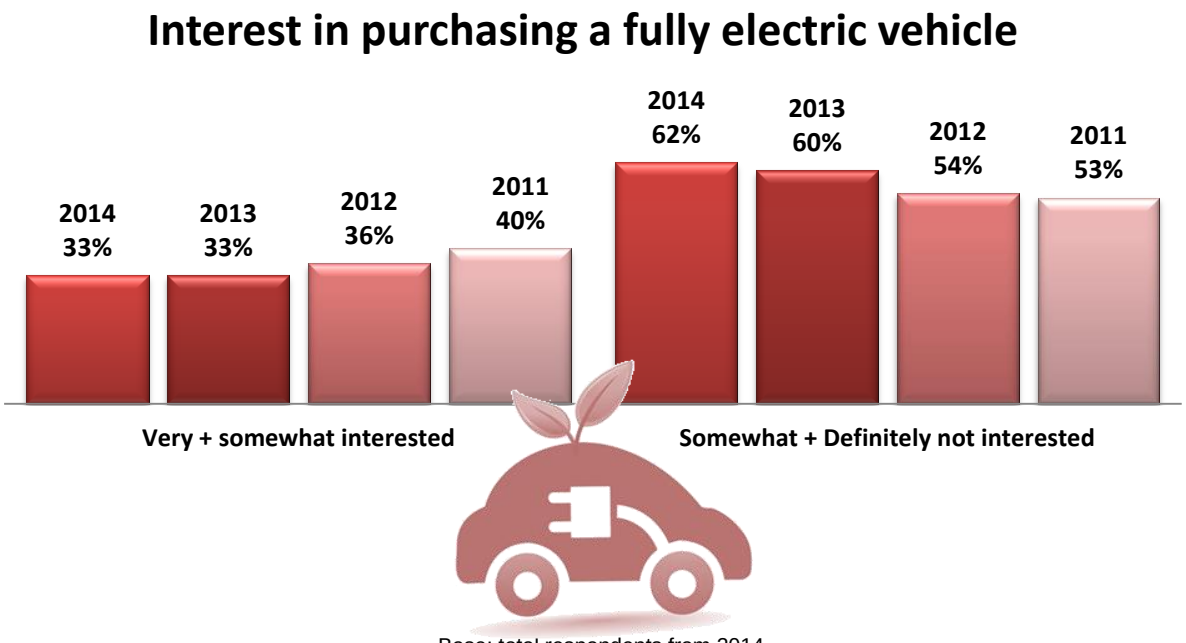
24%

Base: total respondents in the Ontario Benchmark survey whose active efforts have reduced consumption

Purchasing an Electric Vehicle

There is enormous uncertainty about just how quickly the number of EVs on the road is set to grow over the long term. Mass commercialization of EVs has still not taken hold in today's public mindset. 33% of respondents indicated interest in purchasing a fully electric vehicle, consistent with 2013 findings of 34% but a drop since 2011 where 41% expressed interest in replacing conventional vehicles with EVs. 61% expressed little or no interest in EVs, virtually no change since last year, at 60%, however an since 2011, where 53% claimed disinterest in the electric vehicle.

A breakdown of gender support shows that 38% of men vs 27% of women are interested in the EV. There has been a drop in the "positive support" from respondents in the $40k-$70k income range from 45% interested in 2013 to just 28% in 2014.



Base: total respondents from 2014 Ontario Benchmark survey

Looking at age demographics, again, shows a shift in thinking about wanting to purchase an electric vehicle. 22% of older respondents (55+) versus 47% of respondents aged 35-54 are in favour of EVs replacing conventional cars. 43% of those aged 18-34 are receptive to the idea of purchasing an electric vehicle.

When asked how long it would be before they would consider an EV as an option for their next car purchase, only 1 in 10 (11%) would consider an EV within the next 24 months.

Interest in purchasing a fully electric vehicle						
	Income <$40K	Income $40K<$70K	Income $70K +	Age 18-34	Age 35-54	Age 55+
Top 2 Boxes: 2014 'very + somewhat interested'	30%	28%	42%	27%	39%	28%
Top 2 Boxes: 2013 'very + somewhat interested'	22%	45%	43%	43%	47%	22%

Base: total respondents from 2014 Ontario Benchmark survey

Length of time before purchasing a fully electric vehicle	
	Ontario
Immediately to next 6 months	2%
7 to 12 months	2%
13 to 24 months	9%
Over 24 months	79%
Depends	5%
Don't know	3%

Base: total respondents from 2014 Ontario Benchmark survey

Method

The findings in this report are based on telephone interviews conducted for Simul Corp. by Greenwich Associates between April 28 - April 30, 2014, with 407 respondents who pay or look after the electricity bills from a list of residential and small and medium-sized business customers supplied by WNH.

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 407 residential and commercial customers will differ by no more than ±4.86 percentage points where opinion is evenly split.

This means you can be 95% certain that the survey results do not vary by more than 4.86 percentage points in either direction from results that would have been obtained by interviewing all WNH 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 1,108 households and businesses from the customer list supplied by WNH. The 407 who completed the interview represent a 37% response rate.

The findings for the Simul/UtilityPULSE National Benchmark of Electric Utility Customers are based on telephone interviews conducted March 3 through March 21, 2014, 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 ±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 WNH 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 3.63 for providing consistent, reliable electricity. The average is 3.27 for providing information to help customers reduce their energy costs.

For reliable electricity the standard deviation is 0.56. For affordable energy the S.D. is 0.71. These findings mean there is a wider range of opinion – meaning less consensus – about whether WNH provides information to help customers to reduce their energy costs than about whether WNH 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 2014 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 6,500.

At a 95% confidence level the margin of error is ±1.22 and at a 99% confidence level the margin of error would be ±1.6 . 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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Culture, Leadership & Performance – Organizational Development	**Focus Groups, Surveys, Polls, Diagnostics**	**Customer Service Excellence**
Leadership development	Diagnostics ie. Change Readiness, Leadership Effectiveness, Managerial Competencies	Service Excellence Leadership
Strategic Planning	Surveys & Polls	Telephone Skills
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Your personal contact is:

Sid Ridgley, CSP, MBA

Phone: (905) 895-7900 Fax: (905) 895-7970 E-mail: sidridgley@utilitypulse.com or sridgley@simulcorp.com

ATTACHMENT 1-8

INNOVATIVE RESEARCH GROUP INC. CUSTOMER ENGAGEMENT REPORT

Innovative Research Group, Inc.
Toronto • Vancouver

Customer Consultation Report

2016 Rate Application Review

April 2015

Prepared for:

Waterloo North Hydro
526 Country Squire Road, PO Box 640
Waterloo, Ontario
N2J 4A3

Waterloo North Hydro Inc.

Customer Consultation Report

2016 Rate Application Review

April 2015

This report has been prepared by Innovative Research Group Inc. for Waterloo North Hydro Inc.

The conclusions drawn and opinions expressed are those of the authors.

Innovative Research Group Inc.
56 The Esplanade, Suite 310
Toronto ON | M5E 1A7
Tel: 416.642.6340
Fax: 416.640.5988
www.innovativeresearch.ca

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Introduction

About this Consultation

Innovative Research Group Inc. (INNOVATIVE) was commissioned by Waterloo North Hydro (WNH) to help the utility design, collect feedback and document its customer engagement and consultation process as part of the development of WNH's 2016 cost of service rate application.

WNH's customer consultation is a key element of its next distribution cost of service rate application. The outcome of this application will determine WNH's electricity distribution rates for its test year – beginning January 1, 2016– and will help set the pace for the utility's regulated spending over the following four years ending December 31, 2020.

The Ontario Energy Board's (OEB) new "consumer-centric" approach to rate applications as detailed in the *Renewed Regulatory Framework for Electricity Distributors (RRFE)* requires distributors to demonstrate services are provided in a manner that responds to identified customer needs and preferences[1]. Distributors are required to provide an overview of customer engagement activities that they have undertaken with respect to its plans and how customer needs and preferences have been reflected in the distributor's application. This initiative sought to bring customers directly into the process of finding the right balance between cost and reliability in WNH's 2016 rate application with the OEB.

This process of identifying and reacting to customer needs and preferences towards WNH's system plan development and execution, as it relates to rate applications, is relatively new to Ontario's distributors. Aside from a few distributors who have had their rates approved under the RRFE, there are few established practices of engaging customers to identify their needs and preferences. That said, there are a number of options available to distributors to engage with their customers. The following section explains WNH's approach to its customer engagement related specifically to its rate application.

Effective and Meaningful Customer Engagement

INNOVATIVE's past experience with engaging customers in meaningful consultation has documented a number of challenges. The reality of most consultation processes is that they start out aiming to collect the views of the average person, but end up collecting the views of organized advocacy groups.

Many customers feel they do not know enough to contribute to the consultation process. Others fear the combative nature of some public processes or prefer not to risk offending friends and neighbours by taking positions on issues that are sometimes controversial. Moreover, many customers simply do not pay attention and remain unaware of particular consultations that they would participate in if they had have been aware.

[1] OEB Renewed Regulatory Framework for Electricity Sections 2.4.2, 5.0, and 5.0.4.

Running a customer consultation for distributors has an additional challenge – the lack of familiarity with the distribution system; including how it is funded, regulated and the nature of its challenges. This is well documented in the OEB's publicly available consumer research and in INNOVATIVE's own experience.

Considering both the challenge of engaging a representative group of customers and the challenge of lack of knowledge, we developed a process built on five key principles:

1. Ensure all WNH customers have an opportunity to be heard.
2. Use random-sampling research elements to ensure a representative sample of customers are engaged.
3. Create open voluntary processes to allow anyone who wants to be heard to be heard.
4. Focus on fundamental value choices. Look for questions that ask people to choose between key outcomes rather than focus on the technical questions of how to reach those outcomes.
5. Create an opportunity for the public to learn the basics of the distribution system so they can provide a more informed point of view.

Since this was the first time WNH so explicitly engaged customers in the development of their distribution system planning, a specific effort was made to collect participant comments on the process itself. Most customers felt this approach to engagement was effective at soliciting their feedback on WHN's investment and spending plan.

Customer Consultation Overview

Based on the principles outline above, INNOVATIVE worked with WNH staff to design a multifaceted customer engagement program which included a combination of qualitative and quantitative research elements. This consultation was designed to engage various rate classes and collect feedback on preferences and needs as they relate WNH 2016 Rate Application Review.

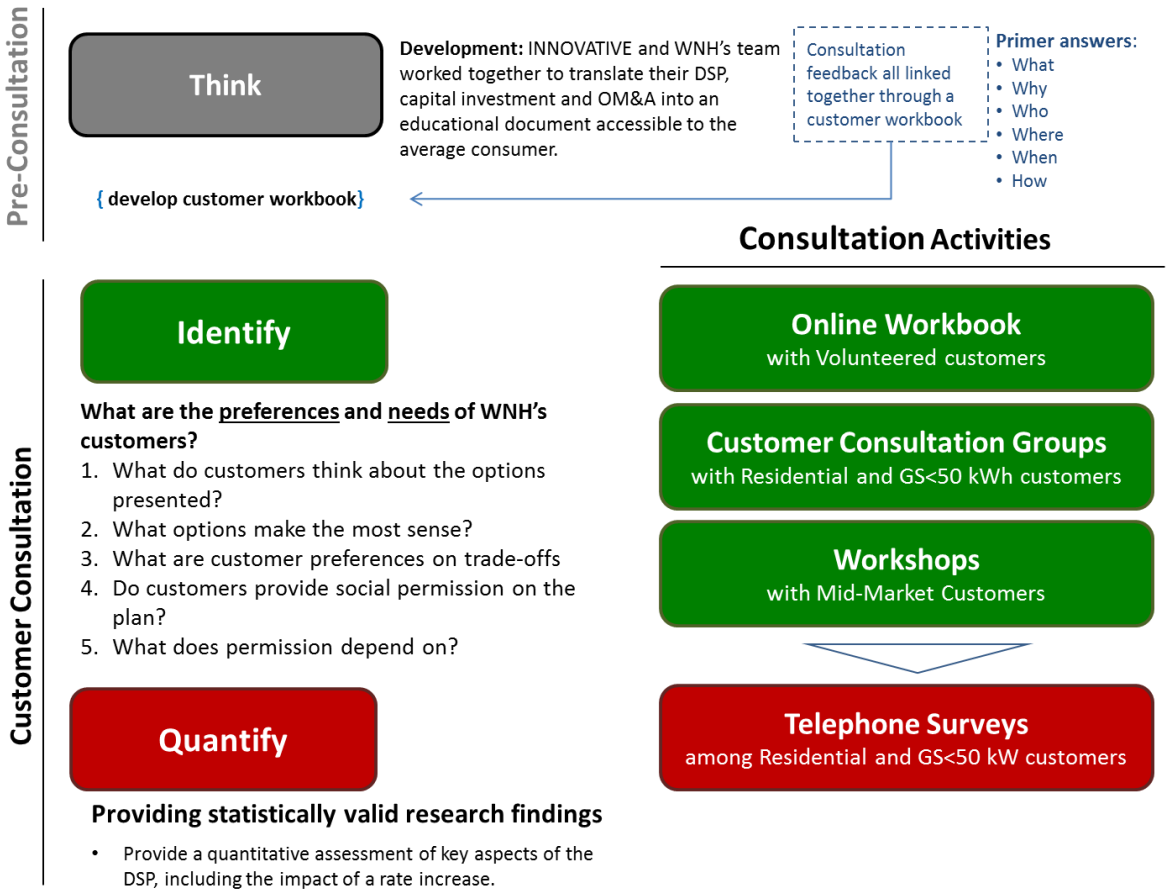
There were three stages in developing and implementing WNH's consultation:

- **Think**: The first stage was to develop the core background material and key questions for the workbook. INNOVATIVE and WNH worked together to review the utilities system plan, capital investments and OM&A spending. Potential questions were identified that would allow customers to share their needs and preferences. Then a workbook was developed that would provide the information needed to allow customers with varying levels of knowledge to find answers to those questions.
- **Identify**: The second step was to find out the range of views held by the WNH's customers regarding the system plan through qualitative elements of the process. This included an open access online workbook to collect customer feedback and a series of customer discussion groups among randomly recruited residential and GS customers.
- **Quantify**: The third step was quantitative – a randomly recruited telephone surveys of residential and GS customers. Randomly recruited surveys allow for generalizable

conclusions that can be applied to the broader population of WNH's customers. The surveys were developed based on the feedback from the qualitative research.

WNH's consultation encompassed four core elements of customer engagement.

1. **Online Workbook**: The online workbook was promoted through traditional print advertising, social media, email blasts to customers for whom email addresses were available, as well as WNH's website. This first phase of the consultation was available to any WNH customer who wanted to participate.
2. **General Service and Residential Consultation Focus Groups:** Similar to the online workbook, this qualitative phase of the consultation was designed to educate customers, assess their preferences and priorities, gauge reaction to proposed rate changes, and ultimately inform the quantitative phases of the consultation. The customer focus groups were randomly recruited and held at WNH's offices in Waterloo. A workbook was used to provide the participants with core information customers about both the provincial and local electricity system, WNH's proposed capital investment and operating spend to maintain system reliability, as well as the rate impact for each respective rate classes. Participants were provided incentives in recognition of their time commitment and to help ensure diverse participation among WNH's customers.
3. **Mid-Market & Large Business Workshops**: general service customers over 50 kW (GS > 50kW) were engaged through a WNH organized breakfast meeting workshop. This workshop included a presentation delivered by WNH's CEO on the utility's DSP and rate implication for this rate class, a Q&A session with WNH senior management, and the administration of an INNOVATIVE survey to collect customer preferences and needs as related to WNH's DSP and rate implications.
4. **Random Telephone Surveys**: INNOVATIVE conducted telephone surveys among residential and general service (GS < 50 kW) customers to provide a generalizable assessment of WNH's system plan and rate implications. Customer were randomly selected by INNOVATIVE from lists provided by WNH.



The consultation was designed so anyone who is interested would have an opportunity to participate in the process through the online workbook. However, in our approach, we distinguish between responses from the opinion research discipline (random recruits and scientific polls) and responses from an "open invitation" consultation discipline.

The small group results are presented as numeric counts to help readers remember that qualitative research only identifies points of view, it does not project the incidence of that point of view in the broader public.

The results from the online workbook and random surveys are presented as percentages due to the larger numbers involved.

- Readers are cautioned that the online workbook result represent the views of volunteers. The online workbook sample is not randomly selected and cannot be generalized to the broader WNH customer base.
- The telephone surveys are based on random samples so we can reliable project the incidence to the broader population of WNH's customers.
- In some instances, the quantitative total may be greater than 100% due to rounding. This is in keeping with standard research practice.

Workbook Development

As we noted earlier, a key challenge in getting customer feedback on WNH's rate application is the lack of knowledge customers have toward Ontario's electricity system and WNH's role as the local distributor within the system. WNH's proposed distribution system plan, capital investment plan and OM&A budget are all very detailed and extensive documents that uses technical language. Our challenge was to briefly cover these key issues and frame meaningful questions about customer needs and preferences.

The process of developing the consultation workbook began in the winter of 2015. The workbook was divided into key sections that explained WNH' electric system, the challenges facing the system, and how WNH intended to meet those challenges over time.

The final consultation workbook had four distinct chapters:

1. **What is this Consultation About?** the purpose of the discussion, where the discussion fits in the context of electricity planning in Ontario.
2. **Electricity 101**: how the overall system works and the players involved in operating and regulating the system as it relates to WNH's customers.
3. **System Challenges and Solutions**: a discussion of the various challenges facing WNH's distribution system and an overview of recent and current initiatives to manage the challenges.
4. **What the Plan Means for You**: a section covering the level of planned spending for 2016 by capital investments and OM&A, the expected impact on rates and feedback on priorities, pacing and overall reaction.

Although the general proficiency of customers varied as it related to understanding issues related to Ontario's electricity system, the same basic workbook was used in all qualitative customer engagements. The references to bill impact were varied to reflect the details of that specific rate class (either residential or GS less than 50 kW).

As customers went through the consultation workbook they were prompted with questions relating to system reliability, system challenges, and preferences on the direction of WNH's proposed system plan, capital investment and operating spend. In developing the questions, we looked for those that could also work on the telephone, without requiring all of the information in the workbook.

Identifying customer *needs*. We started with a basic satisfaction question and then asked an open-ended question about how WNH could improve its services. We let customers discuss whatever topics they wanted to without boundaries. Later in the workbook we probed satisfaction with the number and length of power service interruptions and probed the impacts of those outages.

Identifying customer *preferences*. We were looking for value choices rather than technical issues. Preference questions included understanding the investment and spending priorities and which areas should have more or less priority?

The final substantive question asked about the cost of the plan and the outcomes it planned to achieve. Sometimes this questions is asked with a simple support or oppose response scale, but

previous research has demonstrated that this type of scale does not effectively capture customer sentiment as it relates to distributor rate increases. Instead, customers were given three options, as well as a "don't know" option:

- The rate increase is reasonable and I support it
- I don't like it, but I think the rate increase is necessary
- The rate increase is unreasonable and I oppose it
- Don't know

Note: Throughout this report the term "**social permission**" is used in place of "support" in reference to WNH's proposed rate increase. In this context, it's not so much that customers *support* a rate increase so much as they accept that it is necessary. It is less likely that customers will *support* a rate increase because it means more money coming out of their pockets, however they may acknowledge that there is a *need* for a rate increase and so they give it social permission.

The workbook concluded with a final set of five questions to assess the workbook and process itself.

The customer workbooks can be found in the **Appendix** of this report.

Executive Summary

The following section provides the detailed findings on the needs and the preferences of WNH's general service and residential customer base. In this section, we provide a high level overview of WNH customers' needs and preferences.

The overview includes feedback from customers who participated in the *qualitative stage* of the consultation where we explored the range of issues related to WNH's rate application, as well as feedback from another 700 customers who responded to the quantitative stage where we documented the incidence of *needs* and *preferences* across the customer population.

Customer Needs & Preference

Continued delivery of high quality services

Almost all WNH customers are satisfied with the job the utility is doing at running the electricity distribution system. This pattern was consistent across all rate classes in all phases of the customer consultation.

Overall Satisfaction across Consultation Activities

Q. Generally speaking, how satisfied are you with the job Waterloo North Hydro is doing running your electricity distribution system?

Response	Directional (Focus Groups)		Directional (Online)[2]	Directional (Workshop)	Generalizable (Telephone Surveys)	
	General Service	Residential	Residential	Mid-market & Large GS	General Service	Residential
Very satisfied	4	4	49%	11	44%	45%
Somewhat satisfied	4	5	43%	12	50%	49%
Not very satisfied	0	1	5%	1	4%	3%
Not satisfied at all	1	1	2%	0	3%	2%
Don't know / Refused	0	0	1%	0	0%	1%
TOTAL	**n=9**	**n=11**	**n=1,522**	**n=24**	**n=200**	**n=500**

When we asked what WNH can do better to improve services, a most customers were either satisfied and had nothing to suggest or simply didn't know who the utility could improve services. However, among those who did have suggestions, comments focused on two areas:

- Lowering rates; and
- Improvements to reliability or reduced outages.

[2] Business respondents are not included as only n=11 completed the online workbook.

This paradox of *lower rates* while seeking *improvements in reliability* is the key dilemma the consultation sought to explore and better understand.

The consultation focused deeper on the question of power service interruptions. In both the qualitative and quantitative phases of the consultation, information about the system's current average level of reliability was provided to customer. The consultation collected feedback on satisfaction with the current level of reliability, WNH's efforts to address reliability and impact of power outages.

Reliability of Service

The qualitative consultation phases explored the impacts of outages on customers, acceptable frequencies, and durations of outages. Those findings are detailed in the following section, in the qualitative phases of the customer consultation.

The telephone surveys built on the qualitative feedback and asked questions about customer preferences on the trade-off between cost and reliability.

Half of residential customers (50%) and 61% of GS customers recall experiencing a power outages due to the ice storm in December of 2013. Whether they were impacted or not, a strong majority were satisfied with how WNH responded to the ice storm.

- 9-in-10 (89%) of residential customers were satisfied with the way WNH responded to the ice storm, while 91% of GS customers were satisfied.

Aside from the ice storm, most residential (69%) and GS (59%) customers had experienced at least one outage in the 12 months leading up to the survey, with most outages lasting less than an hour. Asking respondents to think back to their most recent power outage:

- 7-in-10 (71%) residential respondents said the outage caused a *minor inconvenience*, while 23% said it caused *no inconvenience at all*. The most recent power outage was a major inconvenience for 5% of residential customers.
- Again, 7-in-10 (71%) GS respondents said the outage caused a *minor inconvenience*, while 9% said it *no inconvenience at all*. The most recent power outage was a major inconvenience for 19% of GS customers.

When it comes to addressing power outages, a majority of residential and GS customers want to see continued spending on upgrades and maintenance.

Regarding the number of power outages:

- 1-in-5 (20%) residential respondents think WNH should spend what is needed to reduce the number of power outages, while 2-in-3 (65%) think they should spend what is needed to maintain the current level. Only 10% state that WNH should accept more power outages in order to keep customer costs from rising.
- General Service customers respond similarly on how to address the number of outages: 21% think that WNH should spend what is needed to reduce the number of power outages and 68% say they should spend what is needed to maintain the current level. Again, only a small minority (7%) believe that WNH should accept more power outages in order to keep customer costs from rising.

Regarding the length of power outages:

- Over 8-in-10 (83%) of residential respondents think WNH should spend what is needed to either reduce (16%) or maintain (67%) the length of power outages. Only 13% think that WNH should accept longer power outages to help minimize customer costs from rising.
- Similar proportions of general service respondents think that WNH should spend what is needed to reduce (15%) or maintain (66%) the length of power outages. 17% think that WNH should accept longer power outages to help minimize customer costs from rising.

Both customer groups agree that greater priority should be given to reducing the length of outages (53% RS vs. 50% GS) as opposed to the number of outages (27% RS vs. 39% GS).

Survey respondents were informed of WNH's proposed capital investment required to maintain system reliability and then asked to think about reliability in terms of bill impact.

- Over 8-in-10 (85%) residential customers and 76% general service customers believe that WNH should invest in aging infrastructure to maintain system reliability, even if it means their bills may increase.
- Just under two thirds in both groups (63% RS; 63% GS) think the benefits of new technology are important enough to be a priority for WNH.
- Even more (70% RS; 73% GS) feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.

Affordable electricity costs

It is true that many customers are feeling a "financial pinch" when it comes to their electricity bills. However, just as many customers are able and willing to pay more if that means maintaining system reliability.

When it comes to the impact on household finances and the bottom line, a number of customers indicate that their electricity bill has a significant impact:

- 49% of residential customers agree that "*The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities*";
- While 69% of GS customers agree that "*The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.*"

Yet, at the same time, most claim to be able to pay more for electricity but have concerns about the impact a rate increase will have on others.

- 68% of residential and 72% of GS customers agree that *"I [my organization] can personally afford to pay more for electricity, but I am worried about the impact this will have on others [some of my suppliers and customers]"*.

Finally, when it comes to legacy issues, a large majority support spending more to maintain the local distribution system for future generations.

- 85% of residential and 96% of GS customers agree that "*Nobody likes to pay more for electricity, but I think we have an obligation to maintain the reliability of our local electrical system for future generations.*"

Customer Reaction to Proposed Rate Increase

Asking customer whether they support or oppose a rate increase puts many participants in a difficult spot. It is clear that many customers have an issue with the idea of "supporting" a rate increase. While they do not want or like a rate increase, they are often not opposed to a rate increase. In fact, many feel a rate increase is needed. As such, we created a response for these customers: "I don't like it, but I think the rate increase is necessary".

Other participants had no problem in expressing outright support for a rate increase. The statement we provided for them is "The rate increase is reasonable and I support it".

When we refer to the combination of these two groups – I don't like it but it's necessary and I support the rate increase – we refer to the level of "**permission**".

Referring to the generalizable results from the telephone surveys, 84% of residential customers accept WNH's proposed rate increase, while 86% of general service customers accept the proposed rate increase.

Q: Considering the cost of Waterloo North Hydro's proposed plan, would you say …

Response	Directional (Focus Groups)		Directional (Online)[3]	Directional (Workshop)	Generalizable (Telephone Surveys)	
	General Service	Residential	Residential	Mid-market & Large GS	General Service	Residential
The rate increase is reasonable and I support it	1	1	21%	6	31%	40%
I don't like it, but I think the rate increase is necessary	2	6	55%	14	55%	44%
The rate increase is unreasonable and I oppose it	2	3	18%	2	13%	14%
Don't know / Refused	4	1	6%	1	2%	2%
TOTAL	**n=9**	**n=11**	**n=1,522**	**n=23[4]**	**n=200**	**n=500**

As seen throughout WNH's customer consultation, there is no simple answer to electricity utility spending and investing from the customer's perspective. Rate increases are undesirable, but lower reliability is clearly unacceptable and a proactive and consistent approach to system maintenance is understood and accepted. As a result, WNH customers accept the proposed spending and investment plan and its accompanying rate increase as an unfortunate necessity.

[3] Business respondents are not included as only n=11 completed the online workbook.

[4] Although 24 medium and large business participated in WNH's workshop, one customer did not complete this question.

Online Workbook

The following summary highlights key findings from the online workbook and survey that was conducted between March 13th and April 1st, 2015.

Online Workbook
with Volunteered Customers

PURPOSE: To inform customers on the details of Waterloo North Hydro's proposed DSP and obtain feedback on the proposed plan

Summary

Familiarity and Satisfaction

- Waterloo North Hydro residential customers express a high level of familiarity (85%) with the electricity system and WNH's role within in.
- Further, the vast majority (92%) are satisfied with the service they receive from WNH – 49% are *very* satisfied.
- 19% were unable to cite any specific areas for improvement, but some would like to see lower rates (17%) and a reduction or elimination of power outages (13%).

Cost Drivers and Investment Solutions

- Asked how well they understand the costs the WNH is responding to, two thirds (66%) say *somewhat well* and an additional 20% say *very well*.
- Customers feel WNH is doing a good job of managing cost pressures, with 77% saying they are doing so either *somewhat* (62%) or *very* (15%) well.
- A strong majority (72%) feel WNH should invest what is required to replace the system's aging infrastructure to maintain system reliability, even if they increases their monthly bill by a few dollars over the next few years.

System Reliability

- Aside from major weather outages, a plurality (29%) had not experienced any unexpected power outages in the past year. Less than a quarter (23%) report one outage, one-in-five (19%) report two outages, and a similar proportion (20%) report three or more outages.
- Among both residential and business customers (directional information only due to small sample size), unexpected power outages are only a minor inconvenience (61% of residential; 7 of 11 business customers).
- When it comes to how to address the number of unexpected outages, more than half (54%) would prefer that WNH spends what is needed to maintain the current level of unexpected outages.

- Looking at duration, half (50%) would also like WNH to spend what is needed to maintain the current length of unexpected power outages.
- Asked to choose between a focus on frequency or a focus on duration, almost two-thirds (63%) would like WNH to focus on reducing the length of power outages.

Investing in the System

- Two-thirds (64%) feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.
- Three-quarters (74%) are either *very* (19%) or *somewhat* (55%) satisfied with the efforts WNH has made to find efficiencies and cost savings.
- Half (49%) say WNH's investment plan *might* be going in the right direction, while an additional 22% say it is *definitely* going in the right direction.
- Almost nine-in-ten (87%) feel WNH's investment plan covered the topics they expected either *very* (37%) or *somewhat* (51%) well.
- More than half (55%) are *somewhat* satisfied with how WNH is planning for the future, with another 29% saying they are *very* satisfied.

Social Permission

- Three-quarters (76%) of residential respondents accept the proposed rate increase. One-in-five (21%) feel the rate increase is necessary and they support it, while 55% say they don't like it but feel it is necessary. Fewer than one-in-five (18%) oppose the rate increase.

Methodology

About the Online Workbook

Waterloo North Hydro (WNH) and INNOVATIVE collaborated in early 2015 on the development of a workbook that would be used in the customer consultations and that would serve as the basis of the online workbook phase of the customer engagement program.

The objective of the workbook was to provide customers with information about the provincial electricity system, WNH's role within it, and the OEB rate application process. The workbook also included information on cost drivers, and WNH's response to these drivers, their investment plan for the next five years, the impact this investment would have on customer rates. Survey questions embedded in the workbook allowed us to identify customer preferences and priorities, seek customer feedback on rate increases, and to inform the subsequent telephone survey phase of the consultation.

NOTE: Results contained within this section of the report are based on self-selected or volunteered participation and therefore should not be interpreted as a representative sample of WNH customers.

Recall, the purpose of the online workbook is to identify potentially unique issues, concerns, needs and preferences they relate to WNH's investment and spending plan and use this customer feedback to help design the generalizable telephone survey in the subsequent phase of the consultation.

Online Workbook Design

The online workbook was very similar to the workbook that was used for the previous customer consultations, as were the questions contained within. The workbook themes included the following:

1. What is this Consultation About?
2. Electricity Grid 101
3. Cost Drivers
4. Challenges and Solutions
5. Value Added Services & Efficiencies
6. What Does this Mean for You?

Under the heading "What is This Consultation About?" the workbook set out WNH's mission, the purpose of the customer consultation process, and INNOVATIVE's role within that process. There is a short description of why the consultation is being conducted and a note on how the workbook is designed to gather customer feedback. There is also a description of how electricity rates are determined in Ontario.

Customers were then presented with an Executive Summary that introduces WNH's Distribution System Plan and what that plan covers. The summary provides historical and forecasted capital and operating expenses for 2013 to 2020, along with an indication of how these expenses will impact customer rates.

A section entitled "Electricity 101" explained who does what in Ontario's electricity system and provides examples of generation, transmission and distribution companies that make up the three components of the system.

The next section provided customers with some key financial information: historical rate increases, guiding principles for how WNH spends and invests customer dollars, capital investments, and operating expenses.

The "Challenges and Solutions" section of the workbook described the various challenges currently facing the WNH system: aging and obsolescence, re-urbanization, weather and major events, and incorporating new technology into the system. The next page described the value added services and efficiencies that are a part of the WNH system.

At the end of the workbook, customers are provided with preliminary rate impact figures for the distribution portion of their 2016 electricity bills.

Throughout the workbook, questions were embedded to gather customer feedback on the information as it was being shared with them as they worked their way through the workbook. Final questions addressed social acceptance of the rate increase and then gathered feedback on the online workbook overall.

Field Dates

The Online Workbook was accessible to WNH customers from March 13th to April 1st 2015.

Promoting the Online Workbook

Waterloo North Hydro promoted the online workbook consultation to its customers in a number of ways:

- Ads were run in two local newspapers – The Record and The Woolwich Observer – both in print and as banners in the online versions.
- E-mails were sent to 14,990 Waterloo North Hydro customers for whom email addresses were available.
- Details and a link to the consultation website were provided on the WNH website and via Twitter and Facebook.

Publishing the Workbook Online

INNOVATIVE hosted the workbook at the following URL: www.wnhcustomerconsultation.com.

The website prevented customers from completing the survey multiple times. Upon completion, the site was no longer accessible at the web address given.

Note that INNOVATIVE does not ever link to the personal information submitted on the website. All responses were kept anonymous and confidential.

Validating Customer Responses

Customers who filled out the workbook were tagged with an identification number based on their postal code and their response as a residential or business customer of Waterloo North Hydro. Postal codes were checked against a list provided by Waterloo North Hydro for validity and those deemed invalid were removed from the final sample. IP addresses were also used to verify that responses were unique and human.

Sample Characteristics

The breakdown of Online Workbook responses are as follows:

- 3,062 unique visitors came to the landing page.
- 1,528 unique visitors answered at least a few questions.
- 1,533 customers (including 11 business respondents) completed the entire Online Workbook.

The information provided by customers were grouped together anonymously and used only for exploratory analysis in this report.

Business Respondents

Since only 11 business customers finished the workbook out of a total of 1,533 respondents, the focus of the online workbook report will primarily be on the views and opinions of residential customers.

Responses provided by business customers are included in some of the following charts as footnotes and for key questions on satisfaction and permission.

Respondent Profile

The following chart displays a breakdown of the residential respondents by responsibility for electricity bill, type of residence, living situation, and number of people in household. The subsequent chart presents the breakdown of commercial respondents in terms of business operations and monthly spending on electricity.

Figure A1: Residential Customer Profile

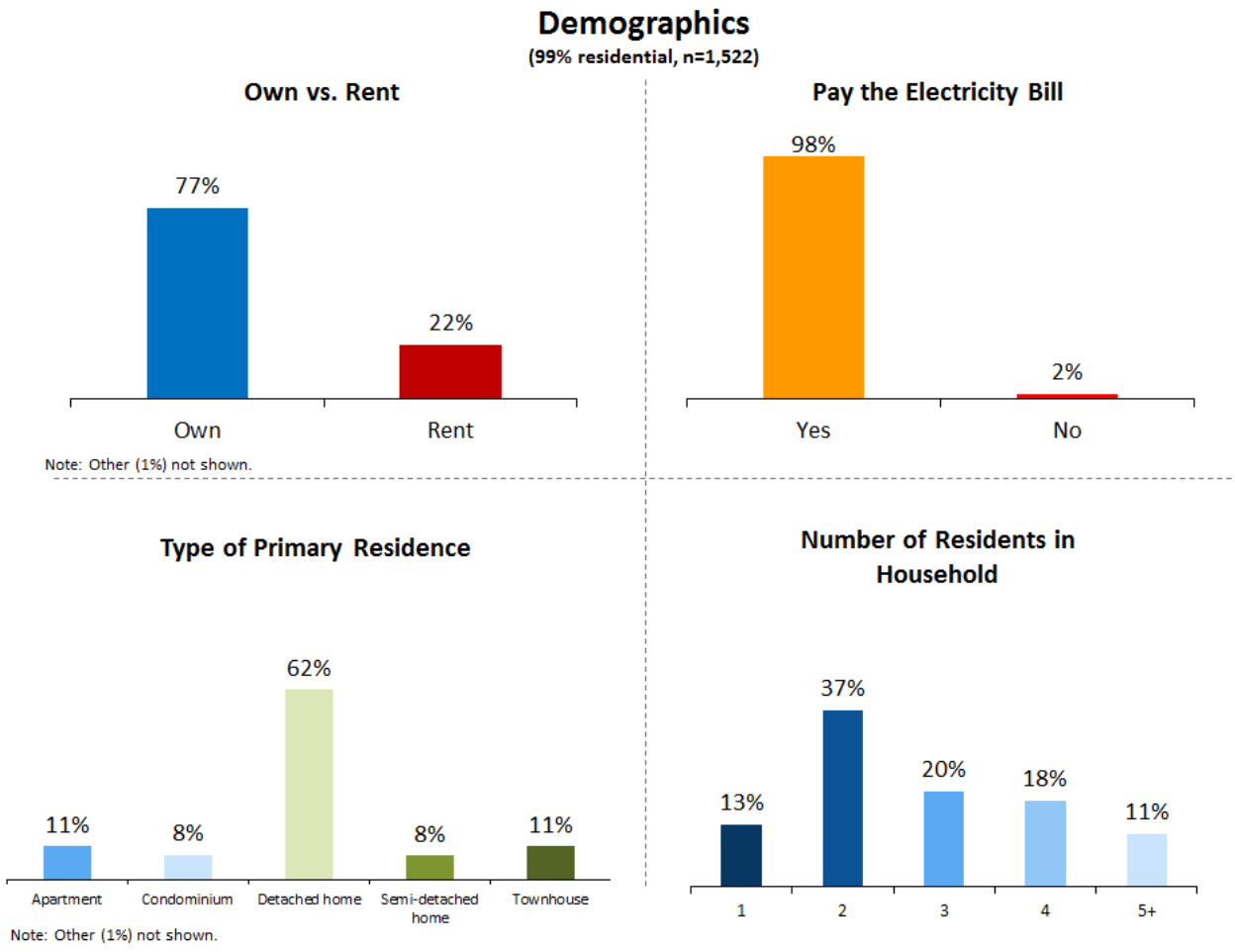
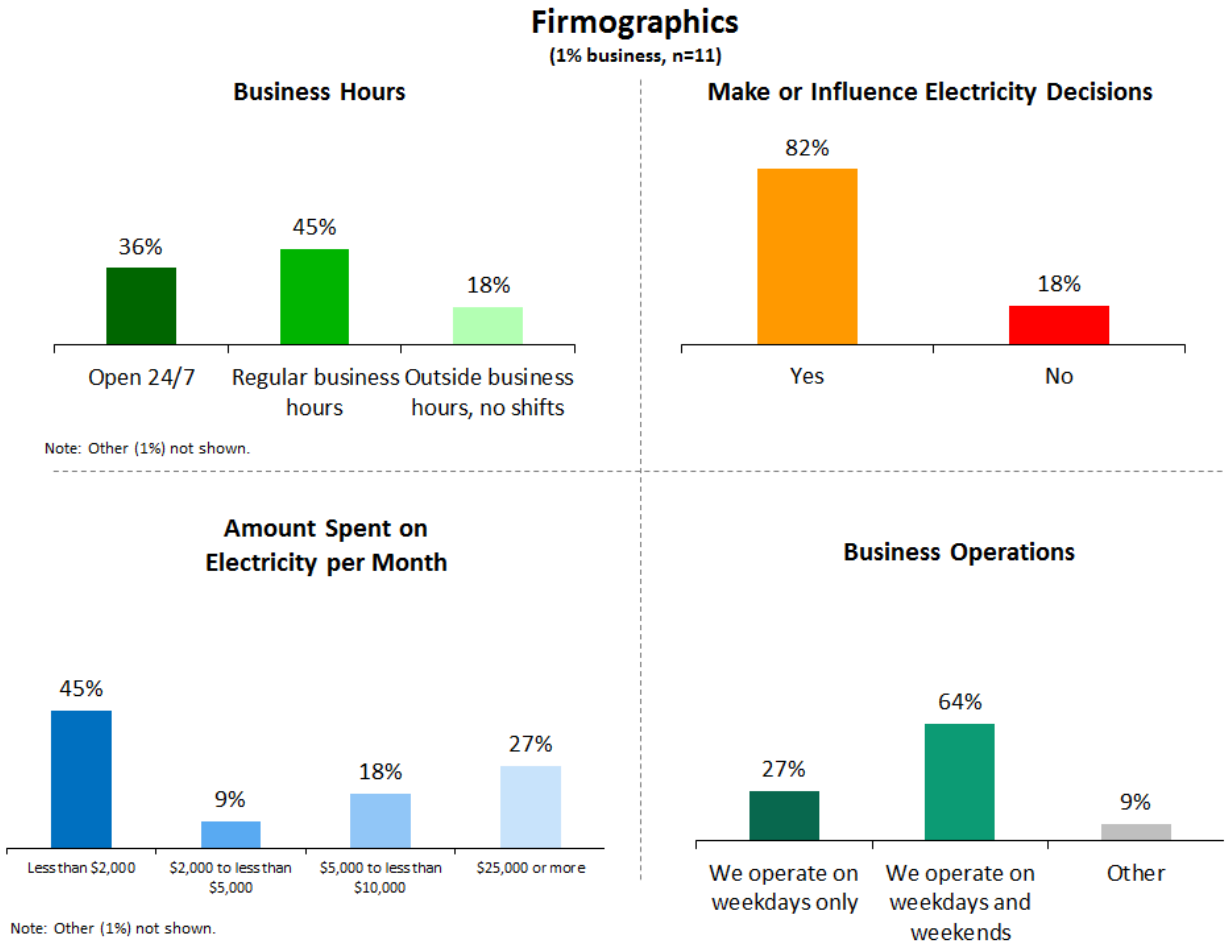


Figure A2: Business Customer Profile



Customer Feedback

In total, 1,533 respondents answered questions to the end of the workbook (including 11 business respondents). Note that the number of responses will vary on the open-ended questions as respondents were not required to provide a response. The sample sizes for residential respondents and business respondents are indicated separately.

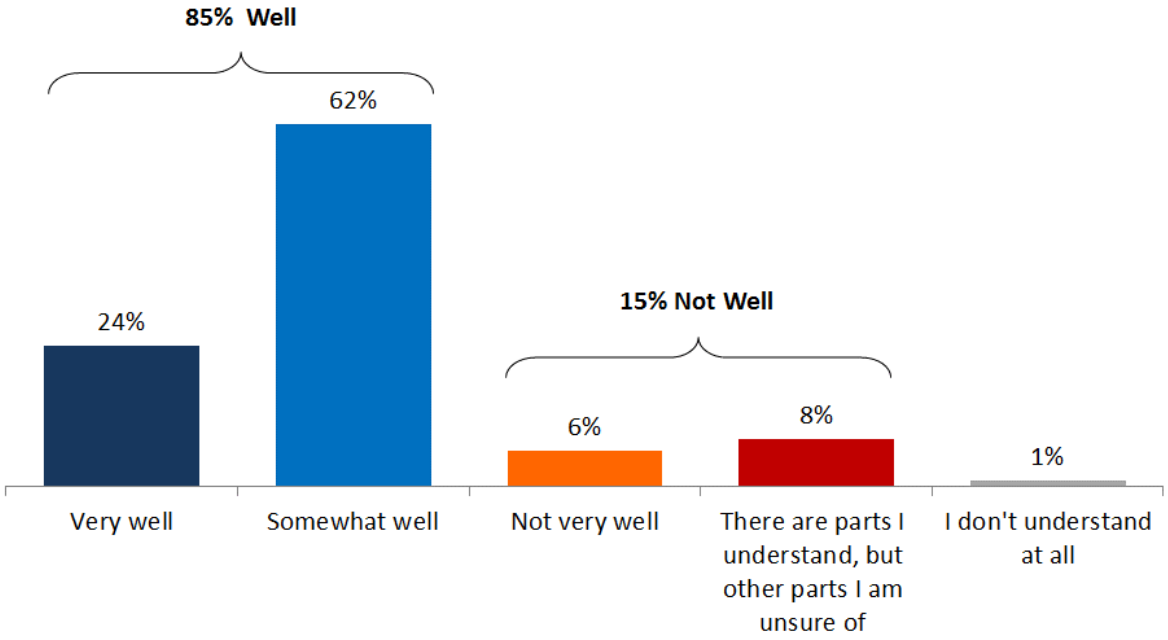
Familiarity and Satisfaction

The first section of respondent feedback focuses on familiarity with the system and Waterloo North Hydro, satisfaction with their level of service in the past year and perceived system reliability in both normal and extreme weather.

Familiarity and Understanding of the System

Figure 1: Familiarity with Electricity Distribution System

Q Given what you know and what you have learned today, how well do you feel you understand the parts of the electricity system, how they work together and which services Waterloo North Hydro is responsible for?
[n=1,522; residential]



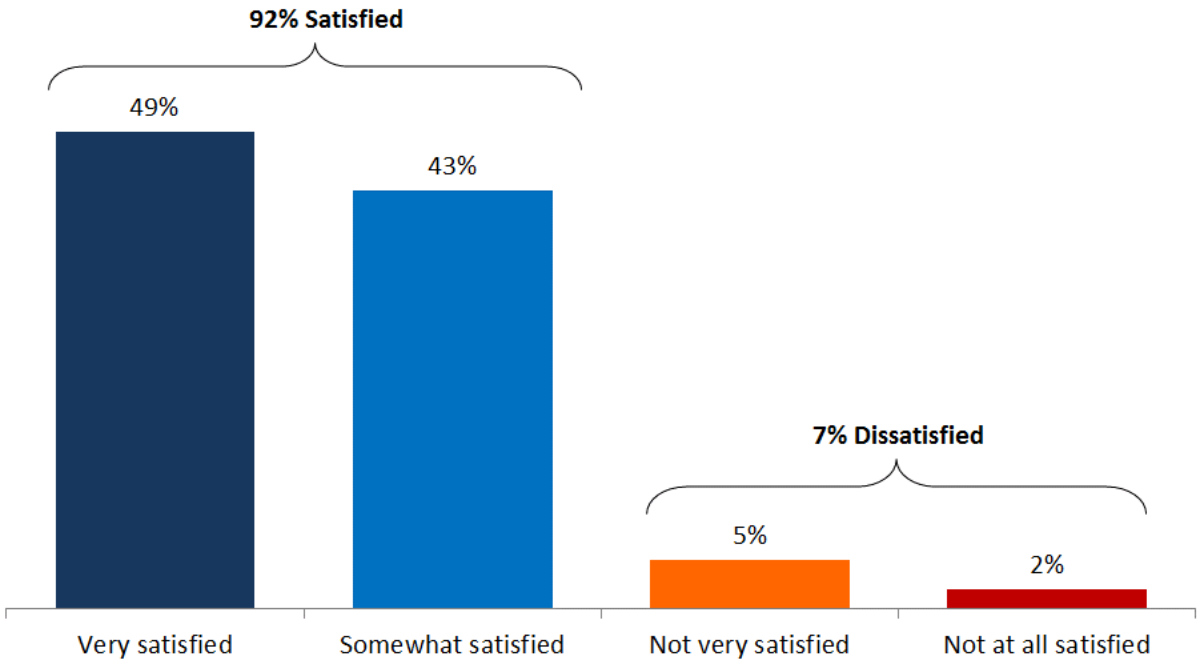
Note: Business respondents (n=11) not shown- n=5 "very well", n=5 "somewhat well", n=1 "there are parts..."

A large proportion (85%) of residential customers feel that they understand the electricity system and WNH's part within it either *very* (24%) or *somewhat* (62%) well. Respondents living in a fully- or semi-detached house express a higher degree of familiarity than those living in a multi-unit building (86% vs 81%, respectively).

Satisfaction and System Reliability

Figure 2: Satisfaction with Service

Q Generally, how satisfied are you with the service you receive from Waterloo North Hydro?
[n=1,522; residential]

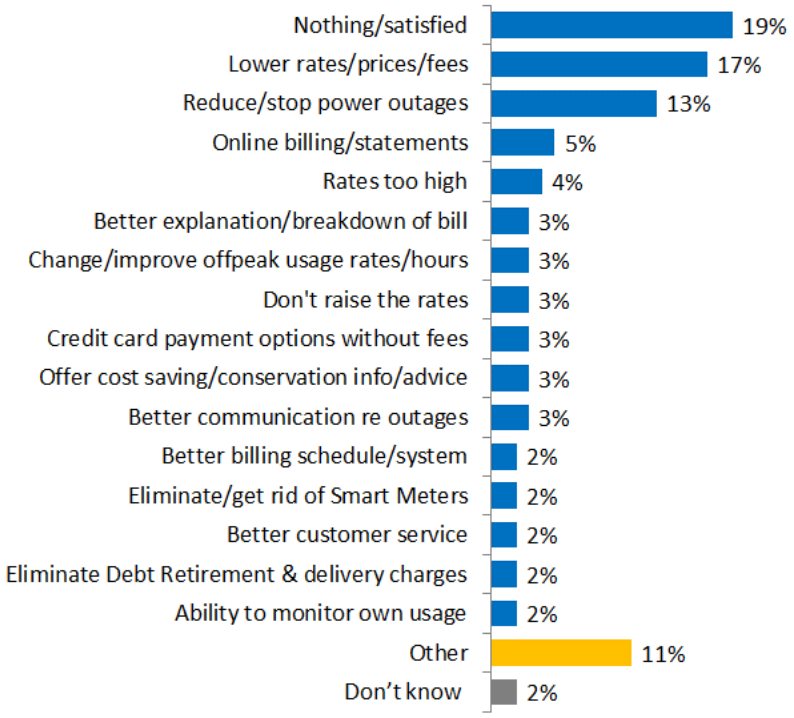


Don't know (1%) not shown
Note: Business respondents (n=11) not shown- n=2 "very satisfied"; n=7 "somewhat satisfied" and n=2 "not at all satisfied"

The overwhelming majority (92%) of customers are satisfied with the service they receive from Waterloo North Hydro. In fact, half (49%) are *very* satisfied. Overall satisfaction levels are consistently high regardless of type of residence or size of household, but those living in a two-person household are most likely to be *very* satisfied (52%).

Figure 3: How Can Service be Improved?

Q Is there anything in particular that Waterloo North Hydro can do to improve its service to you? [OPEN]
[n=653 residential; 869 non-responsive]



Note: Business respondents (n=11) not shown

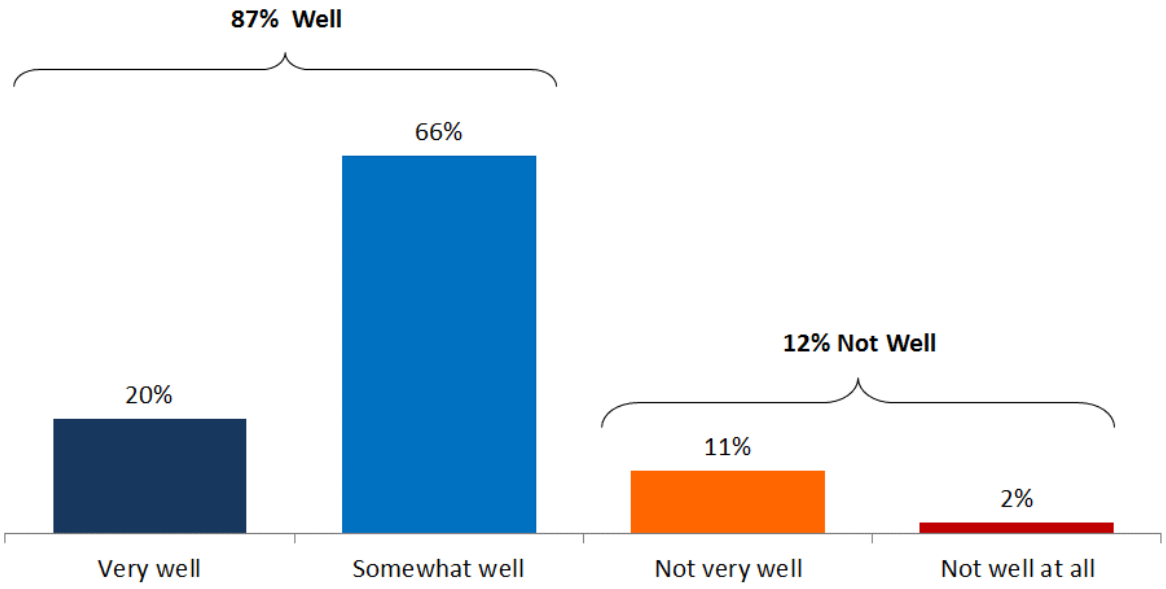
Asked if there is anything Waterloo North Hydro can do to improve its service, one-in-five (19%) residential customers say "nothing/satisfied". "Lower rates/prices/fees" follows close behind at 17%, followed by "reduce/stop power outages" at 13%. There is a wide range of other suggestions that are mentioned by 5% or fewer respondents. Notably, only 657 – or 43% – of respondents provided feedback to this question, suggesting that most customers either didn't feel like giving a response or had no specific issues to report.

Cost Drivers and Investment Solutions

The second section examines customers' understanding of the pressures on the system and how they feel Whitby Hydro is managing them. It also gages customer "permission" to increase rates to address these challenges.

Figure 4: Understanding Cost Pressures

Q How well do you feel you understand the costs that Waterloo North Hydro is responding to?
[n=1,522 residential]

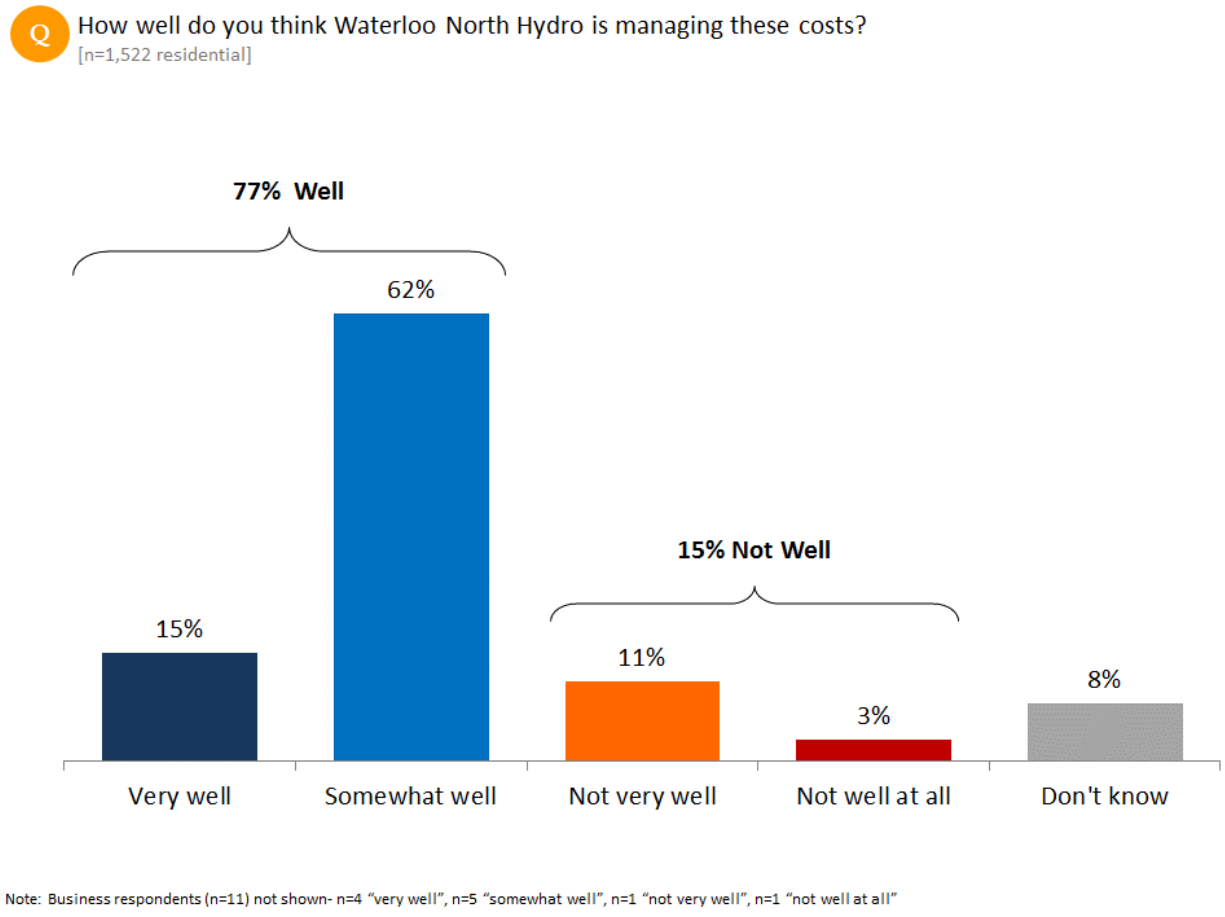


Don't know (1%) not shown

Note: Business respondents (n=11) not shown- n=3 "very well", n=7 "somewhat well", n=1 "not well at all"

While a strong majority (87%) feel they understand the cost pressures WNH is responding to, two thirds (66%) understand them just *somewhat well*. The expressed level of understanding is highest in households with five or more people (90%).

Figure 5a: Managing Cost Pressures



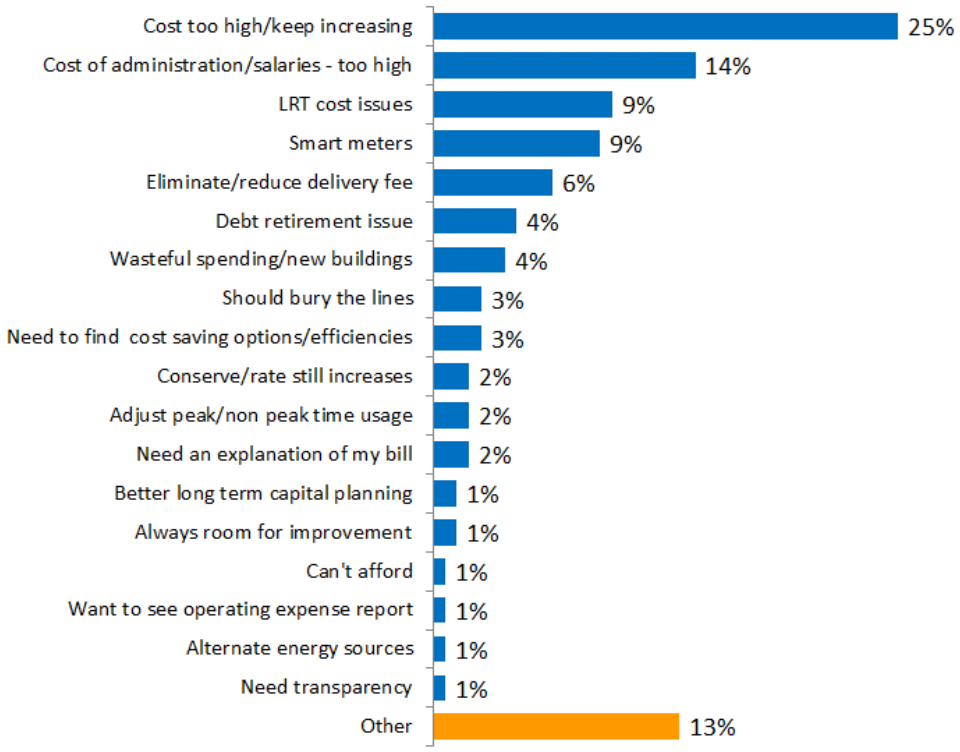
Note: Business respondents (n=11) not shown- n=4 "very well", n=5 "somewhat well", n=1 "not very well", n=1 "not well at all"

Similar to their level of understanding of WNH's cost pressures, most (77%) feel that WNH is managing these costs well, but mostly at the *somewhat* level (62%). Those living in households of five or more are most likely to give WNH credit for managing cost pressures well (84%).

Among those who feel WNH is *not* managing costs well, one-in-four (25%) cite "costs too high/keep rising" as their reason for feeling this way. There are a wide variety of other reasons, including: "cost of administration/salaries – too high" (14%), "LRT cost issues" (9%), and "Smart meters" (9%).

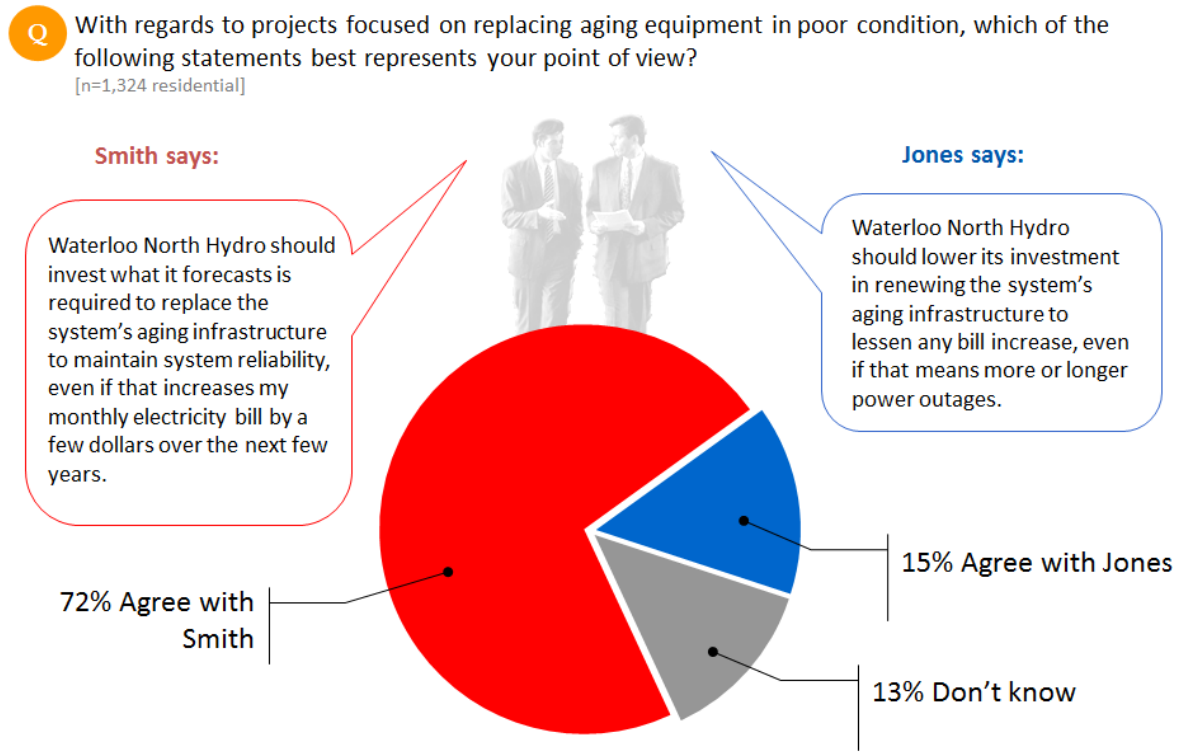
Figure 5b: Managing Cost Pressures

Q Why don't you feel Waterloo North Hydro is managing costs well? [OPEN]
[asked only of those who feel WNH is not managing costs well, n=159 residential, 66 non-responsive]



Note: Business respondents not shown

Figure 6: Replacing Aging Equipment



Note: Business respondents [n=11] not shown – n=8 Smith; n=2 Jones; n=2 "Don't know

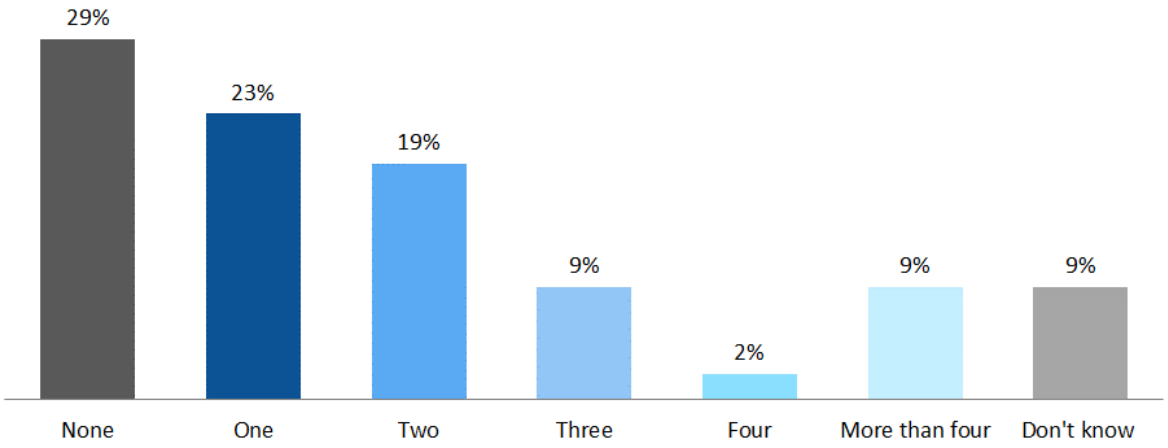
When it comes to replacing aging equipment, almost three-quarters (72%) feel WNH should invest what it feels is required to replace the system's aging infrastructure, even if it means a bill increase over the next few years.

System Reliability

In this section, we look at the experience and impact of unexpected power outages, and how customers feel Waterloo North Hydro should be addressing the number of unexpected power outages. We include a customer assessment of what the priority should be: length of outages, or number of outages.

Figure 7: Unexpected Outages Experienced

Q Aside from major weather events, do you recall how many unexpected outages you experienced in the past year?
[n=1,522 residential]

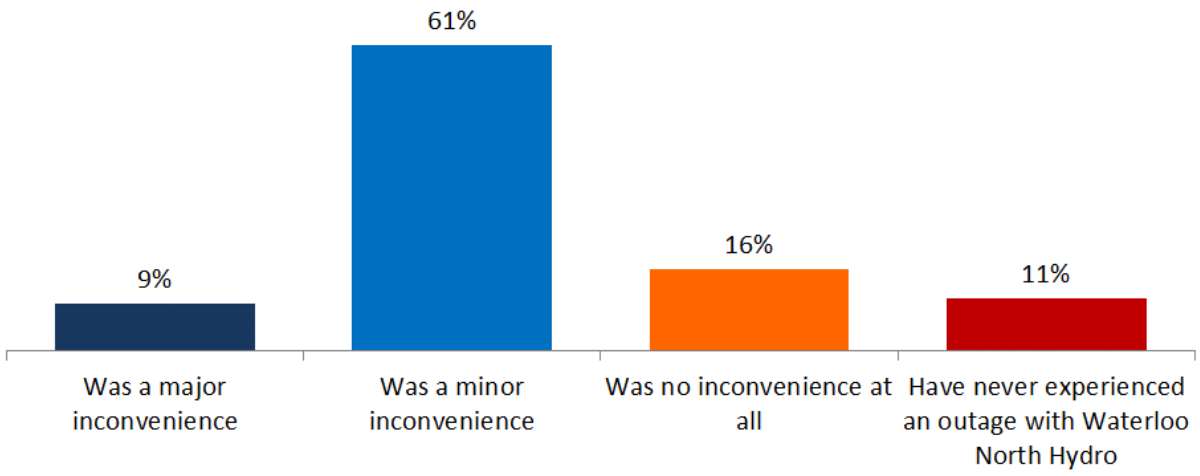


Note: Business respondents not shown [n=11] – n=3 "Two", n=1 "Three", n=4 "more than four", n=1 "None", n=2 "Don't know"

Aside from major weather events, three-in-ten (29%) haven't experienced any power outages in the past year. One quarter (23%) experienced one outage, with fewer (19%) reporting two outages. One-in-five (20%) report three or more outages. Those living in a multi-unit building are most likely to report not experiencing any unexpected power outages in the past year (37%).

Figure 8a: Impact of Outages – Residential

Q [ONLY RESIDENTIAL CUSTOMERS] Again, aside from major weather events, thinking back to the most recent power outage you experienced as a Waterloo North Hydro customer, would you say the power outage …?
[n=1,517, residential only]



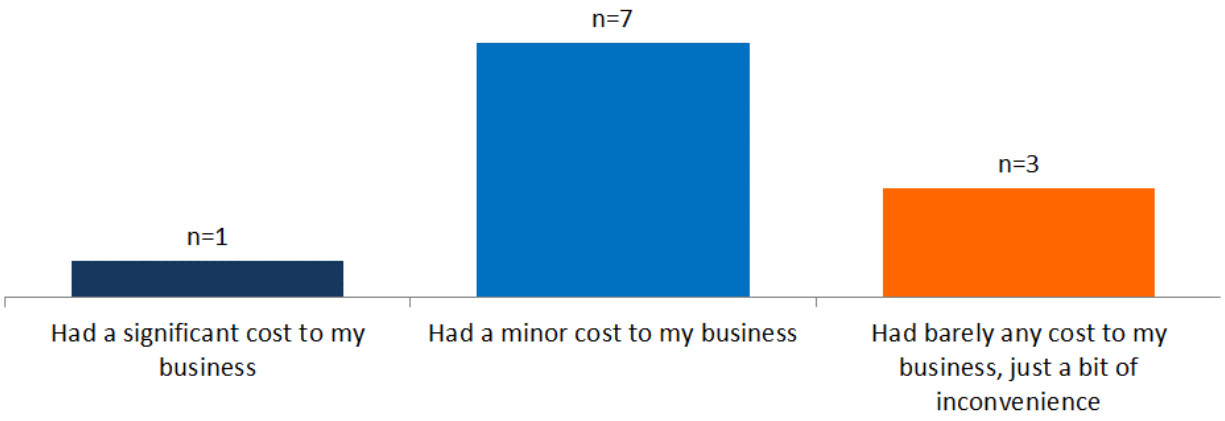
"Don't know" (3%) not shown.

Among those reporting at least one unexpected power outages, three-in-five (61%) report that it was only a minor inconvenience, with another 16% saying it was no inconvenience at all. Only one-in-ten (9%) say their most recent power outage was a major inconvenience.

Figure 8b: Impact of Outages – Business

Q [ONLY BUSINESS CUSTOMERS] Again, aside from major weather events, thinking back to the most recent power outage you experienced as a Waterloo North Hydro business customer, would you say the power outage …?

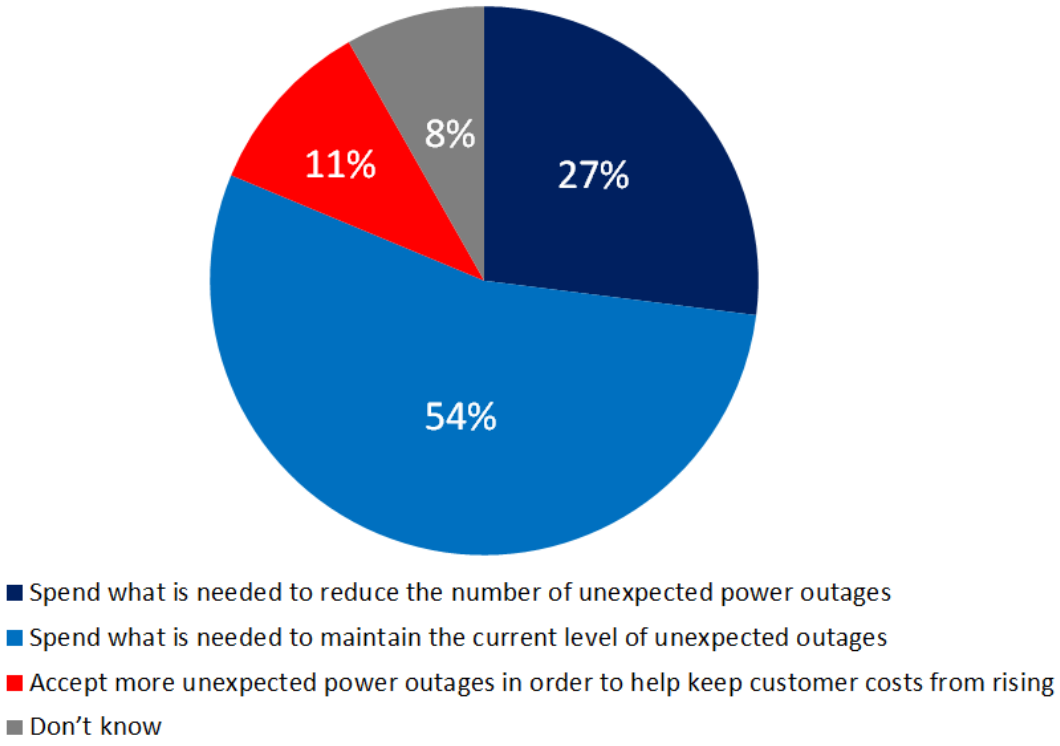
[n=11, business only]



Responses were similar among business customers, with 7 of the 11 business respondents saying their most recent power outage had only a minor cost to their business. Three said there were barely any cost ramifications, just a bit of inconvenience.

Figure 9: Addressing the Number of Power Outages

Q In your view, how do you think Waterloo North Hydro should address the number of unexpected customer power outages?
[n=1,522 residential]

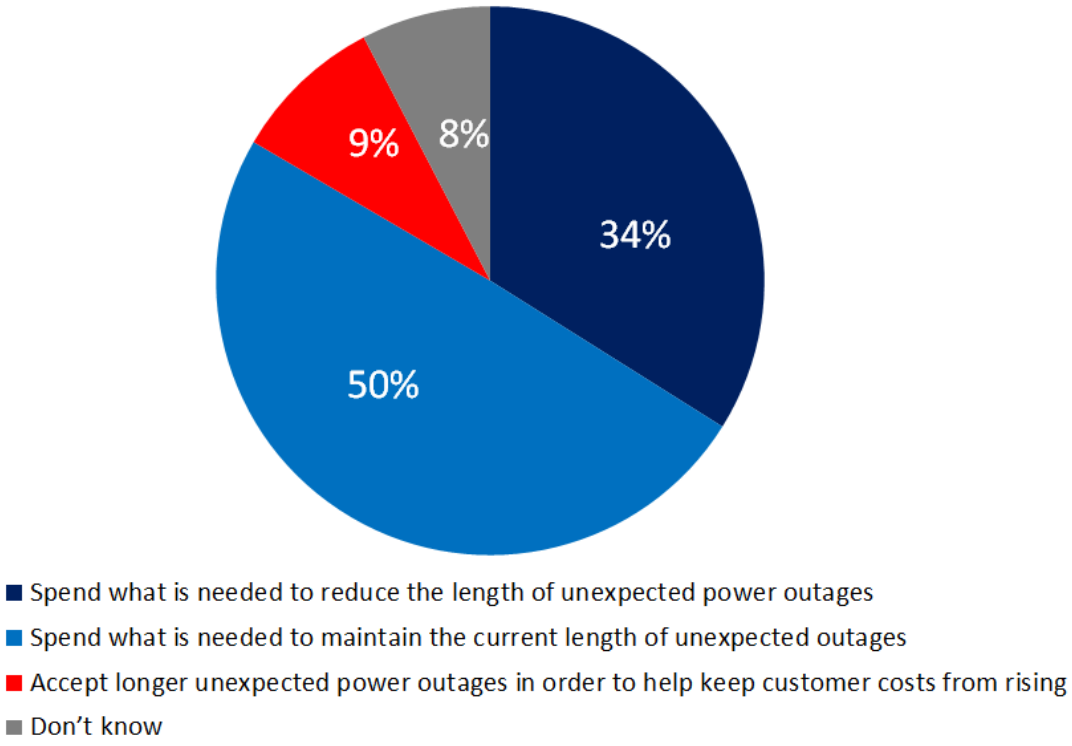


Note: Business respondents [n=11] not shown - n=5 "Spend what is needed to reduce the number of unexpected power outages"; n=6 " Spend what is needed to maintain the current level of unexpected outages"

More than half (54%) feel Waterloo North Hydro should spend what is needed to maintain the current level of unexpected outages. Just over one-in-four (27%) would prefer that they spend what is needed to reduce the number of unexpected outages, while only one-in-ten (11%) would be willing to accept more outages in order to keep customer costs from rising. Those living alone (31%) are slightly more likely to prefer a level of spending that will reduce the number of unexpected outages, while those living with one other person are most likely to prefer spending what is needed to maintain the current number (58%)

Figure 10: Length of Outages

Q In your view, how do you think Waterloo North Hydro should address the length of time customers are without power?
[n=1,522 residential]

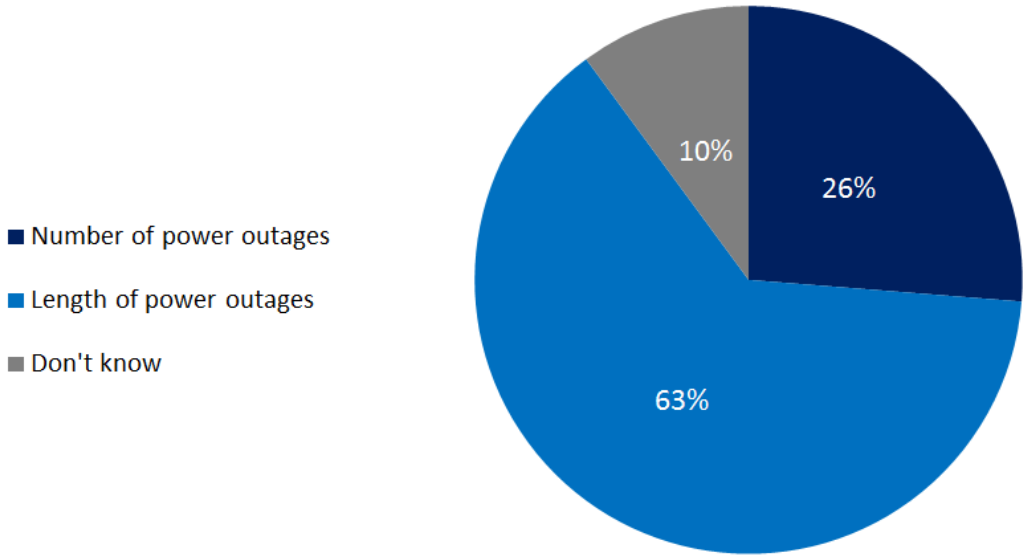


Note: Business respondents [n=11] not shown - 45% "Spend what is needed to reduce the number of unexpected power outages"; 45%" Spend what is needed to maintain the current level of unexpected outages"; 9% "Don't know"

When it comes to how best to address the length of time customer are without power, half (50%) would like to see WNH spend what is needed to maintain the current length of unexpected power outages. One third (34%) would prefer that WNH spend what is needed to reduce the length, while only one-in-ten (9%) are prepared to accept longer power outages if it will keep customer costs from rising. Residents of multi-unit dwellings are slightly more likely than those living in a detached house to prefer a level of spending that will reduce the number of outages (38% vs 33%). Those living in a two-person household are most likely (54%) to prefer spending to maintain the current length.

Figure 11: Focus on Frequency or Duration?

Q Should Waterloo North Hydro give greater priority to reducing the number of power outages or the length of time power is out during an outage?
[[n=1,522 residential]

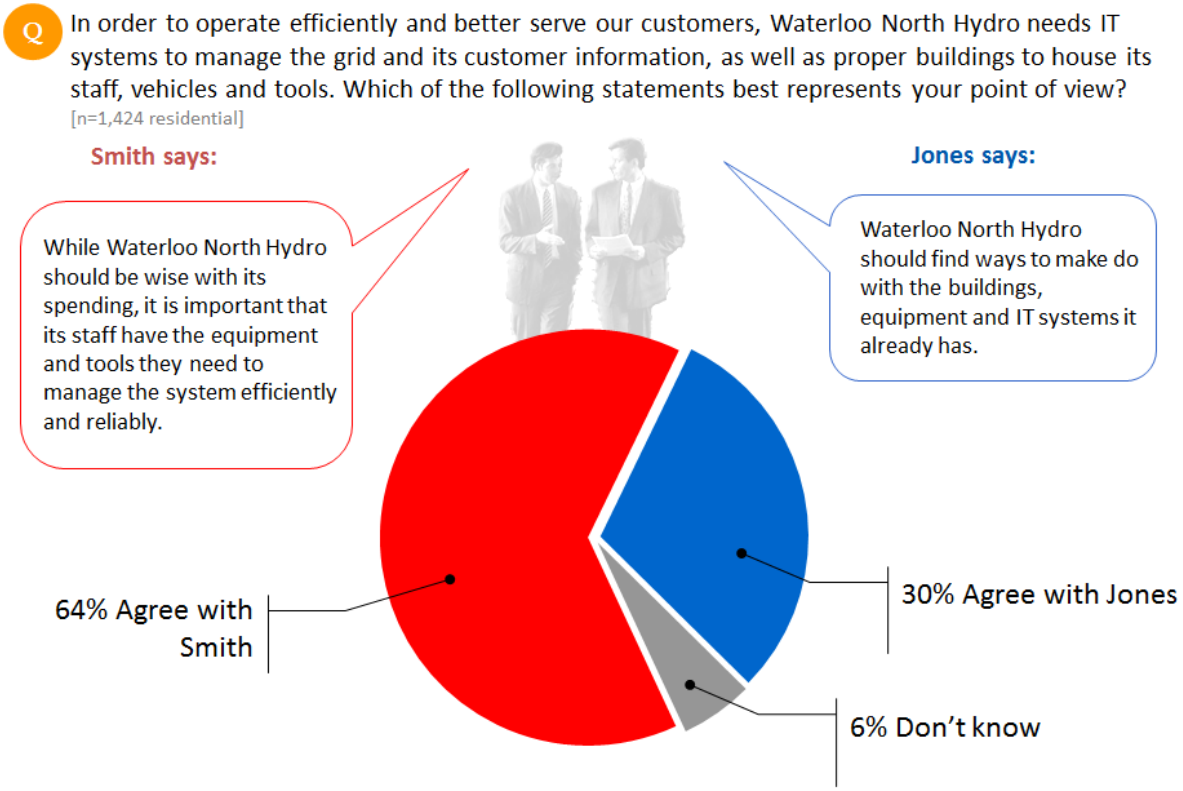


Note: Business respondents [n=11] not shown - n=7 "Number", n=3 "Length", n=1 "Don't know"

Asked whether WNH should give greater priority to reducing the number of power outages or the length of time power is out during an outage, the majority (63%) place the priority on reducing the duration of outages. Just over one quarter (27%) would prefer an emphasis on reducing the frequency outages. Residents of detached dwellings are most likely that those living in a multi-unit building to prefer a priority on reducing the length of power outage (65% vs 57%, respectively).

Investing in the System

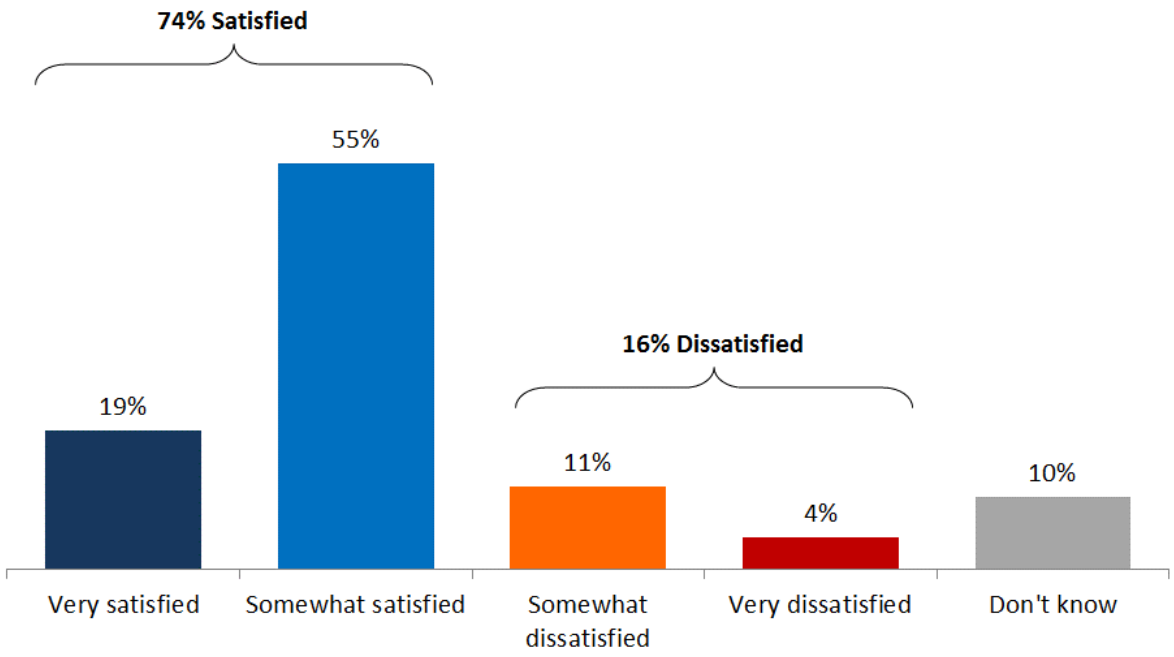
Figure 12: Investing in the System



Almost two-thirds (64%) feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably. Conversely, only three-in-ten (30%) say WNH should make do with the buildings, equipment and IT systems in already has.

Figure 13: Finding Efficiencies and Cost Savings

Q How satisfied or dissatisfied are you with the efforts Waterloo North Hydro has made to find efficiencies and cost savings?
[n=1,522, residential]

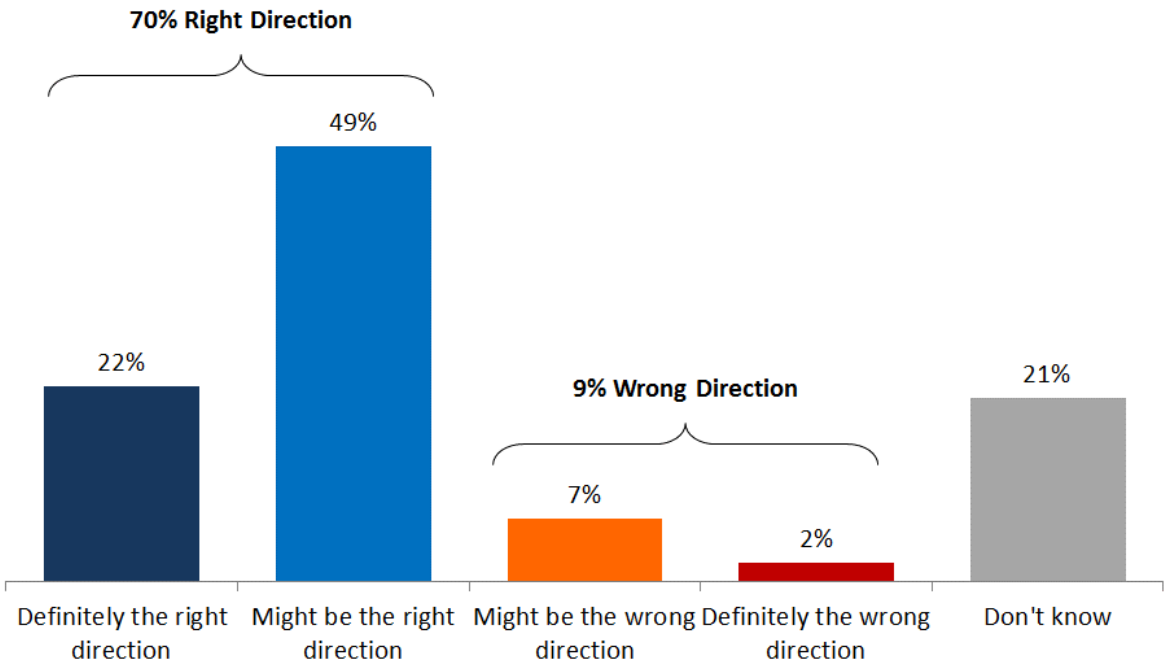


Note: Business respondents not shown [n=11] - n=2 "Very satisfied", n=5 "somewhat satisfied", n=1 "somewhat dissatisfied", n=2 "very dissatisfied", n=1 "don't know"

Three quarters (74%) are satisfied (19% *very*, 55% *somewhat*) with the efforts Waterloo North Hydro has made to find efficiencies and cost savings. Only 16% are dissatisfied, while the remaining 10% don't know. Satisfaction is highest among those living in a household of five or more (83%).

Figure 14a: Response to Investment Plan

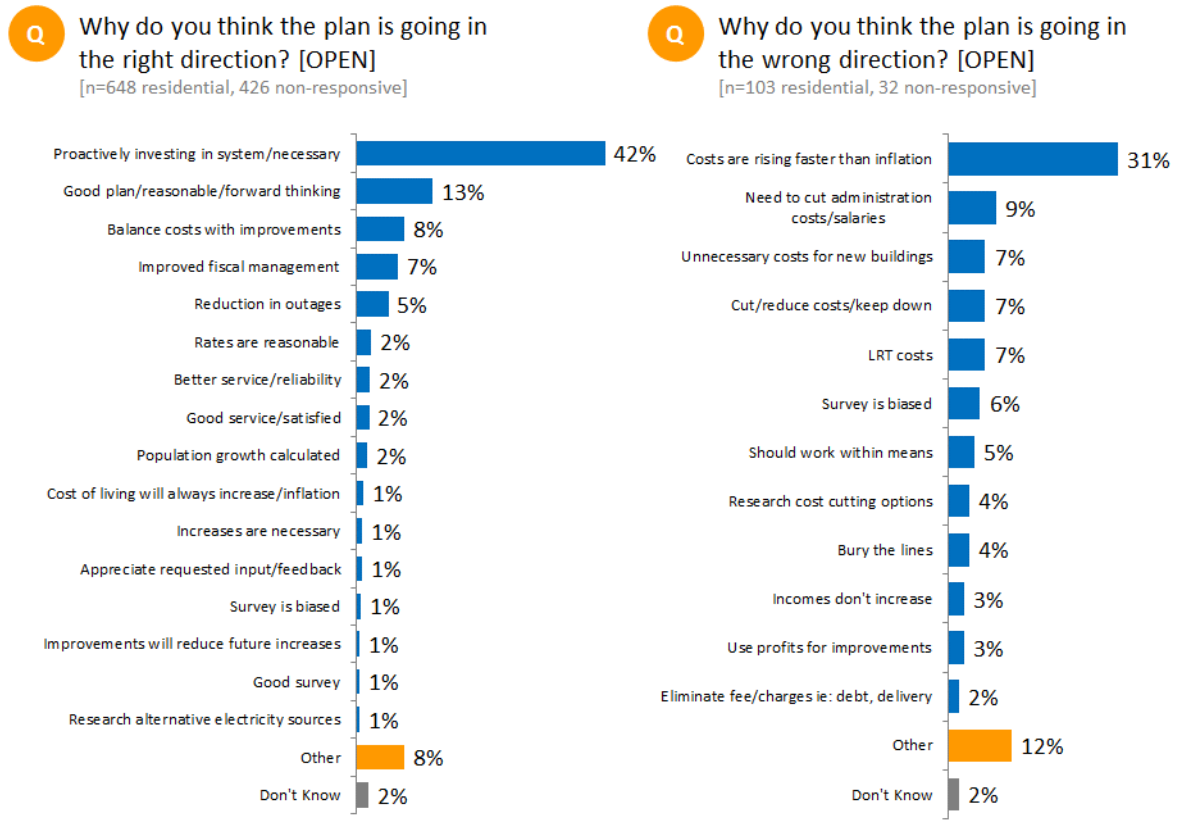
Q From what you have read here and what you may have heard elsewhere, does Waterloo North Hydro's investment plan seem like it is going in the right direction or the wrong direction?
[n=1,522, residential]



Note: Business respondents not shown [n=11] - n=4 "definitely", n=2 "might be right", n=2 "might be wrong", n=1 "definitely wrong", n=2 "don't know".

Based on what they read in the online workbook and what they may have heard elsewhere, seven-in-ten (70%) say WNH's investment plan seems like it is going in the right direction. Almost half (49%) are only saying it *might be* in the right direction, while one-in-five (22%) are confident that it is *definitely* the right direction. Notably, one-in-five (21%) don't know how they feel about the investment plan.

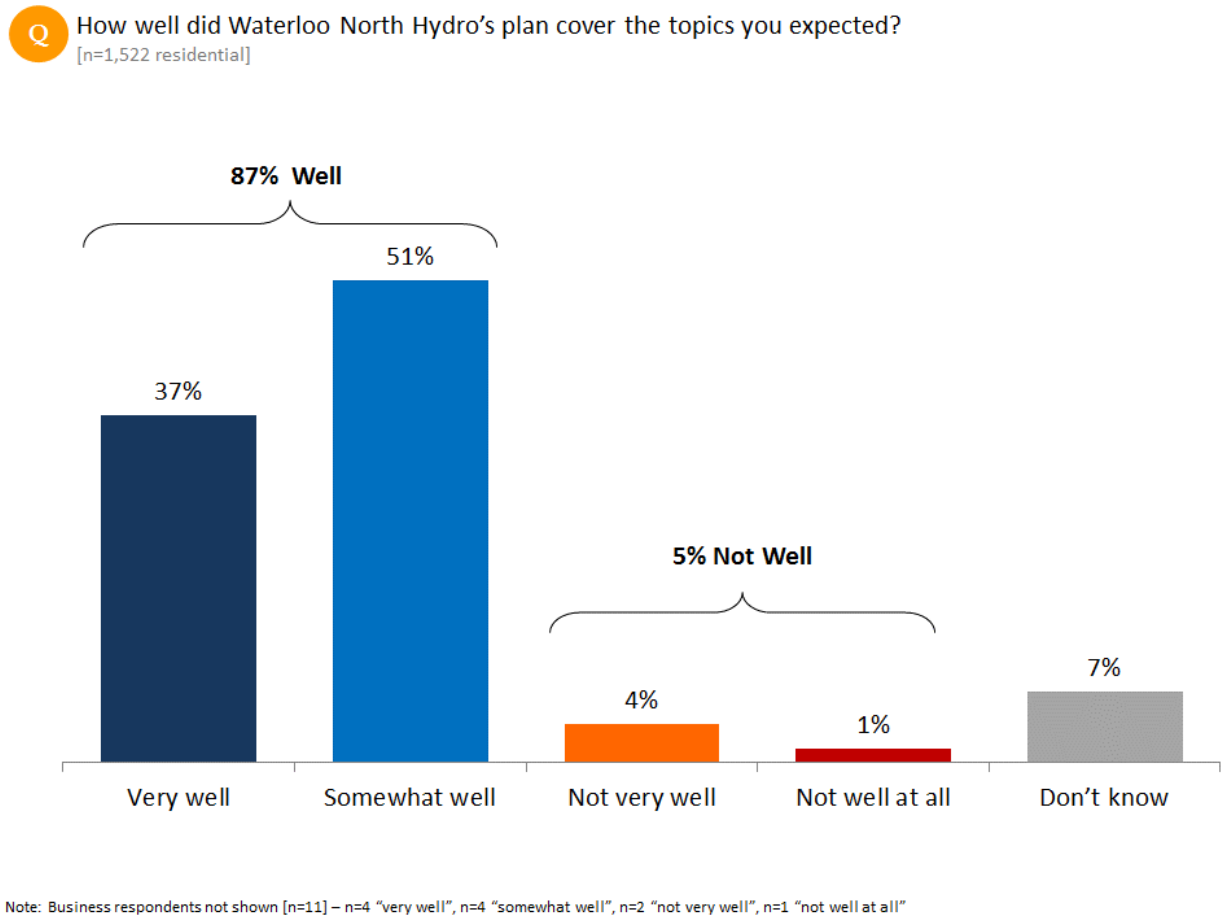
Figure 14b: Response to Investment Plan



Note: Business respondents (n=11) not shown

Those who feel the plan is heading in the right direction say WNH is "proactively investing in the system/necessary" (42%), or that it is a "good plan/reasonable/forward thinking" (13%). Conversely, those who feel the plan is going in the wrong direction say that "costs are rising faster than inflation" (31%) and "need to cut administration costs/salaries" (9%).

Figure 15: Plan Coverage

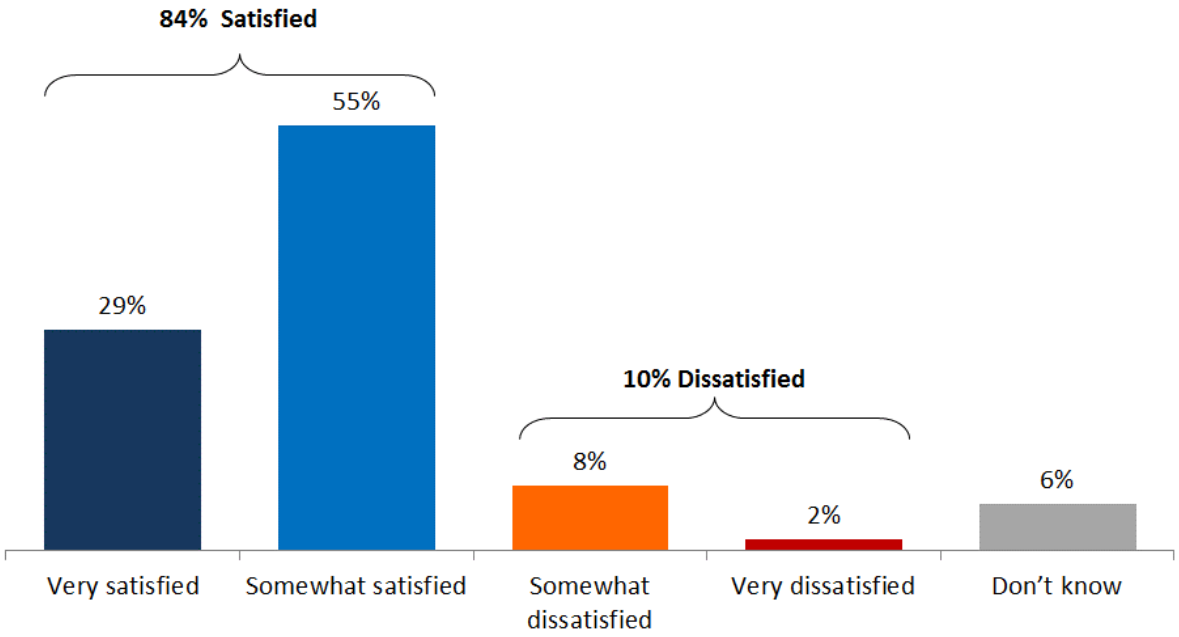


Note: Business respondents not shown [n=11] – n=4 "very well", n=4 "somewhat well", n=2 "not very well", n=1 "not well at all"

A strong majority (87%) felt that Waterloo North Hydro's plan covers the topics they expected either *very well* (37%) or *somewhat well* (50%). Only five percent felt the plan did not cover the topics they expected.

Figure 16: Planning for the Future

Q How satisfied or dissatisfied are you with how Waterloo North Hydro is planning for the future?
[n=1,522 residential]



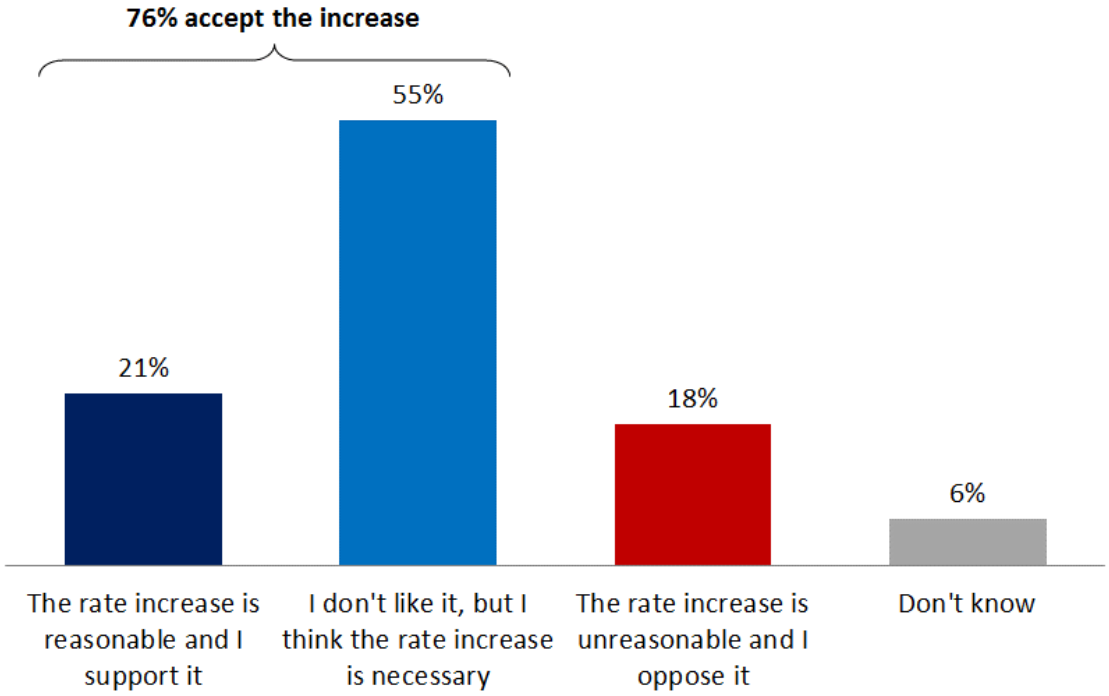
Most (84%) are at least *somewhat* satisfied (55%) with how Waterloo North Hydro is planning for the future. Only 10% are dissatisfied, with most of this group (8%) being only *somewhat* dissatisfied.

Acceptance of a Rate Increase

Once respondents have made their way through the online workbook and have been exposed to Waterloo North Hydro's cost pressures and investment plans, we told them what the rate impact would be and then asked the extent to which they are prepared to accept this rate increase.

Figure 17a: Acceptance of Rate Increase

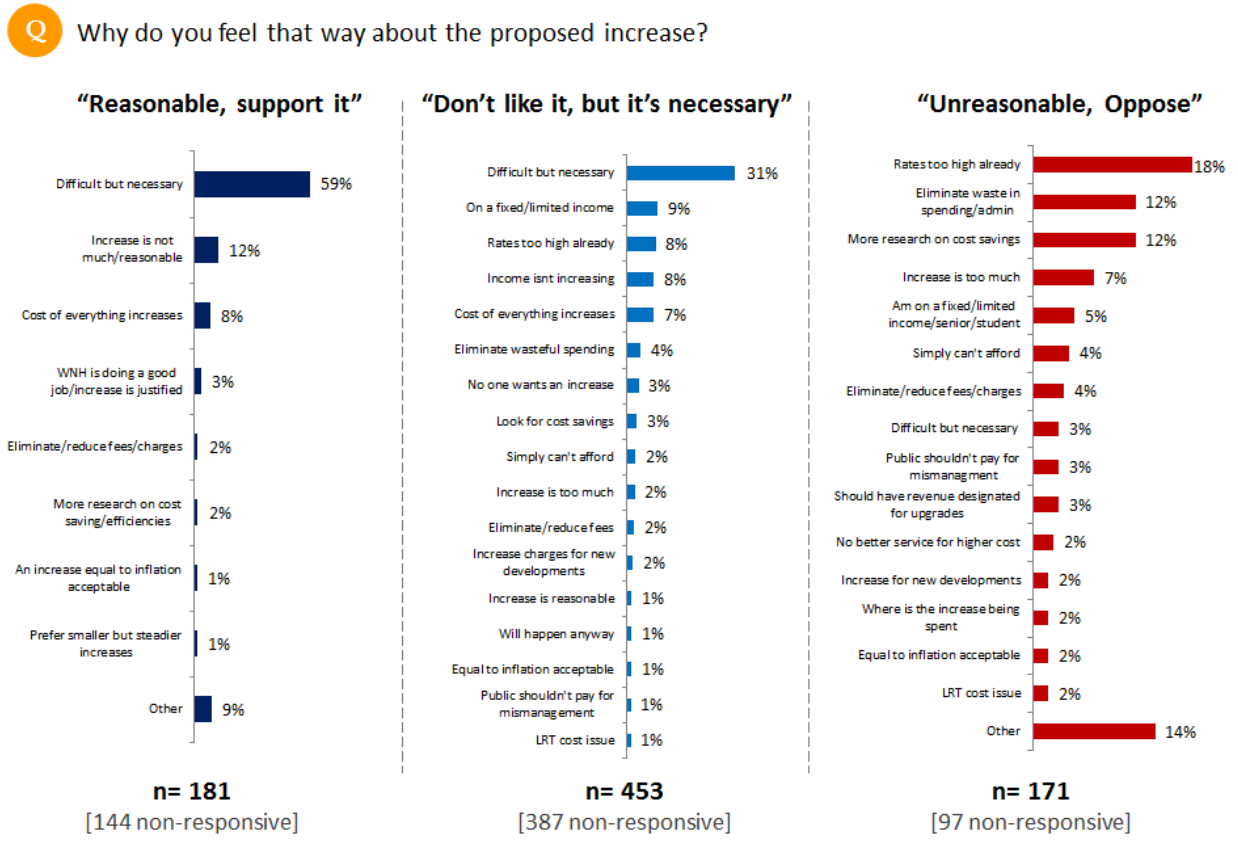
Q Considering what you know about Waterloo North Hydro's plan, which of the following best represents your point of view?
[n=1,522 residential]



Note: Business respondents not shown [n=11] – n=2 "reasonable and I support it", n=7 "don't like it … necessary", n=2 "unreasonable and I oppose it"

Having gone through the workbook, respondents are then asked how they feel about the rate increase associated with WNH's investment plan. Overall, three quarters (76%) accept the rate increase with one-in-five (21%) saying the increase is reasonable and the support it, and an additional 55% saying they don't like it, but think the rate increase is necessary. Fewer than one-in-five (18%) say the rate increase is unacceptable and they oppose it. Those living in households with five or more people are most likely to say they don't like the increase, but find it necessary (62%).

Figure 17b: Acceptance of Rate Increase



The primary reason for supporting the rate increase is that it is "difficult but necessary" (59%), followed by "increase is not much/reasonable" (12%) and "cost of everything increases" (8%). Among those who don't like the increase but find it necessary, three-in-ten (31%) say it is "difficult but necessary". Others are unhappy because they are "on a fixed/limited income" (9%), they think "rates are too high already" (8%), and that their "income isn't increasing" (8%).

Those opposed to the rate increase feel that "rates are too high already" (18%), more work should be done to "eliminate waste in spending/administration" (12%) and "more research on cost savings" (12%).

Customer Feedback on the Workbook

In the appendix, respondents were asked a series of questions to give feedback on the workbook; their impression of the workbook itself, the volume of information, the depth of coverage, and suggestions for future consultations.

- General impression of the workbook overall was quite positive: the majority of respondents found it to be good/excellent/informative/interesting (50%).
- In terms of the amount of information provided, most thought it was a good amount/about right/enough (57%).

- Asked if there was any content missing that they would like to have seen, almost half (46%) said “none”, and an additional 10% said it was good/informative. A few wanted more information on salaries (5%) or a more detailed breakdown of costs and expenditures (5%).
- More than half (56%) did not have any outstanding questions. Of the outstanding questions that were mentioned, none received more than three percent of mentions.
- Asked how they would prefer to participate in future customer consultations, 34% said the same way, 26% said email/online, and another 14% said surveys are fine.

Customer Consultation Groups

Customer Consultation Groups
with RS and GS Customers

PURPOSE: To gain qualitative input/ response to proposed DSP from Residential and GS < 50 kW customers and to feed into survey design

The following summary highlights key findings from the general service and residential consultation sessions held in Waterloo on February 25, 2015.

Summary

General Satisfaction

Both general service and residential rate classes are generally satisfied with the service they receive from Waterloo North Hydro. WNH's customer service and response time during outages is seen to be a strength, however, overall knowledge of the services they offer is low. Both rate classes have a difficult time understanding what part of the electricity system WNH is responsible for, and therefore, find it hard to separate WNH from the larger energy sector. Additionally, residential customers are generally dissatisfied with rising rates, not only for electricity, but all other utilities and overall cost of living.

System Reliability

The majority of customers in both rate classes feel that Waterloo North Hydro is highly reliable. While most customers have experienced an outage in the past year outside of extreme weather, recovery time was generally seen to be adequate. Few customers in either rate class have experienced prolonged outages in the past year. For residential customers, outages were often quite short (only a few seconds in most instances), and often occurred at night where the impacts resulted only in minor inconveniences.

Impact of Outages

General service and residential customers are generally impacted differently by outages.

For residential customers, outages outside of extreme weather are generally seen as more of an inconvenience. Typically occurring at night, outages are generally short and result in having to re-set clocks and appliances. A few customers fear that these outages could have more serious impacts to their home's electrical system.

General service customers are generally more seriously impacted by outages. Even short "blips" in service can result in lost productivity and product spoilage (for restaurants). For small business owners, the duration of an outage is often more important than the frequency.

Areas for Improvement

While both rate classes are generally satisfied with the service they receive from WNH, they are able to identify areas for improvement. The prevailing theme amongst both rate classes was rates. Customers feel that WNH can do more to help customers reduce their overall bill, whether through CDM initiatives or improved usage tracking.

Additionally, customers in both groups mentioned improved communication, especially during outages. For general service customers, receiving information regarding expected outage duration is crucial in deciding whether or not to keep their establishment open.

Overall, customers in both rate classes would benefit from further education of the services that WNH is responsible for. Customers in both rate classes frequently request programs and services that are already being offered by WNH.

Cost Drivers

Customers in both rate classes generally felt that they did not have enough information to effectively evaluate WNH's cost drivers. Both the LRT project and Smart Meters were areas of push-back in both general service and residential groups. Additionally, both rate classes requested information regarding executive and employee salaries to help better understand if their rates were being effectively spent. Again, because overall knowledge was low, and satisfaction with service was high, customers generally trusted WNH with spending.

Waterloo North Hydro's Proposed Plan and Rate Impact

Response to Waterloo North Hydro's proposed plan and rate impact was generally different in both rate classes. Four out of 9 general service customers do not believe that they have enough information and therefore offered push-back. Many customers in this group requested additional information regarding expenditures and rate projections beyond 2016. For many general service customers, WNH's proposed rate increase is seen as yet another rising cost that is making it increasingly difficult to keep up with the cost of doing business.

In general, residential customers provided less push-back to the plan and proposed rate increase. Most customers found that the proposed rate increase was manageable, and despite not necessarily liking it, 7 of 11 found it necessary. Despite understanding that the proposed rate increase is necessary, residential customers feel that WNH should be doing more to help them conserve energy and ultimately reduce overall bills.

Considering what you know about the local electricity distribution system, which of the following best represents your point of view?

	RS	GS	COMBINED
The rate increase is reasonable and I support it	1	1	2
I don't like it, but I think the rate increase is necessary	6	2	8
The rate increase is unreasonable and I oppose it	3	2	5
Don't know	1	4	5
TOTAL	**11**	**9**	**20**

How Could the Consultation Process be Improved?

Both rate classes felt that this consultation was a good opportunity to help better understand to services offered by WNH. General service customers felt that more information would help to improve the consultation session. Additionally, some customers felt that the information was being presented in a somewhat biased manner – an area that the consultation could improve on. Generally, the consultation was well-received.

Methodology

About the General Service and Residential Customer Consultation

In the first phase of the customer consultation research program for Waterloo North Hydro, INNOVATIVE conducted focus groups with general service under 50 kW and residential customers. The purpose of these focus groups was to provide customers with some education about their local distribution system, and then to garner their feedback on WNH's proposed investments for the next five years.

The consultation sessions were held in Waterloo on February 25th, 2015. A total of 20 general service and residential customers participated in these consultation sessions.

General Service under 50 kW Rate Class	9 participants
Residential Rate Class	11 participants

Recruiting Consultation Participants

All customer recruitment lists were randomly generated and provided to INNOVATIVE by Waterloo North Hydro.

Customers were then contacted by telephone and screened to determine whether or not they were appropriate participants for the research. General service customers in the under 50 kW rate class qualified for the consultation if they managed or oversaw their business' electricity bill. Residential customers were screened to ensure they are the person in the household who is primarily responsible for paying the electricity bill. The screening criteria were designed to ensure participants were at least somewhat knowledgeable of their electricity costs and could have an informed discussion on the impact of the proposed rate increases.

An incentive of $100 was provided to all general service and $80 to all residential customers who participated in the consultation sessions.

All consultation sessions were video recorded to verify participant feedback and verbatim quotes.

Consultation Session Structure

As a primary tool for the customer consultations, INNOVATIVE and WNH developed an informational workbook to provide research participants with an overview of the electricity system, WNH's role within it and their cost drivers, investment plans and impact on distribution rates. The consultation sessions were structured around the themes contained in this workbook, which was developed in early 2015.

The workbook themes included the following:

1. What is this Consultation About?
2. Electricity Grid 101
3. Cost Drivers
4. Challenges and Solutions
5. Value Added Services & Efficiencies

6. What Does this Mean for You?

Each focus group began with an overview explaining the purpose of the consultation and why WNH is seeking feedback from general service and residential customers.

After explaining the purpose of the consultation, the facilitator distributed hardcopy workbooks to act as a guide for the rest of the session. The workbooks contained questions to gather feedback from customers on specific aspects of the system, WNH's investment plan, and resulting impact on rates.

The facilitator then led participants through the workbook section by section to ensure they understood the information and to answer any questions they had about the content.

Participants were asked to independently respond to the questions within the workbook. The facilitator then led a group discussion on the answers participants provided and what the various issues meant for their household or business.

The hardcopy workbooks were collected from the participants at the conclusion of each consultation session.

Each consultation session ran for approximately 2 hours.

Informing the Consultation Process

In addition to identifying customer needs and preferences as they relate to the proposed system plan, feedback collected from this phase of the consultation was used to inform the design of the online feedback and telephone survey consultation phases of Waterloo North Hydro's customer engagement program.

NOTE: Results contained within this report are based on a limited sample and should be interpreted as directional only.

Customer Feedback

The following section highlights the general feedback from each consultation group.

General Service under 50 kW Rate Class

General Satisfaction

Overall, customers were generally satisfied with the service they received from Waterloo North Hydro. Many customers responded positively to WNH's customer service track record.

> *"[Waterloo North Hydro] went way above and beyond to help me"*
>
> *"They were great. They waved any late payment fees…"*

System Reliability

Generally speaking, customers were also satisfied with the level of system reliability. Aside from extreme weather events, most GS customers had experienced an outage in the past year, but satisfaction with system reliability remains high, nonetheless.

> *"Low outages, very low outages. I travel around the world and they go days without any hydro. Here, it's always running"*

> *"I'm very satisfied. I have had my business for three years and I've never had to shut down because I didn't have electricity"*

While satisfaction both overall and with system reliability were high, many customers found it difficult to understand where WNH fits into the larger electricity system. At times, in the early stages of the discussion, customers wanted to focus on aspects of TOU, and found it difficult to understand that WNH was only responsible for the distribution portion of their overall energy bill.

> *"We have to work when we're open, can't avoid the Time of Use charges"*

Impact of Outages

Generally, the impact of outages is dependent on the type of business, as well as the time of day. That being said, both short and sustained outages can negatively affect a business' bottom line. For some customers, a short outage or "flicker" can cause an inconvenience, such as having to restart computer systems, while more sustained outages can present more severe impacts. For instance, in the restaurant industry, a sustained outage can force closures, and substantial loss of revenue.

> *"I think duration would be worse [than frequency] in my situation. If I lose power for an extended period of time I can't do anything, we have to shut down"*

> *"I'll come in maybe once or twice a month and all my computers will be shut down"*

> *"Outages can really hold us back"*

> *"If the power goes out in the middle of the night, the smokers re-set to zero. We can lose a couple hundred pounds of meat"*

Areas for Improvement

As expected, customers immediately pointed to rates as an area that WNH could improve upon. Distribution rates were not viewed as being separate from the overall energy bill, and as such, many customers were frustrated with their overall bill continuing to rise.

> *"I'm not satisfied with rates; the delivery charge is too high"*

> *"Supply uninterrupted power at as low a cost as possible"*

For many small business customers, rates can directly affect their bottom line, and result in them being forced to make difficult business decisions. In fact, due to faulty equipment, one restaurant owner was faced with an $8,000 bill from WNH and as a result was forced to lay off two employees the day before the focus group.

"Can we not come up with a strategy for small businesses that's better than now? We're paying $1,000 bi-weekly to try and get this thing paid off. So we laid off two people yesterday, because the money just isn't there. That's how these things affect small businesses"

For many customers, beyond rates, Waterloo North Hydro could improve communication, especially during outages. Many small business owners want to receive critical information regarding outages, in order to make the appropriate decisions quickly (ie. should they shut down, or remain open).

"When there are power outages and you're trying to get information – I know it's tough but when you have a business you want to know whether you're going to be out – they should be able to tell you whether you're going to be out for an hour or out for ten hours"

"Provide better information when there is a power outage"

"I would like to see faster emergency response times"

Improvements to Billing and Payment System

In addition to improvements related to rates, communication and outage responses, several customers pointed to the current billing and payment system. Discussions here focused on four areas; overall bill understanding, credit card payments, student tenants and consolidated bills.

First, a number of customers expressed concern about an overall inability to understand the various components of the bill. Again, because several customers found it difficult to understand where WNH "fit" in the larger electricity bill, they felt that the various components were somewhat misleading.

Next, one customer in the group expressed his desire to see improvements made to the credit card payment system. In particular, this customer saw the third party credit card payment system as being overly expensive, and that WNH was doing little to help mitigate the costs.

"I work for an overseas company and I have to pay by credit card using a third party company. The fees are extraordinarily high so if Waterloo North Hydro could take on some sort of credit card payment, that would be helpful for my situation. It's a significant cost, so if Waterloo Hydro could take some of that on themselves that'd be really appreciated. Essentially, I feel like I'm being gouged and that Waterloo Hydro is leaving me high and dry"

Thirdly, with regards to payments, one customer, a landlord for student housing, found that the current billing system was damaging both to his business and his student tenants. In some instances, students are vacating their houses, and the next tenants to move in are having their electricity shut off because the bill payments are not up to date. For this landlord, improved communication with WNH would help to avoid some of this hassle.

"Maybe we can set up a system for students. They should call the property management before they shut them off"

Finally, one customer, who receives multiple bills, would like to see one consolidated bill. Instead of receiving 15 individual bills, he would find it more efficient to receive just one.

"If possible, I would like to receive just one bill instead of 15. Because they are all under the same name"

"I have about 20 units, so I would like to receive one bill"

Cost Drivers

Many customers found it difficult to understand the various cost drivers that WNH is facing. In fact, very few customers felt that they had enough information to accurately provide an opinion on cost drivers. There is generally very little knowledge of WNH and the system it operates, and this affected how customers reacted to the plan.

"*I don't really have enough information to say"*

"You can't tell how efficiently they're managing their resources"

As knowledge regarding cost drivers was generally low, customers turned to management, employee salaries and inefficiencies as points of push-back. In fact, some customers believe that the workbook was purposefully general in order to create a favourable image of Waterloo North Hydro.

"They tell you what they're spending on – what they think it's going to cost – but they're not really giving much. They give you labour costs here, but we don't know about management, we don't know what they're paying them"

Despite this push-back, some customers equated general satisfaction with WNH as a sign that they are effectively managing cost drivers. Because many customers see WNH favourably, they trust that their rates are being managed effectively and generally put to good use (with regards to managing cost drivers).

"*Going back, given that we're satisfied, they must be managing it well, but I don't know enough to say anything about it"*

Waterloo North Hydro's Proposed Plan and Rate Impact

In general, WNH's proposed rate increase generated some push-back. Some customers found it difficult to provide a response with the information that they were provided in the workbook. Specifically, customers requested additional information regarding what direction the rate increase would continue on beyond 2016. Upon clarifying that rate projections for the next five years were between one and two per cent, customers generally responded more positively to the proposed rate impact.

"Assuming that [the rate increase] is between 1 and 2 per cent over the next five years, yes I think it's reasonable"

WNH's proposed rate increase also generated push-back on the basis of overall cost of living and rising electricity costs. Again, some businesses are struggling to keep up with rising costs, and this rate increase will directly affect their businesses.

"That seems high [the 4 per cent] given what the cost of living index is. We should try and get below what the cost of living is"

While there was some push-back with regards to the proposed rate increase, 4 out of 9 customers did not feel that they had adequate information to draw a conclusion. In the workbook, customers

who responded "don't know" to the social permission on the rate increase question provided the following open-ended responses to why they felt that way:

> *It doesn't sound unreasonable. Should show price changes for each of the past 5 years, and price changes proposed for each of the next 5 years*

‘ *I do not feel that I am provided enough information to help you in this 'rate increase' process*

> *I don't believe we were given enough information. I would have liked to see more in depth document that talked about specifics (numbers etc)*

> *Unsure if the rate increase is necessary. While infrastructure upgrades are very important. I am opposed to rate increases due to obvious inefficiencies that exist in the power generation system*

How Could the Consultation Process be Improved?

Some customers felt as though the workbook either withheld information or did not provide enough altogether. While customers generally found that the consultation session was positive, the consensus was that more information could be provided to help answer some outstanding questions. Specifically, a few customers pointed to the questions within the workbook as being "skewed towards us accepting the rate increase". Providing a more detailed account of both past and future rates helped to provide context for the overall plan.

> *"I think it's a good start. I think they could develop it into something a little bit more informational"*

> *"It's too vague. The whole thing is just too vague"*

Residential Rate Class

General Satisfaction

In general, residential customers were quite satisfied with the service they receive from Waterloo North Hydro, despite a limited understanding of the distribution system that they operate and maintain. In spite of overall satisfaction, customers are unhappy with rates, which continue to rise. For many customers it is becoming increasingly difficult to keep up with the rising cost of living, and electricity bills are becoming a major source of these costs.

> *"I believe that Waterloo North Hydro provides a great service to people but it costs too much for people to pay for their services and even if I try to conserve electricity the bills are still a lot. I only have three people living in our rented townhouse. Make it more affordable"*

> *"The service itself I think is very good. The cost is astronomical. We don't run the dishwasher during the day – everything's off peak – we don't do laundry but my bills are astronomical"*

> *"The service they provide to people is good but the bills are too much. Even when people try to conserve electricity they still always get the same bill"*

> *"The customer service centre is great"*

While satisfaction was generally high, customers often requested information regarding WNH's CDM initiatives. Many customers felt that despite their best efforts to conserve electricity, their bills remained high. Not aware that the service is already in place, customers requested a service where they could monitor their usage to help reduce their overall bills.

> *"We should be able to monitor our individual use so we can see what the deal is, because I do everything off peak and there's no way I use four times more cost off-peak than during the day"*

> *"We should be able to monitor [usage]. With the amount of money we pay, I think we should be able to say, 'okay, if I'm using my dishwasher – it's an energy star – it should cost between this much and this much'. I think they should be more accountable for their bills. Especially since it's owned by the city"*

System Reliability & Outage Impacts

Satisfaction with system reliability is high. While customers had generally experienced outages outside of extreme weather, they were short, and did not greatly impact them. Most customers who had reported experiencing an outage in the past 12 months said that they were not severely affected. In fact, most customers report only minor inconveniences like having to re-set alarms and appliances. Some customers wondered if these short outages could potentially affect the integrity of their homes' electrical system.

> *"Occasionally we'll have the power go out for two seconds, the alarm clock flashes but it's not a big deal"*

> *"There are a lot of short power outages at night. There are about two or three at night. You don't notice them because you're asleep, but you get up in the morning and there are all the clocks to change. You have to wonder if there's electrical damage to your appliances"*

> *"I think reliability is good compared to some areas in the GTA. I have noticed though that the Waterloo region has more power blips than other regions"*

Areas for Improvement & Additional Services

Customers made several suggestions in relation to areas of improvement for Waterloo North Hydro. Generally, areas of improvement involved rate reductions, CDM and an improved understanding of electricity bills.

First, as mentioned earlier, satisfaction is generally high, but customers believe that rates remain too high. When asked how WNH could improve service, this is most common answer provided – rate reductions.

Second are CDM initiatives to, again, help reduce rates. In addition to providing usage tracking online, customers expressed interest in a tracking app, as well as an email service that sends a notification when usage is surpassing typical household use. It seems as if customers are hungry for ways to help conserve, and they generally don't feel as if they are being given the necessary information to do so.

"When you reach a certain level you get a notification saying you've reached 75 per cent of your hydro bill. So if I'm exceeding the usage at least let me know so I can try to correct all my usage"

"I'd like an online or app where I can view my power usage per day – for every hour of the day. That way I could go in and find out at what time of the day my usage is too high"

"I think the technology is there to be able to send you a notice if your bill is going 50% more than last month. They should send you a text or an email, or call on the phone"

Finally, several customers noted having a difficult time understanding all the various components of their electricity bill. Because familiarly with the distribution system is low, customers are having a difficult time understanding what charges are connected to what or who.

"In terms of understanding the bill… this debt retirement charge, you can never get info. You can't Google it and get the answer, you can't call Waterloo [North] Hydro and get an answer"

Cost Drivers

Customers provided push-back on a number of cost drivers, both in terms of capital and operating expenses. First, some customers were skeptical about WNH investing in the controversial LRT project. Some customers had a difficult time understanding why they would have to pay for this project, when it was a government initiative.

The second incidence of push-back came from Smart Meters on the operating side of the budget. While customers generally understood that this program was implemented by the government, they had a difficult time understanding why this would affect WNH's expenses.

"It says that Smart Meters cost four times more than old meters and I find that hard to believe"

Finally, some customers were skeptical about why they were being asked to pay for Waterloo North Hydro's "big shiny building".

"I don't see anything in here in terms of investments or capital investments forecasts about how much this particular pretty fancy building cost. I personally don't believe page 13 because there's nothing about this building and there's also nothing about operating costs"

To better understand the cost drivers, several customers requested more information, including expenditures prior to 2013 and forecasts beyond 2020. Although there was some push-back on individual projects, customers generally accepted the steady nature of spending, including the five-year forecast.

Waterloo North Hydro's Proposed Plan and Rate Impact

Seven of 11 customers found the proposed rate increase either reasonable or necessary. In general, the proposed rate increase generated little push-back. That being said, customers continuously focused on the desire to conserve electricity and reduce overall rate impacts. Many customers think that Waterloo North Hydro should be doing more to promote and encourage customers to take advantage of its CDM programs. Again, the proposed rate increase was generally seen as reasonable, but customers still want to find ways to reduce their overall bill.

"The 2.9 per cent increase on the bill, that's only about two or three dollars. That's not the problem. The problem is that people don't know why they're paying $250-$300 per month. I want to know where I'm using this electricity"

"There are a lot of people in this town that are on the border of being able to pay their utilities because they keep going up. It's not enough to send out a little pamphlet, which Waterloo Hydro does, saying use things after 7pm"

For those who don't like it, but support the proposed rate increase, reasons include the following:

I don't like the rate increase; however, I understand the need for maintenance and replacement.

The rate hike matches more or less with the inflation. It's reasonable.

The increase is necessary for the local electricity distribution system.

Those who oppose the proposed rate increase said:

It has not been made clear why costs need to go up. I wonder if the projected 2% usage increase, which will result in 2% increased revenue to Waterloo North Hydro has been taken into account?

Ultimately, most customers did not see the proposed rate increase as being unreasonable. That said, there is a strong desire to find different ways to reduce the overall electricity bill. Customers are somewhat frustrated with costs rising across the board, and want WNH to do more to help them save. In the grand scheme of electricity, one customer suggested:

"Waterloo North Hydro has little power in the grand scheme of things. The true impact is coming from elsewhere"

How Could the Consultation Process be Improved?

Residential customers generally felt positive regarding the consultation process. Customers generally agreed that they learned valuable information regarding the services that WNH offers. Some felt that the information presented was both biased and misleading. Generally, the consultation was positively received and the information was, according to one customer *"both valuable and meaningful".*

Questionnaire Results

The following are the tabulations of participant feedback to questions in the workbooks, which were returned at the end of each consultation session.

Note: "GS" = general service less than 50 kW customers, while "RS" = residential customers.

1. Given what you know and what you have learned today, how well do you feel you understand the parts of the electricity system, how they work together and which services Waterloo North Hydro is responsible for?

	RS	GS	TOTAL
Very well	8	3	11
Somewhat well	2	6	8
Not very well	0	0	0
There are parts I understand, but other parts I am unsure of	1	0	1
I don't understand at all	0	0	0
TOTAL	**11**	**9**	**20**

2. Generally, how satisfied are you with the service you receive from Waterloo North Hydro?

	RS	GS	TOTAL
Very Satisfied	4	4	8
Somewhat satisfied	5	4	9
Not very satisfied	1	0	1
Not at all satisfied	1	1	2
Don't know	0	0	0
TOTAL	**11**	**9**	**20**

4. How well do you feel you understand the cost drivers that Waterloo North Hydro is responding to?

	RS	GS	TOTAL
Very well	4	3	7
Somewhat well	6	4	10
Not very well	0	1	1
Not well at all	0	0	0
Don't know	0	1	1
Missing value	1	0	1
TOTAL	**11**	**9**	**20**

5. How well do you think Waterloo North Hydro is managing these cost drivers while meeting customer expectations?

	RS	GS	TOTAL
Very well	1	0	1
Somewhat well	8	6	14
Not very well	0	1	1
Not well at all	0	0	0
Don't know	1	2	3
Missing value	1	0	1
TOTAL	**11**	**9**	**20**

6. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?

	RS	GS	TOTAL
Waterloo North Hydro should invest what is required 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.	6	5	11
Waterloo North Hydro should lower its investment in renewing the system's aging infrastructure to lessen any bill increase, even if that means more or longer power outages.	4	1	5
Don’t know	0	3	3
Missing value	1	0	1
TOTAL	**11**	**9**	**20**

7. Aside from major weather events, do you recall how many unexpected outages you experienced in the past year?

	RS	GS	TOTAL
None	2	3	5
One	2	2	4
Two	1	1	2
Three	4	0	4
Four	0	0	0
More than four	2	3	5
Don’t know	0	0	0
TOTAL	**11**	**9**	**20**

8. In your view, how do you think Waterloo North Hydro should address the number of customer unexpected power outages?

	RS	GS	TOTAL
Spend what is needed to reduce the number of unexpected power outages	2	3	5
Spend what is needed to maintain the current level of unexpected outages	8	3	11
Accept more unexpected power outages in order to help keep customer costs from rising	0	0	0
Don't know	1	2	3
Missing value	0	1	1
TOTAL	**11**	**9**	**20**

9. In your view, how do you think Waterloo North Hydro should address the length of time customers are without power?

	RS	GS	TOTAL
Spend what is needed to reduce the duration of unexpected power outages.	3	3	6
Spend what is needed to maintain the current duration of unexpected outages?	8	2	10
Accept longer unexpected power outages in order to keep customer costs from rising	0	1	1
Don’t know	0	2	2
Missing value	0	1	1
TOTAL	**11**	**9**	**20**

10. In order to operate efficiently and better serve our customers, Waterloo North Hydro needs IT systems to manage the grid and its customer information, as well as proper facilities to house its staff, vehicles and tools. Which of the following statements best represents your point of view?

	RS	GS	TOTAL
While Waterloo North Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.	3	4	7
Waterloo North Hydro should find ways to make do with the buildings, equipment and IT systems it already has.	6	4	10
Don’t know	1	1	2
Missing value	1	0	1
TOTAL	**11**	**9**	**20**

11. How satisfied are you with the efforts Waterloo North Hydro has made to find efficiencies and cost savings?

	RS	GS	TOTAL
Very satisfied	0	0	0
Somewhat satisfied	5	4	9
Not very satisfied	4	2	6
Not at all satisfied	1	0	1
Don't know	1	3	4
TOTAL	**11**	**9**	**20**

12. From what you have read here and what you may have heard elsewhere, does Waterloo North Hydro's investment plan seem like it is going in the right direction or the wrong direction?

	RS	GS	TOTAL
Definitely the right direction	1	1	2
Might be the right direction	6	5	11
Might be the wrong direction	2	1	3
Definitely the wrong direction	1	0	1
Don't know	1	2	3
TOTAL	**11**	**9**	**20**

13. How well did Waterloo North Hydro's plan cover the topics you expected?

	RS	GS	TOTAL
Very well	4	0	4
Somewhat well	6	6	12
Not very well	0	1	1
Not well at all	1	1	2
Don't know	0	1	1
TOTAL	**11**	**9**	**20**

14. How well do you think Waterloo North Hydro is planning for the future?

	RS	GS	TOTAL
Very well	1	2	3
Somewhat well	7	5	12
Not very well	1	0	1
Not well at all	1	0	1
Don't know	1	2	3
TOTAL	**11**	**9**	**20**

15. Considering what you know about the local electricity distribution system, which of the following best represents your point of view?

	RS	GS	TOTAL
The rate increase is reasonable and I support it	1	1	2
I don't like it, but I think the rate increase is necessary	6	2	8
The rate increase is unreasonable and I oppose it	3	2	5
Don't know	1	4	5
TOTAL	**11**	**9**	**20**

Mid-Market & Large Account Workshop

Informational Presentation and Survey
with Mid-market & Large Customers

PURPOSE: To gain qualitative input/ response to proposed DSP and rate impact from GS > 50 kW and Large customers

The following summary highlights key findings from the Mid-Market and Large Business consultation session held in Waterloo on February 26, 2015.

Summary

In their presentation to Mid-Market Large Business customers, WNH projected a 9.3% increase to the distribution portion of the electricity bill based on their investment plans for 2016-2020. While larger GS customer may not like the increase, most (14 of 24) of the customers who participated in the consultation are prepared to accept it as necessary, and an additional six deem the increase reasonable and support it.

The vast majority of customers at the consultation were satisfied with the service they receive from WNH, and when asked what WNH might do to improve their service to Mid-Market and Large Business customers, most cited concerns regarding outages (frequency and duration), with only two participants mentioning *cost* as an area for improvement. The stated reasons for supporting the rate increase suggest that this customer group understands the balance between keeping the system reliable while keeping costs down.

Not surprisingly, these customers don't like rate increases because it impacts their bottom line, and some feel the 9.3% figure seems high, but they also acknowledge that it costs money to keep the system functioning reliably and that the cost to do so must be borne by customers.

Q: Considering what you know about the local electricity distribution system, which of the following best represents your point of view?

The rate increase is reasonable and I support it	6
I don't like it, but I think the rate increase is necessary	14
The rate increase is unreasonable and I oppose it	2
Don't know	1
Missing value	1
TOTAL	**24**

Methodology

In the second phase of the customer consultation research program for Waterloo North Hydro, INNOVATIVE conducted a survey of Mid-Market and Large Business Customers (over 50 kW) following a presentation by WNH to this customer group. The purpose of this presentation and survey was to provide these customers with some education about their local distribution system, and then to gather their feedback on WNH's proposed investments for the next five years.

The presentation was held in Waterloo on February 26th, 2015. A total of 24 customers attended this consultation session.

Recruiting Consultation Participants

All attendees to this breakfast presentation were recruited by WNH. Customers in this rate class were invited via an emailed letter to attend "an Invitational Breakfast Forum to obtain your feedback regarding hydro distribution services". The invitation explained the purpose of the consultation as follows:

"We are looking to engage those who are responsible for managing the electricity bill, or facility management within your organization. Ultimately, this consultation will help Waterloo North Hydro align its operational and capital investment plans with customer needs and preferences.

As a customer, this is an opportunity for you to tell us what you think about our plans and the cost implications for you. In addition, WNH will outline the challenges in operating and maintaining the local electricity distribution system, and more importantly, how we intend to meet those challenges."

In appreciation of their time, all participants were entered into a draw for one of five $100 gift cards for an organization (Charcoal Group) representing several restaurants in the Waterloo region, or one of five gift baskets.

The session was held in a local event facility and a hot buffet style breakfast was served.

Consultation Session Structure

The breakfast session was hosted by WNH who gave a 45 minute presentation, followed by a Q&A session. The presentation was based largely on the primer used in the GS<50 kW and residential customer focus groups (albeit tailored slightly for the large business customer group), and covered the following topics:

1. Who we are
2. What we do
3. Where we are going
4. How it impacts you

The session was hosted by Waterloo North Hydro CEO, Rene Gatien, who gave the presentation and facilitated the Q&A session.

Following the Q&A session, representatives of INNOVATIVE distributed a five page survey to gather feedback on customers' current experience with WNH, their feedback on the proposed plan and investments, and their reaction to the proposed distribution rate increase.

The consultation session ran for approximately 1.5 hours.

NOTE: Results contained within this report are based on a limited sample and should be interpreted as directional only.

Customer Feedback

Familiarity and Satisfaction

The level of familiarity is very high in this rate class, with almost everyone saying they understand WNH's role within the electricity system at least "somewhat well". Also very high is the level of customer satisfaction, with all but one customer being anything less than at least "somewhat satisfied". Suggestions for improving service included reducing power outages/consistent power, and asking WNH to help organizations reduce their energy consumption/bills.

- Almost all (22 of 24) participants feel that they understand the electricity system and WNH's role within it at least "somewhat well".
- Only one participant is "not very satisfied" with their service from WNH. All others are either "very" or "somewhat" satisfied. Asked what WNH can do to improve their service, participants provided the following input, which focusses heavily on power outages:
    - *Be more proactive in providing up to date systems and technology*
    - *Momentary disruptions have been a pain point in the past, but we have noticed improvement*
    - *Power outage notification*
    - *Power outages, even short ones are very costly to our business*
    - *Consistency of clean power is the most important*
    - *Our corporation has numerous electricity accounts and meters. WNH could assist with how we currently analyze our bills, provide guidance on different metering options and how we verify actual savings of energy. In addition provide assistance with year to year electricity budgets that encompass all elements of the bill (GA)*
    - *Very short 'blips' in the electricity distribution system has a major impact on my plant. It takes us many hours to recover production to the pumps, compressors and heater tripping because of a small power interruption. Often WNH is unaware of the power dip. The cause is usually attributed to a suicidal creature*
    - *The upgrade program. Multiple areas at my facility should be upgraded. To help in consumption.*
    - *Info meetings are good*

- *As a renewable energy provider we are incented to provide energy during peak hours. WNH has not always scheduled down times for capital projects or maintenance to maximize our ability to accomplish this.*
- *Reduce power outages*
- *We are a church with use only Sunday and Wednesdays – we need help in understanding how best to spread out use and avoid spikes.*
- *Cost containment*
- *Try to keep prices down while maintaining service*
- *Less squirrels*

Cost Drivers and Investment Plans

Participants had a good understanding of the cost drivers WNH is responding to, and most feel they are responding to them well. When it comes to investing in the system, half feel WNH should spend what is needed to maintain the current number of outages, even if it means a slight increase to their bill, while some prefer an investment in reducing the current level of outages. The pattern is similar with regard to the duration of outages: about half are satisfied with maintaining the current duration, but there are some who would prefer that WNH spend what is needed to reduce it. Almost all feel it is important for WNH staff to have the general plant equipment and tools needed to manage the system.

The majority feel that WNH's investment plan is heading in the right direction, and almost all feel the plan addresses the topics they would expect it to.

- Twenty of the 24 participants say understand the cost drivers WNH is responding to at least "somewhat well", and 19 of 24 feel that WNH is responding to these cost drivers at least "somewhat well".
- Almost all (22) feel WNH should invest what is required to maintain system reliability even if the result is a slight increase to their electricity bill.
- Half say WNH should spend what is needed to maintain the current level of unexpected outages, while 9 say WNH should spend what is needed to reduce this number.
- Similarly, 14 of 24 want WNH to spend what is needed to maintain the current duration of unexpected outages while 9 would like to see WNH spend what is needed to reduce the current duration of outages.
- All but 4 participants say that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system.
- 23 of 24 are at least "somewhat satisfied" with WNH's efforts to find efficiencies and cost savings.
- Ten feel WNH's investment plan is "definitely" heading in the right direction, while 11 feel it "might be" going in the right direction.

- Almost all (22) feel WNH's plan covers the topics they expected at least "somewhat well". Asked what they felt was missing, participants had the following to say:
    - *Did not mention the efficiency of its current system on today's presentation.*
    - *Alternatives to contain cost while keeping existing services*
    - *Global adjustment*
    - *More on the larger picture and what WNH can do for the customer by being a voice to Ontario Hydro/Gov. HST charges – Debt reduction needs to be better explained to customers. WNH has explained why their costs are in place very well.*
    - *Comparison to similar utilities for distribution costs and efficiencies*
    - *Future of renewable energy. Solar: distribution and region, business.*
    - *Underground wires*
    - *Actual cost to service distributors. There was no cost-benefit*
    - *I did not know what to expect although my desire was to understand the billing process and programs, so that was awesome.*
- All but one feel WNH is planning for the future at least "somewhat well".

Acceptance of the Rate Increase

A handful find the proposed rate increase reasonable and they support it, but most don't like it yet find it necessary. Only a couple of participants outright oppose the rate increase. Reasons for support focus on power reliability and the fact that WNH had previously explained the reasons for the increase. Those who reluctantly accept the rate increase feel it is higher than other jurisdictions or services, or they feel the specified increase of 9% is too high.

- 14 of the 24 participants don't like the rate increase but feel it is necessary, and another six feel the increase is reasonable and they support it. Only two feel the rate increase is unreasonable and oppose it. The stated reasons for support/acceptance/opposition are provided below.

"The rate increase is reasonable and I support it"

- *The integrity of the supply has been very good over a recent period, suggesting that things are being done correctly. This must also be maintained in the future*
- *I wouldn't feel this way if I hadn't been provided with the info covered this morning. Now I have a better understanding of how the rate review and filing is done, and the increase seems fair and reasonable*
- *We can't expect to get consistent clean power without doing all the things necessary for that to happen. Fiscal responsibility, elimination of redundancy and good HR management are also part of this plan*
- *Reliable power distribution requires reliable, functional, infrastructure. Infrastructure requires money.*
- *It is reasonable pertaining to how it was explained. This cost increase seems normal.*

"I don't like it, but I think the rate increase is necessary"

- *Because of all the other factors that come into the bill for which there is no control of. While 9.31% could be accepted it is such items as Global Adjustment etc.*
- *We still have to keep our systems current and in good working order but any increase directly comes off our bottom line. We all need to stay competitive.*
- *We do need to keep equipment up to standards on distribution. It is unfortunate though, that hydro costs are so much higher than other parts of the country and North America who we compete with in the business*
- *Rate increases impact cost savings we are anticipating from energy retrofit measures*
- *Who likes increases?*
- *I believe that Power and distribution costs are lower in other distributors (i.e. U.S.)*
- *Our business uses a great deal of electricity so as a %, the cost increase is very high*
- *9% is high given what other services are projecting*
- *Our rates are high as it is and business has been at a fairly stable rate. Rate increases are expected but financially impacting*
- *More money should be invested in renewable energy. Prices should not be going up when consumers' salaries are staying the same. Most of the costs seem to be allocated to salary increases and pensions. Something that 80% of the work force does not get.*

"The rate increase is unreasonable and I oppose it"

- *Similar to taxes, increased development brings increased revenue and businesses can't afford a 9.3% increase*
- *Alternative ways to contract work should be explored to contain costs*

Questionnaire Results

The following are the tabulations of participant feedback to the survey that was distributed following an informative presentation by WNH.

1. Given what you know and what you have learned this morning, how well do you feel you understand the parts of the electricity system, how they work together and which services Waterloo North Hydro is responsible for?

	TOTAL
Very well	8
Somewhat well	14
Not very well	0
There are parts I understand, but other parts I am unsure of	2
I don't understand at all	0
TOTAL	24

2. Generally, how satisfied are you with the service you receive from Waterloo North Hydro?

	TOTAL
Very Satisfied	11
Somewhat satisfied	12
Not very satisfied	1
Not at all satisfied	0
Don't know	0
TOTAL	24

4. How well do you feel you understand the cost drivers that Waterloo North Hydro is responding to?

	TOTAL
Very well	8
Somewhat well	12
Not very well	3
Not well at all	1
Don't know	0
TOTAL	24

5. How well do you think Waterloo North Hydro is managing these cost drivers while meeting customer expectations?

	TOTAL
Very well	8
Somewhat well	11
Not very well	3
Not well at all	2
Don't know	0
TOTAL	24

6. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?

	TOTAL
Waterloo North Hydro should invest what is required 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.	22
Waterloo North Hydro should lower its investment in renewing the system's again infrastructure to lessen any bill increase, even if that means more or longer power outages.	2
Don’t know	0
TOTAL	24

7. Aside from major weather events, do you recall how many unexpected outages you experienced in the past year?

	TOTAL
None	1
One	3
Two	7
Three	2
Four	3
More than four	5
Don’t know	3
TOTAL	24

8. In your view, how do you think Waterloo North Hydro should address the number of unexpected power outages?

	TOTAL
Spend what is needed to reduce the number of unexpected power outages	9
Spend what is needed to maintain the current level of unexpected outages	12
Accept more unexpected power outages in order to help keep customer costs from rising	0
Don't know	3
TOTAL	24

9. In your view, how do you think Waterloo North Hydro should address the length of time customers are without power?

	TOTAL
Spend what is needed to reduce the duration of unexpected power outages.	9
Spend what is needed to maintain the current duration of unexpected outages?	14
Accept longer unexpected power outages in order to keep customer costs from rising	0
Don't know	1
TOTAL	24

10. In order to operate efficiently and better serve our customers, Waterloo North Hydro needs IT systems to manage the grid and its customer information, as well as proper facilities to house its staff, vehicles and tools. Which of the following statements best represents your point of view?

	TOTAL
While Waterloo North Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.	20
Waterloo North Hydro should find ways to make do with the buildings, equipment and IT systems it already has.	4
Don't know	0
TOTAL	24

11. How satisfied are with the efforts Waterloo North Hydro has made to find efficiencies and cost savings?

	TOTAL
Very satisfied	6
Somewhat satisfied	17
Not very satisfied	1
Not at all satisfied	0
Don't know	0
TOTAL	24

12. From what you have read here and what you may have heard elsewhere, does Waterloo North Hydro's investment plan seem like it is going in the right direction or the wrong direction?

	TOTAL
Definitely the right direction	10
Might be the right direction	11
Might be the wrong direction	1
Definitely the wrong direction	0
Don't know	2
TOTAL	24

13. How well did Waterloo North Hydro's plan cover the topics you expected?

	TOTAL
Very well	9
Somewhat well	13
Not very well	1
Not well at all	0
Don't know	1
TOTAL	24

14. How well do you think Waterloo North Hydro is planning for the future?

	TOTAL
Very well	11
Somewhat well	12
Not very well	0
Not well at all	0
Don't know	1
TOTAL	24

15. Considering what you know about the local electricity distribution system, which of the following best represents your point of view?

	TOTAL
The rate increase is reasonable and I support it	6
I don't like it, but I think the rate increase is necessary	14
The rate increase is unreasonable and I oppose it	2
Don't know	1
Missing value	1
TOTAL	24

Customer Telephone Surveys

Telephone Surveys
among Residential and GS Customers

PURPOSE: To obtain statistically significant quantitative feedback on the proposed system plan spending and assess reaction to customer opinions obtained from the previous research phases

Summary

The following summary highlights the key findings from telephone surveys of 500 WNH residential customers and 200 general service (GS) <50 kW customers:

General Satisfaction

Residential (94%) and general service (93%) customers are both highly satisfied with the job WNH is doing running their electricity distribution system. Among both customer groups, there is only a small gap between those who are *very* satisfied (45% RS; 44% GS) and those who are only *somewhat* satisfied (40% RS; 50% GS). One fifth (22%) of residential customers and one third (34%) of GS customers did not have any suggestions for improvement. The main suggestion respondents did provide on how WNH could improve their service was "lower/reduce rates" (24% RS; 31% GS).

Electricity Bill Knowledge Summary

Having been provided with a brief preamble that detailed how much of their electricity bill actually goes to WNH, only 27% of residential customers and 29% of general service customers indicated that they were familiar with this prior to the survey.

System Reliability

Half of residential customers and 61% of GS customers experienced power outages due to the ice storm in December of 2013. Whether they were impacted or not, a strong majority (89% RS; 91% GS) were satisfied with how WNH responded to the ice storm.

Aside from the ice storm, most residential (69%) and GS (59%) customers had experienced at least one outage in the 12 months leading up to the survey, with most outages lasting less than an hour, and most being only a minor inconvenience.

When it comes to addressing the number of power outages, both residential (65%) and GS (68%) customers want WNH to spend what is needed to maintain the current number of outages. Similarly, both respondent groups want WNH to spend what is needed to maintain the current length of outages (67% RS; 66% GS). Both groups agree that greater priority should be given to reducing the length of outages (53% RS; 50% GS).

System Challenges & Priorities

A majority of residential (85%) and general service (76%) customers feel WNH should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases their monthly electricity bill over the next few years.

Just under two thirds in both groups (63% RS; 63% GS) think the benefits of new technology are important enough to be a priority for WNH. Even more (70% RS; 73% GS) feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.

Overall Assessment of Plan

Residential Social Permission:

At the end of the survey, 84% of residential respondents give social permission for the proposed rate increase. Four-in-ten (40%) feel the rate increase is reasonable and they support it, and another 44% say they don't like it, but think the rate increase is necessary. Only 14% oppose the rate increase.

General Service Acceptance:

A similar proportion (86%) of general service respondents are prepared to accept the proposed rate increase: 31% say it's reasonable and they support it, and another 55% say they don't like it but think it is necessary.

Methodology

INNOVATIVE conducted two random-digit dialing customer telephone surveys for WNH:

- A **residential customer survey** was conducted among 500 respondents between March 25 and April 1, 2015. Respondents were randomly selected from a customer list provided by WNH (37,589 residential records). A sample of 500 residential customers is considered accurate to within ±4.4 percentage points, 19 times out of 20.
- A **general service customer (GS < 50 kW) survey** was conducted among 200 respondents between March 25 and April 2, 2015. Respondents were randomly selected from a customer list provided by WNH (3,238 GS records). A sample of 200 residential customers is considered accurate to within ±6.9 percentage points, 19 times out of 20.

The margin of error in both surveys will be larger within each sub-grouping of the samples.

Questionnaire Design

The residential and GS questionnaires were designed to simulate the journey that respondents to the online workbook and participants in the Customer Consultation Focus Groups experienced. This included a combination of educating the customer, having customers reflect on their personal

experience with their distribution system, and having them make value judgments on trade-offs between system reliability and bill impact.

As part of simulating the "*workbook journey*", the questionnaire was informed by and incorporated feedback from the previous qualitative consultation phases of WNH customer engagement. This included sharing both supportive and non-supportive feedback in the survey from previous phases of WNH's customer consultation as it related to the utility's proposed rate increase.

Both surveys are practically identical and ran at approximately 10 minutes in length. The survey instruments can be found at the end of this section of the report.

Fielding the Surveys

Residential (RS) Customer Survey:

For the purposes of executing the residential survey, WNH provided INNOVATIVE with a confidential list containing 37,589 of their residential customers' contact information.

The contact list included only residential customers with residential landline contact information on file and who had been a customer of WNH since at least January 1, 2014. The information contained in the contact list included customer name, home telephone number, home address, service area, and total annual usage between January 1 and December 31, 2014.

Only one customer per household was eligible to complete the residential survey. Survey respondents were screened to certify that only the customer primarily responsible for paying their WNH electricity bill was interviewed. This step was taken to ensure that survey respondents represented the most qualified person within a household to answer questions about their electricity bill and how WNH's proposed rate increase would impact their household.

Before retiring any randomly selected telephone number from the contact list, 8 attempts were made to reach a potential respondent for each unique telephone number, or until an interviewer received a hard refusal. Each night a new sample was released from the contact list to replace completed or retired numbers.

WNH's residential customers were contacted at their home by telephone between 4pm and 9pm on weekdays; between 10am and 9pm on Saturday; and between 11am and 9pm on Sunday.

General Service (GS) Customer Survey:

The sample for the GS survey consisted of 3,238 customers drawn from a confidential list provided to INNOVATIVE by WNH. GS respondents were screened to ensure they were in charge of managing or overseeing the electricity bill at their organization.

GS customers were contacted on weekdays between 9am to 5pm.

All fieldwork for both surveys was conducted using a computer-assisted telephone interviewing (CATI) system.

Sample Design

The two surveys followed a stratified random sampling methodology. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, electricity consumption). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In both surveys, residential and general customers were divided into quartiles based on annual electricity consumption to ensure the sample had a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households and small businesses.

Ensuring the samples represented the known customer consumption profiles reduces non-response bias in the survey estimates. **Note**: A non-response bias occurs in a survey if the answers of respondents differ from that of the potential answers of those who did not answer.

WNH's customers were divided into quartiles based on annual electricity consumption. The following table illustrates the segmentation of the residential and general service customer survey samples by annual electricity consumption quartile.

Customer Type		Total Sample	Low	Medium-Low	Medium-High	High
Residential	Target	500	125	125	125	125
	Actual	500	125	125	125	125
	Difference	--	--	--	--	--
General Service	Target	200	50	50	50	50
	Actual	200	50	50	50	50
	Difference	--	--	--	--	--

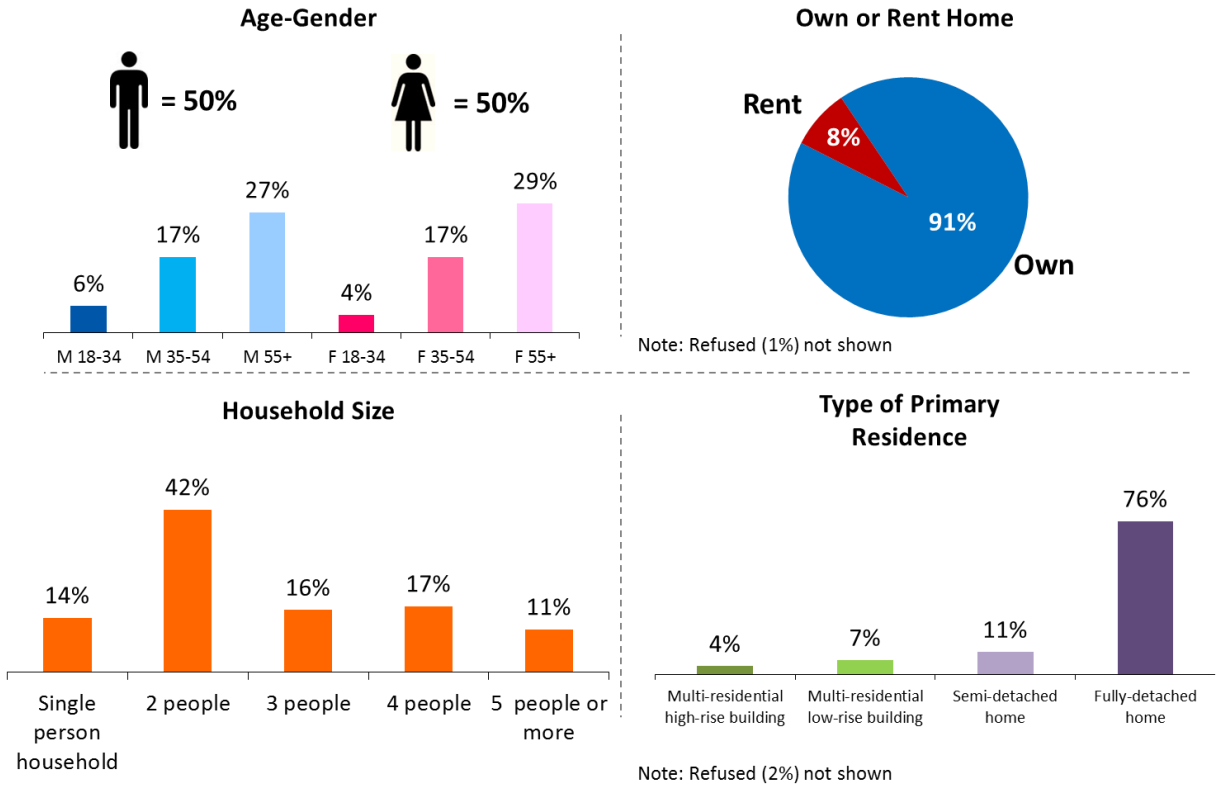
Sample Weights

Weights have not been applied to either the residential or GS data as the stratified random samples provide an accurate representations of WNH's actual customer base.

Demographic Profiles

The following details the demographic characteristics of respondents who completed the Residential Ratepayer Survey [n=500].

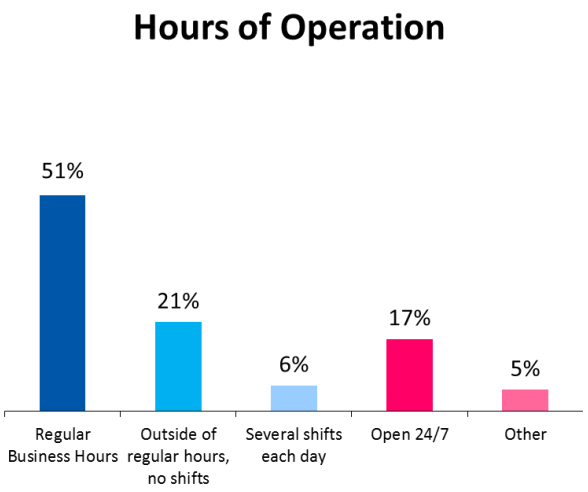
Figure A: Residential Customer Profile

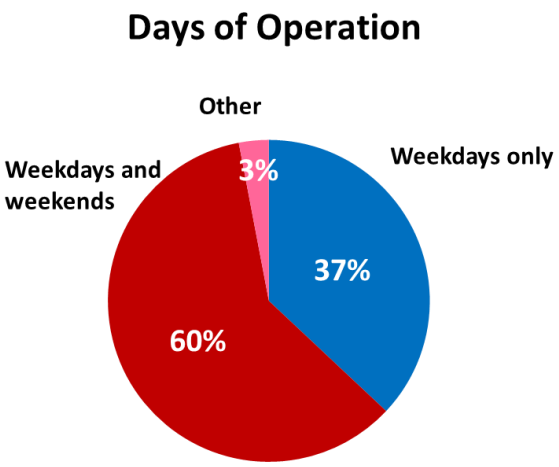


Firmographic Profiles

Below are the firmographics of respondents who completed the general service ratepayer survey [n=200].

Figure B: GS Customer Profile





Respondent Feedback

Familiarity and Satisfaction

In the first section of the survey, we asked respondents about their level of familiarity with Waterloo North Hydro, and whether or not they are generally satisfied with them. We also invite input on how WNH could improve their service. In this section, as in all subsequent sections, we present the findings from the residential survey followed by the general service survey.

Familiarity and Satisfaction Summary

- Fewer than half (45%) of residential customers claim to be familiar with their local electricity distribution system. This figure is slightly higher among general service customers (51%).
- An impressive 94% of residential customers are satisfied with the service they receive from Waterloo North Hydro, as are 93% of general service customers.
- 22% of residential customers and 34% of general service customers say there is nothing WNH can do to improve their service.

Prior to answering the questions in the General Satisfaction Section, respondents were presented with a preamble concerning key components of Ontario's electricity system.

The preamble read as follows:

"To start, I'd like to ask you a few questions about the electricity system…

As you may know, Ontario's electricity system has three key components: ***generation***, ***transmission*** *and* ***distribution****.*

- ***Generating stations*** *convert various forms of energy into electric power;*
- ***Transmission lines*** *connect the power produced at generating stations to where it is needed across the province; and*
- ***Distribution lines*** *carry electricity to the homes and businesses in our communities.*

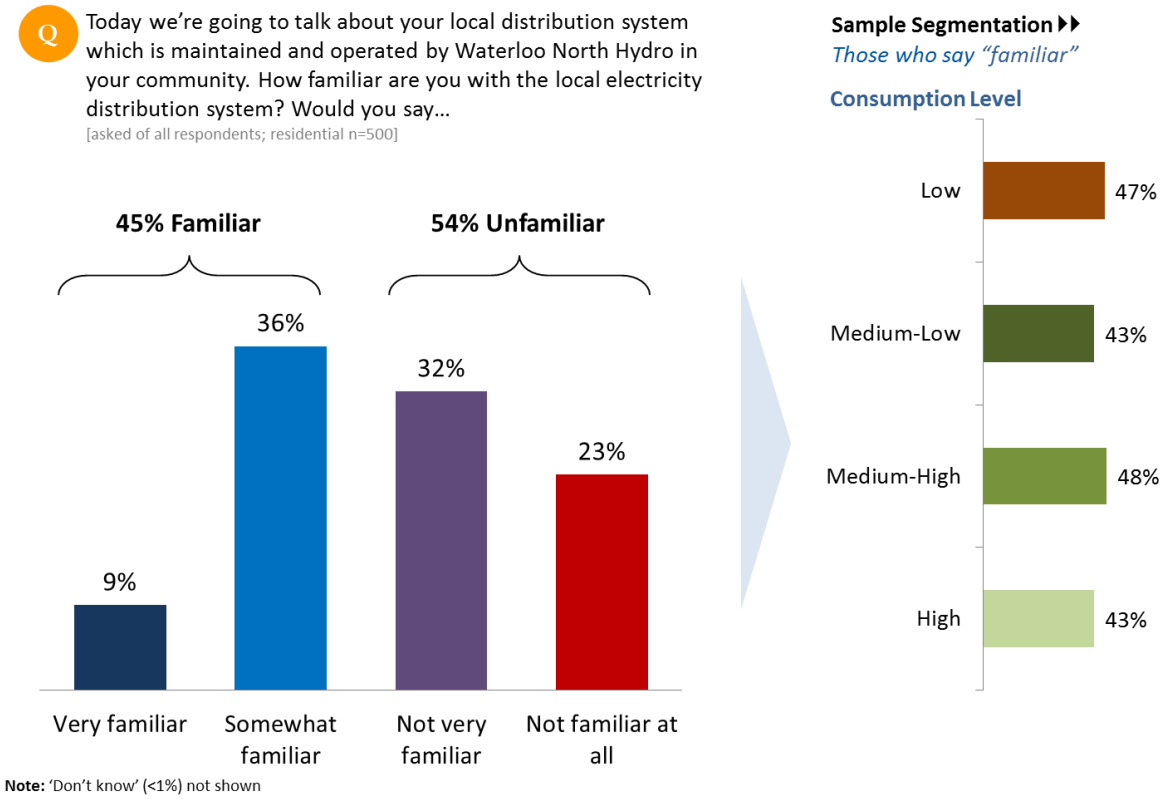
Today we're going to talk about your ***local distribution system*** *which is maintained and operated by* ***Waterloo North Hydro****."*

Familiarity with Local Electricity Distribution System

Fewer than half of residential customers say they are either *somewhat* (36%) or *very* (9%) familiar with their local electricity distribution system. Almost one-in-four (23%) report that they are *not familiar at all* with the system.

- Degree of familiarity is directionally higher among those with low (47%) or medium-high (48%) levels of consumption.

Figure RS.1: Familiarity with the Local Distribution System

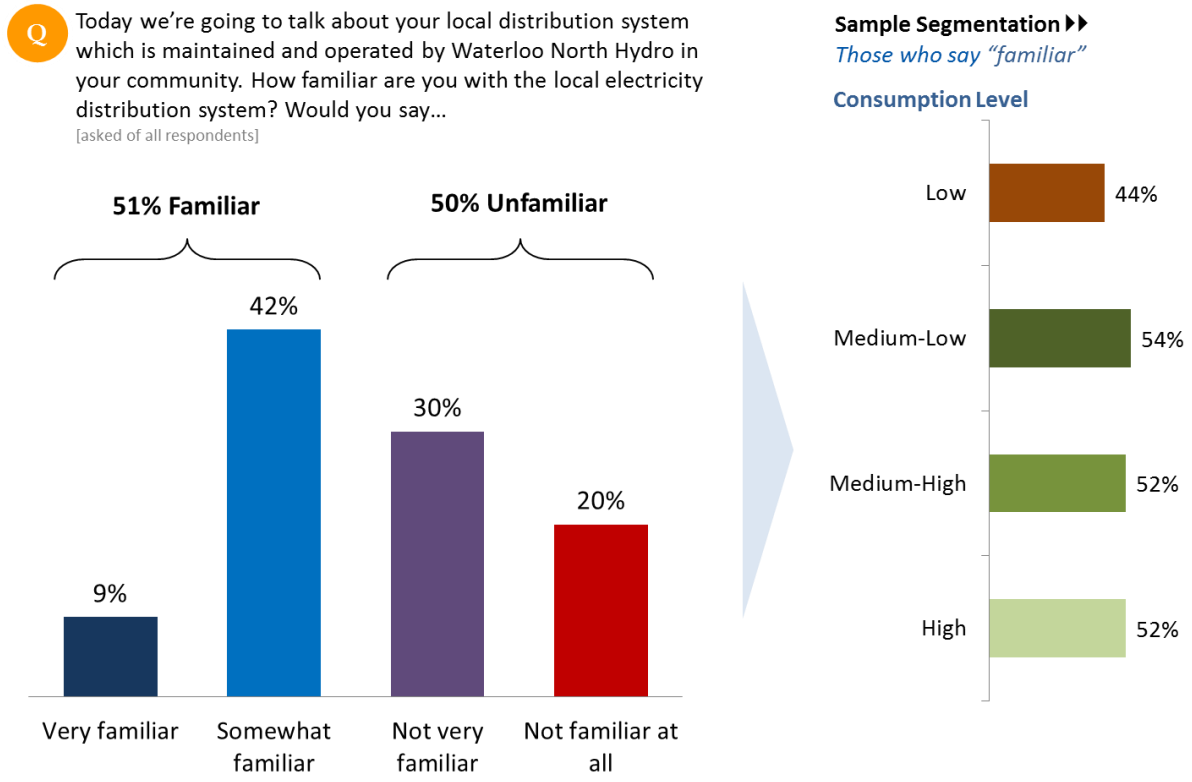


Note: 'Don't know' (<1%) not shown

Familiarity is slightly higher among general service respondents, with half saying they are *somewhat* (42%) or *very* (9%) familiar with their local electricity system. One-in-five (20%) say they are *not familiar at all* with the system.

- Familiarity is lowest among GS<50 kWh customers with a low level of consumption.

Figure GS.1: Familiarity with the Local Distribution System

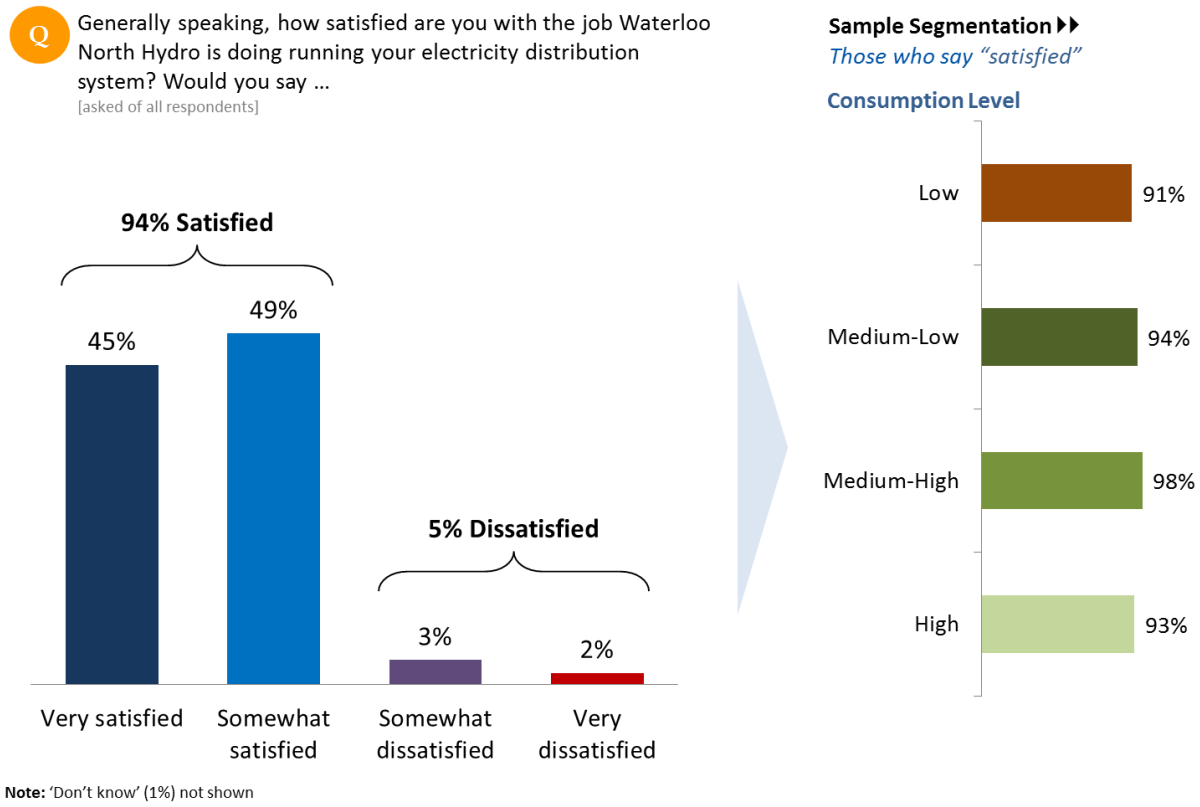


Satisfaction with WNH Running the Distribution System

Almost all (94%) of residential customers are satisfied with the job WNH is doing running their local electricity distribution system, with 45% being *very* satisfied and a further 49% being *somewhat* satisfied. Only two percent report being *very dissatisfied.*

- Satisfaction ranges from 91% among low-consumption customers to a high of 98% among those with a medium-high consumption level.

Figure RS.2: Satisfaction with Waterloo North Hydro

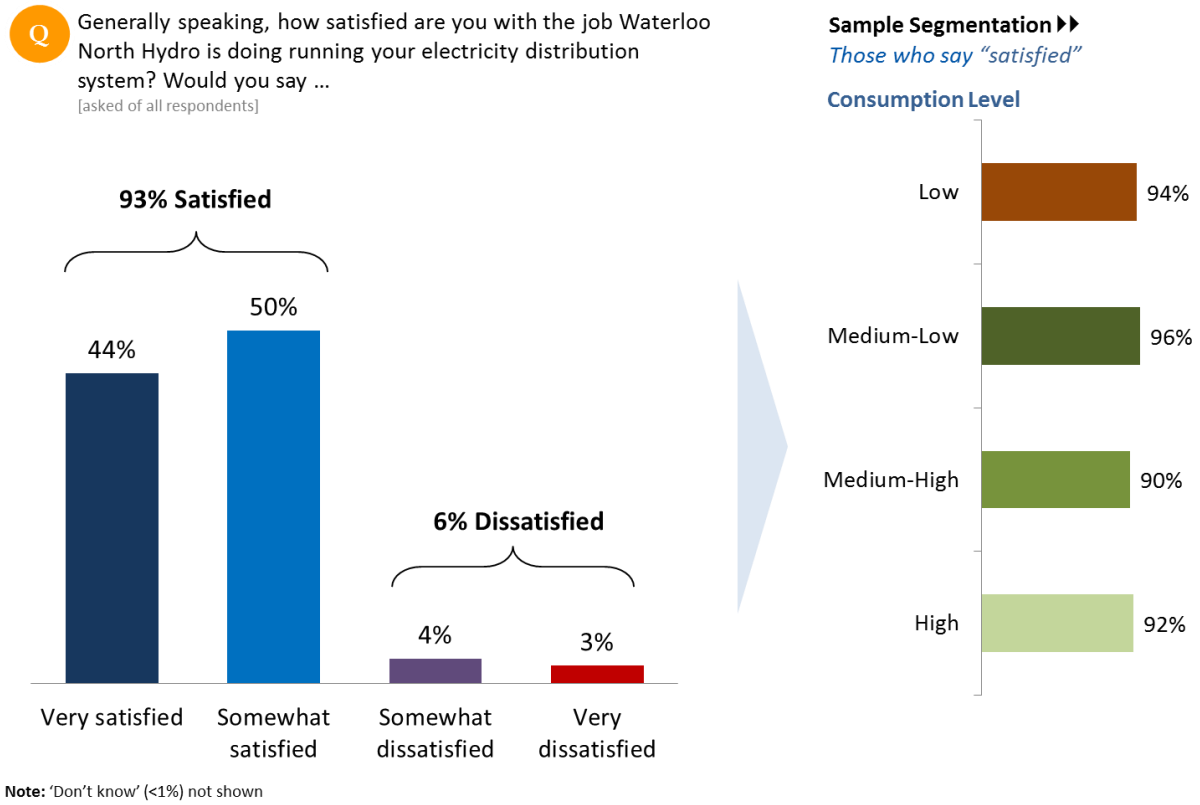


Note: 'Don't know' (1%) not shown

Like residential customers, a strong majority (93%) of general service customers reporting being satisfied with the job WNH is doing, with 44% *very* satisfied and another 50% who are *somewhat* satisfied. Only three percent say they are *very dissatisfied.*

- There are no statistically significant differences in satisfaction across consumption levels.
- Those who report their electricity bill *does not* have a significant impact on their company's finances are more satisfied than those who bill does have an impact (98% vs 91%, respectively).

Figure GS.2: Satisfaction with Waterloo North Hydro

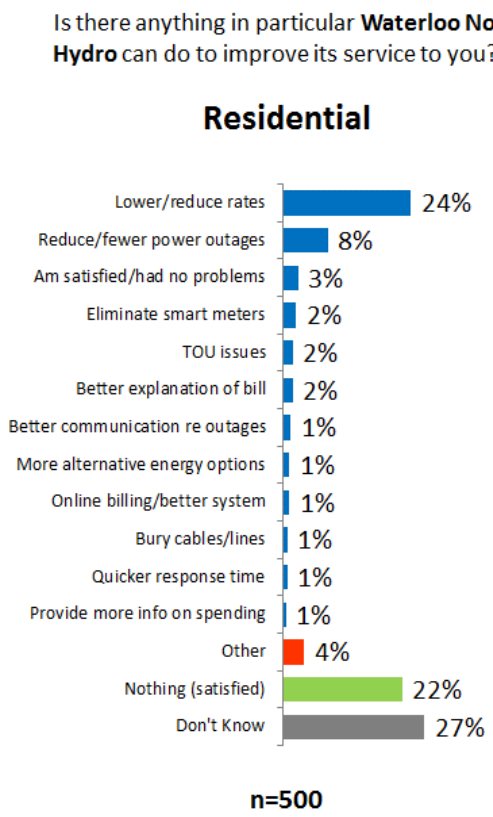


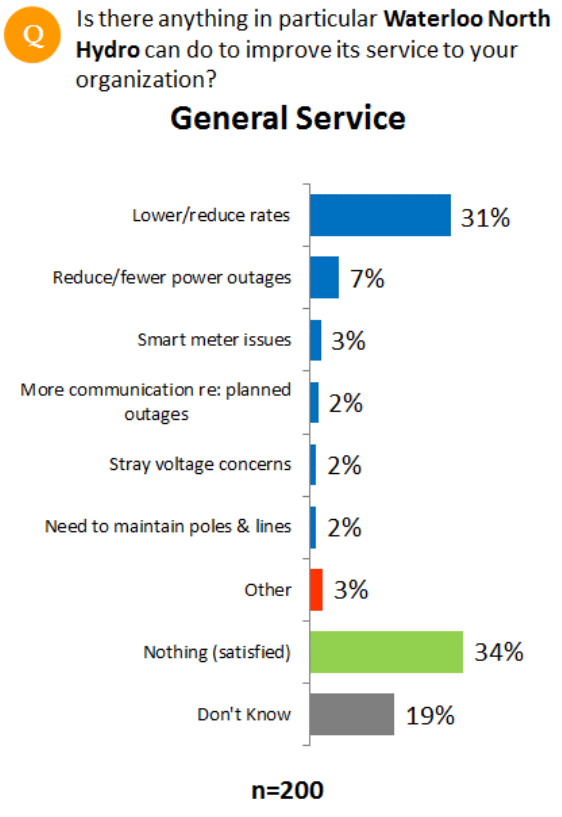
Note: 'Don't know' (<1%) not shown

How to Improve Service

Asked how WNH could improve their service, 22% of residential customers and 34% of general service customers say there is nothing they can do – they are already satisfied. Among both respondent groups, the primary suggestion for improving rates is "lower/reduced rates" (24% residential; 31% general service). This is followed distantly by "reduce/fewer power outages" (8% RS; 7% GS).

Figure RS/GS.3: How to Improve Service





Knowledge of Ownership

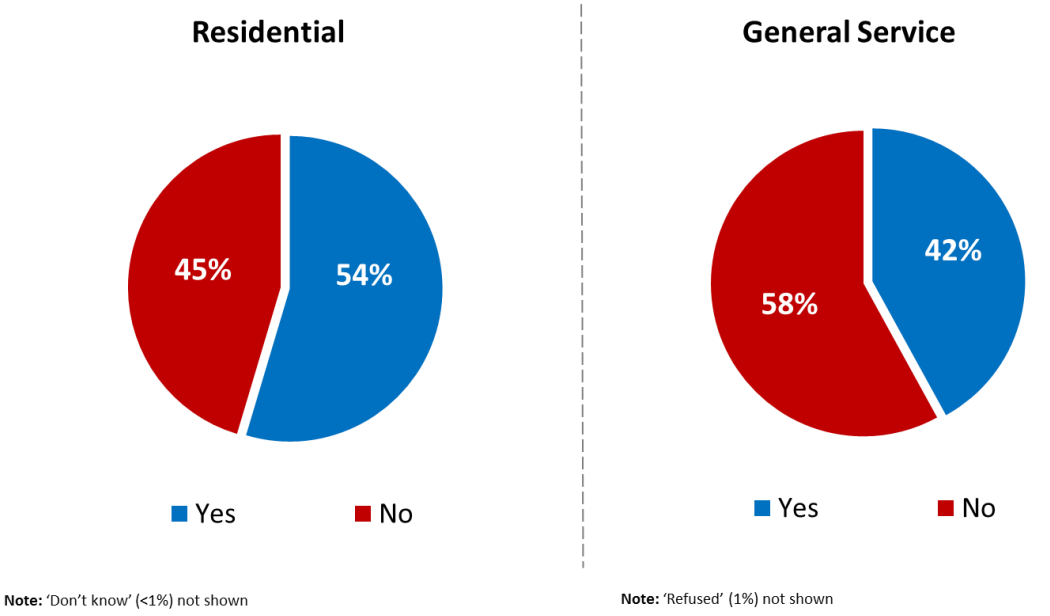
At 54%, residential respondents are more likely than general service respondents (42%) to know that WNH is owned by the City of Waterloo and the Townships of Wellesley and Woolwich.

- There are no significant variations across sub-segments of either residential or general service respondents.

Figure RS/GS.4: Knowledge of Ownership

Q Waterloo North Hydro is 100% owned by the City of Waterloo and the Townships of Wellesley and Woolwich and is overseen by an independent board of directors. The board is responsible for overseeing the operations and management of the utility.

Before this survey, did you know that Waterloo North Hydro was owned by the City of Waterloo and the Townships of Wellesley and Woolwich?
[asked of all respondents]



Note: 'Don't know' (<1%) not shown

Note: 'Refused' (1%) not shown

Electricity Bill Knowledge

Before asking respondents about their familiarity with their electricity bill, residential and general service customers were presented with a preamble on the breakdown of their electricity bill:

Residential Survey Preamble:

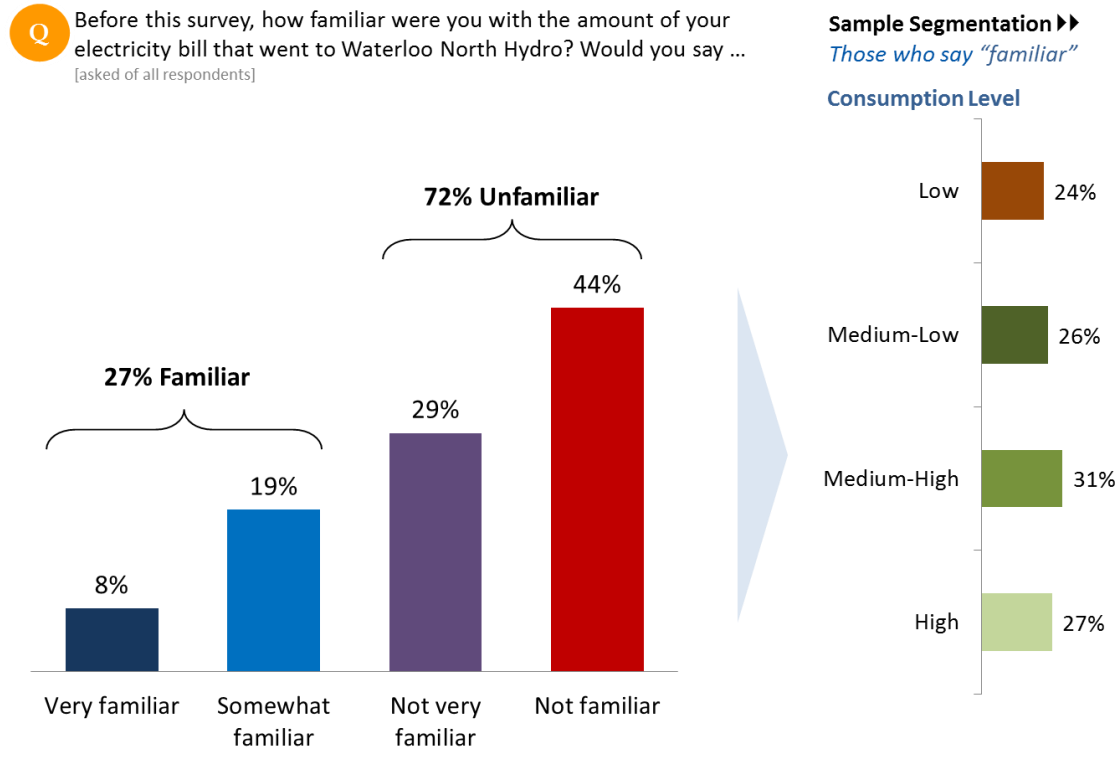
I'd now like to talk with you about your electricity bill …

While some customers pay more and other pay less, the **average residential customer pays approximately $130 a month** for electricity of **which $30 or approximately 23% goes to Waterloo North Hydro**. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Most (72%) residential respondents were unfamiliar with how much of their energy bill goes to Waterloo North Hydro. In fact, 44% were *not familiar at all*. Just over one-in-four (27%) said they were familiar with the bill breakdown.

- Familiarity is higher among households where the energy bill has an impact on finances (31%) than among those whose energy bill does not have a significant impact (23%).

Figure RS.5: Familiarity with Electricity Bill



Note: 'Don't know' (1%) not shown

General Service Survey Preamble:

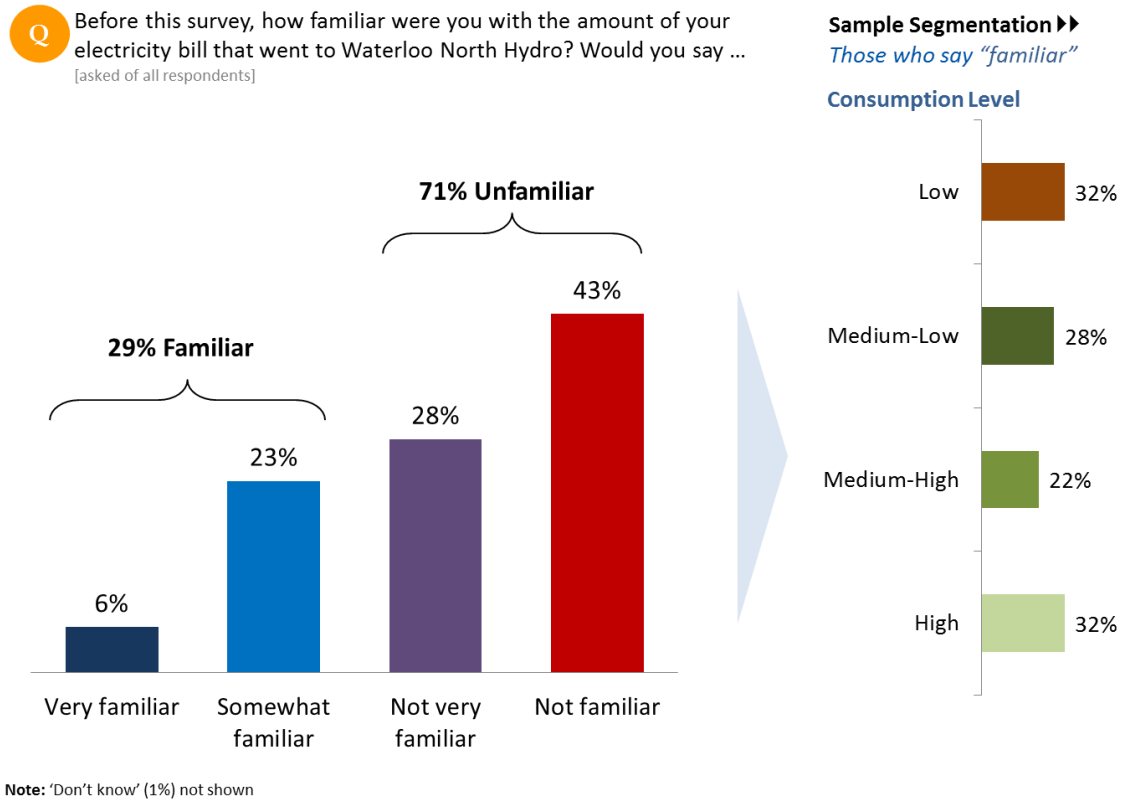
I'd now like to talk with you about your electricity bill …

While some customers pay more and other pay less, the **average small and medium-sized business pays about $320 a month** for electricity of **which $65 or approximately 20% goes to Waterloo North Hydro**. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Among general service customers, seven-in-ten (71%) were not familiar with how much of their energy bill went to Waterloo North Hydro, with 43% being *not familiar at all.* Conversely, 29% reported being familiar with this bill breakdown.

- There are no significant variations across the sub-segments of the general service sample.

Figure GS.5: Familiarity with Electricity Bill



Note: 'Don't know' (1%) not shown

System Reliability

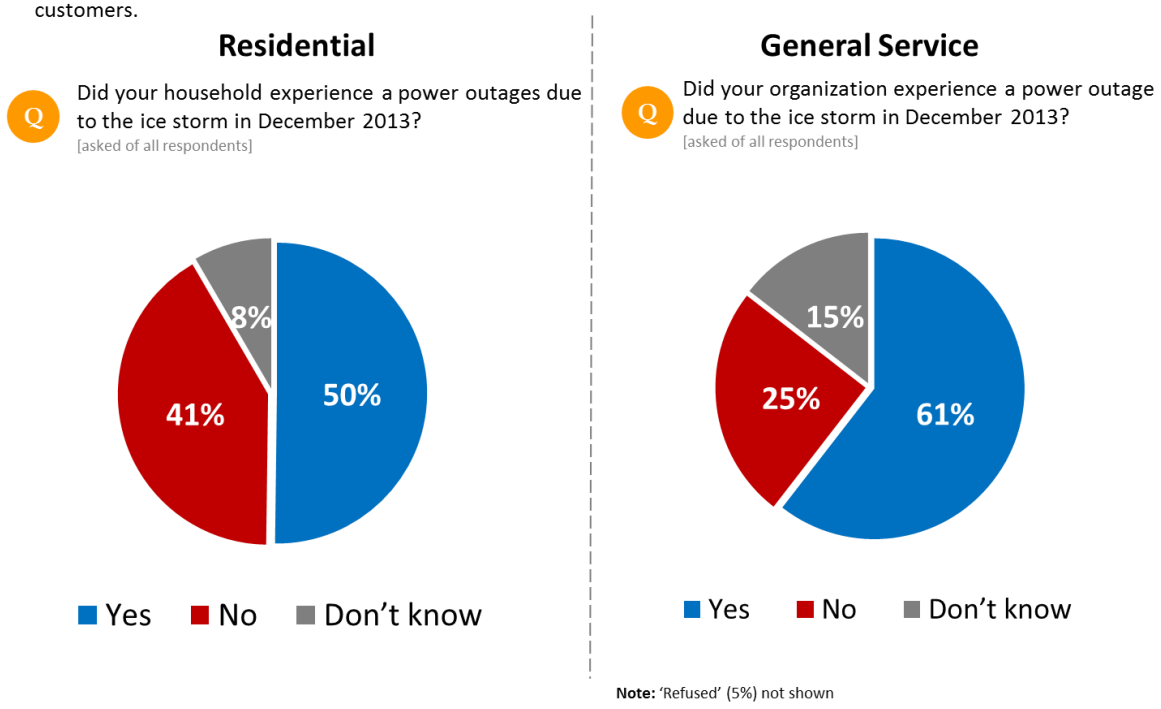
This section of the survey focused on customers' experiences with unexpected power outages, including the major ice storm in December, 2013. We also asked respondents what they think WNH's priorities should be when it comes to investing in system reliability.

Half (50%) of residential customers and even more (61%) general service customers report experiencing a power outage due to the December 2013 ice storm.

- Businesses operating weekdays and weekends (66%) and those operating outside of regular business hours (74%) were most likely to have experienced an outage due to the storm.

Figure RS/GS.6: Impact of 2013 Ice Storm

In the past year or so, Waterloo North Hydro customers experienced unusually extreme weather – *notably the ice storm in December 2013*. This major weather event caused power outages for many Waterloo North Hydro customers.

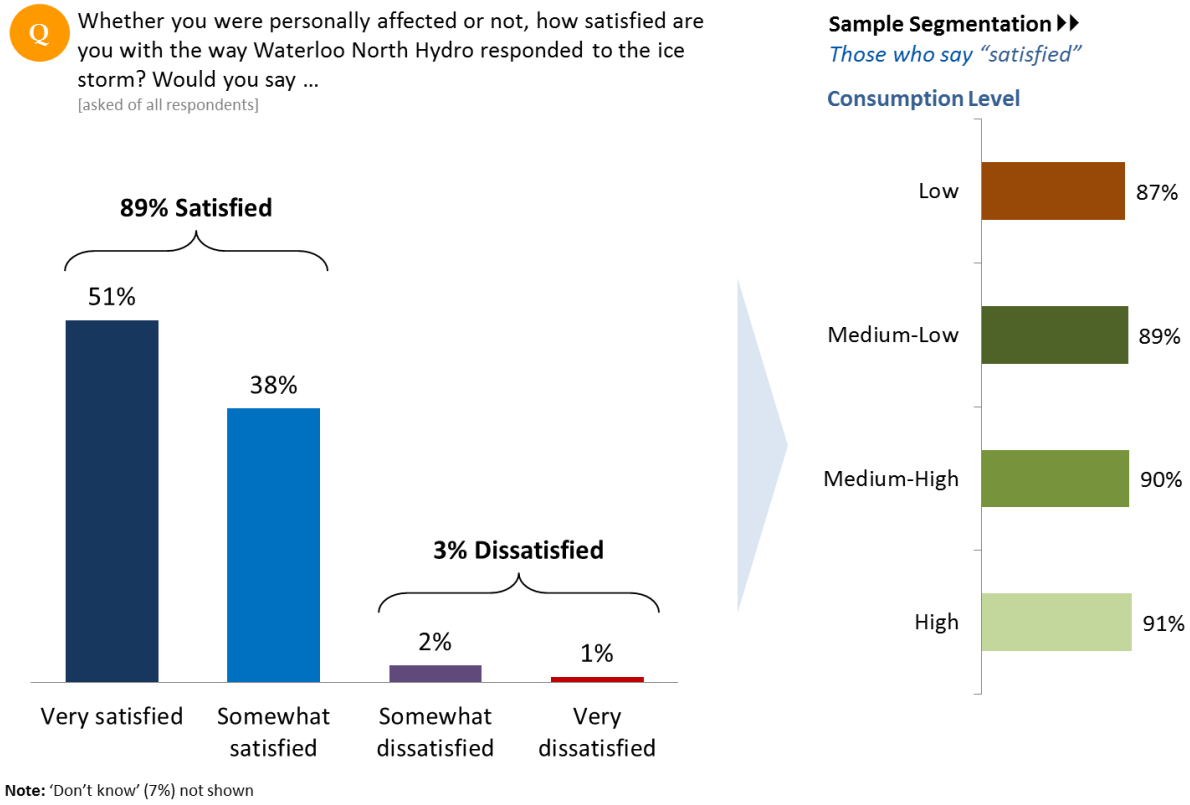


Note: 'Refused' (5%) not shown

Overall, residential customers were satisfied with the way WNH responded to the ice storm, with more than half (51%) being *very* satisfied and an additional 38% being *somewhat* satisfied.

- While not statistically significant, satisfaction increases directionally with level of household consumption, ranging from 87% to 91%.

Figure RS.7: Satisfaction with WNH's Response to 2013 Ice Storm

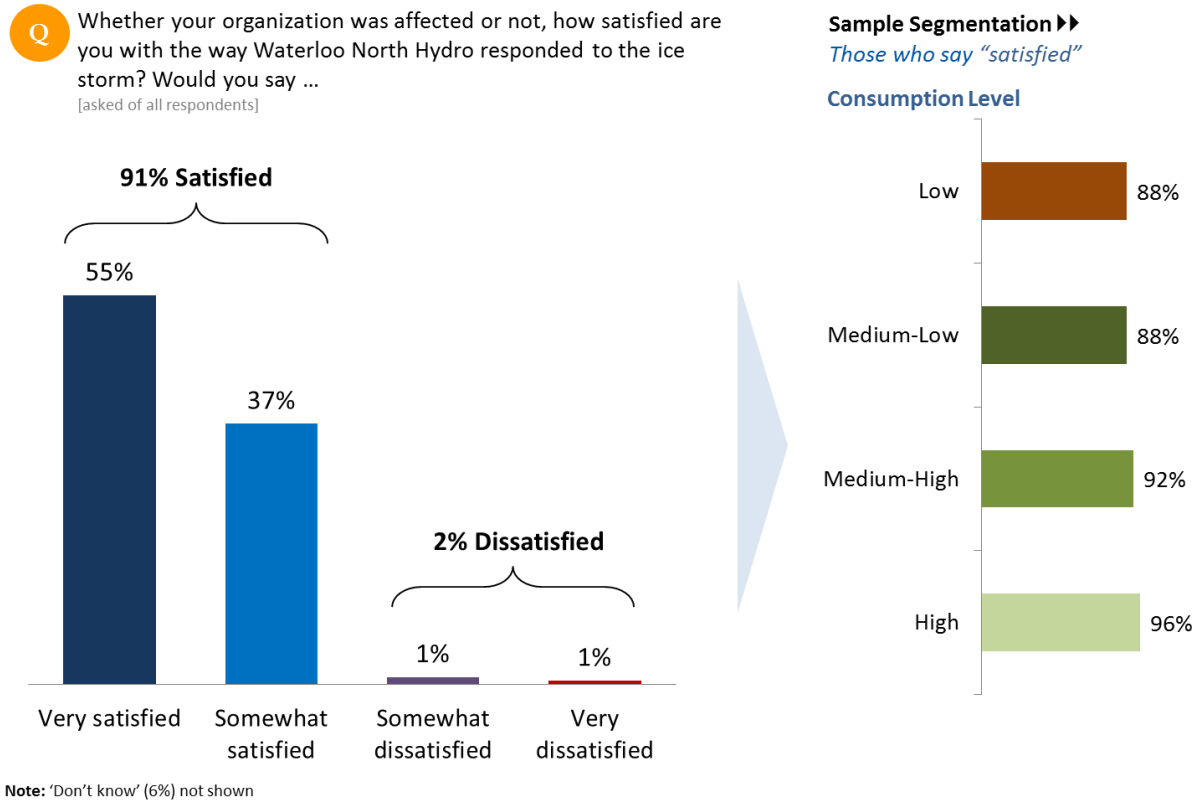


Note: 'Don't know' (7%) not shown

Among general service customers, overall satisfaction is even higher at 91%, with more than half (55%) being *very* satisfied with WNH's response to the ice storm.

- Almost all (97%) GS <50 kW customers whose energy bill *does not* have a significant impact on their organization's finances were satisfied with the response to the storm, compared to 88% among those whose energy bill does have a significant impact.
- Similar to that noted for residential customers, there is a directional increase in satisfaction in conjunction with consumption level, ranging from 88% to 96%.

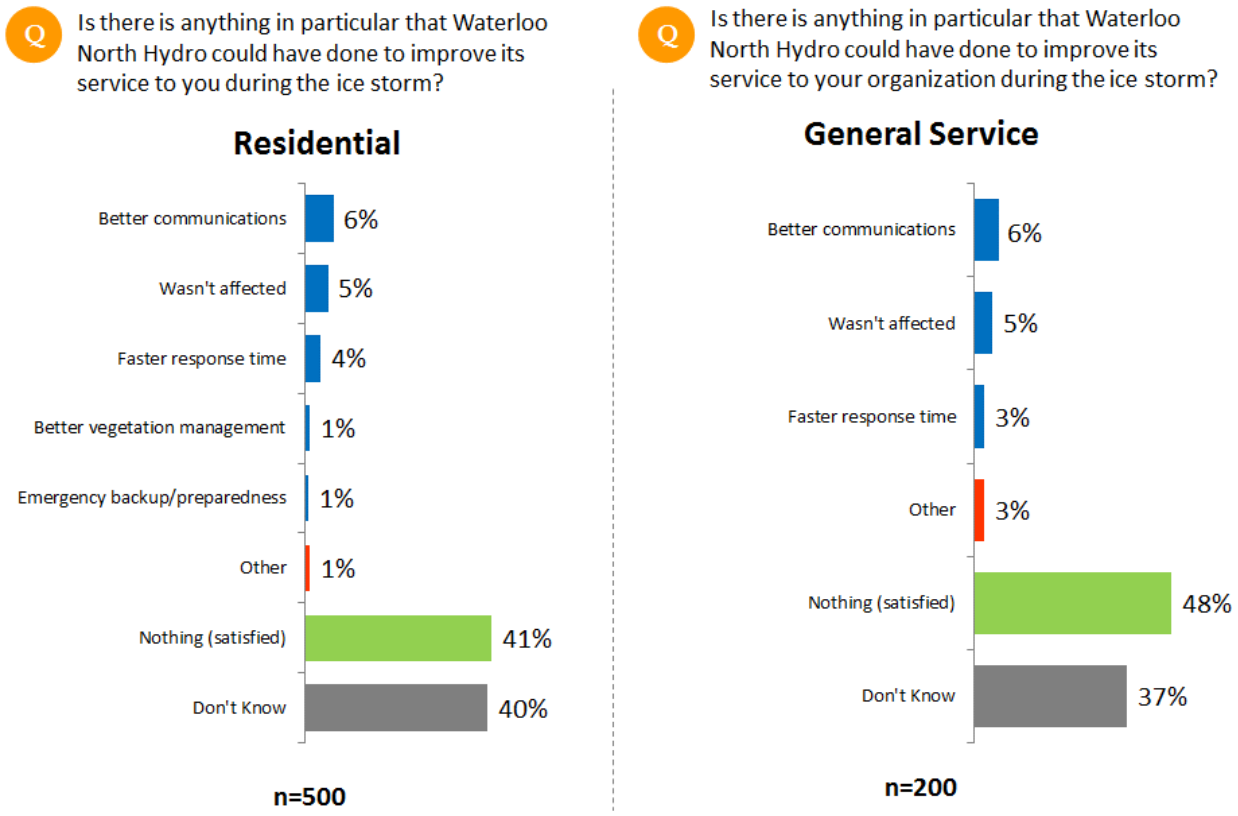
Figure GS.7: Satisfaction with WNH's Response to 2013 Ice Storm



Note: 'Don't know' (6%) not shown

When asked if there is anything WNH could have done to improve its service during the ice storm, most said there was nothing [because they are already satisfied] (41% residential; 48% general service) or that they "don't know" (40% RS; 37% GS). The primary suggestion for better service during the storm was better communications (6% among both respondent groups).

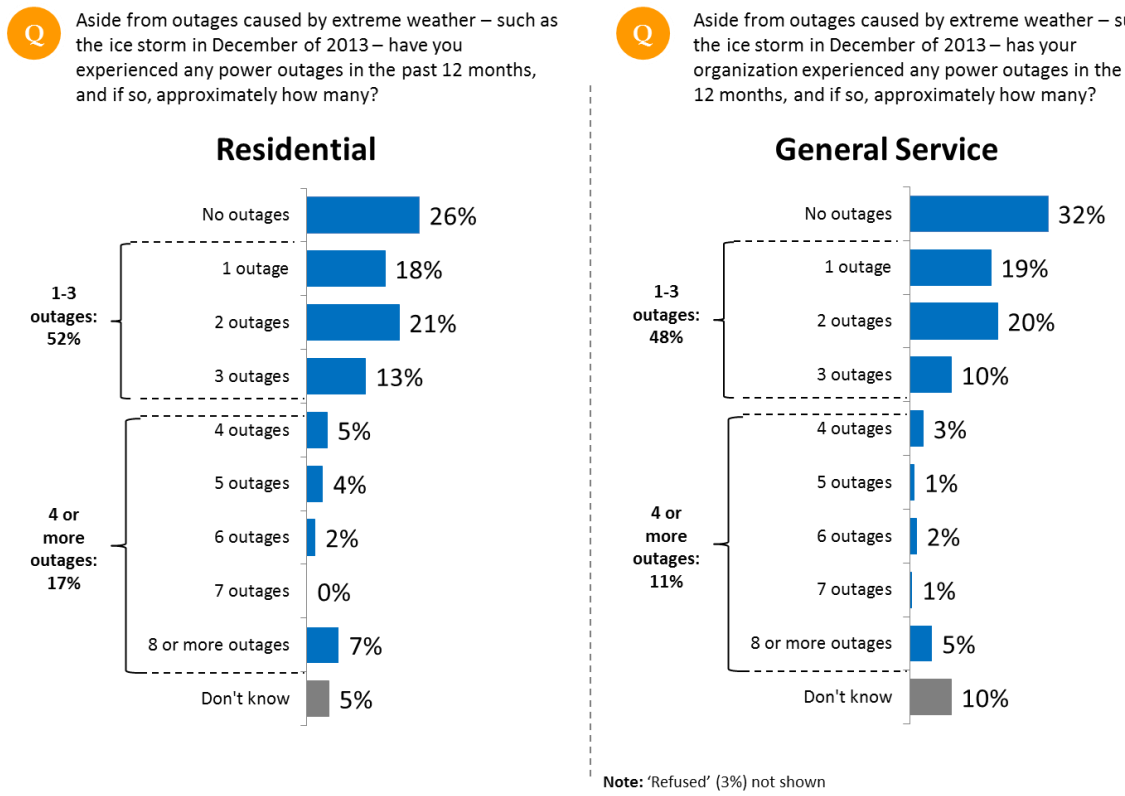
Figure RS/GS.8: Improving WHN's Response to Ice Storm



One quarter (26%) of residential customers did not experience an outage in the prior 12 months aside from those caused by extreme weather. Half (52%) experience between one and three outages, with only 17% experiencing four or more.

One third (32%) of general service customers did not experience an outage, while almost half (48%) experienced between one and three outages. Only-one-in ten (11%) reported four or more outages.

Figure RS/GS.9: Number of Power Service Interruptions

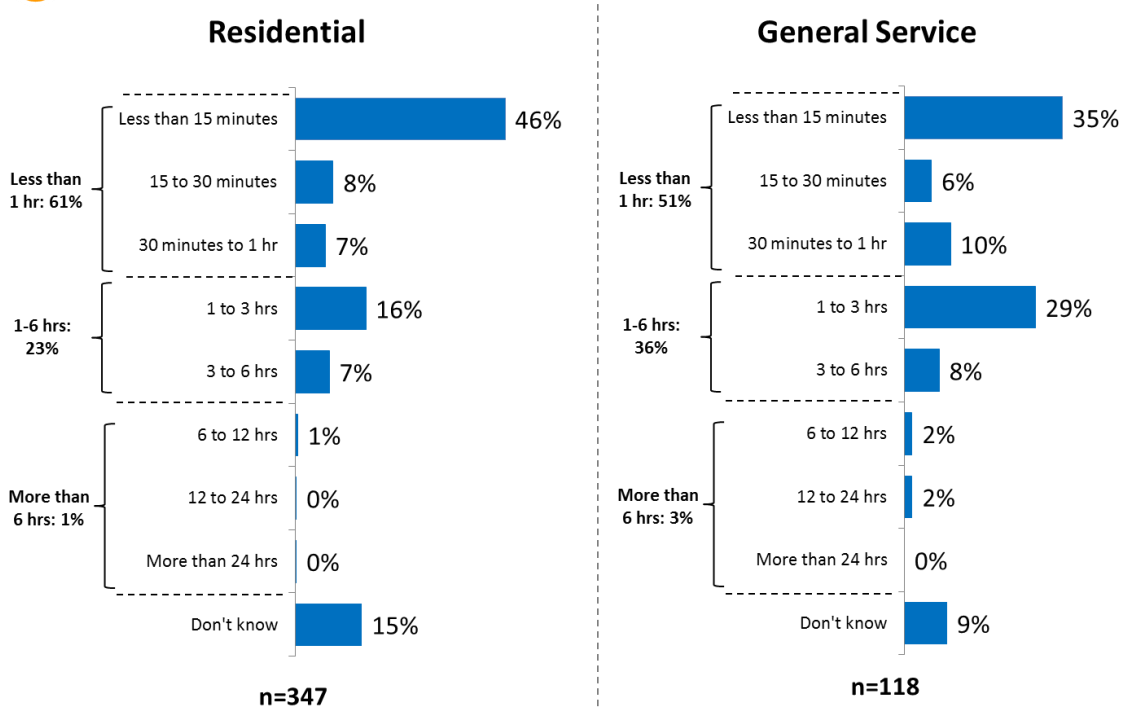


Among residential customers who experienced a power outage, most (61%) report that their most recent outage lasted less than one hour. In fact, almost half (46%) say theirs was less than 15 minutes in duration. One-in-four (23%) reported an outage lasting between one and six hours, and only one percent had an outage that lasted longer than that.

General service customers reported longer outages than residential customers. Half (51%) said their most recent outage lasted less than an hour (35% said less than 15 minutes), more than a third (36%) said between one and six hours, and three percent said even longer than that.

Figure RS/GS.10: Length of Power Service Interruptions

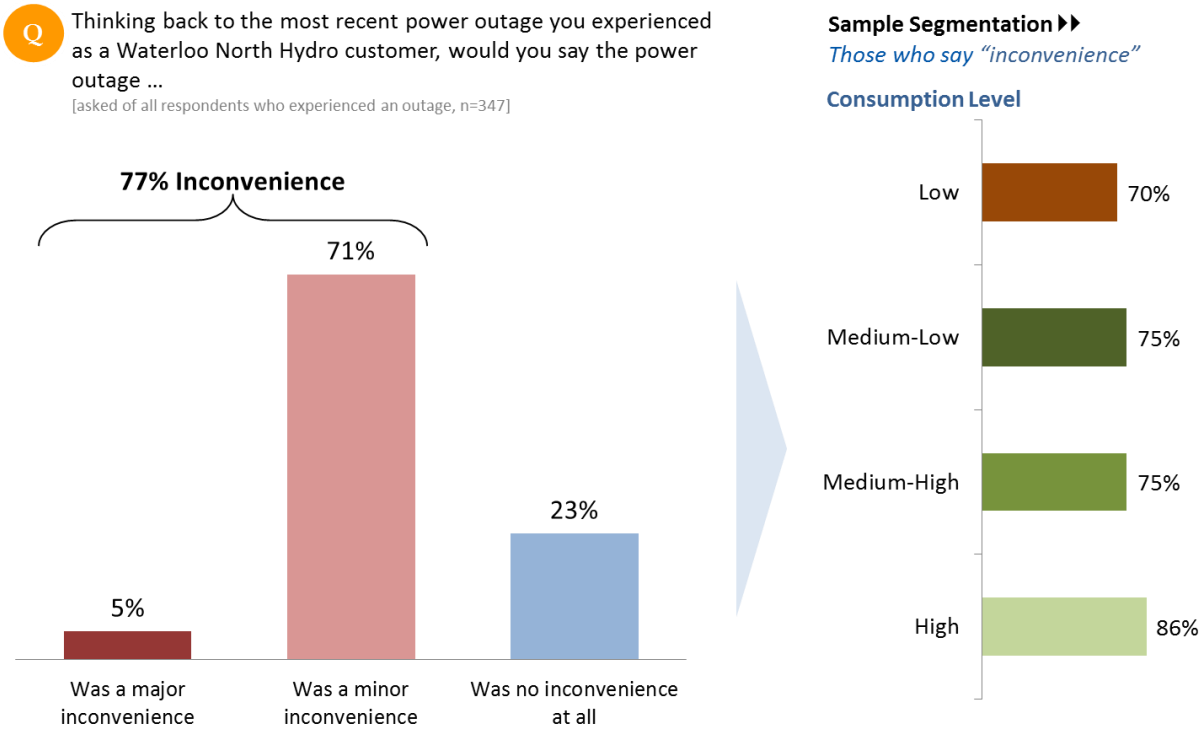
Q [If experienced outage] And approximately how many minutes did the most recent power outage last?



Regardless of duration, seven-in-ten (71%) residential customers say their most recent power outages was only a minor inconvenience. An additional 23% said their most recent power outage was no inconvenience at all, while only five percent said theirs was a major inconvenience.

- Most likely to say their last power outage was only a minor inconvenience are those with a high level of consumption (81%).
- Respondents living in 4-person households are most likely to say their most recent outage was a major inconvenience (13%).

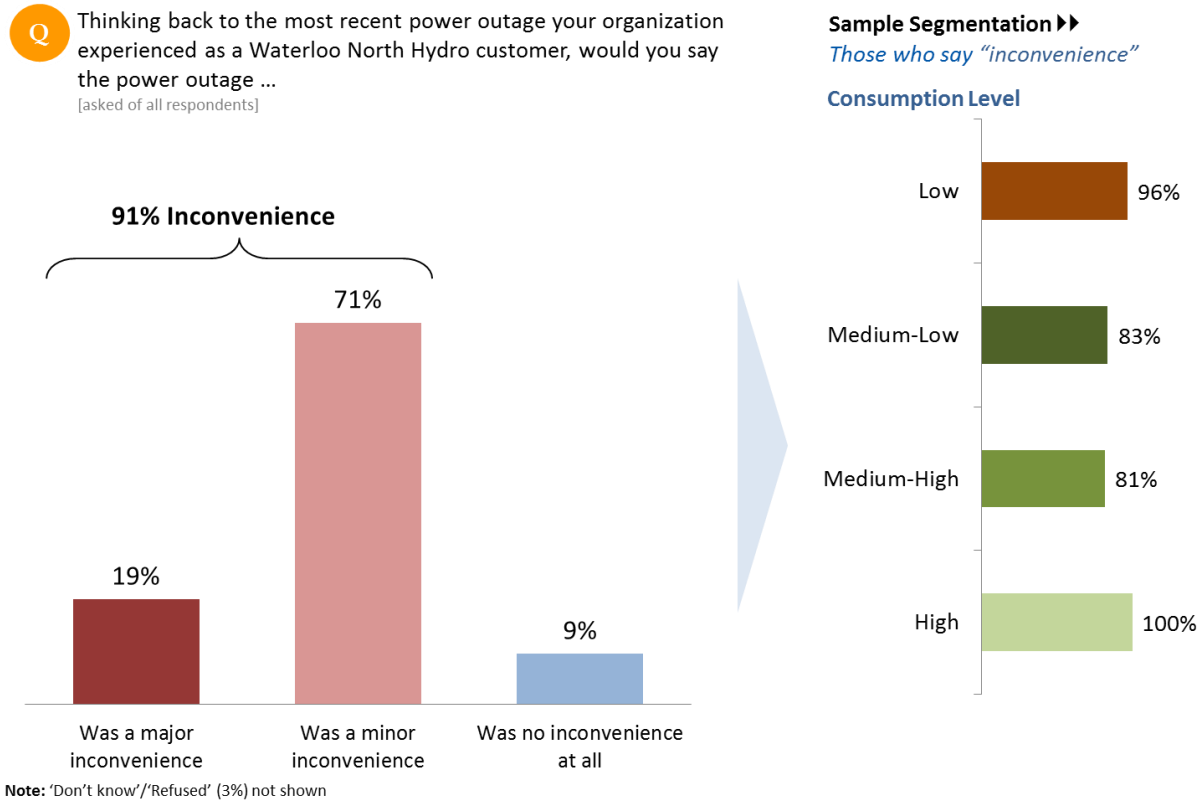
Figure RS.11: Impact of Most Recent Power Service Interruption



Similar to residential customers, 71% of general service customers reported that their most recent power outage was only a minor inconvenience. But, while only one-in-ten (9%) said theirs was no inconvenience at all, twice as many (19%) said their most recent power outage was a major inconvenience.

- Most likely to say their most recent outages was only a minor inconvenience are businesses with a low (78%) or high (85%) level of consumption.

Figure GS.11: Impact of Most Recent Power Service Interruption

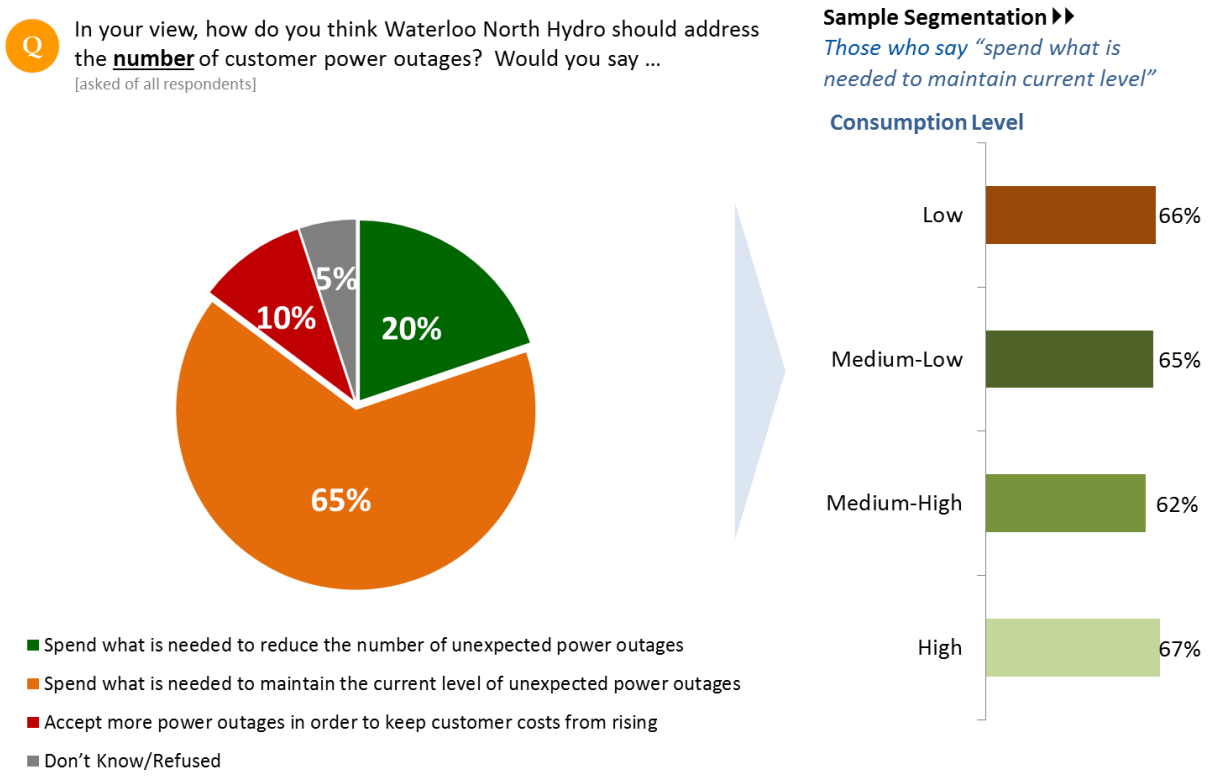


Note: 'Don't know'/'Refused' (3%) not shown

Two thirds (65%) of residential customers say Waterloo North Hydro should spend what is needed to maintain the current level of unexpected power outages, while one-in-five (20%) would prefer that they spend what is needed to reduce the number of outages. Only one-in-ten (10%) say they are willing to accept more outages to help keep customer costs from rising.

- Those whose energy bill has a big impact on their household finances (13%) are more likely than those whose energy bill *does not* have an impact on their household finances (7%) to say they are willing to accept more outages.

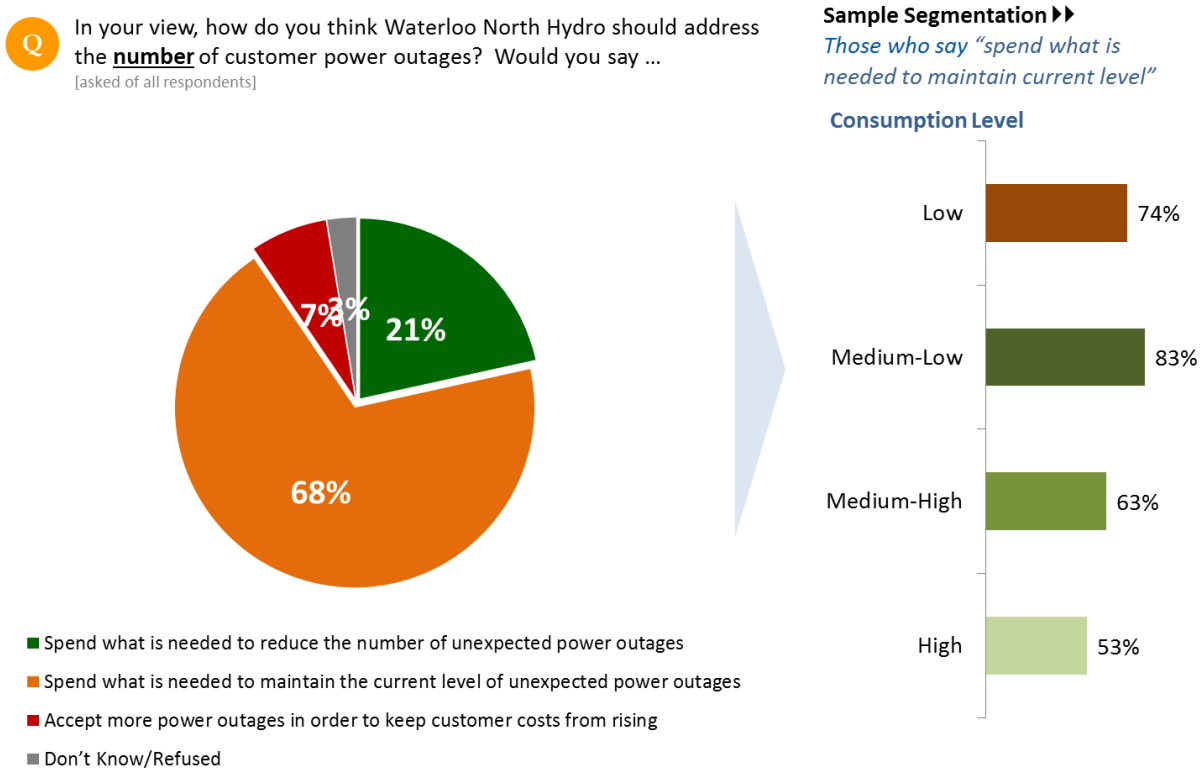
Figure RS.12: Addressing the Number of Power Service Interruption



Among general service customers, the preference (68%) is also for WNH to spend what is needed to maintain the current level of unexpected power outages. One-in-five (21%) would like them to spend what is needed to reduce the current number, but only seven percent are willing to accept more outages in order to keep customer costs from rising.

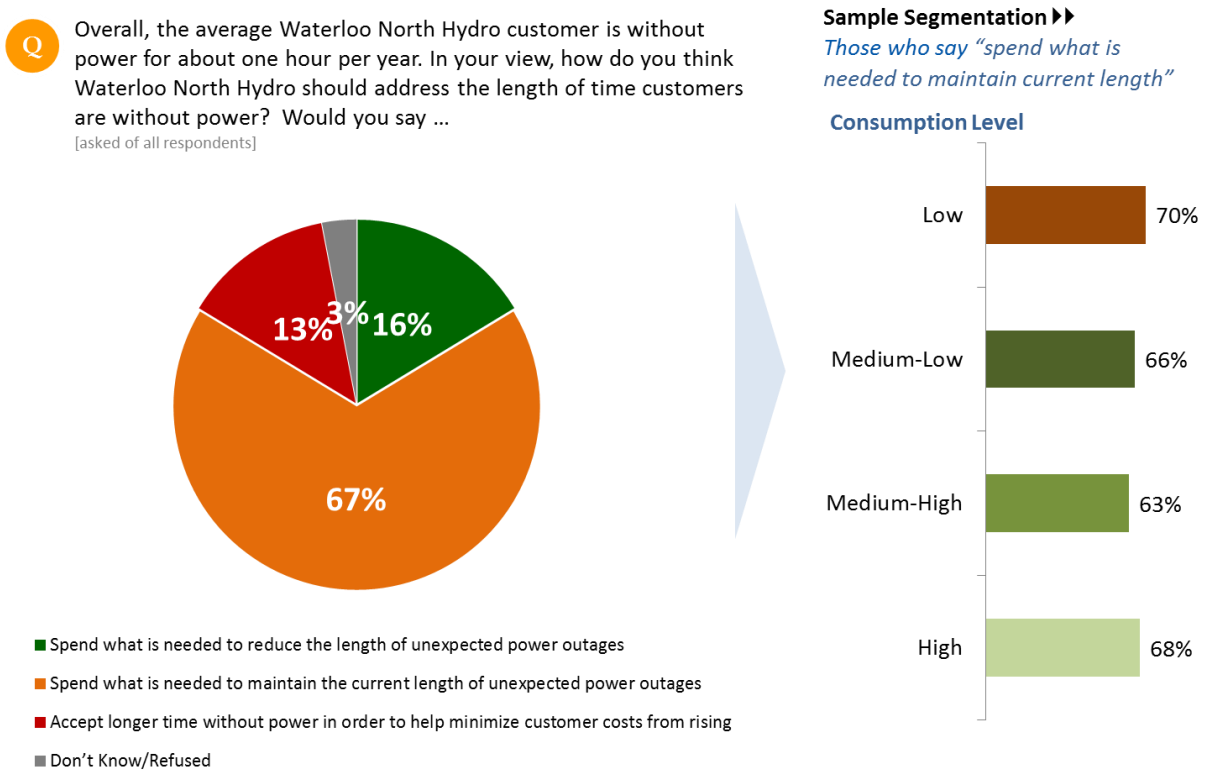
- Businesses with medium-low energy consumption levels are most likely (83%) to prefer a spending plan with maintaining the current number of outages as the goal.

Figure GS.12: Addressing the Number of Power Service Interruption



Consistent with their preference for spending what is needed to maintain the current number of outages, residential customers also want maintenance to be the objective when it comes to spending on the duration of power outages (67%). About one-in-six (16%) would prefer that WNH spend what is needed to reduce the length of unexpected power outages, while fewer (13%) say they would accept long time without power in order to keep customer costs from rising.

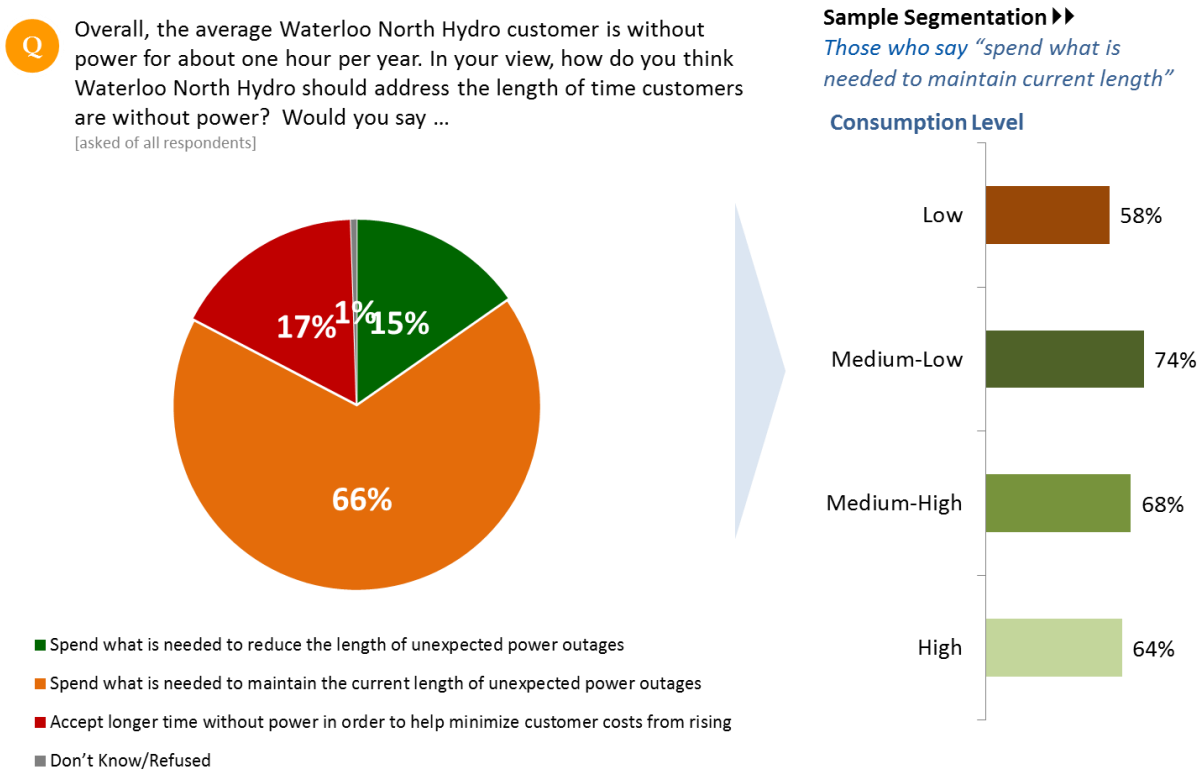
Figure RS.13: Addressing the Length of Power Service Interruption



Again, like residential customers, general service customers prefer a spending level with the goal of maintaining the current length of power outages (66%). Fewer than one-in-five (17%) are prepared to accept longer time without power to keep customer costs from rising, while slightly less (15%) would like WNN to spend what is needed to reduce the current length of outages.

- Businesses that operate weekdays only are less prepared to accept longer time without power in order to keep costs down than those that operate weekday and weekends (11% vs 18%).

Figure GS.13: Addressing the Length of Power Service Interruption

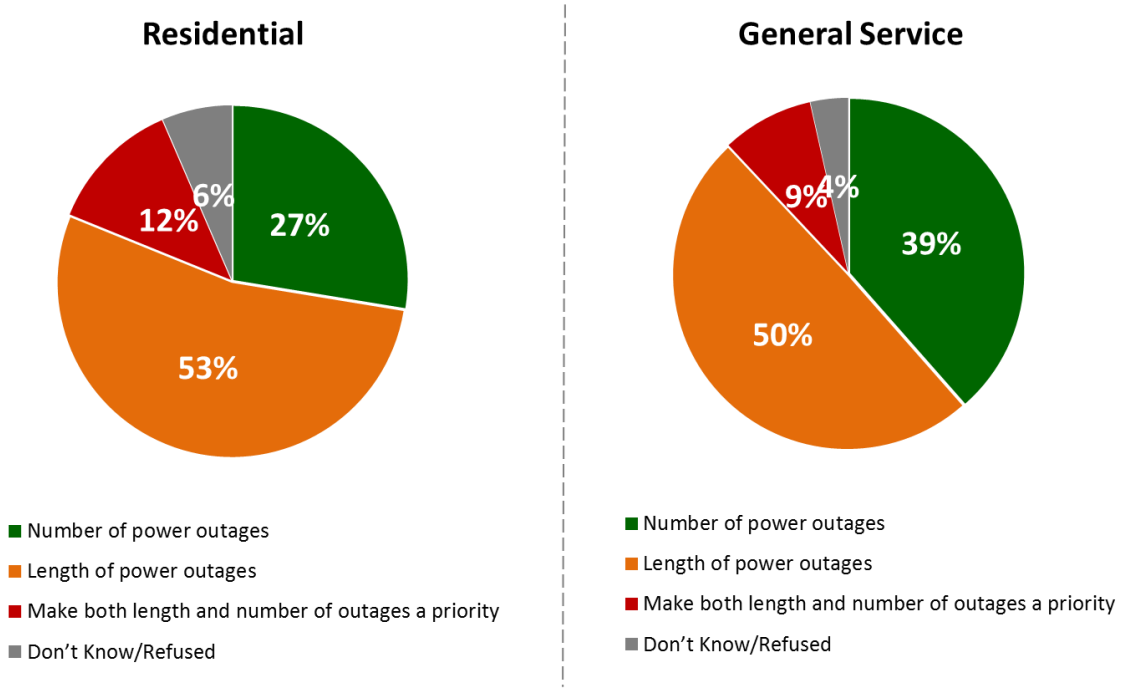


Residential (53%) and general service (50%) customers alike feel WNH should give greater priority to reducing the length of outages over the number of outages (27% residential; 39% GS). Very few feel that frequency and duration should be equal priorities (12% residential; 9% GS).

- There are no significant various across residential customer groups.
- The majority (51%) of businesses that operate weekdays only feel the number of outages should be the priority, whereas the majority (55%) of businesses that operate both weekdays and weekends feel that reducing the length of outages should be the priority.

Figure RS/GS.14: System Priorities: Number vs. Length of Power Outages

Q Should Waterloo North Hydro give greater priority to reduce the number of power outages or the length of power outages?



System Challenges and Priorities

This series of questions gathered feedback on investment in the areas of System Renewal, System Service and General Plant. Preambles prior to each question provided respondents with some background information to help them give a more informed opinion.

System Renewal

Before asking respondents about WNH's investment priorities, residential and general service customers were read the following preamble related to the utility's proposed system renewal program.

System Renewal Preamble:

Waterloo North Hydro's goal is to deliver the electricity local homes and businesses depend on, reliably and efficiently. However, every year its distribution system ages and part of it deteriorates. With a growing community, continued investments must be made annually to replace the most vulnerable parts of our distribution system and support growth in the community.

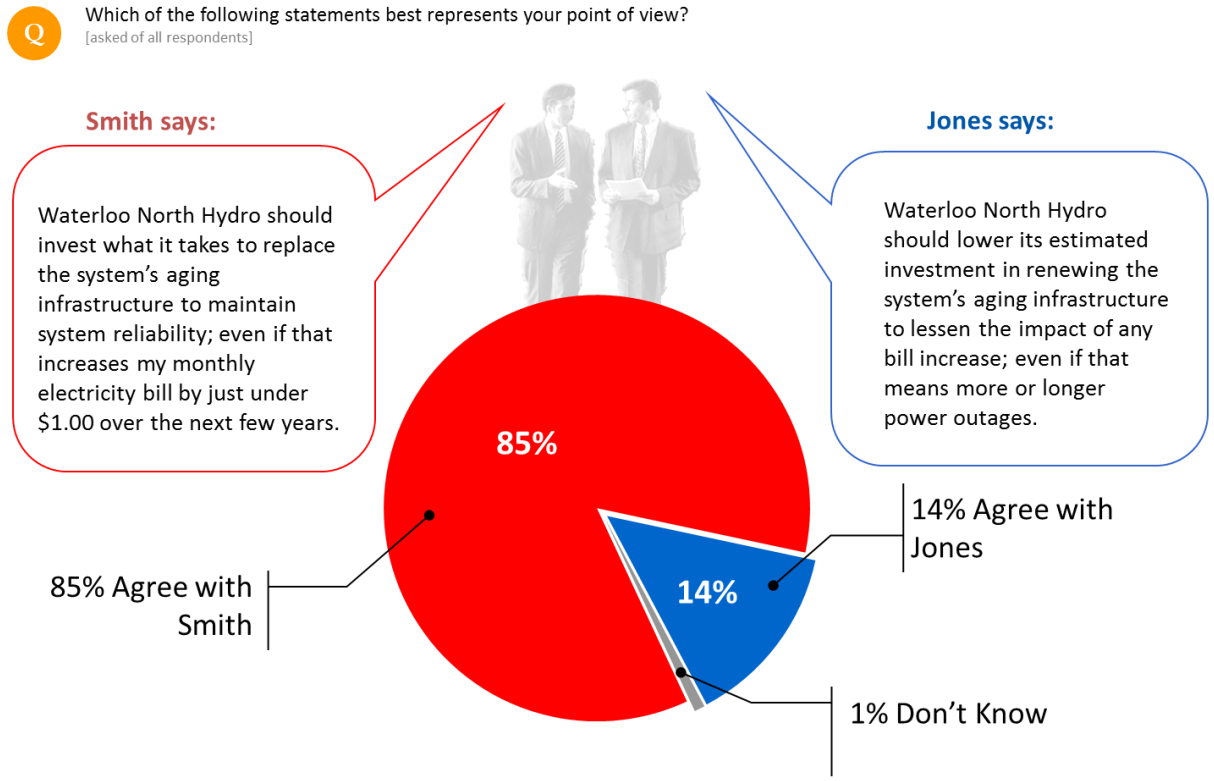
As part of its investment plan, Waterloo North Hydro is proposing to spend about **$43 million** on a system renewal program over the next 5 years.

Although this plan will allow Waterloo North Hydro to make the necessary investments to maintain system reliability, **it will have an impact on customer bills.**

A solid majority (85%) of residential customers feel WNH should invest what it takes to replace the system's aging infrastructure to maintain system reliability. Only 14% say WNH should lower its investment in system renewal in order to lessen the impact of a bill increase; even if it means more or longer power outages.

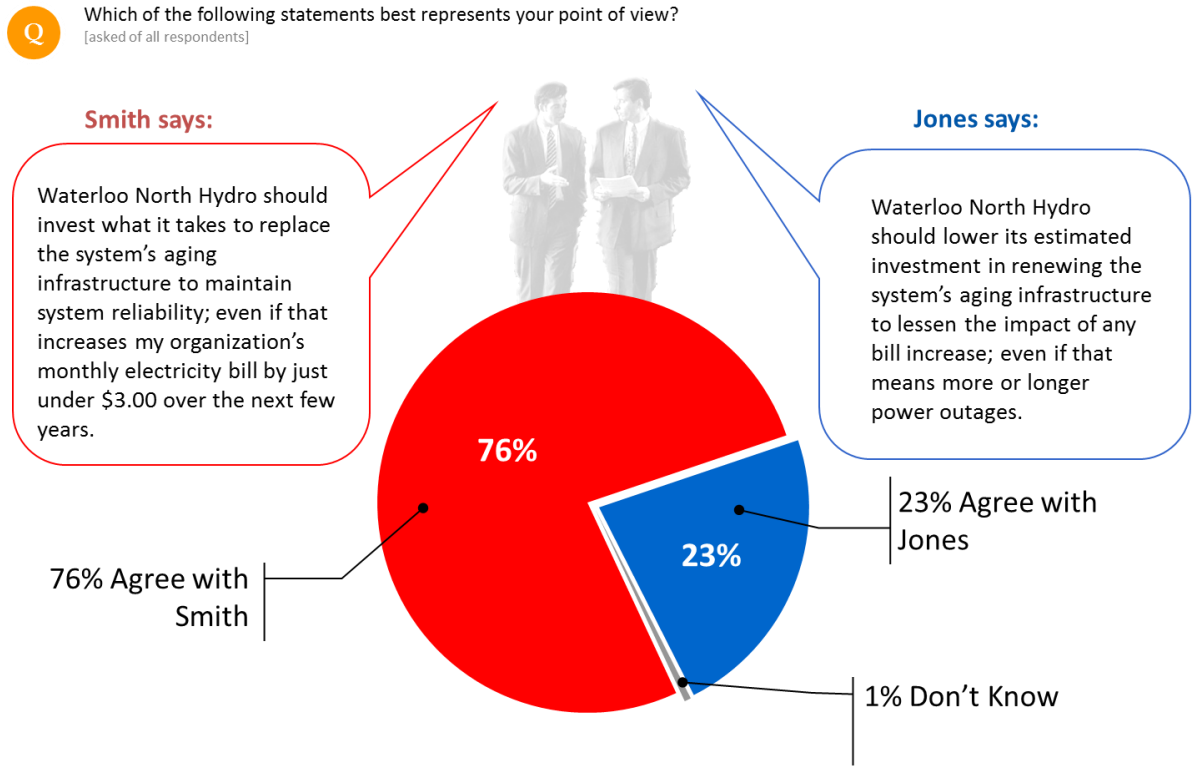
- At 92%, customers whose energy bills do not have a major impact on their household finances are much more likely to feel WNH should invest what it takes than those whose energy bill does have an impact on their household finances (78%).

Figure RS.15: System Renewal Preferences



While not as high as among residential customers, there is still a strong preference among general service customers (76%) for investing what it takes to maintain system reliability; even it means an increase to their organization's monthly electricity bill. One quarter (23%) feel the opposite: that WNH should lower its estimated investment in system renewal in order to lessen the impact of a bill increase.

Figure GS.15: System Renewal Preferences



System Service

System Service Preamble:

New technology can have many impacts on electricity distribution systems:

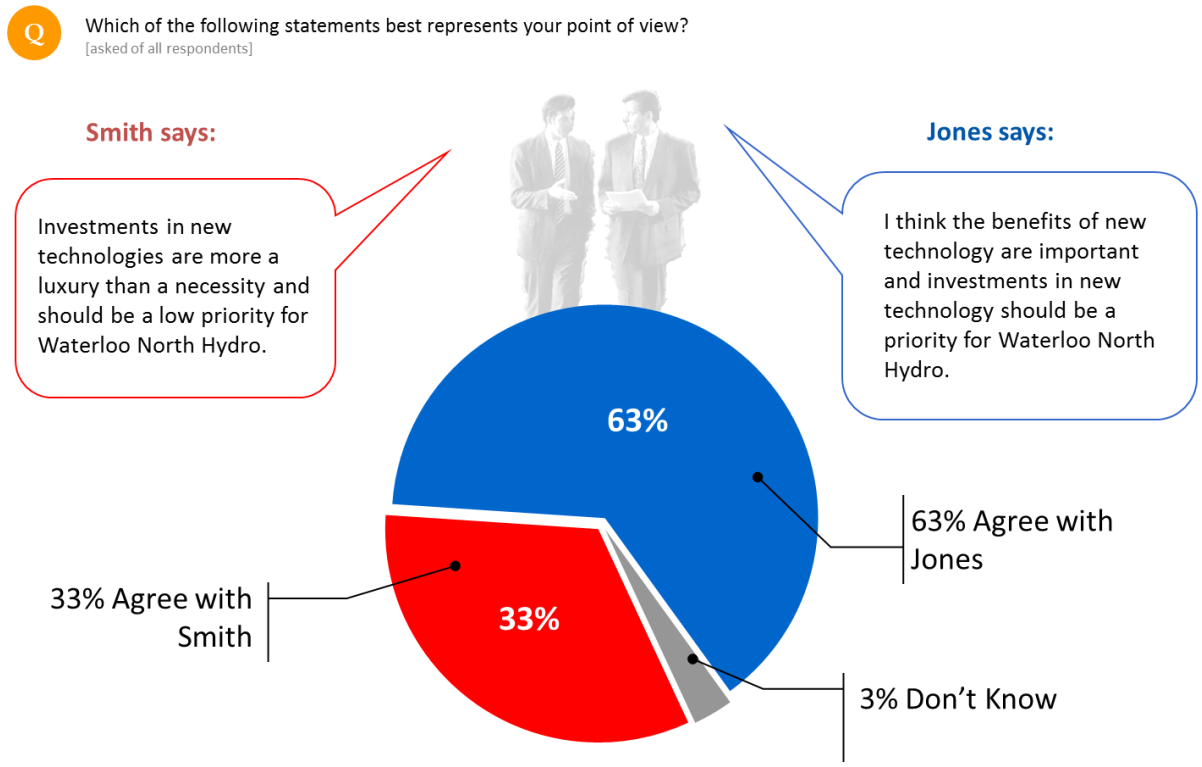
- New computer systems and GPS systems provide pinpointed information about outages to both system controllers and customers in real time.
- Remote monitors and switches allow power to be restored to many customers much more quickly than in the past.

While there are benefits from new technology, there are also costs.

Almost two thirds (63%) of residential customers feel the benefits of new technology are important and investments in new technology should be a priority for WNH. Conversely, one third (33%) feel investing in new technology is more of a luxury and should therefore be a low priority.

- Residential customers whose energy bill has a significant impact on their household finances are more likely to feel new technology is a luxury investment than those whose bill does not have a significant impact (41% vs 25%, respectively).

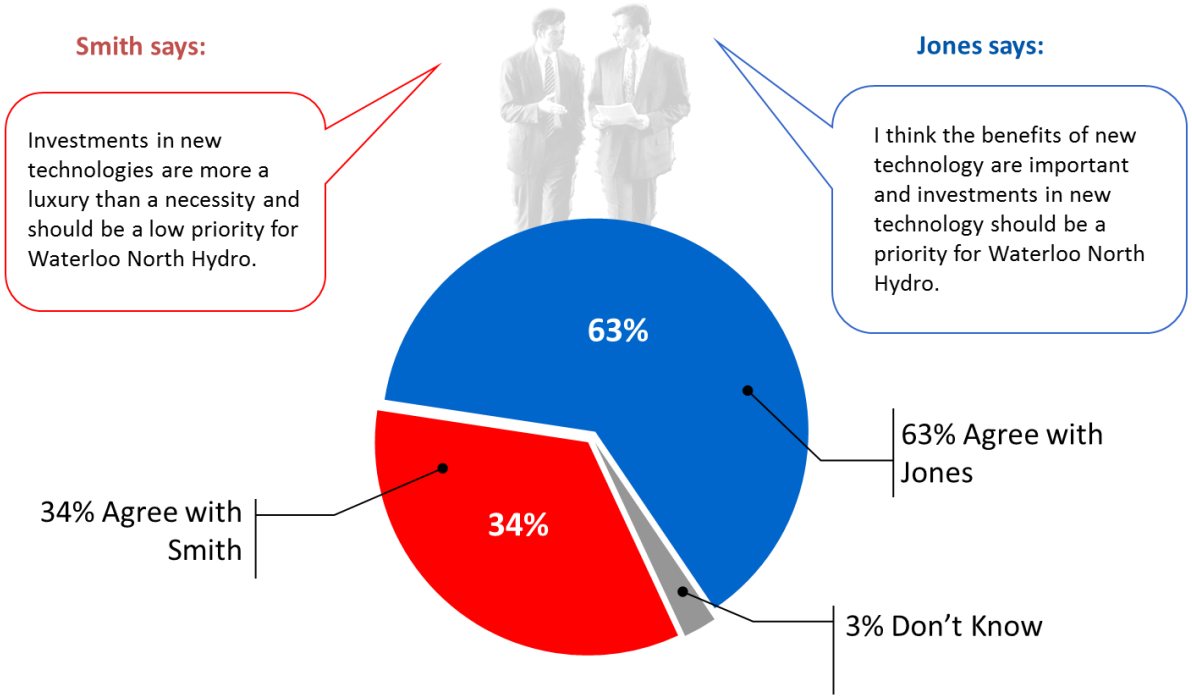
Figure RS.16: System Service Preferences



Almost identical to residential customers, two thirds (63%) of general service customers feel investments in new technology should be a priority, while 34% feel they are more of a luxury and should not be a priority.

Figure GS.16: System Service Preferences

Q Which of the following statements best represents your point of view?
[asked of all respondents]

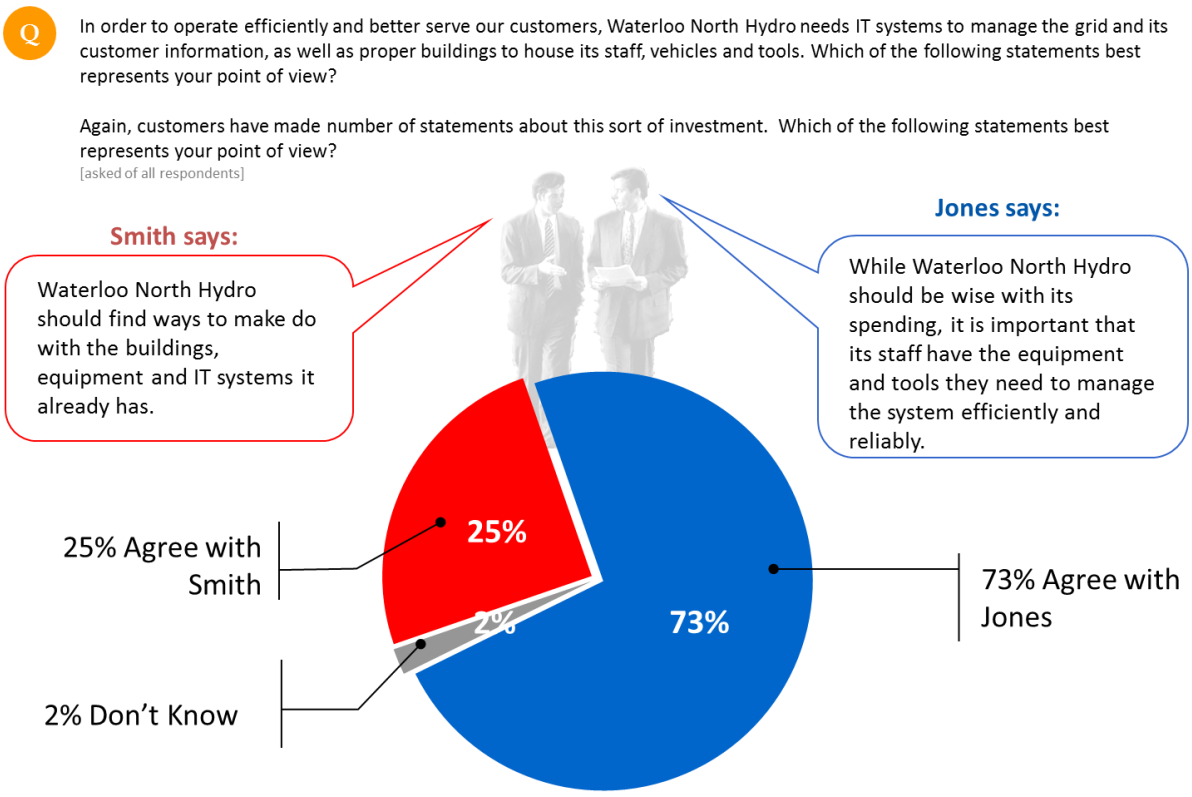


General Plant

Three quarters (73%) of residential customers feel that, while WNH should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably. One quarter (25%) say WNH should find ways to make do with the general plant assets it already has.

- Those whose energy bill has an impact on their household finances are more likely to feel WNH should make do with what it has than those whose energy bill does not have a significant impact (30% vs 20%, respectively).

Figure RS.17: General Plant Preferences



Again, similar to residential customers, most general service customers (70%) feel that it is important that WNH staff have the equipment and tools they need to manage the system efficiently and reliably. Just over one quarter (28%) feel WNH should make do with their current general plant assets.

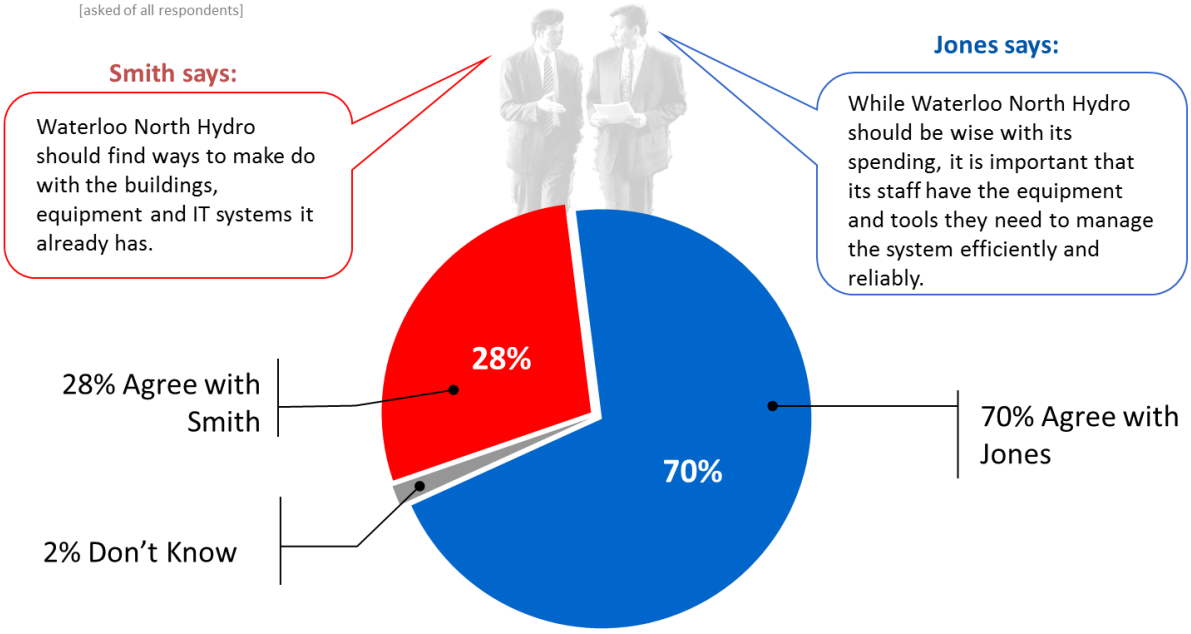
- Businesses whose energy bill has a significant impact on their finances are more likely than those whose energy bill does not have a significant impact to feel that WNH should make do with the assets it currently owns (32% vs 20%, respectively).

Figure GS.17: General Plant Preferences

Q In order to operate efficiently and better serve our customers, Waterloo North Hydro needs IT systems to manage the grid and its customer information, as well as proper buildings to house its staff, vehicles and tools. Which of the following statements best represents your point of view?

Again, customers have made number of statements about this sort of investment. Which of the following statements best represents your point of view?

[asked of all respondents]



Reaction to Customer Consultation Feedback

This section measures agreement with some of the key opinion statements provided by WNH's customers in the previous phases of the consultation. There were a total of eight statements in the questionnaire, and respondents were asked to indicate their level of agreement with each one.

Customer Reaction Statements

Among both residential and general service customers, the statement that garnered the highest level of agreement overall (strongly agree plus somewhat agree) was "nobody likes to pay more for electricity, but I think we have an obligation to maintain the reliability of our local electrical system for future generations".

The statement with which residential respondents were least in agreement (somewhat disagree plus strongly disagree) was "the cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities".

Among general service customer, the statement which respondents were least likely to agree with was "Waterloo North Hydro should have charged its customers more over the past decade to create a reserve fund that could have helped pay to replace the system's aging electrical infrastructure".

Residential Customer Reaction

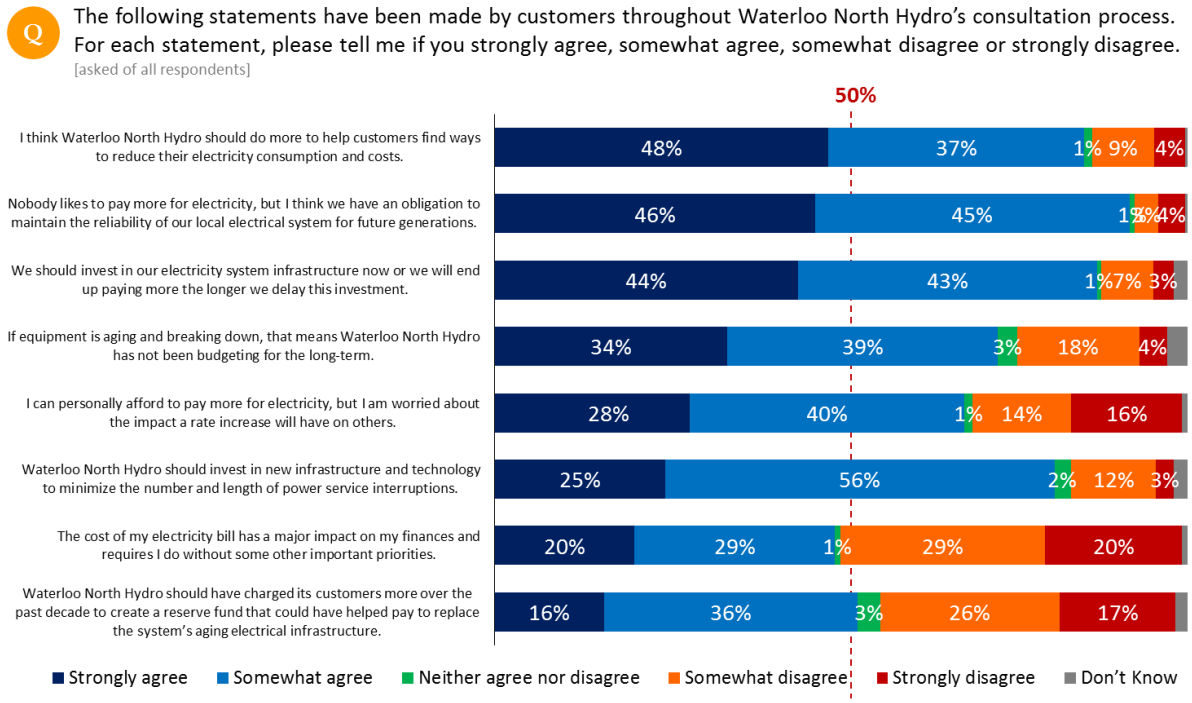
Of the eight statements included in the survey, only one had less than a majority agree with it: "the cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities". All others had at least 50% of respondents agree with them – although none of them had a majority *strongly agree* with them.

While "nobody likes to pay more for electricity, but I think we have an obligation to maintain the reliability of our local electrical system for future generations" had the highest level of *total* agreement, "I think Waterloo North Hydro should do more to help customers find ways to reduce their electricity consumption and costs" was more often *strongly agreed* with (48% vs 46%).

Two other statements that at least three quarters of respondents agreed with involve investment in infrastructure: "we should invest in our electricity system infrastructure now or we will end up paying more the longer we delay this investment" and "Waterloo North Hydro should invest in new infrastructure and technology to minimize the number and length of power service interruptions".

The statement with which respondents were least likely to *strongly* agree was "Waterloo North Hydro should have charged its customers more over the past decade to create a reserve fund that could have helped pay to replace the system's aging electrical infrastructure".

Figure RS.18: Reaction to Previous Customer Input



GS Customer Reaction

Fully half (50%) of general service customers *strongly agree* that "nobody likes to pay more for electricity, but I think we have an obligation to maintain the reliability of our local electrical system for future generations", and an additional 46% *somewhat agree*. All other statements had fewer than half *strongly agree*.

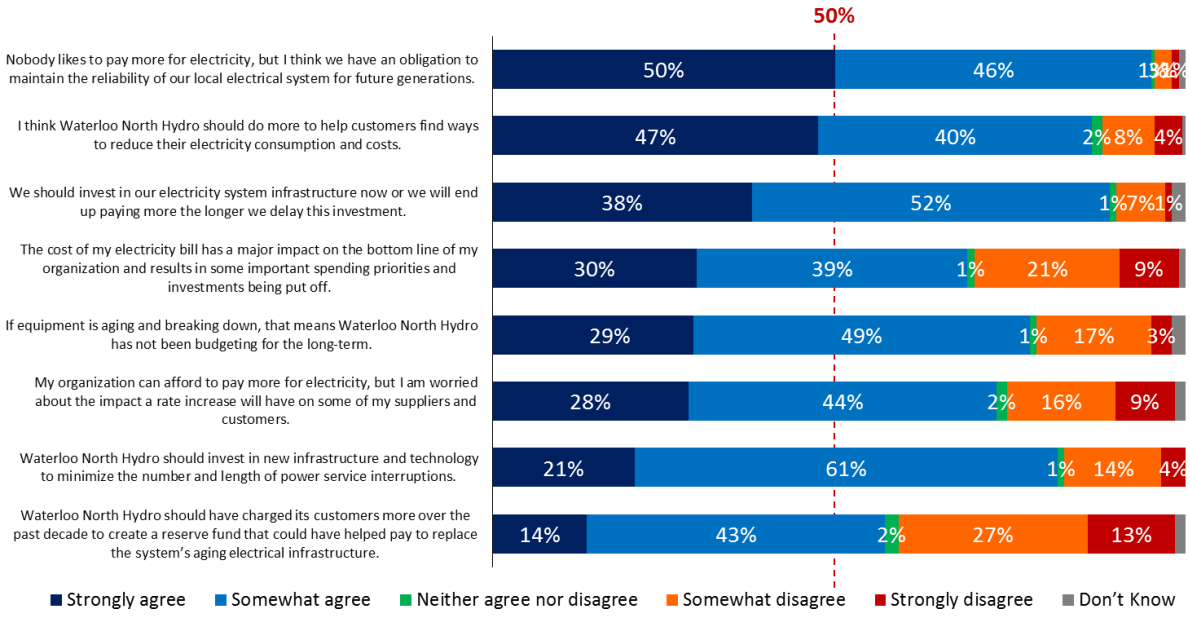
Five of the eight statements had at least three quarters agree (strongly plus somewhat) with them. The one noted above, plus:

- "I think Waterloo North Hydro should do more to help customers find ways to reduce their electricity consumption and costs"
- "we should invest in our electricity system infrastructure now or we will end up paying more the longer we delay the investment"
- "if equipment is aging and breaking down, that means Waterloo North Hydro has not been budgeting for the long-term"
- "Waterloo North Hydro should invest in new infrastructure and technology to minimize the number and length of power service interruptions"

While a majority still agreed with it, the statement that garnered the lowest level of agreement among general service customers was "Waterloo North Hydro should have charged its customers more over the past decade to create a reserve fund that could have helped pay to reduce the system's aging electrical infrastructure".

Figure GS.18: Reaction to Previous Customer Input

Q The following statements have been made by customers throughout Waterloo North Hydro's consultation process. For each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.
[asked of all respondents]



Overall Assessment of Plan

This section explores the degree to which WNH's customers are prepared to accept a rate increase. Acceptance is defined as either support for a rate increase or agreeing that it is necessary. This section also explores the underlying reasons for acceptance and opposition to a rate increase, probing more specifically through open-ended questions.

Acceptance of Rate Increase Summary

The vast majority of residential customers (84%) accept the rate increase, and there is a very narrow gap between those who say they don't like it but find it necessary (44%) and those who say it is reasonable and they support it (40%).

Acceptance is also very high (86%) among general service customers, although there is a wider gap between those who accept it reluctantly (55%) and those who accept it outright (31%).

Financial Flexibility and Level of Acceptance

The level of acceptance varies depending on the extent to which energy bills are impacting household and business finances. More than nine-in-ten (92%) residential customers who are not financially constrained by their energy bill accept the rate increase, compared to 76% of those how are financially constrained.

At first glance, the same doesn't appear to be true among general service customers, but while total acceptance is similar whether or not a company is financially constrained, the difference is the extent to which the rate increase is outright supported. Among businesses that are under financial strain due to their energy bill, only 26% find the propose rate increase reasonable and they support it. This, compared to 41% among GS respondents whose businesses are not under the same financial strain.

Reasons why customers accept or oppose WNH's proposed plan

- Among residential customers, those who support the increase say it is either "minimal/affordable" (40%) or that it is "necessary/have to pay somehow" (35%).
- Reasons for reluctant acceptance are that it is "necessary/have to pay somehow (38%) and that "rates are high enough/don't want an increase" (10%).
- The primary cited for opposing the rate increase are that "rates are high enough/don't want an increase" (45%) and "money wasted by corporations" (10%).
- In the GS breakdown, "it's necessary/need to invest to improve system" (53%) is the primary reason for support, followed by "increase is minimal/affordable" (39%).
- "It's necessary/need to invest to improve system" (46%) is also the main reason cited for reluctant acceptance of a rate increase.
- The main reason for opposing the rate increase is "manage funds better/improve efficiency" (44%), followed by "pay too much already" (24%).

Social Permission

Prior to the questions given in the Assessment of Plan Section, customers were presented with a preamble concerning the estimated breakdown of costs for WNH's plan over the next 5 years and the impact this would have on customer rates.

Social Permission Preamble:

*Waterloo North Hydro believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. **Waterloo North Hydro's** proposed plan will spend an estimated **$90 million** on capital investments over the next 5 years. This includes …*

- ***$43 million** to replace aging infrastructure;*
- ***$31 million** to serve new communities and connect customers to the grid;*
- ***$9 million** to invest in equipment needed to maintain and operate the system; and*
- ***$7 million** to integrate new technologies into the power system.*

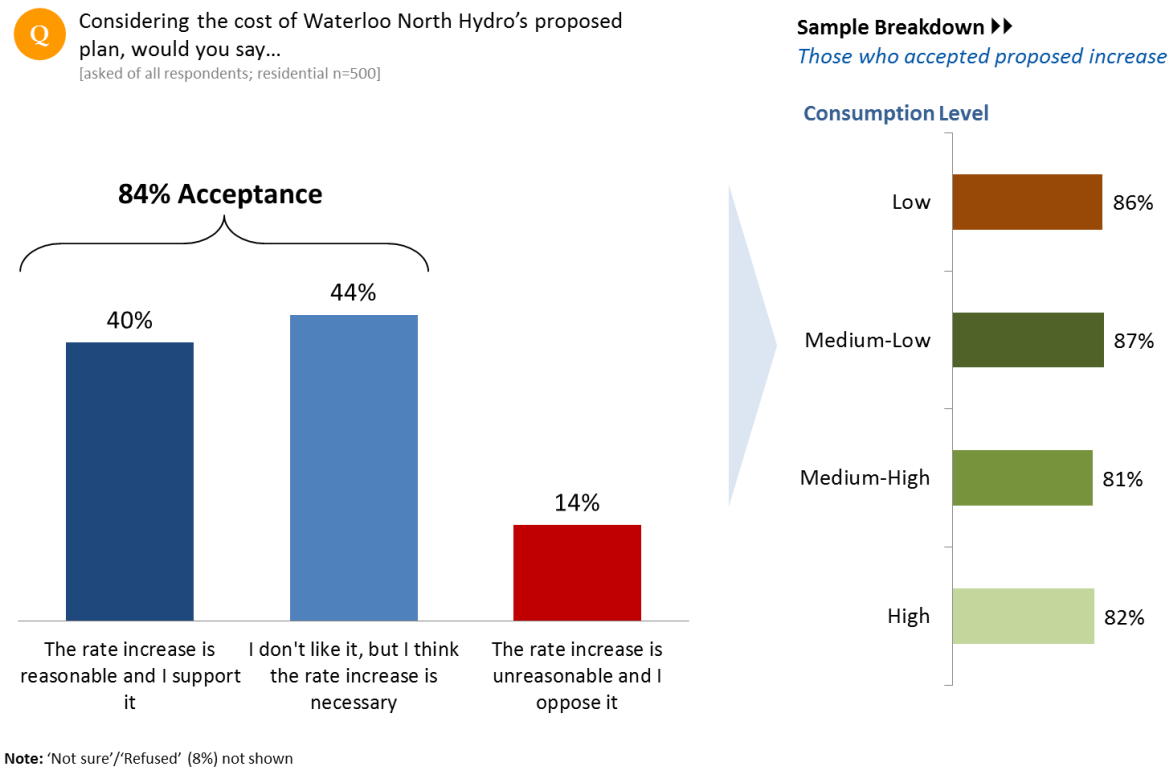
*To fund this plan, Waterloo North Hydro is proposing the **average residential customers' rate increase by $0.95 per month – or about 2.9%** – on the distribution portion of their bill in 2016. Between 2017 and 2020, it is estimated that the average residential customers' rate increase by about 1.1% on the distribution portion of their electricity bill.*

*(Note: in the GS Survey, the two bolded phrases in the last paragraph were replaced with "… **small business' rate increase by about $2.60 per month – or about 4% …"** respectively. The rest of the preamble remained the same for organizational customers.)*

When residential respondents were asked the "social permission question" on rate increases, a strong majority (84%) indicated acceptance, with 40% saying *the increase is reasonable and I support it*, and an additional 44% saying *I don't like it, but I think the rate increase is necessary*.

- 53% of those living in four-person households think the increase is reasonable and support it, but this dips to 39% in larger households.
- Households with low consumption levels are most likely to support the increase with 47% saying it is reasonable and they support it.

Figure RS.19 – Social Permission

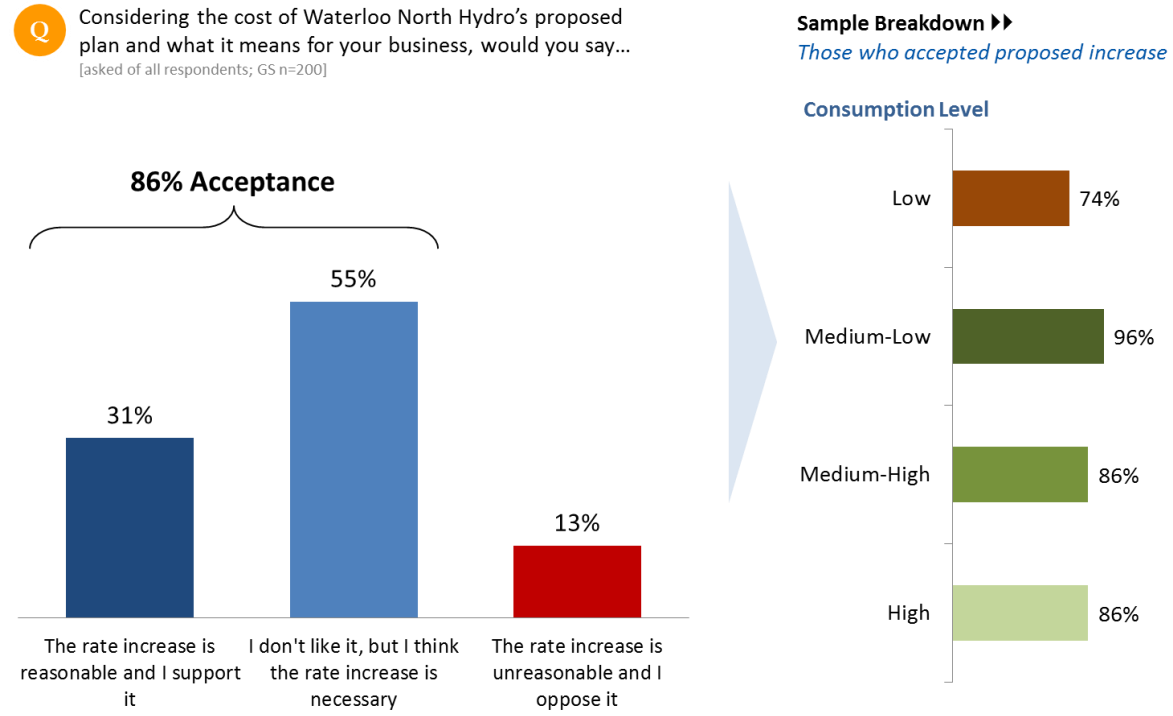


Note: 'Not sure'/'Refused' (8%) not shown

Social permission is also very high among general service customers, with 86% total acceptance. Among this group, more than half (55%) don't like the increase but feel it is necessary, while three-in-ten (31%) feel the increase is reasonable and they support it. Only 13% oppose the rate increase.

- Acceptance is highest among business with a medium-low level of consumption, but most is at the reluctant level (68% don't like it but feel it is necessary)

Figure GS.19 – Social Permission



Note: 'Not sure'/'Refused' (2%) not shown

Ability to Pay and Level of Acceptance

As might be expected, social permission is lower among residential customers whose energy bill has a significant impact on their household finances and requires them to do without some other priorities. Among this group, while a majority (76%) give social permission, most (51%) is because, while they don't like it, they feel the increase is necessary. This, compared to the group who are not financial strained, where more than half (55%) find the rate increase reasonable and they support it, and a further 37% don't like the increase but agree that it is necessary.

Looking at opposition to the rate increase, while only 7% of those who are not financially strained oppose the rate increase, three times as many (21%) of those who are financially strained say the increase is unreasonable and they oppose it.

Figure RS.20 – Ability to Pay by Social Permission

Responses	Financially Strained	Not Financially Strained	All Residential Customers
The rate increase is reasonable and I support it	26%	55%	40%
I don't like it, but I think the rate increase is necessary	51%	37%	44%
The rate increase is unreasonable and I oppose it	21%	7%	14%
Don't know	3%	1%	2%
Social Permission	**76%**	**92%**	**84%**

Looking at consumption levels, those who use less energy are more likely to support the rate increase. Almost half (47%) of those with a low level of household consumption fully support the rate increase, compared to 37% among those with a medium-high or high level of consumption. Nonetheless, total social permission across all consumption categories is higher than eight-in-ten.

Figure RS.21 – Ability to Pay by Consumption Level

	Low	Medium-Low	Medium-High	High
Rate increase reasonable, support it	47%	39%	37%	37%
Don't like it, but necessary	39%	48%	44%	45%
Unreasonable and oppose it	12%	12%	16%	15%
Total Permission	**86%**	**87%**	**81%**	**82%**
Total Opposition	**12%**	**12%**	**16%**	**15%**

"Don't know" not shown.

Among general service customers, the gap in social permission between the financially strained (85%) and the not financially strained (88%) is not as wide as it is among residential customers. For GS respondents whose electricity bill has major impact on their organizations' bottom line and requires them to put off some important spending priorities and investments, more than one quarter (26%) still say the increase is reasonable and they support it, and a further 58% don't like it but deem it necessary.

Four-in-ten (41%) GS respondents whose organizations are not financially strained say the increase is reasonable and they support it, while slightly more (47%) say they don't like the increase but think it is necessary.

Figure GS.20 – Ability to Pay by Social Permission

Responses	Financially Strained	Not Financially Strained	All GS Customers
The rate increase is reasonable and I support it	26%	41%	31%
I don't like it, but I think the rate increase is necessary	58%	47%	55%
The rate increase is unreasonable and I oppose it	14%	8%	13%
Don't know	1%	3%	2%
Social Permission	**85%**	**88%**	**86%**

Total social permission among general service customers ranges from 74% among those with a low level of energy consumption to 96% among those with a medium-low level of consumption. Among medium-high and high consumption organizations, social permission sits at 86%. Most likely to find the rate increase reasonable and support it are those at the medium-high consumption level at 38%.

Figure GS.21 – Ability to Pay by Consumption Level

	Low	Medium-Low	Medium-High	High
Rate increase reasonable, support it	26%	28%	38%	32%
Don't like it, but necessary	48%	68%	48%	54%
Unreasonable and oppose it	22%	4%	10%	14%
Total Permission	**74%**	**96%**	**86%**	**86%**
Total Opposition	**22%**	**4%**	**10%**	**14%**

"Don't know" not shown.

Opinions on Proposed Rate Increase

Among residential customers who say the increase is reasonable and they support it, the primary reason is that the "increase is minimal/affordable" (40%), followed by "necessary/have to pay somehow" (35%).

Those who don't like the increase but feel it is necessary say it is "necessary/have to pay somehow" (38%), or that "rates are high enough/don't want increase" (10%).

Those who oppose the rate increase also feel that "rates are high enough/don't want increase" (45%), and some feel that "money wasted by corporations" (10%).

Figure RS.22 – Opinion on Proposed Rate Increase

Q Why do you say that? (i.e. proposed WNH rate increase)

PERMISSION: Reasonable, support it	% RS
Increase is minimal/affordable	40%
Necessary/have to pay somehow	35%
Better to spend less now rather than more later	11%
Everything/costs will always increase	6%
Makes sense	2%
Budgeted funds saved/set aside for upgrades	2%
Other	4%
Don't Know	2%
Sample Size	**n=200**

NO PERMISSION: Unreasonable, oppose it	% RS
Rates are high enough/don't want increase	45%
Money wasted by corporations	10%
Budgeted funds saved/set aside for upgrades	6%
Live on fixed income/can't afford	4%
Income does not increase	4%
Administrative costs/salaries too high	4%
No one wants to pay more	4%
Not necessary	4%
Other	10%
Don't Know	6%
Sample Size	**n=69**

PERMISSION: Don't like, but necessary	% RS
Necessary/have to pay somehow	38%
Rates are high enough/don't want increase	10%
Live on fixed income/can't afford	7%
Everything/costs will always increase	6%
Money wasted by corporations	5%
No one wants to pay more	5%
Administrative costs/salaries too high	4%
Better to spend less now rather than more later	4%
No choice in this matter	4%
Increase is minimal/affordable	2%
Should set funds aside for future upgrades	2%
Necessary but cannot afford	2%
Should invest using profits/dividend	1%
Other	7%
Don't Know	3%
Sample Size	**n=220**

The main reason GS customer support the rate increase outright is that "it's necessary/need to invest to improve system" (53%), followed by "increase is minimal/affordable" (39%).

Those who don't like the increase but feel it is necessary say "it's necessary/need to invest to improve system" (46%) or "manage funds better/improve efficiency" (16%).

"Manage funds better/improve efficiency" is also the main reason for opposing the rate increase (44%), followed by "pay too much already" (24%).

Figure GS.22 – Opinion on Proposed Rate Increase

Q Why do you say that? (i.e. proposed WNH rate increase)

PERMISSION: Reasonable, support it	% GS
It's necessary/need to invest to improve system	53%
Increase is minimal/affordable	39%
Manage funds better/improve efficiency	3%
Reduce corporate salaries/bonuses	2%
Don't Know	3%
Sample Size	**n=62**

NO PERMISSION: Unreasonable, oppose it	% GS
Manage funds better/improve efficiency	44%
Pay too much already	24%
Small businesses paying most of the bill	8%
Everything increases	4%
Reduce corporate salaries/bonuses	4%
Other	16%
Sample Size *(interpret as directional due to small sample size)*	**n=25**

PERMISSION: Don't like, but necessary	% GS
It's necessary/need to invest to improve system	46%
Manage funds better/improve efficiency	16%
Pay too much already	10%
Increase is minimal/affordable	6%
Reduce corporate salaries/bonuses	6%
Everything increases	3%
No one likes an increase	3%
Small businesses paying most of the bill	1%
Other	7%
Don't know	3%
Sample Size	**n=109**

Workbook Appendix:

Waterloo North Hydro's 2016 Rate Application Review

Customer Consultation Briefing

Residential Customer Primer

February 25, 2015

What is This Consultation About?

Waterloo North Hydro (WNH) mission: **To create value for our customers and shareholders by providing safe and reliable electrical distribution services at competitive rates.**

However, there is a balancing act that all utilities should consider when planning for the future: system reliability and service versus the cost to customers.

The purpose of this customer consultation process is to obtain your input regarding our plans for the next five years and how these plans will affect you in terms of service and cost. Your feedback will be presented to the Ontario Energy Board (OEB) when WNH files its rate application for **2016**.

This process will help us to better align our capital and operational spending with your needs and preferences.

Innovative Research Group Inc. has been engaged by WNH to collect participant feedback and will deliver it to WNH to assist them in shaping their rate application and distribution system plan.

You Don't Have to be an Electricity Expert to Participate:

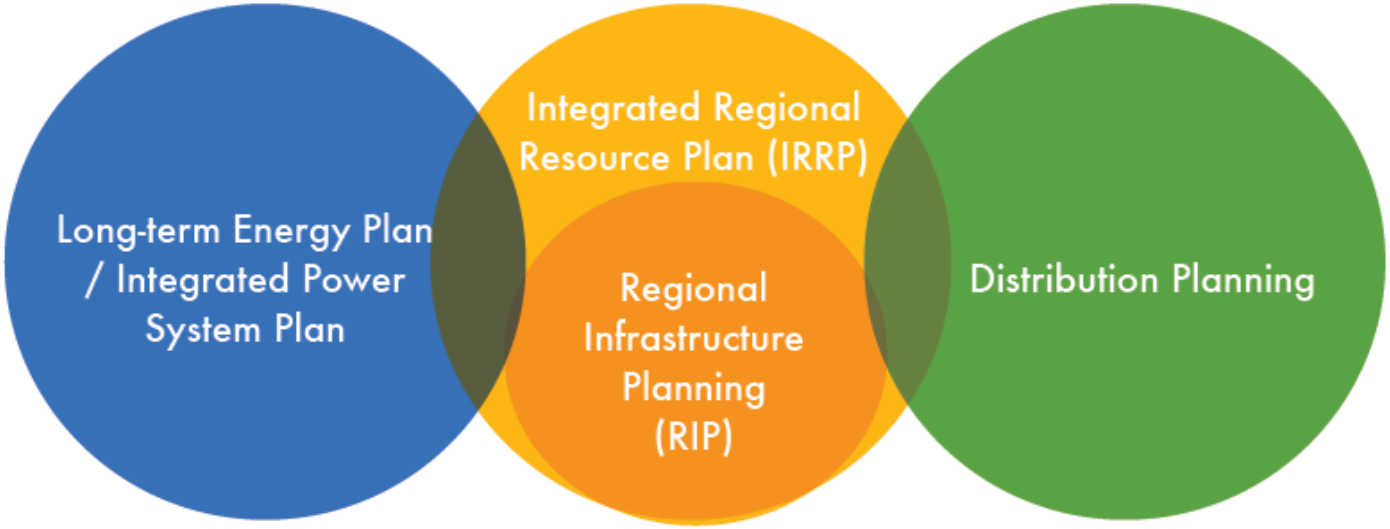
This consultation is not about technical issues. The OEB hearing process will allow experts (called *intervenors*) representing various consumer groups to challenge the detailed engineering and business decisions within WNH's plan. This consultation focuses on the goals of the system. Should WNH focus more on reducing the number of outages or the lengths of outages? Should reliability be increased even if rates go higher, or should WNH maintain the current level of reliability and keep rate increases lower?

This briefing has been developed to guide you through WNH's plan. As you proceed, it asks questions designed to obtain your feedback. In order to facilitate this, the briefing is divided into several sections that explain the distribution system, the challenges WNH faces and, more importantly, how WNH will be responding to those challenges.

Your input matters. During the OEB hearing process, WNH will be held accountable for the way you were consulted and the ways in which the utility's plans respond to what you said.

What is This Consultation About?

Electricity System Planning in Ontario



Provincial System Planning

This involves more long-term planning on how Ontario's electricity system is designed and operated.

This includes planning on:

- Provincial electricity supply mix (e.g. greening the grid and phasing out coal power generation)
- System supply and demand forecasting
- Interconnections and grid design

Regional Planning

Regional planning involves short- and medium-term plans to meet the needs of a region of the province, and ensure all key players (i.e. transmission and distribution operators) are coordinated moving forward.

This planning process is focused on considering whether conservation demand management and local generation options have been considered, in addition to core infrastructure ("wires") solutions.

Distribution Network Planning

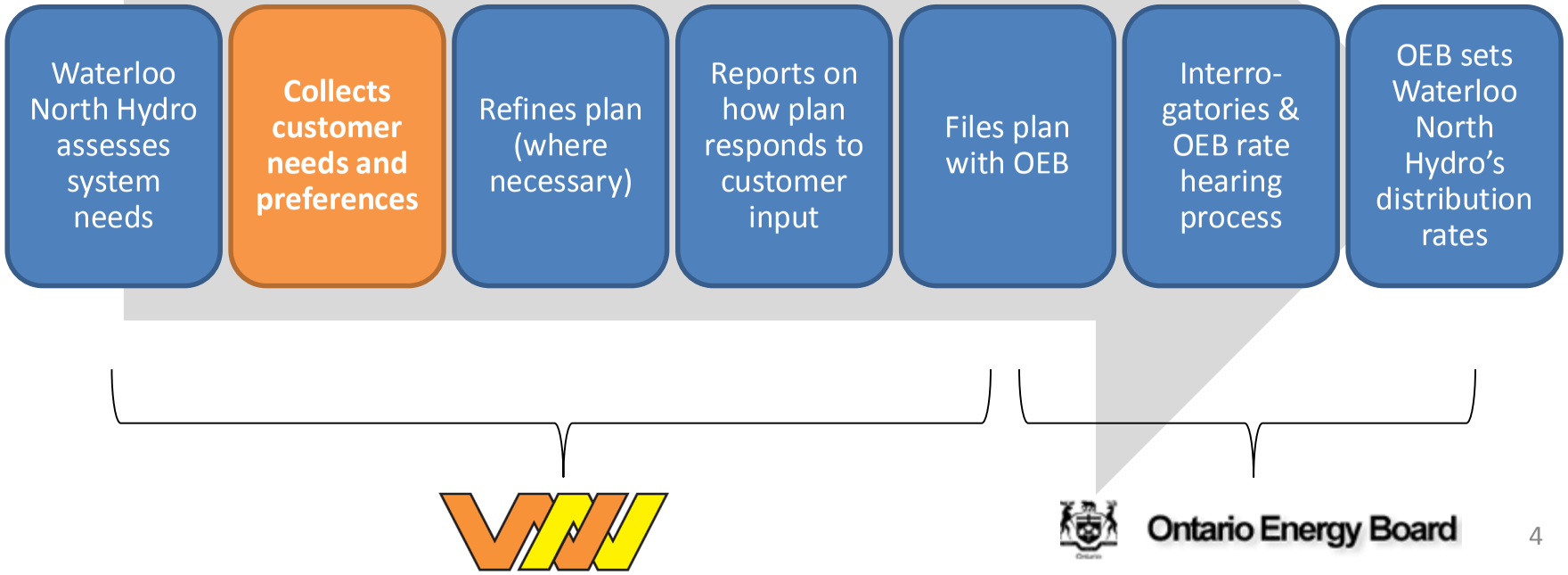
Distribution planning involves plans, both near- and longer-term, to ensure the local distribution systems have the adequate infrastructure to meet required reliability and safety standards, and to otherwise meet the needs of consumers.

Waterloo North Hydro Inc.

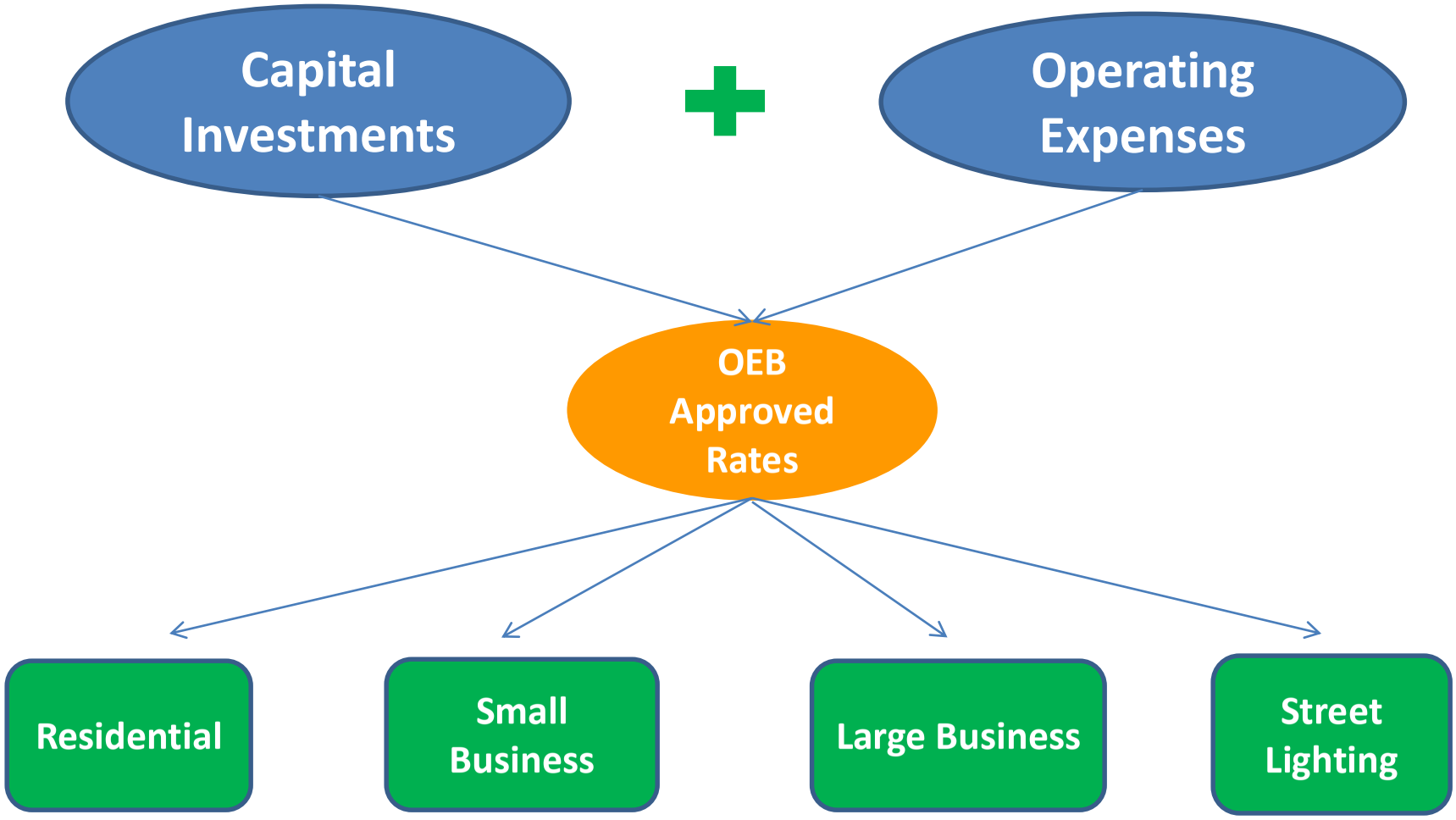
How are Electricity Rates Determined?

WNH is funded by the distribution rates paid by its customers. Periodically WNH is required to file a rate application with the OEB to justify the amount of funding it needs to deliver electricity and maintain a reliable and safe distribution system.

Who Protects Consumer Interests? The OEB - WNH's evidence is assessed in an open and transparent public process known as a rate hearing. Any customer can participate. A number of intervenors with electricity industry expertise submit their own evidence challenging WNH's plans and assumptions. At the end of the process, the OEB weighs the evidence and decides on the rates that WNH can charge their customers.



WNH's Rate Setting Process



Electricity 101

Who Does What in Ontario Electricity System?

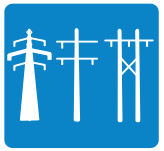
Ontario's electricity system is owned and operated by public, private and municipal corporations across the province. It is made up of three components: **generation**, **transmission** and **distribution**.

GENERATION

Generating facilities convert various forms of energy into electric power.

EXAMPLES

Ontario Power Generation
TransCanada Energy Ltd
Bruce Power
Samsung Renewable



TRANSMISSION

Transmission lines (high voltage lines) connect the power produced at generating facilities to transformer stations.

EXAMPLE

Hydro One

DISTRIBUTION

Distribution lines (at medium voltages) carry electricity to homes and businesses.

EXAMPLES

Kitchener-Wilmot Hydro
Cambridge and North Dumfries Hydro

Consumers

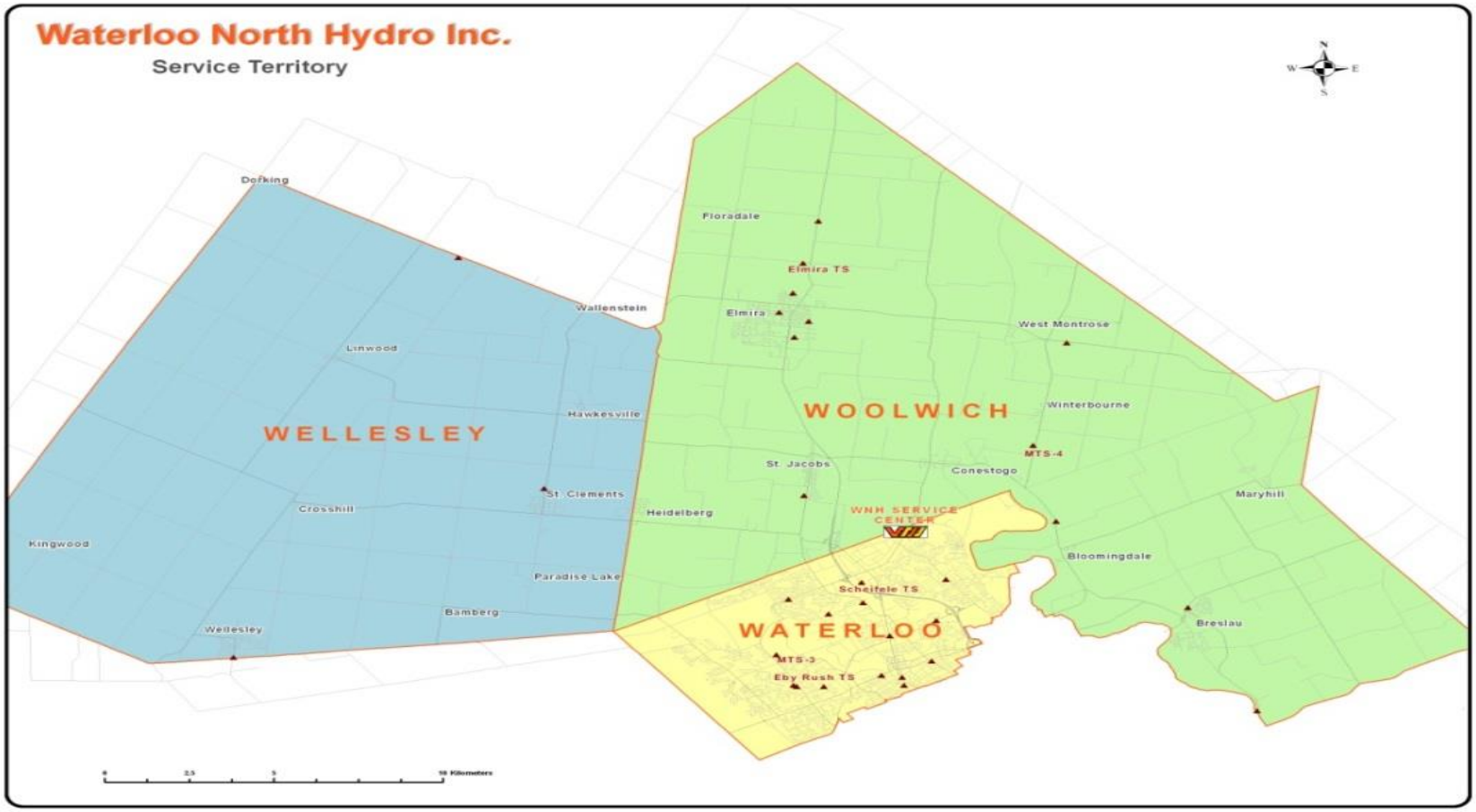
Downtown Waterloo: 1905 vs 2015

Waterloo North Hydro has been operating since 1905.

1905 King & Erb Intersection 2015

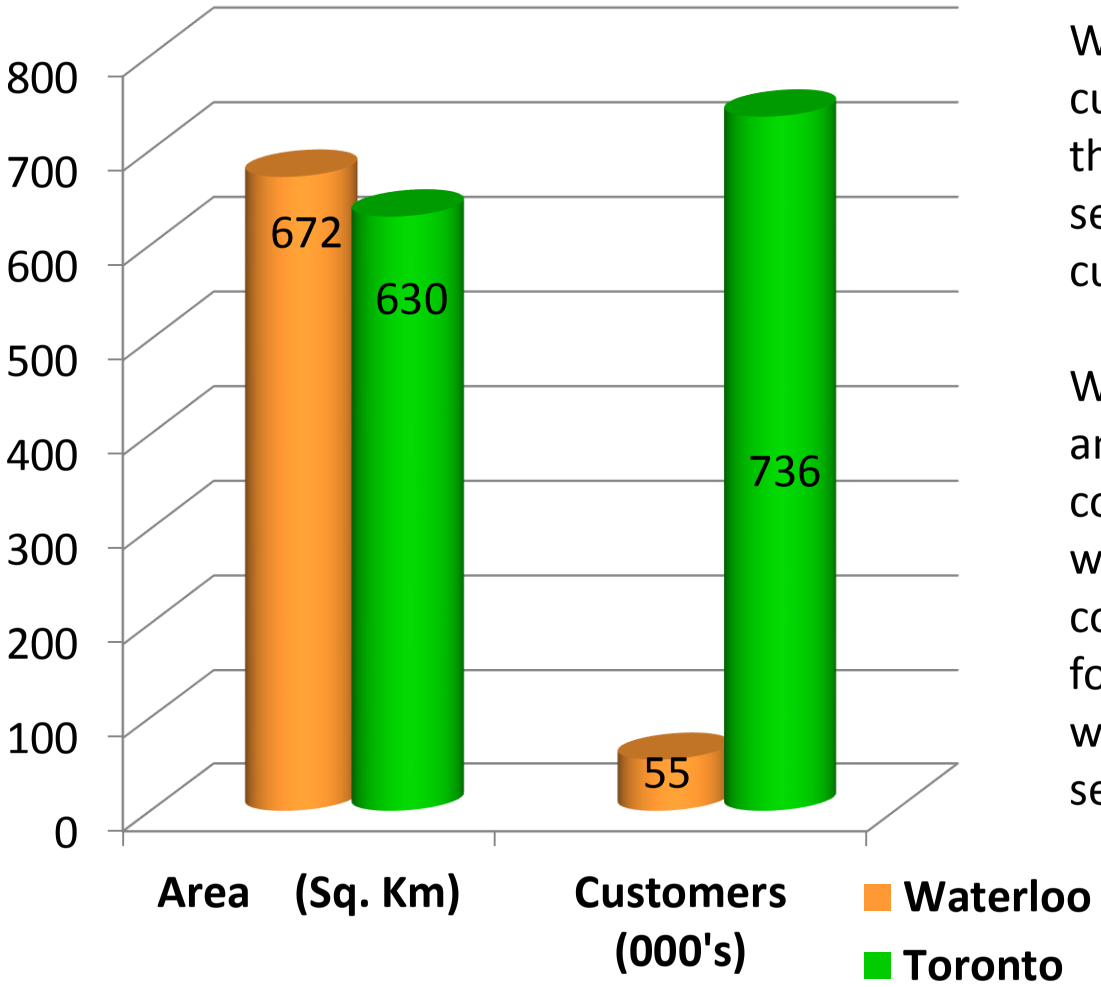
Downtown Waterloo

WNH Electricity System



WNH provides electricity to over 55,000 customers residing or owning a business in the City of Waterloo, the Township of Wellesley and the Township of Woolwich covering an area of 672 square kilometers. WNH is owned by the City of Waterloo, the Township of Wellesley and the Township of Woolwich.

WNH Electricity System



WNH services 55 thousand customers in an area larger than Toronto Hydro who services 736 thousand customers.

We need to build a strong and reliable infrastructure covering a large service area with fewer customers to cover the cost. We must look for efficient and resourceful ways to provide excellent service with less revenue.

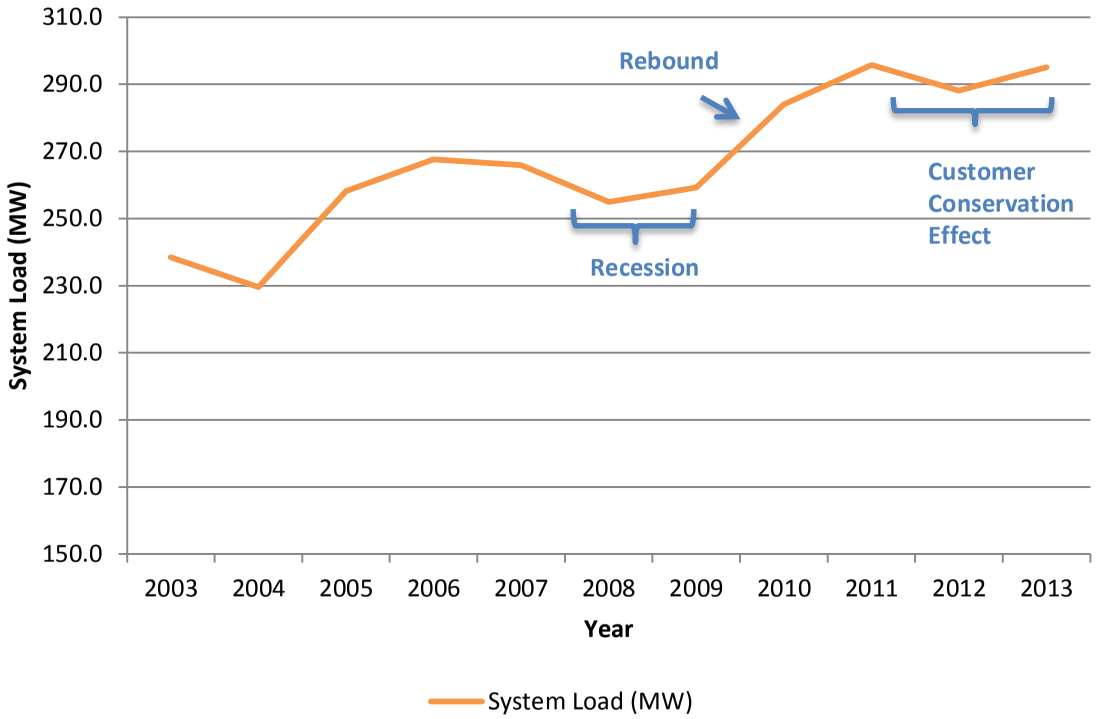
Customer Feedback

1. Given what you know and what you have learned today, how well do you feel you understand the parts of the electricity system, how they work together and which services Waterloo North Hydro is responsible for?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ There are parts I understand, but other parts I am unsure of
   - ❑ I don't understand at all

2. Generally, how satisfied are you with the service you receive from Waterloo North Hydro?
   - ❑ Very satisfied
   - ❑ Somewhat satisfied
   - ❑ Not very satisfied
   - ❑ Not at all satisfied
   - ❑ Don't know

3. Is there anything in particular that Waterloo North Hydro can do to improve its service to you?

Historic Growth Rates



WNH has consistently experienced electrical consumption increases above 3%, sometimes reaching 4% (compared to the provincial average of 1%). Due to the mix of the customer base, the system peak is affected to a higher degree by weather and local development conditions and to a lesser degree by provincial or global factors. WNH's system peak has a tendency to rebound from recessions faster than other Ontario jurisdictions. Conservation and green power generation have recently slowed the growth down to 2%, still double the provincial average.

Your Electricity Bill

SAMPLE MONTHLY BILL STATEMENT

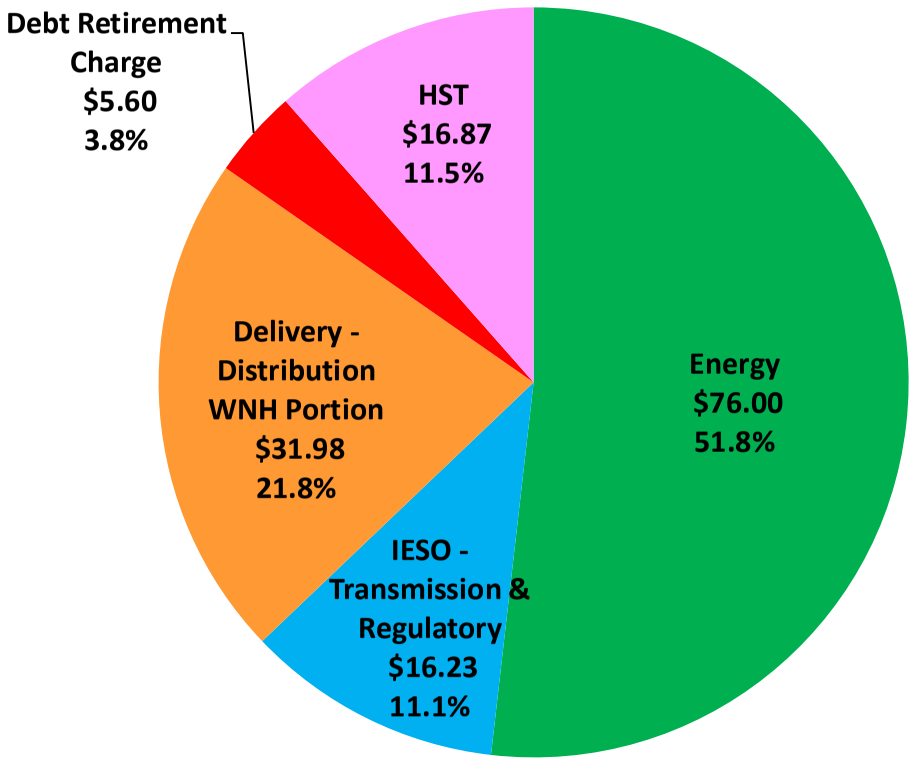
Waterloo North Hydro Inc. - Main

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges	
Electricity (what is this charge?)	
Off-Peak @ 7.700 ¢/kWh	39.42
Mid-Peak @ 11.400 ¢/kWh	16.42
On-Peak @ 14.00 ¢/kWh	20.16
Delivery (Transmission & Distribution)	43.21
Regulatory Charges (what is this charge?)	4.99
Debt Retirement Charge (what is this charge?)	5.60
Total Electricity Charges	**$129.80**
HST	16.87
Subtotal	**$146.68**
Ontario Clean Energy Benefit (-10%) (what is this?)	(-14.67)
Total Amount	**$132.01**

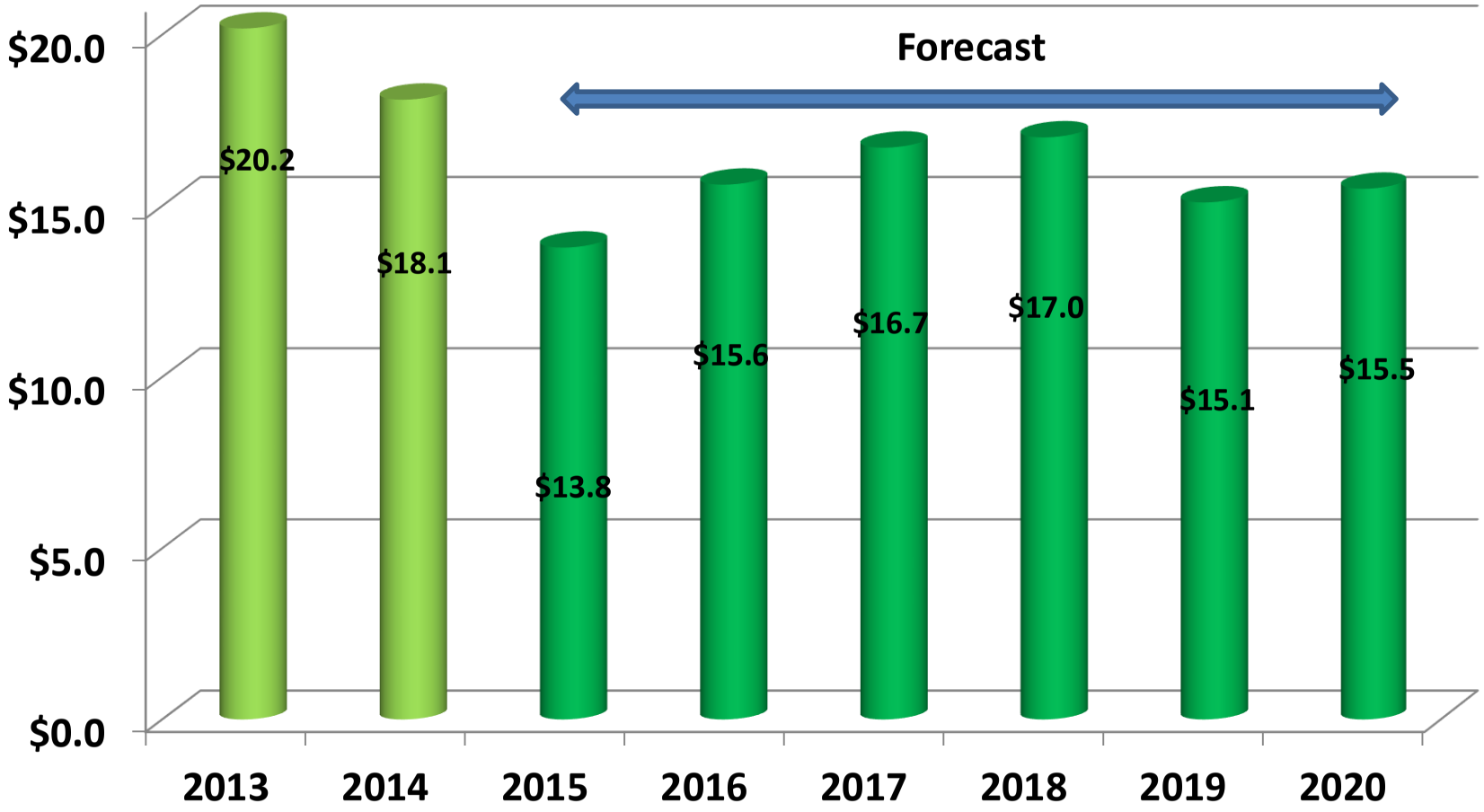
Average Monthly Residential Bill – 800 kWh



How WNH Spends and Invests Your Money:
Guiding Principles

- Support growth initiatives of the development community and local municipalities
- Replace infrastructure that poses safety hazards
- Replace aging or obsolete equipment before failure to avoid unexpected outages
- Implement smart grid technologies to minimize outage impact when outages do occur
- Support green energy initiatives and culture of conservation
- Provide appropriate training, tools and equipment for the safety and efficiency of our workers
- Invest in computer systems that support our operating needs and ability to communicate with customers

Historic and Forecast Capital Investments $Millions



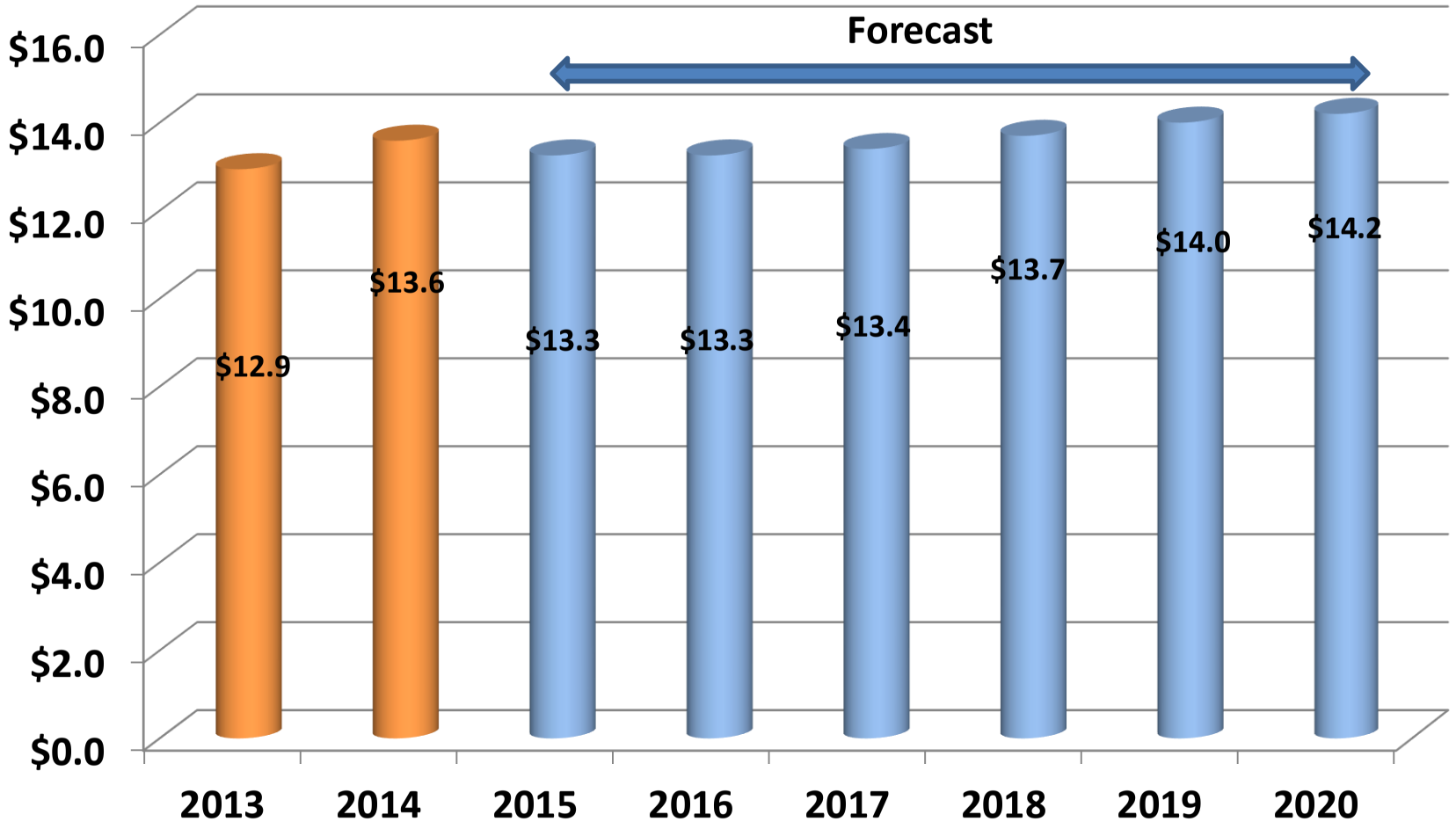
Cost Drivers: Gross Capital Investments

The following five projects represent approximately 83% of WNH's estimated 2016 Capital Investment Budget:

1. Rebuild and Upgrade Aging Infrastructure – $7.7M
2. New or upgraded connections, road relocations, pole attachments – $4.0M
3. LRT Project – $2.1M
4. Smart Grid Enhancements: Smart switches, new lines for system restoration – $1.6M
5. System Software & Hardware (including new Customer Information System) – $0.7M

The remaining 17% of the capital investment plan is earmarked for a number of smaller capital projects.

Historic and Budget Operating Expenses $Millions



Cost Drivers: Operating Expenses

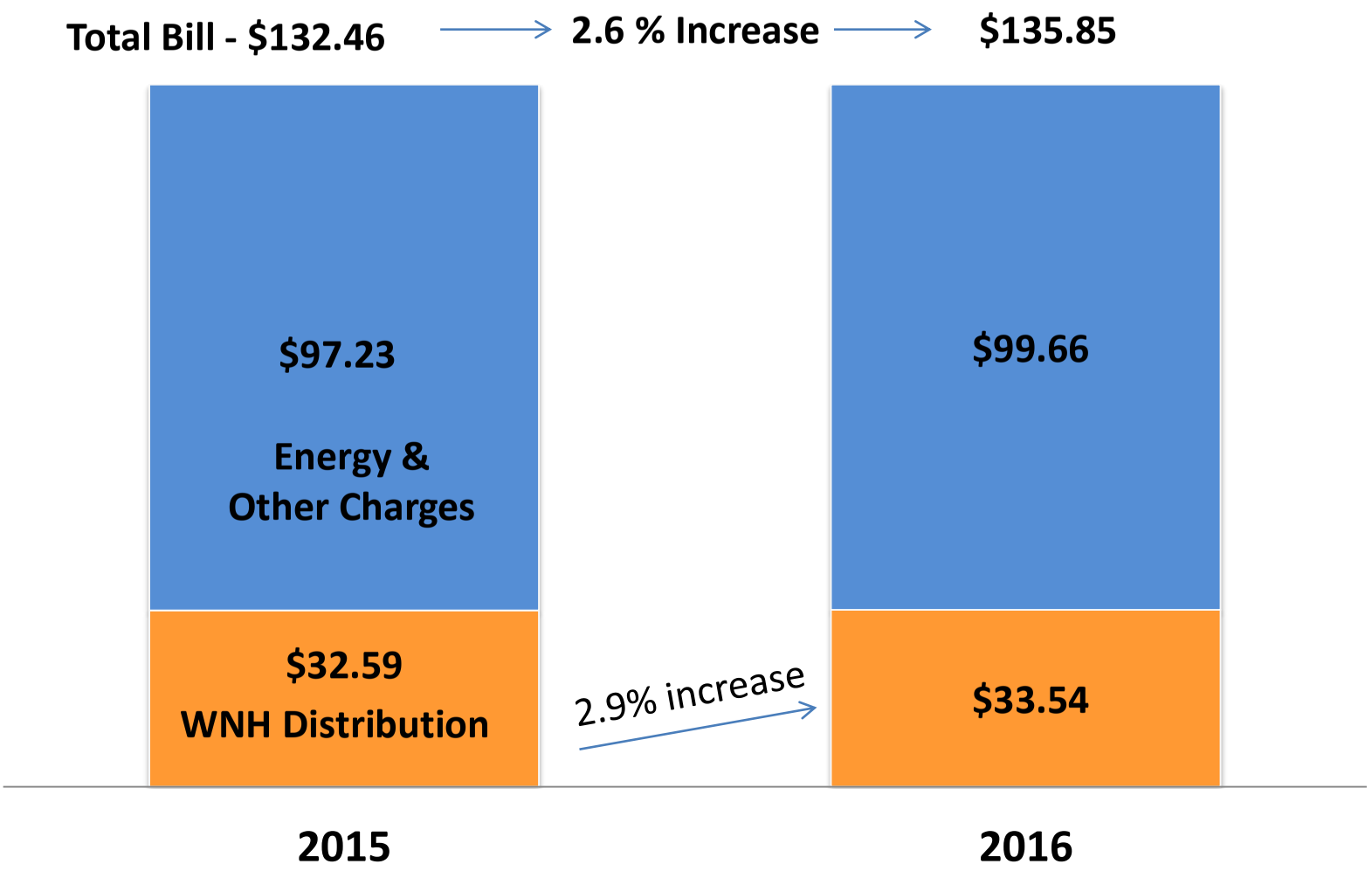
- **Vegetation Management** – Annual cost to trim vegetation around power lines to reduce outages and safety hazards.
- **Ongoing Distribution Maintenance** – Cost to operate and maintain the local grid in a safe and reliable manner to reduce outages.
- **Labour Costs** – Due to the changing labour market, baby boomers are retiring and WNH must hire new apprentices which increases training costs. As well there are annual wage and benefit increases to keep in line with inflation.
- **Smart Meters** – Cost of Time-of-Use metering and billings as mandated by the Province. The cost of administering smart meter technology is approximately 4 times more than old meter reading costs.
- **IT Systems & Maintenance** – Software systems to manage the distribution and customer service functions.

Customer Feedback

4. How well do you feel you understand the cost drivers that Waterloo North Hydro is responding to?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ Not well at all
   - ❑ Don't know

5. How well do you think Waterloo North Hydro is managing these cost drivers while meeting customer expectations?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ Not well at all
   - ❑ Don't know

The Impact on Your Bill
Average Residential Customer



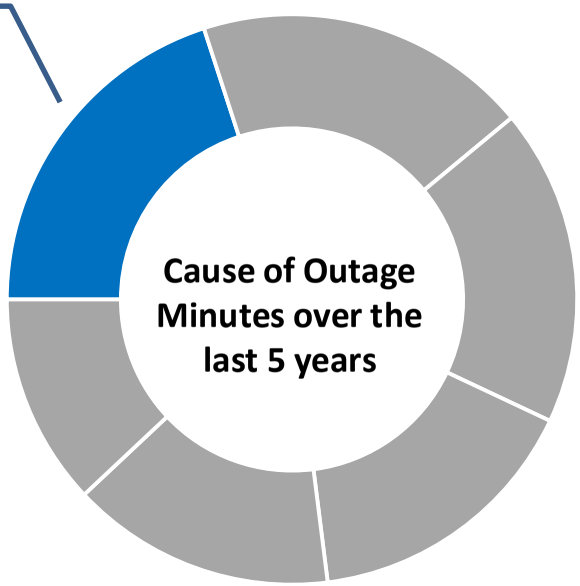
Please note that these are preliminary estimates and are subject to change as the rate application process continues. Rates estimated for average residential household that consumes 800 kWh per month.

Challenges and Solutions

Aging & Obsolescence

Challenge:

20% Equipment Failure
19% Planned Outages
18% Loss of Supply
(from Hydro One transmission lines)
16% Foreign Interference
(car accidents, animal contact, etc.)
15% Adverse Weather and Lightning
12% Other



- An amount of the distribution system was installed in the 1960's and 1970's and is still in service. Much of this equipment needs to be replaced soon. Deferring renewal can impact reliability and safety.
- WNH plans outages to replace aging equipment before failure to decrease the disruption to customers.
- Each year some assets are maturing and nearing end of life. They are in need of replacement before they present safety and reliability concerns to our customers and the public.
- Some assets need to be replaced each year to meet the greater demands and expectations on today's modern electrical systems.

Solution

- WNH needs to continue to replace the most vulnerable parts of our distribution system.
- At the same time WNH will build to allow for future growth and improved efficiency.

Customer Feedback

6. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?

   - ❑ Waterloo North Hydro should invest what it forecasts is required 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.
   - ❑ Waterloo North Hydro should lower its investment in renewing the system's aging infrastructure to lessen any bill increase, even if that means more or longer power outages.
   - ❑ Don't know

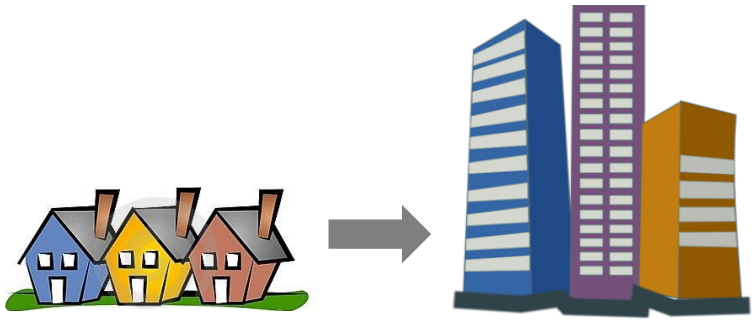
Re-Urbanization

Challenge:

- As a result of recessions in the late 1980's and early 1990's, the City of Waterloo formulated a strategic plan to capitalize on the two very reputable local universities and to create conditions for students to start new businesses and remain in the area.
- Housing demand was very strong resulting in the City developing to the limits of its boundaries and running out of greenfield land. This resulted in the City setting a new strategy of brownfield re-development. Most of the brownfield re-development is in the area surrounding the universities as well as the UpTown core.
- The Region has limited urban sprawl by setting hard boundaries for greenfield development to coincide with existing city limits. To support the provincial legislation as well as the City's efforts to intensify the UpTown and university neighbourhoods, the Region is building a Light Rail Transit (LRT) that will ultimately connect the three local cities: Waterloo, Kitchener, and Cambridge.
- The LRT is expected to spur development along the train route in both the residential and commercial sectors.
- The re-urbanization and the LRT will require WNH to invest in relocating and upgrading Hydro infrastructure.

Solution:

- Replace old inefficient lines with higher capacity lines to ensure growth needs are met while system efficiency is improved.
- Road relocation projects to accommodate the LRT.
- Monitor and plan capital projects to ensure that WNH can sustain long term load growth.



Weather & Major Events

Challenge:

- WNH's system is built to quickly restore power after the loss of one or two key components of the grid. But what happens when there is a major disruption to the system?
- In 2013 there were three Major Events resulting in approximately 10 times the outage minutes for an average year.
- Industry analysis indicates that major storms are becoming more frequent.

Solution:

- The recent increase in the severity and frequency of weather events is leading us to harden our distribution system.
- Replace majority of rear lot lines to decrease the number of overhead high voltage wires on private residential properties.
- Clear trees encroaching on overhead lines.
- Increase the number of interconnection lines between major points of supply.
- Utilize WNH's Outage Management System to get faster updates on storm damage and quicker dispatch of crews with the right materials to fix the problem.

Customer Feedback

7. Aside from major weather events, do you recall how many unexpected outages you experienced in the past year?
   - ❑ None
   - ❑ One
   - ❑ Two
   - ❑ Three
   - ❑ Four
   - ❑ More than four
   - ❑ Don't know

8. In your view, how do you think Waterloo North Hydro should address the number of unexpected customer power outages?
   - ❑ Spend what is needed to reduce the number of unexpected power outages
   - ❑ Spend what is needed to maintain the current level of unexpected outages
   - ❑ Accept more unexpected power outages in order to help keep customer costs from rising
   - ❑ Don't know

9. In your view, how do you think Waterloo North Hydro should address the length of time customers are without power?
   - ❑ Spend what is needed to reduce the duration of unexpected power outages
   - ❑ Spend what is needed to maintain the current duration of unexpected outages
   - ❑ Accept longer unexpected power outages in order to help keep customer costs from rising
   - ❑ Don't know

New Technology

Challenge:

- Our information systems need to meet the greater demands and expectations customers and other stakeholders place on today's modern electrical systems.
- The requirement to develop and support smart grid technology to meet the high reliability demands of our customers.

Solution:

- A modern customer information system that integrates with other systems to eliminate manual work and ensure long-term cost savings.
- To provide a more efficient platform to allow customers to better access their data with a high level of privacy protection.
- Installation of smart switches, controlled from our office, to quickly restore power to as many customers as possible.
- Further develop the Asset Management System that will track the current age and condition of all assets to make sure the right assets get replaced at the right time.

Customer Feedback

10. In order to operate efficiently and better serve our customers, Waterloo North Hydro needs IT systems to manage the grid and its customer information, as well as proper facilities to house its staff, vehicles and tools. Which of the following statements best represents your point of view?

    - ❑ While Waterloo North Hydro should be wise with its spending, it is important that its staff have the equipment and tools they need to manage the system efficiently and reliably.
    - ❑ Waterloo North Hydro should find ways to make do with the buildings, equipment and IT systems it already has.
    - ❑ Don't know

Value Added Services & Efficiencies

Value Added Services Provided by WNH

To understand the full context of WNH's operations, below are some examples of other activities beyond construction and maintenance of the physical distribution system:

- In 2011 WNH handled 6,412 underground cable locates for the safety of public and contractors. In 2014 this increased 58% to 10,138 locates.
- Since 2011 WNH has connected 3,440 new services including 360 FIT and MicroFIT connections to support renewable generation.
- 81 elementary school Electrical Safety Awareness presentations to help students recognize and respect electrical system hazards.
- Of the 213,000 telephone calls that came into WNH in 2014 91% were answered within 30 seconds.

Because of these activities WNH received a 96% Satisfaction Rating on 2014 Customer Satisfaction Survey versus the Ontario average of 80%

Finding Efficiencies and Cost Savings:

- Continuous pressure to reduce operating costs
- Reducing annual energy line losses in 2014 by $1.5 million since 2006
- Automating work processes to decrease manual tasks
- Working safely – zero lost time injuries in 2014
- Improving coordination and planning of capital projects

Customer Feedback

11. How satisfied are you with the efforts Waterloo North Hydro has made to find efficiencies and cost savings?

- ❑ Very satisfied
- ❑ Somewhat satisfied
- ❑ Not very satisfied
- ❑ Not at all satisfied
- ❑ Don’t know

What Does This Mean For You?

WNH has a long range "Distribution System Plan" (DSP) that takes a look at all of the poles, transformers, lines and other equipment that we need to supply you with electricity. This plan provides for the following:

- Timely replacement of assets based on best engineering practices and end of life
- Annual Condition Assessments to determine remaining useful life
- Priority replacement based on equipment performance and reliability
- Annual Capital & Five Year Planned Budgets

The Capital Investments for 2015 and 2016 reflect the priorities and needs required as per the DSP. WNH believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term.

The preliminary monthly rate impact to the average residential customer distribution portion is **$0.95** for an increase of **2.9%** and the total bill is **$3.39** for an increase of **2.6% for 2016.**

Customer Feedback

13. From what you have read here and what you may have heard elsewhere, does Waterloo North Hydro's investment plan seem like it is going in the right direction or the wrong direction?
    - ❑ Definitely the right direction
    - ❑ Might be the right direction
    - ❑ Might be the wrong direction
    - ❑ Definitely the wrong direction
    - ❑ Don't know

14. How well did Waterloo North Hydro's plan cover the topics you expected?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ Not very well
    - ❑ Not well at all
    - ❑ Don't know

15. How well do you think Waterloo North Hydro is planning for the future?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ Not very well
    - ❑ Not well at all
    - ❑ Don't know

Customer Feedback

16. Considering what you know about the local electricity distribution system, which of the following best represents your point of view?
    - ❑ The rate increase is reasonable and I support it
    - ❑ I don't like it, but I think the rate increase is necessary
    - ❑ The rate increase is unreasonable and I oppose it
    - ❑ Don't know

17. Why do you feel that way?

Customer Feedback

WNH values your feedback. This is the first time the utility has conducted a review about its upcoming investment plan in this format.

General Impression - Overall, what did you think about this primer?

Volume of Information: Did WNH provide too much information, not enough, or just the right amount?

Content Covered: Was there any content missing that you would have liked to have seen included?

Outstanding Questions: Is there anything that you would still like answered?

Suggestions for Future Consultations: How would you prefer to participate in these consultations?

ATTACHMENT 1-9

2013 AUDITED FINANCIAL STATEMENTS INCLUDES 2012 AUDITED FINANCIAL STATEMENTS AS COMPARATIVES

Financial Statements

WATERLOO NORTH HYDRO INC.

December 31, 2013

KPMG LLP
Chartered Accountants
115 King Street South, 2nd Floor
Waterloo ON N2J 5A3

Telephone 519-747-8800
Fax 519-747-8830
Internet www.kpmg.ca

Independent Auditors' Report

To the shareholder of Waterloo North Hydro Inc:

We have audited the accompanying financial statements of Waterloo North Hydro Inc., which comprise the balance sheet as at December 31, 2013 the statements of retained earnings, operations and cash flows for the year then ended, and notes, comprising 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.

Auditors' 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 our 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, we consider 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 overall presentation of the financial statements.

We believe that the audit evidence we have obtained 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 Waterloo North Hydro Inc. as at December 31, 2013, and its results of operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Chartered Accountants, Licensed Public Accountants

April 17, 2014
Waterloo, Canada

Waterloo North Hydro Inc.

BALANCE SHEET

As at December 31

	2013 $	2012 $
ASSETS		
Current		
Cash and cash equivalents	**132,538**	3,462
Accounts receivable	**12,506,016**	13,441,252
Unbilled energy receivable	**19,703,017**	16,737,801
Income tax receivable	**1,265,381**	1,045,814
Inventories	**2,557,875**	2,764,460
Prepaid expenses	**617,474**	519,550
Total current assets	**36,782,301**	34,512,339
Capital assets - net of accumulated amortization *[note 5]*	**177,260,760**	171,932,567
Future tax asset	**2,591,638**	4,759,785
Total assets	**216,634,699**	211,204,691
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current		
Accounts payable and accrued liabilities	**21,568,648**	19,012,407
Short-term debt *[note 4]*	**3,880,802**	11,897,266
Current portion of long-term debt *[note 4]*	**3,364,000**	2,614,000
Customer deposits	**2,415,041**	2,691,688
Total current liabilities	**31,228,491**	36,215,361
Long-term		
Note payable to shareholder *[note 8]*	**33,513,211**	33,513,211
Long-term debt *[note 4]*	**47,205,853**	35,779,943
Customer deposits	**2,952,844**	2,799,282
Net regulatory liabilities *[note 6]*	**12,615,158**	15,369,842
Post employment benefits *[note 10]*	**4,288,657**	4,371,245
Future tax asset deferral	**2,591,638**	4,759,785
Total long-term liabilities	**103,167,361**	96,593,308
Shareholder's equity		
Share capital *[note 11]*	**26,887,104**	26,887,104
Retained earnings	**55,351,743**	51,508,918
Total shareholder's equity	**82,238,847**	78,396,022
Total liabilities and shareholder's equity	**216,634,699**	211,204,691

See accompanying notes

On behalf of the Board:

Eugene Moser, Director

D. Charles Martin, Director

Waterloo North Hydro Inc.

STATEMENT OF RETAINED EARNINGS

Year ended December 31

	2013 $	2012 $
Retained earnings, beginning of year	**51,508,918**	47,943,409
Dividends paid	**(3,776,400)**	(3,062,802)
Net income	**7,619,225**	6,628,310
Retained earnings, end of year	**55,351,743**	51,508,918

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF OPERATIONS

Year ended December 31

	2013 $	2012 $
REVENUES		
Sales of electricity	**146,585,258**	133,881,401
Distribution services revenue	**31,898,320**	30,379,348
	178,483,578	164,260,749
Power purchased	**146,585,258**	133,881,401
Operating Revenue	**31,898,320**	30,379,348
Other revenues		
Rental revenue	**259,013**	254,549
Late payment charges	**216,222**	209,164
Gain on disposal of capital assets	**420,125**	31,440
Miscellaneous	**571,778**	695,752
Total other revenues	**1,467,138**	1,190,905
Total Revenues	**33,365,458**	31,570,253
EXPENSES		
Distribution	**7,025,344**	5,662,215
Billing and collecting	**2,676,238**	2,678,369
General administration	**2,903,021**	2,099,730
Community relations	**226,362**	234,923
Amortization	**7,779,380**	8,961,990
Total Expenses	**20,610,345**	19,637,227
Income before under noted items	**12,755,113**	11,933,026
Interest – net *[note 12]*	**(4,241,036)**	(3,677,092)
Income before provision for Pils & taxes	**8,514,077**	8,255,934
Provision for PILs & taxes *[note 13]*	**(894,852)**	(1,627,624)
Net income	**7,619,225**	6,628,310

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF CASH FLOWS

Year ended December 31

	2013 $	2012 $
OPERATING ACTIVITIES		
Net income	**7,619,225**	6,628,310
Add (deduct) charges to operations not requiring a current cash payment:		
Amortization	**8,391,514**	11,423,617
Gain on disposal of capital assets	**(420,125)**	(31,440)
Increase (decrease) in regulatory liabilities	**(4,187,708)**	(4,156,979)
Increase (decrease) in post employment benefits liability	**(82,588)**	154,028
Net change in non-cash operating working capital	**415,354**	(8,582,653)
Cash provided by operating activities	**11,735,672**	5,434,883
INVESTING ACTIVITIES		
Additions to capital assets	**(20,689,825)**	(22,674,402)
Proceeds on disposal of capital assets	**7,150,563**	31,440
Cash applied to investing activities	**(13,539,262)**	(22,642,962)
FINANCING ACTIVITIES		
Increase (decrease) in customer deposits	**(123,085)**	1,998,053
Increase in long-term debt *[note 4]*	**12,175,910**	3,702,707
Increase (decrease) in short-term debt *[note 4]*	**(8,016,464)**	11,404,827
Increase in contributed capital	**1,672,705**	2,895,451
Dividends paid	**(3,776,400)**	(3,062,802)
Cash provided by financing activities	**1,932,666**	16,938,236
Net cash provided (applied) during year	**129,076**	(269,843)
Cash and cash equivalents, beginning of year	**3,462**	273,305
Cash and cash equivalents, end of year	**132,538**	3,462
Supplementary information:		
Interest paid	**4,159,608**	3,609,574
Interest received	**13,939**	6,829
Payments in lieu of corporate income taxes	**556,697**	922,965

See accompanying notes

NOTES TO FINANCIAL STATEMENTS

December 31, 2013

1. INCORPORATION

Waterloo North Hydro Inc. [the Company] is a regulated electricity distribution company incorporated under the Business Corporations Act [Ontario] on May 1, 2000. The incorporation was required in accordance with the provincial government's Electricity Competition Act [Bill 35]. The Company is wholly-owned by Waterloo North Hydro Holding Corporation whose shareholders are the City of Waterloo and the Townships of Wellesley and Woolwich.

Under a municipal by-law, the former Hydro-Electric Commission of Waterloo, Wellesley and Woolwich and the City of Waterloo and the Townships of Wellesley and Woolwich transferred the net book value of the assets, liabilities, and the employees, associated with the distribution of electricity and associated business activities, to the new Company.

Effective October 1, 2001, all electric utility companies in Ontario are subject to a number of taxes, which will be used to repay the stranded debt incurred by the former Ontario Hydro prior to the introduction of Bill 35 [*note 13*].

2. SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles as described in Part V of the CPA Canada Handbook. The significant accounting policies are summarized below:

(a) Regulation

The Ontario Energy Board Act, 1998 (Ontario) ("OEBA") conferred on the Ontario Energy Board ("OEB") increased powers and responsibilities to regulate the electricity industry in Ontario. These powers and responsibilities include approving or fixing rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote residential electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to electricity distributors which may include, among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(b) Rate Setting

The distribution rates of the Company are based on a revenue requirement that provides a regulated Maximum Allowable Return on Equity on the amount of shareholder's equity supporting the business of electricity distribution, which is also determined by regulation. The Company files a rate application with the OEB annually. Rates are typically effective May 1 to April 30 of the following year. Once every four years, the Company files an Electricity Distribution Rate application ("EDR") where rates are rebased through a cost of service review. In the intervening years an Incentive Rate Mechanism application ("IRM") is filed. A cost of service EDR application is based upon a forecast of the amount of operating and capital expenses, debt and shareholder's equity required to support the Company's business. An IRM application results in a formulaic adjustment to distribution rates to increase distribution rates for the annual change in the GDP IPI-FDD net of a productivity factor and a "Stretch Factor" determined by the relative efficiency of an electricity distributor.

The Company's last cost of service EDR application was made in 2010 with rates that were effective June 1, 2011. This application included a recovery of lost revenue and shared savings related to its Conservation and Demand Management ("CDM") programs for the years 2008 and 2009.

On October 18, 2012, the OEB proposed a change to the requirement to file the EDR from every four years to every five years starting after the next cost of service application. The Company has been approved by the OEB to defer the next cost of service EDR application to 2015 with rates effective January 1, 2016.

(c) Green Energy and Green Economy Act

In early 2009, the government tabled the Green Energy and Green Economy Act ("GEGEA"). This new legislation makes fundamental changes to the roles and responsibilities of LDCs in the areas of renewable power generation, conservation and demand management delivery, and the development of smart distribution grids.

The Green Energy and Green Economy Act provides LDCs with the freedom to own and operate a portfolio of renewable power generation and will permit them to provide district heating services in their communities through co-generation. LDCs will also bear added responsibilities to assist and enable consumers to reduce their peak demand and conserve energy in an effort to meet provincial conservation targets. LDCs will also gain new responsibilities in transforming their local distribution networks into smart grids harnessing advanced technologies to facilitate the connection of small-scale generators and the two-way flow of information.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(d) LDC License Requirements - Conservation and Demand Management Targets

On November 12, 2010, the OEB amended LDC licenses to include requirements for achieving certain CDM targets over a four year period commencing January 1, 2011. The Company's CDM targets include a demand reduction target of 15.79 MW and a consumption reduction target of 66.49 GWh by December 31, 2014. For the 3 year period ended December 31, 2013 the Company achieved reductions of 4.6 MW and 56.9 GWh respectively. This program is being replaced by a new six year Conservation First Framework beginning January 1, 2015, with an overall 7.0 TWh province wide target. The Company's target is not known at this time.

(e) Regulatory Accounting

In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from Canadian generally accepted accounting principles for enterprises operating in a non-rate regulated environment. The OEB has the general power to include or exclude costs, revenues, losses or gains in the rates of a specific period, resulting in a change in the timing of accounting recognition from that which would have applied in an unregulated company. Such change in timing involves the application of rate regulated accounting, giving rise to the recognition of regulatory assets and liabilities. The Company's regulatory assets represent certain amounts receivable from future customers and costs that have been deferred for accounting purposes because it is probable that they will be recovered in future rates.

The Company's regulatory liabilities represent costs with respect to non-distribution market related charges and variances in recoveries that are expected to be settled in future periods.

(f) Cash and Cash Equivalents

Cash equivalents are readily convertible investments with maturities of three months or less from their date of acquisition. Investments are carried at cost, which approximates market value.

(g) Inventories

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(h) Capital Assets and Amortization

Capital assets are stated at cost, including material and labour and are removed from the accounts at the end of their estimated average service lives, except in those instances where specific identification allows their removal at retirement or disposition. Gains or losses at retirement or disposition of such assets are credited or charged to other revenue.

A review of property, plant and equipment has been completed as mandated by the Ontario Energy Board (OEB). These accounting changes have been implemented consistent with the Board's regulatory accounting policies as set out for modified IFRS.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) *[note 17]*.

Amortization is provided on a straight-line basis for capital assets available for use over their useful lives as follows:

Buildings	15-60 years
Transformer and substation equipment	15-50 years
Supervisory control and data acquisition equipment	15 years
Distribution system	15-50 years
Meters	15-25 years
General equipment	5-15 years

Amortization on general equipment directly used in the installation of other capital assets, is capitalized to the new assets based on a pro-ration of time during the year they are used for such purposes.

Full amortization is recorded in the year of acquisition and none in the year of disposal. Construction in process is not amortized until the assets are put in use.

(i) Pension Plan

Waterloo North Hydro Inc. 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

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 9]*. The Company recognizes the expense related to this plan as contributions are made.

(j) Post-employment Benefits

Post-employment benefits provided by the Company include health, dental and life insurance benefits. These plans provide benefits to certain employees when they are no longer providing active service. Post-employment benefit expense is recognized in the period in which the employees render the services.

Post-employment benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefits 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. Gains and losses are recognized in the current year. Actuarial gains and losses are recognized in income in the year in which the gains and losses are incurred.

(k) Contributed Capital

Effective May 1, 2000, the Company prospectively adopted the change in accounting policy for contributions received in aid of construction [contributed capital], as prescribed by the OEB "Accounting Procedures Handbook for Electric Distribution Utilities". Capital contributions received from outside sources are used to finance additions to capital assets. Capital contributions received are treated as a "credit" contra account included in the determination of capital assets. 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 capital assets.

(l) Revenue Recognition

Revenue is recorded 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

(m) Customer Deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability.

(n) Use of Estimates

The preparation of financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the year. Actual results could differ from estimates.

(o) Corporate Income Taxes

The current tax-exempt status of the Company under the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] reflects the fact that the Company is wholly owned by municipalities. 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 Company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently, to acquire more than 10% of the shares of the Company.

Commencing October 1, 2001, the Company is required, under the Electricity Act, 1998, to make payments in lieu of corporate taxes to Ontario Electricity Financial Corporation. These payments are calculated in accordance with the rules for computing income and other relevant amounts contained in the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] as modified by the Electricity Act, 1998 and related regulations.

As a result of becoming subject to payments in lieu of corporate income taxes [PILs], the Company's taxation year was deemed to have ended immediately beforehand and a new taxation year was deemed to have commenced immediately thereafter. The Company was therefore deemed to have disposed of each of its assets at its then fair market value and to have reacquired such assets at that same amount for purposes of computing its future income subject to PILs. For purposes of certain provisions, the Company was deemed to be a new company and, as a result, tax credits or tax losses not previously utilized by the Company would not be available to it after the change in tax status. Essentially, the Company was taxed as though it had a "fresh start" at the time of its change in tax status.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

The Company provides for PILs using the asset and liability method. Under this method, future tax assets and liabilities are recognized, to the extent such are determined likely to be realized, for the future tax consequences attributable to differences between the financial carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on future tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

(p) Financial Instruments

The Company follows the following provisions of the CPA Canada Handbook: 1530 – Comprehensive Income, 3855 – Financial Instruments – Recognition and Measurement and 3861 – Financial Instruments – Disclosure and Presentation. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other financial liabilities. Depending on the nature of the financial instrument, revenues, expenses, gains and losses would be reported in either net income or other comprehensive income.

The Company has classified its financial instruments as follows:

Cash and cash equivalents are classified as "Held-for-trading" and are measured at fair value.

Accounts receivable and unbilled energy receivable are classified as "Loans and receivables" and are initially measured at amortized cost, which upon initial recognition is fair value. Subsequent measurements are recorded at amortized cost using the effective interest method.

Accounts payable, due to related party, interest payment – shareholder, customer deposits, and long-term debt are classified as "Other financial liabilities" and are initially measured at amortized cost, which upon initial recognition is fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.

3. FUTURE ACCOUNTING POLICIES

For rate regulated activities, the International Accounting Standards Board ("IASB") issued an interim standard - IFRS 14 *Regulatory Deferral Accounts* in January 2014. This standard provides specific guidance on accounting for the effects of rate regulation and permits first-time adopters of IFRS to continue using previous GAAP to account for regulatory deferral account balances while the IASB completes its comprehensive project in this area.

Adoption of this standard is optional for entities eligible to use it. Deferral account balances and movements in the balances will be required to be presented as separate line items on the face of the financial statements distinguished from assets, liabilities, income and expenses that are recognized in accordance with other IFRSs. Extensive disclosures will be required to enable users of the financial statements to understand the features and nature of and risks associated with rate regulation and the effect of rate regulation on the entity's financial position, performance and cash flows.

The AcSB recently approved an option to rate regulated entities to defer IFRS reporting to January 1, 2015. The Company will adopt IFRS standards starting January 1, 2015.

Contributions in aid of construction account, which represents the Company's obligation to continue to provide the customers access to the supply of electricity, will be reported as deferred revenue, and is amortized to income on a straight-line basis over the terms of the agreement with the customer or the economic useful life of the acquired or contributed asset, which represents the period of ongoing service to the customer.

4. SHORT-TERM & LONG-TERM DEBT

For both the short-term and long-term bank debt the Company has a general security agreement creating in favour of CIBC a first priority security interest covering all company assets.

		2013 $	2012 $
Short-term debt			
Bank debt, bearing a variable interest rate of Prime Rate less 0.30% per annum. Amounts are repayable immediately in whole or in part, on demand. The operating credit limit is $15M.	Line of Credit	**3,880,802**	11,897,266
		3,880,802	11,897,266
Long-term debt			
Bank debt, hedged by interest rate SWAP at 2.95% + 100 basis points per annum payable in monthly payments of $88,667, due April 1, 2037	Mortgage	**24,800,847**	25,864,776
Bank debt, hedged by interest rate SWAP at 1.98% +100 basis points per annum payable in monthly payments of $129,167, due January 29, 2021	Smart Meter	**11,096,781**	12,529,167
Bank debt, hedged by interest rate SWAP at 3.434% +100 basis points per annum payable in monthly payments of $62,500, due July 4, 2033	Term Loan	**14,672,225**	-
		50,569,853	38,393,943
Less: Current Portion		**(3,364,000)**	(2,614,000)
		47,205,853	35,779,943

The aggregate amount of principal payments required is as follows:

2014	3,364,000
2015	3,364,000
2016	3,364,000
2017	3,364,000
2018	3,364,000
Thereafter	33,749,853
	50,569,853

5. CAPITAL ASSETS

	2013		2012	
	Cost	Accumulated amortization	Cost	Accumulated amortization
	$	$	$	$
Land and easements	**3,712,571**	-	4,414,771	-
Buildings	**29,409,395**	**2,304,512**	34,787,478	3,325,902
Transformer and substation equipment	**36,216,445**	**14,129,413**	35,334,924	12,738,579
Supervisory control and data acquisition equipment	**4,430,919**	**2,525,508**	3,949,135	2,311,566
Distribution system	**220,446,685**	**94,284,807**	204,684,812	90,507,416
Meters	**21,698,092**	**9,001,735**	19,158,975	7,924,508
General equipment	**24,582,438**	**18,116,222**	24,926,145	16,573,602
Contributed capital	**(31,840,870)**	**(8,967,282)**	(30,168,165)	(8,226,066)
	308,655,675	**131,394,915**	297,088,075	125,155,508
Less accumulated amortization	**131,394,915**		125,155,508	

6. NET REGULATORY ASSETS/LIABILITIES

Net regulatory assets (liabilities) represent costs incurred by the Company in excess of amounts billed to the consumer at OEB approved rates less recoveries. These amounts have been accumulated pursuant to the Electricity Act and deferred in anticipation of their future recovery (or disposition) in electricity distribution rates. Management assesses the future uncertainty with respect to the final regulatory disposition of those amounts, and to the extent required, makes accounting provisions to reduce the deferred balances accumulated or to increase the recorded liabilities. Upon rendering of the final regulatory decision adjusting distribution rates, the provisions are adjusted to reflect the final impact of that decision, and such adjustment is reflected in net earnings for the period.

Regulatory assets and liabilities attract interest at OEB prescribed rates. In 2013 the rate remained steady at 1.47%.

6. NET REGULATORY ASSETS/LIABILITIES cont'd

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultations between the OEB and interested stakeholders, may affect the distribution rates that the Company may charge and the costs that the Company may recover, including the balance of its regulatory assets.

Post-market opening variances - represent amounts that have accumulated since Market Opening and comprise:

a) variances between amounts charged by the Independent Electricity System Operator ("IESO") for the operation of the wholesale electricity market and grid, various wholesale market settlement charges and transmission charges, and the amounts billed to customers by the Company based on the OEB approved wholesale market service rate; and,

b) variances between the amounts charged by the IESO for energy commodity costs and the amounts billed to customers by the Company based on OEB approved rates.

In the absence of rate regulation, generally accepted accounting principles would require the Company to record the costs and recoveries described above in the operating results of the year in which they are incurred and reported earnings before income taxes would be $2,754,654 lower in 2013 and $5,380,065 higher in 2012 than reported.

Net regulatory assets and liabilities consist of the following:

	2013 $	2012 $
Post market opening variances	**(10,182,305)**	(8,746,335)
Conservation and demand management	**(1,351,601)**	(1,535,096)
Recovery of regulatory assets	**(1,081,252)**	(5,088,381)
Net regulatory assets and liabilities	**(12,615,158)**	(15,369,812)

7. RELATED PARTY TRANSACTIONS

The Company conducted transactions with related parties during the year ended December 31, 2013. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.
During the year, the company provided street lighting energy and street lighting maintenance services to the City of Waterloo in the amounts of $675,033 and $195,038 respectively [2012 - $618,022 and $253,740 respectively].

8. NOTE PAYABLE TO SHAREHOLDER

	2013 $	2012 $
Senior long-term note payable [a]	**17,266,271**	17,266,271
Junior long-term note payable [b]	**16,246,940**	16,246,940
	33,513,211	33,513,211

[a] The senior long-term note payable is due to Waterloo North Hydro Holding Corporation, the Company's parent, bears interest at a rate of 6.0% per annum, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

[b] The junior long-term note payable is due to Waterloo North Hydro Holding Corporation, bears interest at a rate of 1 1/8% per annum above the interest rate on debt which the Ontario Energy Board permits the Company to pay for rate making purposes in the establishment of distribution rates, has no set principal repayment terms and is due on demand. The current OEB deemed rate is 5.32%.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

9. PENSION PLAN

The Company makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of its staff. The plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and the best 60 consecutive month's average earnings.

Contributions by the Company in 2013 was at a rate of 9.0% [2012- 8.3%] for employee earnings below the year's maximum pensionable earnings and 14.6% [2012-12.8%] thereafter. The amount contributed to OMERS for 2013 was $1,013,997 [2012 - $853,564] for current service.

10. POST EMPLOYMENT BENEFITS

The Company has a number of unfunded defined benefit plans providing post-employment benefits resulting from retirement to most of its employees. An actuarial valuation was done at December 31, 2013.

Information about these defined benefit plans are as follows:

	2013	2012
	$	$
Accrued benefit obligation		
Balance, beginning of year	**4,371,245**	4,217,217
Current service cost	**156,522**	145,282
Interest cost	**156,429**	198,723
Actuarial (gain)/loss	**(192,117)**	22,449
Benefits Paid	**(203,422)**	(212,426)
Balance, end of year	**4,288,657**	4,371,245

The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	%
Discount rate	**4.0**
Future general salary and wage levels increase	**4.0**
Dental costs increase	**4.0**
Medical costs increase	**8.0 reducing to 5.0% after 6 years**

10. POST EMPLOYMENT BENEFITS cont'd

The approximate effect on the accrued benefit obligation and the estimated net benefit expense if the health care trend rate assumption was increased or decreased by 1% is as follows:

1% increase in trend rate	$206,258
1% decrease in trend rate	($184,830)

11. SHARE CAPITAL

		2013	2012
		$	$
Authorized			
Unlimited	common shares		
Unlimited	Class A special shares		
Issued			
1,000	common shares	**24,370,424**	24,370,424
251,668	Class A special shares - $10 Par value Non-voting, non cumulative	**2,516,680**	2,516,680
		26,887,104	26,887,104

12. INTEREST EXPENSE (INCOME)

The Company has interest expense (income) relating to the following:

	2013	2012
	$	$
Interest on debt with Waterloo North Hydro Holding Corporation		
Senior long-term note payable	**1,035,976**	1,035,976
Junior long-term note payable	**1,047,115**	1,047,115
Other debt	**2,076,516**	1,526,483
Regulatory carrying charges	**108,839**	207,447
Interest income	**(27,410)**	(139,929)
Net Interest expense	**4,241,036**	3,677,092

13. CORPORATE INCOME TAX

The provision for PILs differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate. Reconciliation between the statutory and effective tax rates is provided as follows:

Statement of Operations

	2013	2012
	$	$
Rate reconciliation		
Income from continuing operations before income taxes	**8,514,077**	8,255,934
Statutory Canadian federal and provincial income tax rate	**26.50%**	26.50%
Expected taxes on income	**2,256,230**	2,187,823
Increase in income taxes resulting from:		
Permanent differences	**14,204**	17,612
Other temporary differences not benefited	**(1,841,592)**	(1,282,470)
Income tax expense	**541,412**	922,965
Effective tax rate	**6.36%**	11.18%

The provision for PILs & taxes on the Statement of Operations includes property tax in the amount of $353,440.

14. PRUDENTIAL SUPPORT OBLIGATION

Waterloo North Hydro Inc. purchases power from the IESO on behalf of its customers and retailers. The IESO is responsible for ensuring that prudential support is posted by all market participants to mitigate the impact of an event of default by a market participant on the rest of the market. In this regard Waterloo North Hydro Inc. posted an irrevocable standby letter of credit in the amount of $18,534,708, set at 0.60% per annum, underwritten by the Company's principal bank. This instrument expires April 15, 2014 with an automatic renewal for a period of 1 year.

15. FINANCIAL INSTRUMENTS

The carrying values of cash and cash equivalents, accounts receivable, unbilled energy receivable, accounts payable and accrued liabilities, customer deposits and amounts due to related party approximate fair values because of the short maturity of these instruments. No fair value is available for the long-term note payment as there are no specified repayment terms.

The Company's activities provide for a variety of financial risks, particularly credit risk, market risk, and liquidity risk.

Credit Risk

Financial assets carry credit risk should a counterparty fail to discharge an obligation which would result in a financial loss. Financial assets held by the Company, such as accounts receivable are exposed to credit risk.

To mitigate credit risk the Company is permitted to request certain customers to provide security deposits for a prescribed period.

The Company is not exposed to a significant concentration of credit risk as the Company earns its revenue from a broad base of customers located in the City of Waterloo and the Townships of Wellesley and Woolwich. No one customer accounts for more than 3.0% of distribution revenue.

Market Risk

Market risks primarily refer to the risk of loss resulting from changes in commodity prices, foreign exchange rates, and interest rates. The Company currently does not have material commodity or foreign exchange risk. The Company is exposed to interest rate risk as the line of credit is based on the prime rate.

To mitigate interest rate risk the Company has secured fixed rate loans for the majority of its debt.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they occur. To mitigate liquidity risk the Company monitors its obligations and cash flows to ensure access to sufficient funds to meet operational and investing requirements.

16. GENERAL LIABILITY INSURANCE

The Company is a member of the Municipal Electric Association Reciprocal Insurance Exchange [MEARIE] which is a pooling of general liability insurance risks. Members of MEARIE would be assessed on a pro-rata basis should losses be experienced by MEARIE, for the years in which the Company was a member.

To December 31, 2013 the Company has not been made aware of any additional assessments. Participation in MEARIE expires December 31, 2014. Notice to withdraw from MEARIE must be given six months prior to the commencement of the next underwriting term.

17. CHANGE IN ESTIMATES

Effective January 1, 2013, the Company revised its estimates of useful lives of certain items of property, plant and equipment and as a result changed its amortization rates. A comparative table of amortization rates is provided below.

The impact of the change in 2013 was a reduction of amortization expense of approximately $2,820,575 and an increase in OM&A of $2,815,153.

Further, in accordance with OEB accounting requirements, an offsetting increase of $5,422 has been recorded against other revenue and an increase to regulatory liabilities.

Description	Revised (2013)	Previous (2012)
Buildings	15-60	20-50
Transformer and Substation Equipment	15-50	50
Supervisory Control and Data Acquistion Equipment	15	15
Distribution System	15-50	25
Meters	15-25	15-25
General Equipment	5-15	5-10

18. COMPARATIVE FIGURES

Certain of the prior year comparative figures have been restated to conform to the current year's presentation.

ATTACHMENT 1-10

2014 AUDITED
FINANCIAL STATEMENTS

Financial Statements

WATERLOO NORTH HYDRO INC.

December 31, 2014

KPMG LLP
Chartered Professional Accountants
115 King Street South
2nd Floor
Waterloo, Ontario N2J 5A3

Telephone (519) 747-8800
Fax (519) 747-8830
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the shareholder of Waterloo North Hydro Inc.

We have audited the accompanying financial statements of Waterloo North Hydro Inc., which comprise the balance sheet as at December 31, 2014, the statements of retained earnings, operations and cash flows for the year then ended, and notes, comprising 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.

Auditors' 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 our 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, we consider 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 overall presentation of the financial statements.

We believe that the audit evidence we have obtained 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 Waterloo North Hydro Inc. as at December 31, 2014, and its results of operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles**.**

KPMG LLP

Chartered Accountants, Licensed Public Accountants

April 16, 2015
Waterloo, Canada

Waterloo North Hydro Inc.

BALANCE SHEET

As at December 31

	2014 $	2013 $
ASSETS		
Current		
Cash and cash equivalents	**35,272**	132,538
Accounts receivable	**13,995,167**	12,506,016
Unbilled energy receivable	**20,451,308**	19,703,017
Income tax receivable	**-**	1,265,381
Inventories	**3,316,374**	2,557,875
Prepaid expenses	**599,552**	617,474
Total current assets	**38,397,673**	36,782,301
Capital assets - net of accumulated amortization *[note 5]*	**186,425,860**	177,260,760
Future tax asset	**-**	2,591,638
Total assets	**224,823,533**	216,634,699
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current		
Accounts payable and accrued liabilities	**24,061,523**	21,700,178
Short-term debt *[note 4]*	**4,416,018**	3,880,802
Current portion of long-term debt *[note 4]*	**4,114,000**	3,364,000
Income tax payable	**182,755**	-
Customer deposits	**2,298,987**	2,415,041
Total current liabilities	**35,073,283**	31,360,021
Long-term		
Note payable to shareholder *[note 8]*	**33,513,211**	33,513,211
Long-term debt *[note 4]*	**57,700,190**	47,205,853
Derivative liability *[note 4]*	**3,459,331**	-
Customer deposits	**3,842,814**	2,952,844
Net regulatory liabilities *[note 6]*	**3,556,670**	15,206,796
Post employment benefits *[note 10]*	**4,390,991**	4,288,657
Future tax liability	**227,735**	-
Total long-term liabilities	**106,690,942**	103,167,361
Shareholder's equity		
Share capital *[note 11]*	**26,887,104**	26,887,104
Retained earnings	**56,172,204**	55,220,213
Total shareholder's equity	**83,059,308**	82,107,317
Total liabilities and shareholder's equity	**224,823,533**	216,634,699

See accompanying notes

On behalf of the Board:

Glen Wright, Director

D. Charles Martin, Director

Waterloo North Hydro Inc.

STATEMENT OF RETAINED EARNINGS

Year ended December 31

	2014 $	2013 $
Retained earnings, beginning of year *[note 17]*	**55,220,213**	51,377,388
Dividends paid	**(3,639,680)**	(3,776,400)
Net income	**4,591,671**	7,619,225
Retained earnings, end of year	**56,172,204**	55,220,213

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF OPERATIONS

Year ended December 31

	2014 $	2013 $
REVENUES		
Sales of electricity	**155,508,973**	146,585,258
Distribution services revenue	**32,644,609**	31,898,320
	188,153,582	178,483,578
Power purchased	**155,508,973**	146,585,258
Operating Revenue	**32,644,609**	31,898,320
Other revenues		
Rental revenue	**288,591**	259,013
Late payment charges	**233,180**	216,222
Gain on disposal of capital assets	**174**	420,125
Miscellaneous	**595,530**	571,778
Total other revenues	**1,117,475**	1,467,138
Total Revenues	**33,762,084**	33,365,458
EXPENSES		
Distribution	**8,048,817**	7,357,432
Billing and collecting	**2,684,022**	2,676,238
General administration	**2,675,353**	2,570,933
Community relations	**180,935**	226,362
Amortization	**7,604,663**	7,779,380
Total Expenses	**21,193,790**	20,610,345
Income before undernoted items	**12,568,294**	12,755,113
Interest – net *[note 12]*	**(4,590,303)**	(4,241,036)
Income from operations before provision for PILs & taxes	**7,977,991**	8,514,077
Provision for PILs & taxes *[note 13]*	**(843,712)**	(894,852)
Income from operations before unrealized loss from derivatives	**7,134,279**	7,619,225
Unrealized loss from derivatives *[note 4]*	**(3,459,331)**	-
Future tax recovery related to unrealized loss from derivatives *[note 4]*	**916,723**	-
Net Income	**4,591,671**	7,619,225

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF CASH FLOWS

Year ended December 31

	2014 $	2013 $
OPERATING ACTIVITIES		
Net income	**4,591,671**	7,619,225
Add (deduct) charges to operations not requiring a current cash payment:		
Future income tax recovery	**(916,723)**	-
Amortization	**8,279,708**	8,391,514
Gain on disposal of capital assets	**(174)**	(420,125)
Decrease in regulatory liabilities	**(6,549,764)**	(4,187,708)
Increase (decrease) in post employment benefits liability	**102,334**	(82,588)
Unrealized loss on derivatives *[note 4]*	**3,459,331**	-
Net change in non-cash operating working capital	**831,461**	415,354
Cash provided by operating activities	**9,797,844**	11,735,672
INVESTING ACTIVITIES		
Additions to capital assets	**(20,410,695)**	(20,689,825)
Proceeds on disposal of capital assets	**8,552**	7,150,563
Cash applied to investing activities	**(20,402,143)**	(13,539,262)
FINANCING ACTIVITIES		
Increase (decrease) in customer deposits	**773,916**	(123,085)
Increase in long-term debt *[note 4]*	**11,244,337**	12,175,910
Increase (decrease) in short-term debt *[note 4]*	**535,216**	(8,016,464)
Increase in contributed capital	**1,593,244**	1,672,705
Dividends paid	**(3,639,680)**	(3,776,400)
Cash provided by financing activities	**10,507,033**	1,932,666
Net cash provided (applied) during year	**(97,266)**	129,076
Cash and cash equivalents, beginning of year	**132,538**	3,462
Cash and cash equivalents, end of year	**35,272**	132,538
Supplementary information:		
Interest paid	**4,624,684**	4,159,608
Interest received	**13,690**	13,939
Payments in lieu of corporate income taxes paid	**342,161**	556,697

See accompanying notes

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2014

1. INCORPORATION

Waterloo North Hydro Inc. [the Company] is a regulated electricity distribution company incorporated under the Business Corporations Act [Ontario] on May 1, 2000. The incorporation was required in accordance with the provincial government's Electricity Competition Act [Bill 35]. The Company is wholly-owned by Waterloo North Hydro Holding Corporation whose shareholders are the City of Waterloo and the Townships of Wellesley and Woolwich.

Under a municipal by-law, the former Hydro-Electric Commission of Waterloo, Wellesley and Woolwich and the City of Waterloo and the Townships of Wellesley and Woolwich transferred the net book value of the assets, liabilities, and the employees, associated with the distribution of electricity and associated business activities, to the new Company.

Effective October 1, 2001, all electric utility companies in Ontario are subject to a number of taxes, which will be used to repay the stranded debt incurred by the former Ontario Hydro prior to the introduction of Bill 35 [*note 13*].

2. SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles as described in Part V of the CPA Canada Handbook. The significant accounting policies are summarized below:

(a) Regulation

The Ontario Energy Board Act, 1998 (Ontario) ("OEBA") conferred on the Ontario Energy Board ("OEB") increased powers and responsibilities to regulate the electricity industry in Ontario. These powers and responsibilities include approving or fixing rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote residential electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to electricity distributors which may include, among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(b) Rate Setting

The distribution rates of the Company are based on a revenue requirement that provides a regulated Maximum Allowable Return on Equity on the amount of shareholder's equity supporting the business of electricity distribution, which is also determined by regulation. The Company files a rate application with the OEB annually. Rates are typically effective May 1 to April 30 of the following year. Once every five years, the Company files an Electricity Distribution Rate application ("EDR") where rates are rebased through a cost of service review. In the intervening years an Incentive Rate Mechanism application ("IRM") is filed. A cost of service EDR application is based upon a forecast of the amount of operating and capital expenses, debt and shareholder's equity required to support the Company's business. An IRM application results in a formulaic adjustment to distribution rates to increase distribution rates for the annual change in the Gross Domestic Product – Input Price Index (GDP-IPI) net of a productivity factor and a "Stretch Factor" determined by the relative efficiency of an electricity distributor.

The Company's last cost of service EDR application was made in 2010 with rates that were effective June 1, 2011. This application included a recovery of lost revenue and shared savings related to its Conservation and Demand Management ("CDM") programs for the years 2008 and 2009.

The Company will submit its next cost of service EDR application on April 24, 2015 with rates to be effective January 1, 2016.

(c) Green Energy and Green Economy Act

In early 2009, the government tabled the Green Energy and Green Economy Act ("GEGEA"). This new legislation makes fundamental changes to the roles and responsibilities of LDCs in the areas of renewable power generation, conservation and demand management delivery, and the development of smart distribution grids.

The Green Energy and Green Economy Act provides Local Distribution Companies ["LDCs"] with the freedom to own and operate a portfolio of renewable power generation and will permit them to provide district heating services in their communities through co-generation. LDCs will also bear added responsibilities to assist and enable consumers to reduce their peak demand and conserve energy in an effort to meet provincial conservation targets. LDCs will also gain new responsibilities in transforming their local distribution networks into smart grids harnessing advanced technologies to facilitate the connection of small-scale generators and the two-way flow of information.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(d) LDC License Requirements - Conservation and Demand Management Targets

On November 12, 2010, the OEB amended LDC licenses to include requirements for achieving certain CDM targets over a four year period commencing January 1, 2011. The Company's CDM targets include a demand reduction target of 15.79 MW and a consumption reduction target of 66.49 GWh by December 31, 2014. For the four year period ended December 31, 2014 the Company achieved reductions of 7.5 MW and 62.0 GWh respectively. This program is being replaced by a new six year Conservation First Framework beginning January 1, 2015, with an overall 7.0 TWh province wide target. The Company's target is 82.38 GWh.

(e) Regulatory Accounting

In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from Canadian generally accepted accounting principles for enterprises operating in a non-rate regulated environment. The OEB has the general power to include or exclude costs, revenues, losses or gains in the rates of a specific period, resulting in a change in the timing of accounting recognition from that which would have applied in an unregulated company. Such change in timing involves the application of rate regulated accounting, giving rise to the recognition of regulatory assets and liabilities. The Company's regulatory assets represent certain amounts receivable from future customers and costs that have been deferred for accounting purposes because it is probable that they will be recovered in future rates.

The Company's regulatory liabilities represent costs with respect to non-distribution market related charges and variances in recoveries that are expected to be settled in future periods.

(f) Cash and Cash Equivalents

Cash equivalents are readily convertible investments with maturities of three months or less from their date of acquisition. Investments are carried at cost, which approximates market value.

(g) Inventories

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

2. SIGNIFICANT ACCOUNTING POLICIES cont'd

(h) Capital Assets and Amortization

Capital assets are stated at cost, including material and labour and are removed from the accounts at the end of their estimated average service lives, except in those instances where specific identification allows their removal at retirement or disposition. Gains or losses at retirement or disposition of such assets are credited or charged to other revenue.

Amortization is provided on a straight-line basis for capital assets available for use over their useful lives as follows:

Buildings	15-60 years
Transformer and substation equipment	15-50 years
Supervisory control and data acquisition equipment	15 years
Distribution system	15-50 years
Meters	15-25 years
General equipment	5-15 years

Amortization on general equipment directly used in the installation of other capital assets is capitalized to the new assets based on a pro-ration of time during the year they are used for such purposes.

Full amortization is recorded in the year of acquisition and none in the year of disposal. Capital assets under construction at year-end are referred to as construction in process and are not amortized until the assets are put into service.

(i) Pension Plan

Waterloo North Hydro Inc. 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 9]*. The Company recognizes the expense related to this plan as contributions are made.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

(j) Non-vesting Accumulated Sick Leave

Under Canadian generally accepted accounting principles, non-vesting accumulated sick leave is not required to be recognized in the financial statements. However, in preparation for transition to IFRS on January 1, 2015, the Company made a change in policy to record a liability for sick leave benefits that accumulate but do not vest *[note 17]*.

(k) Post-employment Benefits

Post-employment benefits provided by the Company include health, dental and life insurance benefits. These plans provide benefits to certain employees when they are no longer providing active service. Post-employment benefit expense is recognized in the period in which the employees render the services.

Post-employment benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefits 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. Gains and losses are recognized in the current year. Actuarial gains and losses are recognized in income in the year in which the gains and losses are incurred.

(l) Contributed Capital

Effective May 1, 2000, the Company prospectively adopted the change in accounting policy for contributions received in aid of construction [contributed capital], as prescribed by the OEB "Accounting Procedures Handbook for Electric Distribution Utilities". Capital contributions received from outside sources are used to finance additions to capital assets. Capital contributions received are treated as a "credit" contra account included in the determination of capital assets. 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 capital assets.

(m) Revenue Recognition

Revenue is recorded 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

(n) Customer Deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability.

(o) Use of Estimates

The preparation of financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the year. Actual results could differ from estimates.

(p) Corporate Income Taxes

The current tax-exempt status of the Company under the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] reflects the fact that the Company is wholly owned by municipalities. This tax-exempt status might be lost in a number of circumstances, including if the shareholder (municipalities) ceases to own 90% or more of the shares or capital of the Company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently, to acquire more than 10% of the shares of the Company.

Commencing October 1, 2001, the Company is required, under the Electricity Act, 1998, to make payments in lieu of corporate taxes to Ontario Electricity Financial Corporation. These payments are calculated in accordance with the rules for computing income and other relevant amounts contained in the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] as modified by the Electricity Act, 1998 and related regulations.

As a result of becoming subject to payments in lieu of corporate income taxes [PILs], the Company's taxation year was deemed to have ended immediately beforehand and a new taxation year was deemed to have commenced immediately thereafter. The Company was therefore deemed to have disposed of each of its assets at its then fair market value and to have reacquired such assets at that same amount for purposes of computing its future income subject to PILs. For purposes of certain provisions, the Company was deemed to be a new company and, as a result, tax credits or tax losses not previously utilized by the Company would not be available to it after the change in tax status. Essentially, the Company was taxed as though it had a "fresh start" at the time of its change in tax status.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

The Company provides for PILs using the asset and liability method. Under this method, future tax assets and liabilities are recognized, to the extent such are determined likely to be realized, for the future tax consequences attributable to differences between the financial carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on future tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

(q) Financial Instruments

The Company follows the following provisions of the CPA Canada Handbook: 1530 – Comprehensive Income, 3855 – Financial Instruments – Recognition and Measurement and 3861 – Financial Instruments – Disclosure and Presentation. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other financial liabilities. Depending on the nature of the financial instrument, revenues, expenses, gains and losses would be reported in either net income or other comprehensive income.

The Company has classified its financial instruments as follows:

Cash and cash equivalents, and derivatives are classified as "Held-for-trading" and are measured at fair value.

Accounts receivable and unbilled energy receivable are classified as "Loans and receivables" and are initially measured at amortized cost, which upon initial recognition is fair value. Subsequent measurements are recorded at amortized cost using the effective interest method.

Accounts payable, due to related party, interest payment – shareholder, customer deposits, short and long-term debt are classified as "Other financial liabilities" and are initially measured at amortized cost, which upon initial recognition is fair value. Subsequent measurements are recorded at amortized cost using the effective interest rate method.

3. FUTURE ACCOUNTING POLICIES

For rate regulated activities, the International Accounting Standards Board ["IASB"] issued an interim standard - IFRS 14 *Regulatory Deferral Accounts* in January 2014. This standard provides specific guidance on accounting for the effects of rate regulation and permits first-time adopters of IFRS to continue using previous GAAP to account for regulatory deferral account balances while the IASB completes its comprehensive project in this area.

Adoption of this standard is optional for entities eligible to use it. Deferral account balances and movements in the balances will be required to be presented as separate line items on the face of the financial statements distinguished from assets, liabilities, income and expenses that are recognized in accordance with other IFRSs. Extensive disclosures will be required to enable users of the financial statements to understand the features and nature of and risks associated with rate regulation and the effect of rate regulation on the entity's financial position, performance and cash flows.

The AcSB approved an option to rate regulated entities to defer IFRS reporting to January 1, 2015. As mandated by the OEB, the Company will adopt IFRS standards starting January 1, 2015.

Contributions in aid of construction account, which represents the Company's obligation to continue to provide the customers access to the supply of electricity, will be reported as deferred revenue, and is amortized to income on a straight-line basis over the useful life of the acquired or contributed asset. Existing items in contributed capital will continue to be treated as a "credit" contra account included in the determination of capital assets. 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 capital assets.

Re-measurement of actuarial gains & losses for post-employment benefits are to be recognized in Other Comprehensive Income and is not reclassified to profit or loss in a subsequent period, as per IAS 19.

4. SHORT-TERM & LONG-TERM DEBT

For both the short-term and long-term bank debt the Company has a general security agreement creating in favour of CIBC a first priority security interest covering all company assets.

		2014 $	2013 $
Short-term debt			
Bank debt, bearing a variable interest rate of Prime Rate less 0.30% per annum. Amounts are repayable immediately in whole or in part, on demand. The operating credit limit is $15M.	Line of Credit	**4,416,018**	3,880,802
		4,416,018	3,880,802
Long-term debt			
Bank debt, hedged by interest rate SWAP at 2.95% + 100 basis points per annum payable in monthly payments of $88,667, due April 1, 2037	Mortgage 2012	**23,736,053**	24,800,847
Bank debt, hedged by interest rate SWAP at 1.98% +100 basis points per annum payable in monthly payments of $129,167, due January 29, 2021	Smart Meter 2013	**9,547,627**	11,096,781
Bank debt, hedged by interest rate SWAP at 3.434% +100 basis points per annum payable in monthly payments of $62,500, due July 4, 2033	Term Loan 2013	**13,921,890**	14,672,225
Bank debt, hedged by interest rate SWAP at 3.035% +100 basis points per annum payable in monthly payments of $62,500, due June 4, 2034	Term Loan 2014	**14,608,620**	-
		61,814,190	50,569,853
Less: Current Portion		**(4,114,000)**	(3,364,000)
		57,700,190	47,205,853

The aggregate amount of principal payments required is as follows:	
2015	4,114,000
2016	4,114,000
2017	4,114,000
2018	4,114,000
2019	4,114,000
Thereafter	41,244,190
	61,814,190

4. SHORT-TERM & LONG-TERM DEBT cont'd

Interest rate swaps

The Company has entered into interest rate swap agreements with a high quality Canadian charter bank for the purpose of eliminating the risk of fluctuating interest rates and removing the economic impact of interest rate volatility on the majority of its long-term debt. Part V of the CPA Handbook requires the Company determine and record the fair value of its interest rate swap agreements on the balance sheet, with changes in fair values being recorded in the income statement.

As a result, the Company has recorded a non-current derivative liability and a non-cash charge of $3,459,331. A future tax recovery of $916,723 was also recorded to reflect the future tax impact. There is no impact on current tax PILs payable. Over the term of the long-term debt, the non-cash charge and liability will reverse into income. The company issues 30 day banker's acceptances at a floating rate but pays interest at a fixed rate guaranteed by the interest rate swap.

5. CAPITAL ASSETS

	2014		2013	
	Cost	**Accumulated amortization**	**Cost**	**Accumulated amortization**
	$	**$**	**$**	**$**
Land and easements	**3,816,745**	-	3,712,571	-
Buildings	**30,263,353**	**3,139,283**	29,409,395	2,304,512
Transformer and substation equipment	**36,971,806**	**15,534,634**	36,216,445	14,129,413
Supervisory control and data acquisition equipment	**4,712,236**	**2,717,803**	4,430,919	2,525,508
Distribution system	**236,702,616**	**98,406,250**	220,446,685	94,284,807
Meters	**15,410,459**	**4,392,477**	21,698,092	9,001,735
General equipment	**25,930,671**	**19,505,287**	24,582,438	18,116,222
Contributed capital	**(33,434,114)**	**(9,747,822)**	(31,840,870)	(8,967,282)
	320,373,772	**133,947,912**	308,655,675	131,394,915
Less accumulated amortization	**133,947,912**		131,394,915	
Net book value	**186,425,860**		177,260,760	

6. NET REGULATORY ASSETS/LIABILITIES

Net regulatory assets (liabilities) represent costs incurred by the Company that are different from amounts billed to the consumer at OEB approved rates less recoveries. These amounts have been accumulated pursuant to the Electricity Act and deferred in anticipation of their future recovery (or disposition) in electricity distribution rates. Management assesses the future uncertainty with respect to the final regulatory disposition of those amounts, and to the extent required, makes accounting provisions to reduce the deferred balances accumulated or to increase the recorded liabilities. Upon rendering of the final regulatory decision adjusting distribution rates, the provisions are adjusted to reflect the final impact of that decision, and such adjustment is reflected in net earnings for the period.

Regulatory assets and liabilities attract interest at OEB prescribed rates. In 2014 the rate remained steady at 1.47%.

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultations between the OEB and interested stakeholders, may affect the distribution rates that the Company may charge and the costs that the Company may recover, including the balance of its regulatory assets.

Post-market opening variances - represent amounts that have accumulated since Market Opening and comprise:

a) variances between amounts charged by the Independent Electricity System Operator ("IESO") for the operation of the wholesale electricity market and grid, various wholesale market settlement charges and transmission charges, and the amounts billed to customers by the Company based on the OEB approved wholesale market service rate; and,

b) variances between the amounts charged by the IESO for energy commodity costs and the amounts billed to customers by the Company based on OEB approved rates.

In the absence of rate regulation, generally accepted accounting principles would require the Company to record the costs and recoveries described above in the operating results of the year in which they are incurred and reported earnings before income taxes would be $11,650,126 lower in 2014 and $163,016 lower in 2013 than reported.

6. NET REGULATORY ASSETS/LIABILITIES cont'd

Net regulatory assets and liabilities consist of the following:

	2014 $	2013 $
Post market opening variances	**(7,092,891)**	(10,182,305)
Conservation and demand management	**57,260**	(1,351,601)
Recovery of regulatory assets (liabilities)	**2,334,503**	(1,081,252)
Future income taxes	**1,144,458**	(2,591,638)
Net regulatory assets (liabilities)	**(3,556,670)**	(15,206,796)

7. RELATED PARTY TRANSACTIONS

The Company conducted transactions with related parties during the year ended December 31, 2014. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

	2014 $	2013 $
City of Waterloo		
Street light energy	**706,839**	675,033
Street light maintenance	**203,276**	195,038
Township of Wellesley		
Street light energy	**47,259**	44,255
Street light maintenance	**16,463**	15,360
Township of Woolwich		
Street light energy	**164,963**	155,335
Street light maintenance	**51,734**	46,937
Total for the year	**1,190,534**	1,131,958

8. NOTE PAYABLE TO SHAREHOLDER

	2014 $	2013 $
Senior long-term note payable [a]	**17,266,271**	17,266,271
Junior long-term note payable [b]	**16,246,940**	16,246,940
	33,513,211	33,513,211

[a] The senior long-term note payable due to Waterloo North Hydro Holding Corporation, the Company's parent, bears interest at a rate of 6.0% per annum, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

[b] The junior long-term note payable due to Waterloo North Hydro Holding Corporation, bears interest at a rate of 1.125% per annum above the interest rate on debt which the Ontario Energy Board permits the Company to pay for rate making purposes in the establishment of distribution rates, has no set principal repayment terms and is due on demand. The current OEB deemed rate is 5.32%.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

9. PENSION PLAN

The Company makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of its staff. The plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and the best 60 consecutive month's average earnings.

	2014	**2013**
Rate below maximum pensionable earnings	**9.0%**	9.0%
Rate above maximum pensionable earinings	**14.6%**	14.6%
Contributions by the Company	**$1,046,739**	$1,013,997

10. POST EMPLOYMENT BENEFITS

The Company has a number of defined benefit plans providing post-employment benefits resulting from retirement to most of its employees. An extrapolation of the December 2013 actuarial valuation was done at December 31, 2014.

Information about these defined benefit plans are as follows:

	2014	**2013**
	$	**$**
Accrued benefit obligation		
Balance, beginning of year	**4,288,657**	4,371,245
Current service cost	**152,080**	156,522
Interest cost	**169,719**	156,429
Actuarial gain	**(23,966)**	(192,117)
Benefits Paid	**(195,499)**	(203,422)
Balance, end of year	**4,390,991**	4,288,657

10. POST EMPLOYMENT BENEFITS cont'd

The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	%
Discount rate	**4.0**
Future general salary and wage levels increase	**2.5**
Dental costs increase	**4.0**
Medical costs increase	**8.0 reducing to 5.0% after 6 years**

The approximate effect on the accrued benefit obligation and the estimated net benefit expense if the dental and medical care trend rate assumption was increased or decreased by 1% is as follows:

1% increase in trend rate	$212,367
1% decrease in trend rate	($190,304)

11. SHARE CAPITAL

		2014	2013
		$	$
Authorized			
Unlimited	common shares		
Unlimited	Class A special shares		
Issued			
1,000	common shares	**24,370,424**	24,370,424
251,668	Class A special shares - $10 Par value		
	Non-voting, non cumulative	**2,516,680**	2,516,680
		26,887,104	26,887,104

12. INTEREST EXPENSE (INCOME)

The Company has interest expense (income) relating to the following:

	2014 $	2013 $
Interest on debt with Waterloo North Hydro Holding Corporation		
Senior long-term note payable	**1,035,976**	1,035,976
Junior long-term note payable	**1,047,115**	1,047,115
Other debt	**2,541,593**	2,076,516
Regulatory carrying charges	**88,452**	108,839
Interest income	**(122,833)**	(27,410)
Net interest expense	**4,590,303**	4,241,036

13. CORPORATE INCOME TAX

The provision for PILs differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate. Reconciliation between the statutory and effective tax rates is provided as follows:

Statement of Operations

	2014 $	2013 $
Rate reconciliation		
Income from operations before income taxes	**7,508,040**	8,160,637
Statutory Canadian federal and provincial income tax	**26.50%**	26.50%
Expected taxes on income	**1,989,631**	2,162,569
Changes in income taxes resulting from:		
Permanent differences	**15,280**	14,204
Other temporary differences not benefited	**(1,631,150)**	(1,635,361)
Income tax expense	**373,761**	541,412
Effective tax rate	**4.98%**	6.63%

The provision for PILs & taxes on the Statement of Operations includes property tax in the amount of $469,951 [2013 - $353,440]. The future tax recovery of ($916,723) [2013 - nil] is related to the unrealized loss from derivatives.

14. PRUDENTIAL SUPPORT OBLIGATION

Waterloo North Hydro Inc. purchases power from the IESO on behalf of its customers and retailers. The IESO is responsible for ensuring that prudential support is posted by all market participants to mitigate the impact of an event of default by a market participant on the rest of the market. In this regard Waterloo North Hydro Inc. posted an irrevocable standby letter of credit in the amount of $18,534,708, set at 0.60% per annum, underwritten by the Company's principal bank. This instrument expires April 14, 2015 with an automatic renewal for a period of one year.

15. FINANCIAL INSTRUMENTS

The carrying values of cash and cash equivalents, accounts receivable, unbilled energy receivable, accounts payable and accrued liabilities, customer deposits and amounts due to related party approximate fair values because of the short maturity of these instruments. No fair value is available for the long-term note payment as there are no specified repayment terms.

The Company's activities provide for a variety of financial risks, particularly credit risk, market risk, and liquidity risk.

Credit Risk

Financial assets carry credit risk should a counterparty fail to discharge an obligation which would result in a financial loss. Financial assets held by the Company, such as accounts receivable are exposed to credit risk.

To mitigate credit risk the Company is permitted to request certain customers to provide security deposits for a prescribed period.

The Company is not exposed to a significant concentration of credit risk as the Company earns its revenue from a broad base of customers located in the City of Waterloo and the Townships of Wellesley and Woolwich. No one customer accounts for more than 3.0% of distribution revenue.

Market Risk

Market risks primarily refer to the risk of loss resulting from changes in commodity prices, foreign exchange rates, and interest rates. The Company currently does not have material commodity or foreign exchange risk. The Company is exposed to interest rate risk as the line of credit is based on the prime rate.

To mitigate interest rate risk the Company has secured fixed rate swap agreements for the majority of its debt. The company issues 30 day banker's acceptances at a floating rate but pays interest at a fixed rate guaranteed by the interest rate swap.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they occur. To mitigate liquidity risk the Company monitors its obligations and cash flows to ensure access to sufficient funds to meet operational and investing requirements.

16. GENERAL LIABILITY INSURANCE

The Company is a member of the Municipal Electric Association Reciprocal Insurance Exchange [MEARIE] which is a pooling of general liability insurance risks. Members of MEARIE would be assessed on a pro-rata basis should losses be experienced by MEARIE, for the years in which the Company was a member.

To December 31, 2014 the Company has not been made aware of any additional assessments. Participation in MEARIE expires December 31, 2015. Notice to withdraw from MEARIE must be given six months prior to the commencement of the next underwriting term.

17. CHANGE IN POLICY

In preparation for IFRS transition, a policy change was made to recognize non-vesting accumulated sick leave resulting in the retained earnings at beginning of the year reduced by $131,530 as per an actuarial valuation done as at December 31, 2013.

18. COMPARATIVE FIGURES

Certain of the prior year comparative figures have been restated to conform to the current year's presentation.

ATTACHMENT 1-11

2012-2014 RECONCILIATIONS OF AUDITED FINANCIAL STATEMENTS TO RRR TRIAL BALANCE 2.1.7 FILING

WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2012	Regulatory 2012	Difference 2012		Differences Explained
Assets					
Current Assets	34,512,339	31,668,609	(2,843,730)	(2,764,460)	Inventory (#1330) Recorded Separate for Regulatory, Current Assets for Accounting
				899,581	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(1,045,814)	Income Tax Payable (#2294) in Liabilities for Regulatory, Current Assets for Accounting
				66,963	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				(2,843,731)	
Inventory		2,764,460	2,764,460	2,764,460	Inventory Recorded Separate for Regulatory, Current Assets for Accounting
Non-Current Assets		-	-	-	
Other Assets and Deferred Charges		(10,428,541)	(10,428,541)	(10,428,544)	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
Other Capital Assets & Accumulated Amortization		297,445,052 (125,163,828)			
	171,932,567	172,281,224	348,657		
				330,977	Capitalized Interest Regulatory Adjustment
				17,680	Wholesale Meters Recorded in Regulatory, Accounting Adjustment Outstanding
				348,657	
Future Income Tax Asset	4,759,785	-	(4,759,785)	(4,759,785)	Regulatory Treatment is to Net Assets & Liabilities, thus $0, Accounting Records Net Assets & Net Liability Separately
Net Assets	211,204,691	196,285,752	(14,918,939)		
Liabilities & Equity					
Non-Current Liabilities	-	(7,170,527)	(7,170,527)	(2,799,282)	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(4,371,245)	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(7,170,527)	
Current Liabilities	(36,215,361)	(41,564,962)	(5,349,601)	(20,129,627)	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				10,428,544	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
				4,759,785	Deferred Future Tax Regulatory Treatment is to Net Assets & Liabilities, thus $0, Accounting Records Net Assets & Net Liability Separately
				881,791	1508 Pension/OEB Assessment Recorded in Regulatory, Not Recorded in Accounting
				48,310	Settlement Agreement OMERS Variance (#1508) Recorded in Regulatory, Not Recorded in Accounting
				(378,004)	Reg Assets Regulatory Only Collected in 2011 to Revenue for Accounting, to 1595 Regulatory
				648,604	PILs Accounting in Revenue, in Reg Assets 1595 for Regulatory
				(1,768,275)	PILs in #1595 Recorded in Regulatory, Not Recorded in Accounting
				80,000	Rebasing Costs # 1525 - 3 Remaining Years Allocated for Regulatory, Not Recorded in Accounting
				(5,428,872)	
				1,045,814	Income Tax Payable (#2294) in Liabilities for Regulatory, Current Assets for Accounting
				(899,581)	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(66,963)	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				(5,349,601)	
				0	
Long-Term	(96,593,308)	(69,293,154)	27,300,154	2,799,282	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				4,371,245	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				20,129,627	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				27,300,154	
Other Liabilities Deferred Credit	-		-	-	
Shareholders' Equity	(78,396,022)	(78,257,109)	138,913	1,760,202	PILs #1562 Recorded in Regulatory (includes Carrying Charges to 2010), Not Recorded in Accounting
				(697,988)	1508 Pension Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				(404,367)	1508 OEB Assessment Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				(74,018)	Smart Meter Disposition November 1, 2012 Net Income Impact
				220,503	Reg Assets Regulatory Only Collected in 2011 to Revenue for Accounting, to 1595 Regulatory
				(120,000)	Record # 1525 2011 Rebasing Costs for Regulatory, not in Accounting
				(48,310)	Record # 1508 2011 OMERS Settlement Agreement Variance for Regulatory, not in Accounting
				(330,976)	Record Previous Years' Capitalized Interest
				(18,720)	Wholesale Meters Recorded in Regulatory (Amortization to 2010), Accounting Adjustment Outstanding
				(147,413)	Decrease in Net Income for Regulatory Adjustments (See Income Statement)
				138,912	
Net Liabilities & Equity	(211,204,691)	(196,285,752)	14,918,939		

WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2012	Regulatory 2012	Difference 2012		Differences Explained
Revenues					
Sales of electricity	(133,881,401)	(133,881,400)	1		
Revenue from Services	(30,379,348)	(33,315,046)	(2,935,698)	(23,459)	RCVA Revenues (#4082) Grossed up for Regulatory, not for Accounting
				378,004	Reg Assets Regulatory Only Collected in 2012 to Revenue for Accounting, to 1595 Regulatory
				(648,604)	PILs Accounting in Revenue, in Reg Assets 1595 for Regulatory
				(2,641,640)	SMFA Netted in Billing/Collecting for Accounting, in 4080 for Regulatory
				(2,935,698)	
Other Power Supply Expenses	133,881,401	133,881,400	(1)		
Other Operating Revenues	(1,190,905)	(827,746)	363,159	1,050	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				31,440	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				449	Billing Services in Other Income Deductions (#4375) Regulatory, Other Operating Revenues or Billing/Collecting for Acctg
				248,977	Other Income/Deduction (#4390/4375) for Regulatory, Other Operating Revenues for Accounting
				81,245	Collection Charge (#5330) Revenue for Accounting, Against Billing Costs for Regulatory
				363,160	
				(1)	
Other Income / Deductions	-	(335,858)	(335,858)		
				(31,440)	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				(118,298)	Other Income/Deduction (#4390) for Regulatory, Other Operating Revenues for Accounting
				(8,579)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(122,099)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(55,441)	Non-Distribution Revenue/Expenses (#4375/4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				(335,858)	
Investment Income	-	80,241	80,241		
				(139,929)	Regulatory recorded in #4405, Netted against Interest Expense for Accounting
				220,170	Smart Meter Carrying Charges from Disposition Netted Against Billing/Collecting for Accounting, Investment Income Regulatory
				80,241	
Total Income	(31,570,253)	(34,398,409)	(2,828,156)		
Expenses					
Distribution	5,662,215	5,730,973	68,758	93,755	Non-Distribution Revenue (#4375) in Other Income/Deductions for Regulatory, General Admin for Accounting
				(38,314)	Non-Distribution Expenses (#4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				7,529	Expenses in #6205 for Accounting General Administration, Distribution for Regulatory
				6,838	Smart Meter OM&A from Disposition Netted Against Billing/Collecting for Accounting, Distribution Regulatory
				(1,050)	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				68,758	
				0	
Billing and collecting	2,678,369	2,940,036	261,667		
				(9)	Expenses in #4380 for Regulatory,Billing/Collecting for Accounting
				319,847	Smart Meter Total from Disposition Netted Against Billing/Collecting for Accounting, Reversed & Regulatory Portion
				(81,245)	Collection Charge Revenue (#5330) Netted Against Billing/Collecting for Regulatory, In Other Operating Revenues for Accounting
				23,514	RCVA Expenses (#5315) Grossed up for Regulatory, not for Accounting
				(440)	Non-Distribution Expense (#4380) for Regulatory, Billing/Collecting for Accounting
				261,667	
				(0)	
General administration	2,099,730	2,095,400	(4,330)		
				(34,300)	Donations (#6205) in Other Deductions for Regulatory, General Admin for Accounting
				(7,529)	Expenses in #6205 for Accounting General Administration, Distribution for Regulatory
				(2,500)	Expenses in #5410 for Regulatory, General Administration for Accounting
				40,000	Rebasing Cost allocated to Regulatory Exp (#5655) for Regulatory, Not for Accounting
				(4,329)	
Amortization	8,961,990	11,131,837	2,169,847	1,040	Wholesale Meter Depreciation Recorded in Regulatory, Accounting Adjustment Outstanding
				2,168,807	Smart Meter Depreciation from Disposition Netted Against Billing/Collecting for Accounting, Amortization for Regulatory
				2,169,847	
Community relations	234,923	202,478	(32,445)		
				(34,944)	Re-allocate LEAP to # 6205 Regulatory, General Administration Accounting
				2,500	Expenses in #5410 for Regulatory, General Administration for Accounting
				(32,444)	
Interest	3,677,092	3,825,094	148,002	139,929	Regulatory Interest Income recorded in #4405, Netted against Interest Expense for Accounting
				8,073	#1562 Carrying Charges for 2012 in Regulatory, Not Recorded in Accounting
				148,002	
Taxes	1,627,624	1,627,624	-	-	
Other Deductions		69,244	69,244	69,244	Donations (#6205) in Other Deductions for Regulatory, General Admin & Community Relations for Accounting
				69,244	
Total Expenses	24,941,943	27,622,686	2,680,743		
Decrease in Net Income (Carried Forward to Balance Sheet)	(6,628,310)	(6,775,723)	(147,413)		

WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2013	Regulatory 2013	Difference 2013		Differences Explained
Assets					
Current Assets	36,782,301	33,874,099	(2,908,202)	(2,557,875)	Inventory (#1330) Recorded Separate for Regulatory, Current Assets for Accounting
				826,857	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(1,265,381)	Income Tax Payable (#2294) in Liabilities for Regulatory, Current Assets for Accounting
				88,197	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				(2,908,202)	
Inventory		2,557,875	2,557,875	2,557,875	Inventory Recorded Separate for Regulatory, Current Assets for Accounting
Non-Current Assets		-	-	-	
Other Assets and Deferred Charges		(5,731,619)	(5,731,619)	(5,731,619)	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
Other Capital Assets & Accumulated Amortization		309,012,651 (131,404,275)			
	177,260,760	177,608,376	347,616		
				330,977	Capitalized Interest Regulatory Adjustment
				16,640	Wholesale Meters Recorded in Regulatory, Accounting Adjustment Outstanding
				347,617	
Future Income Tax Asset	2,591,638	-	(2,591,638)	(2,591,638)	Regulatory Treatment is to Net Assets & Liabilities, thus $0, Accounting Records Net Assets & Net Liability Separately
Net Assets	216,634,699	208,308,731	(8,325,968)		
Liabilities & Equity					
Non-Current Liabilities	-	(7,241,500)	(7,241,500)	(2,952,844)	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(4,288,657)	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(7,241,501)	
Current Liabilities	(31,228,491)	(37,712,876)	(6,484,385)	(12,615,158)	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				5,731,619	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
				125,844	1508 Pension/OEB Assessment Recorded in Regulatory, Not Recorded in Accounting
				48,310	Settlement Agreement OMERS Variance (#1508) Recorded in Regulatory, Not Recorded in Accounting
				(165,326)	PILs in #1595 Recorded in Regulatory, Not Recorded in Accounting
				40,000	Rebasing Costs # 1525 - 1 Remaining Year Allocated for Regulatory, Not Recorded in Accounting
				(6,834,712)	
				1,265,381	Income Tax Payable (#2294) in Liabilities for Regulatory, Current Assets for Accounting
				(826,857)	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(88,197)	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				(6,484,385)	
Long-Term	(103,167,361)	(80,719,064)	22,448,297	2,952,844	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				2,591,638	Future Income Tax - Regulatory Treatment is to Net Assets & Liabilities, thus $0, Accounting Records Net Assets & Net Liability Separately
				4,288,657	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				12,615,158	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				22,448,297	
Other Liabilities Deferred Credit	-		-	-	
Shareholders' Equity	(82,238,847)	(82,635,291)	(396,444)	1,119,671	PILs #1562 Recorded in Regulatory (includes Carrying Charges to 2012), Not Recorded in Accounting
				(697,988)	1508 Pension Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				(404,367)	1508 OEB Assessment Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				598,507	Reg Assets Regulatory Only Collected in 2012 to Revenue for Accounting, to 1595 Regulatory
				(80,000)	Record # 1525 2012 Rebasing Costs for Regulatory, not in Accounting
				(48,310)	Record # 1508 2011 OMERS Settlement Agreement Variance for Regulatory, not in Accounting
				(330,976)	Record Previous Years' Capitalized Interest
				(17,680)	Wholesale Meters Recorded in Regulatory (Amortization to 2012), Accounting Adjustment Outstanding
				(535,301)	Decrease in Net Income for Regulatory Adjustments (See Income Statement)
				(396,445)	
Net Liabilities & Equity	(216,634,699)	(208,308,731)	8,325,968		
	-	-	-		

WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2013	Regulatory 2013	Difference 2013		Differences Explained
Revenues					
Sales of electricity	(146,585,258)	(146,930,128)	(344,870)	(344,780)	Adjust GA Sale of Electricity & Cost of Power
Revenue from Services	(31,898,320)	(32,512,111)	(613,791)	(37,451)	RCVA Revenues (#4082) Grossed up for Regulatory, not for Accounting
				378,004	Reg Assets Regulatory Only Collected in 2013 to Revenue for Accounting, to 1595 Regulatory
				(954,345)	PILs Accounting in Revenue, in Reg Assets 1595 for Regulatory
					SMFA Netted in Billing/Collecting for Accounting, in 4080 for Regulatory
				(613,792)	
Other Power Supply Expenses	146,585,258	146,930,128	344,870	344,780	Adjust GA Sale of Electricity & Cost of Power
Other Operating Revenues	(1,467,138)	(788,914)	678,224	7,800	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				420,125	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				330	Billing Services in Other Income Deductions (#4375) Regulatory, Other Operating Revenues or Billing/Collecting for Acctg
				174,213	Other Income/Deduction (#4390/4375) for Regulatory, Other Operating Revenues for Accounting
				81,177	Collection Charge (#5330) Revenue for Accounting, Against Billing Costs for Regulatory
				(5,421)	Miscellaneous Debit (#4305) Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				678,224	
Other Income / Deductions	-	(645,850)	(645,850)		
				(420,125)	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				(140,971)	Other Income/Deduction (#4390) for Regulatory, Other Operating Revenues for Accounting
				(1,655)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(31,587)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(56,932)	Non-Distribution Revenue/Expenses (#4375/4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				5,421	Miscellaneous Debit (#4305) Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				(645,849)	
Investment Income	-	(27,410)	(27,410)		
				(27,410)	Regulatory recorded in #4405, Netted against Interest Expense for Accounting
Total Income	(33,365,458)	(33,974,285)	(608,827)		
Expenses					
Distribution	7,025,344	7,406,564	381,220	83,037	Non-Distribution Revenue (#4375) in Other Income/Deductions for Regulatory, General Admin for Accounting
				(26,105)	Non-Distribution Expenses (#4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				332,088	Loss Prevention Costs Distribution for Regulatory, General Admin for Accounting
				(7,800)	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				381,221	
Billing and collecting	2,676,238	2,632,182	(44,056)		
				(81,177)	Collection Charge Revenue (#5330) Netted Against Billing/Collecting for Regulatory, In Other Operating Revenues for Accounting
				37,451	RCVA Expenses (#5315) Grossed up for Regulatory, not for Accounting
				(330)	Non-Distribution Expense (#4380) for Regulatory, Billing/Collecting for Accounting
				(44,056)	
General administration	2,903,021	2,597,198	(305,823)		
				(13,735)	Donations (#6205) in Other Deductions for Regulatory, General Admin for Accounting
				(332,088)	Loss Prevention Costs Distribution for Regulatory, General Admin for Accounting
				40,000	Rebasing Cost allocated to Regulatory Exp (#5655) for Regulatory, Not for Accounting
				(305,823)	
Amortization	7,779,380	7,780,419	1,039	1,040	Wholesale Meter Depreciation Recorded in Regulatory, Accounting Adjustment Outstanding
Community relations	226,362	191,418	(34,944)		
				(34,944)	Re-allocate LEAP to # 6205 Regulatory, General Administration Accounting
Interest	4,241,036	4,268,447	27,411	27,410	Regulatory Interest Income recorded in #4405, Netted against Interest Expense for Accounting
Taxes	894,852	894,852	-	-	
Other Deductions		48,679	48,679	48,679	Donations (#6205) in Other Deductions for Regulatory, General Admin & Community Relations for Accounting
Total Expenses	25,746,233	25,819,759	73,526		
Decrease in Net Income (Carried Forward to Balance Sheet)	(7,619,225)	(8,154,526)	(535,301)	-	

WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2014	Regulatory 2014	Difference 2014		Differences Explained
Assets					
Current Assets	38,397,673	36,160,596	(2,237,077)	(3,316,374)	Inventory (#1330) Recorded Separately for Regulatory, Current Assets for Accounting
				978,967	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(29,997)	Rental Income in Accounting # 4210, in Rent Receivable # 1150 Regulatory
				130,325	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				2	Difference - rounding
				(2,237,077)	
Inventory		3,316,374	3,316,374	*3,316,374*	Inventory (#1330) Recorded Separately for Regulatory, Current Assets for Accounting
Non-Current Assets			-	-	
Other Assets and Deferred Charges		3,594,058	3,594,058	*3,594,058*	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
Other Capital Assets & Accumulated Amortization		320,740,197 (133,975,417)			
	186,425,860	186,764,780	338,920	330,977	Capitalized Interest Regulatory Adjustment
				(18,145)	Increase Depreciation Regulatory for transfer of asset to OH C/Devices (#1835) from Poles (#1830) for Regulatory/#2105 Acc Dep
				9,450	Distributed Generation Contributed Capital (#1995) incorrectly posted to Deferral/Variance (#1531)
				16,640	Wholesale Meters Recorded in Regulatory, Accounting Adjustment Outstanding
				(2)	Difference - rounding
				338,920	
Future Income Tax Asset			-		
Net Assets	224,823,533	229,835,808	5,012,275		
Liabilities & Equity					
Non-Current Liabilities	-	(7,317,082)	(7,317,082)	(3,842,814)	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(4,390,991)	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				916,723	Future Income Tax - Non Current (# 2350) in Non-Current Regulatory in Long-Term Liabilities in Accounting
				(7,317,082)	
Current Liabilities	(35,073,283)	(44,199,142)	(9,125,859)	(4,492,090)	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				(3,594,058)	Regulatory Assets & Liabilities Included in Other Assets & Deferred Charges for Regulatory, Liabilites for Accounting
				(157)	1595 CDM Deferral/Variance Recorded in Regulatory, Not Recorded in Accounting
				(9,728)	Distributed Generation Contributed Capital (#1995) incorrectly posted to Deferral/Variance (#1531) and Interest (#4405)
				(2,200)	Acturial Services from IFRS (#1508) Deferral to Expense (#5630)
				2,534	Regulatory adjustment # 4405, Accounting on Balance Sheet (#1589)
				3,535	1576 Adjusted (#4305) Regulatory, in Accounting on Balance Sheet (#1576)
				48,310	Settlement Agreement OMERS Variance (#1508) Recorded in Regulatory, Not Recorded in Accounting
				(978,967)	Credit Balances (#2208) Allocated to A/P for Regulatory, Current Assets for Accounting
				(130,325)	Deferred Customer Deposit in (#2220) for Regulatory, Current Assets for Accounting
				27,288	Adjustment to Actual Tax Expense Regulatory, Not for Accounting
				(9,125,859)	
Long-Term Other Liabilities Deferred Credit, Long Term Debt	(106,690,942) -	 (94,881,770)	106,690,942 (94,881,770)		
Net			11,809,172	3,842,814	Long-Term Customer Deposit in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				(916,723)	Future Income Tax - Non Current (# 2350) in Non-Current Regulatory in Long-Term Liabilities in Accounting
				4,390,991	Employee Future Benefits in Non-Current Liabilities for Regulatory, Long-Term for Accounting
				4,492,090	Regulatory Assets Recorded in Current Liabilities for Regulatory, Long-Term for Accounting
				11,809,172	
Shareholders' Equity	(83,059,308)	(83,437,814)	(378,506)	165,326	PILs #1562 Recorded in Regulatory (includes Carrying Charges to 2012), Not Recorded in Accounting
				(697,988)	1508 Pension Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				(404,367)	1508 OEB Assessment Recorded in Regulatory (Carrying Charges to 2010), Not Recorded in Accounting
				976,512	Reg Assets Regulatory Only Collected in 2012 to Revenue for Accounting, to 1595 Regulatory
				(40,000)	Record # 1525 2012 Rebasing Costs for Regulatory, not in Accounting
				(48,310)	Record # 1508 2011 OMERS Settlement Agreement Variance for Regulatory, not in Accounting
				(330,977)	Record Previous Years' Capitalized Interest
				(16,640)	Wholesale Meters Recorded in Regulatory (Amortization to 2012), Accounting Adjustment Outstanding
				17,938	Decrease in Net Income for Regulatory Adjustments (See Income Statement)
				(378,506)	
Net Liabilities & Equity	(224,823,533)	(229,835,808)	(5,012,275)		
	-	-	-		

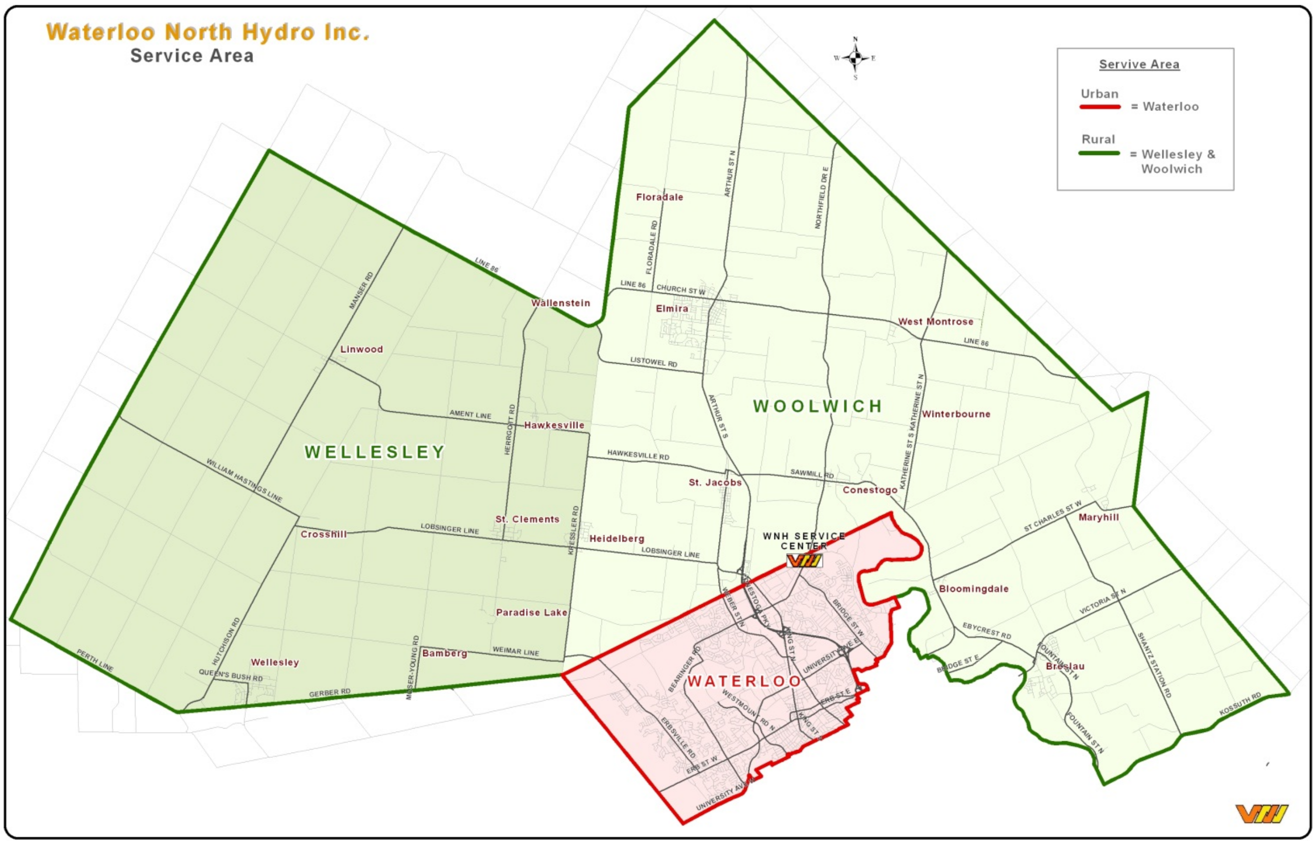
WATERLOO NORTH HYDRO INC.

Reconciliation of Regulatory to Accounting (Financial Statements)

	Accounting 2014	Regulatory 2014	Difference 2014		Differences Explained
Revenues					
Sales of electricity	(155,508,973)	(155,508,973)	-	-	
Revenue from Services	(32,644,609)	(33,467,575)	(822,966)	(34,644)	RCVA Revenues (#4082) Grossed up for Regulatory, not for Accounting
				126,001	Reg Assets Regulatory Only Collected in 2013 to Revenue for Accounting, to 1595 Regulatory
				(165,326)	PILs Accounting in Revenue, in Reg Assets 1595 for Regulatory
				(745,463)	1576 Adjustment (#4305) in Services Revenue Accounting, Other Income/Deductions Regulatory
				(3,534)	1576 Adjusted (#4305) Regulatory, in Accounting on Balance Sheet (#1576)
				(822,966)	
Other Power Supply Expenses	155,508,973	155,508,973	-		
Other Operating Revenues	(1,117,475)	(793,775)	323,700	3,600	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				175	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				250	Billing Services in Other Income Deductions (#4375) Regulatory, Other Operating Revenues or Billing/Collecting for Acctg
				169,633	Other Income/Deduction (#4390/4375) for Regulatory, Other Operating Revenues for Accounting
				103,302	Collection Charge (#5330) Revenue for Accounting, Against Billing Costs for Regulatory
				29,997	Rental Income in Accounting # 4210, in Rent Receivable # 1150 Regulatory
				16,743	15% Administration Charge Revenue Non-Development to General Admin Regulatory, Other Operating Revenues Accounting
				323,700	
Other Income / Deductions		3,986,966	3,986,966	(175)	Gain/Loss (#4355/4360) to Other Income/Deductions for Regulatory, Other Operating Revenues for Accounting
				(158,307)	Other Income/Deduction (#4390) for Regulatory, Other Operating Revenues for Accounting
				(1,595)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(9,732)	Non-Distribution Revenue (#4375) in Other Operating Revenues for Accounting
				(48,020)	Non-Distribution Revenue/Expenses (#4375/4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				745,463	1576 Adjustment (#4305) in Services Revenue Accounting, Other Income/Deductions Regulatory
				3,459,331	Loss on Financial Instrument Hedge (#4335) in Other Income/Deductions Regulatory and Unrealized Loss for Accounting
				3,986,966	
Investment Income		(125,089)	(125,089)	(122,833)	Regulatory recorded in #4405, Netted against Interest Expense for Accounting
				(2,256)	Regulatory adjustment # 4405, Accounting on Balance Sheet (#1589)
				(125,089)	
Total Income	(33,762,084)	(30,399,473)	3,362,611		
Expenses					
Distribution	8,048,817	8,092,236	43,419	70,668	Non-Distribution Revenue (#4375) in Other Income/Deductions for Regulatory, General Admin for Accounting
				(22,649)	Non-Distribution Expenses (#4380) in Other Income/Deductions for Regulatory, General Admin for Accounting
				(1,000)	Sponsorship in General Administration (#5615) for Accounting, in Distribution for Regulatory
				(3,600)	Rental Income Non-Distribution (#4375) for Regulatory, Other Operating Revenue for Accounting
				43,419	
Billing and collecting	2,684,022	2,615,114	(68,908)	(103,302)	Collection Charge Revenue (#5330) Netted Against Billing/Collecting for Regulatory, In Other Operating Revenues for Accounting
				34,644	RCVA Expenses (#5315) Grossed up for Regulatory, not for Accounting
				(250)	Non-Distribution Expense (#4380) for Regulatory, Billing/Collecting for Accounting
				(68,908)	
General administration	2,675,353	2,795,054	119,701	(100)	Donations (#6205) in Other Deductions for Regulatory, General Admin for Accounting
				2,200	Acturial Costs in Deferral/Variance in Accounting (#1508), General Admin for Regulatory
				(16,743)	15% Administration Charge Revenue Non-Development to General Admin Regulatory, Other Operating Revenues Accounting
				40,000	Rebasing Cost allocated to Regulatory Exp (#5655) for Regulatory, Not for Accounting
				(17,863)	Sponsorships in Administration in Accounting, in Community Relations in Regulatory
				1,000	Sponsorship in General Administration (#5615) for Accounting, in Distribution for Regulatory
				111,207	Prudential Cost in General Administration # 5685 Regulatory, Interest in Accounting
				119,701	
Amortization	7,604,663	7,622,808	18,145	*18,145*	Increase Depreciation Regulatory for transfer of asset to OH C/Devices (#1835) from Poles (#1830) for Regulatory/#2105 Acc Dep
Community relations	180,935	163,854	(17,081)	(34,944)	Re-allocate LEAP & Donation to # 6205 Regulatory, General Administration Accounting
				17,863	Sponsorships in Administration in Accounting, in Community Relations in Regulatory
				(17,081)	
Interest	4,590,303	4,601,929	11,626	122,833	Regulatory Interest Income recorded in #4405, Netted against Interest Expense for Accounting
				(111,207)	Prudential Cost in General Administration # 5685 Regulatory, Interest in Accounting
				11,626	
Taxes	843,712	(100,299)	(944,011)	*(916,723)*	Unrealized loss from derivatives in Accounting, in Taxes for Regulatory
				(27,288)	Adjustment to Actual Tax Expense Regulatory, Not for Accounting
				(944,011)	
Unrealized loss from derivatives	(916,723)		916,723	*916,723*	Unrealized loss from derivatives in Accounting, in Taxes for Regulatory
Future tax recovery related to unrealized loss from derivatives	3,459,331	-	(3,459,331)	*(3,459,331)*	Loss on Financial Instrument Hedge (#4335) in Other Income/Deductions Regulatory and Unrealized Loss for Accounting
Other Deductions	-	35,044	35,044	*35,044*	Donations (#6205) in Other Deductions for Regulatory, General Admin & Community Relations for Accounting
Total Expenses	29,170,413	25,825,740	(3,344,673)		
Increase in Net Income (Carried Forward to Balance Sheet)	(4,591,671)	(4,573,733)	17,938	-	

ATTACHMENT 1-12

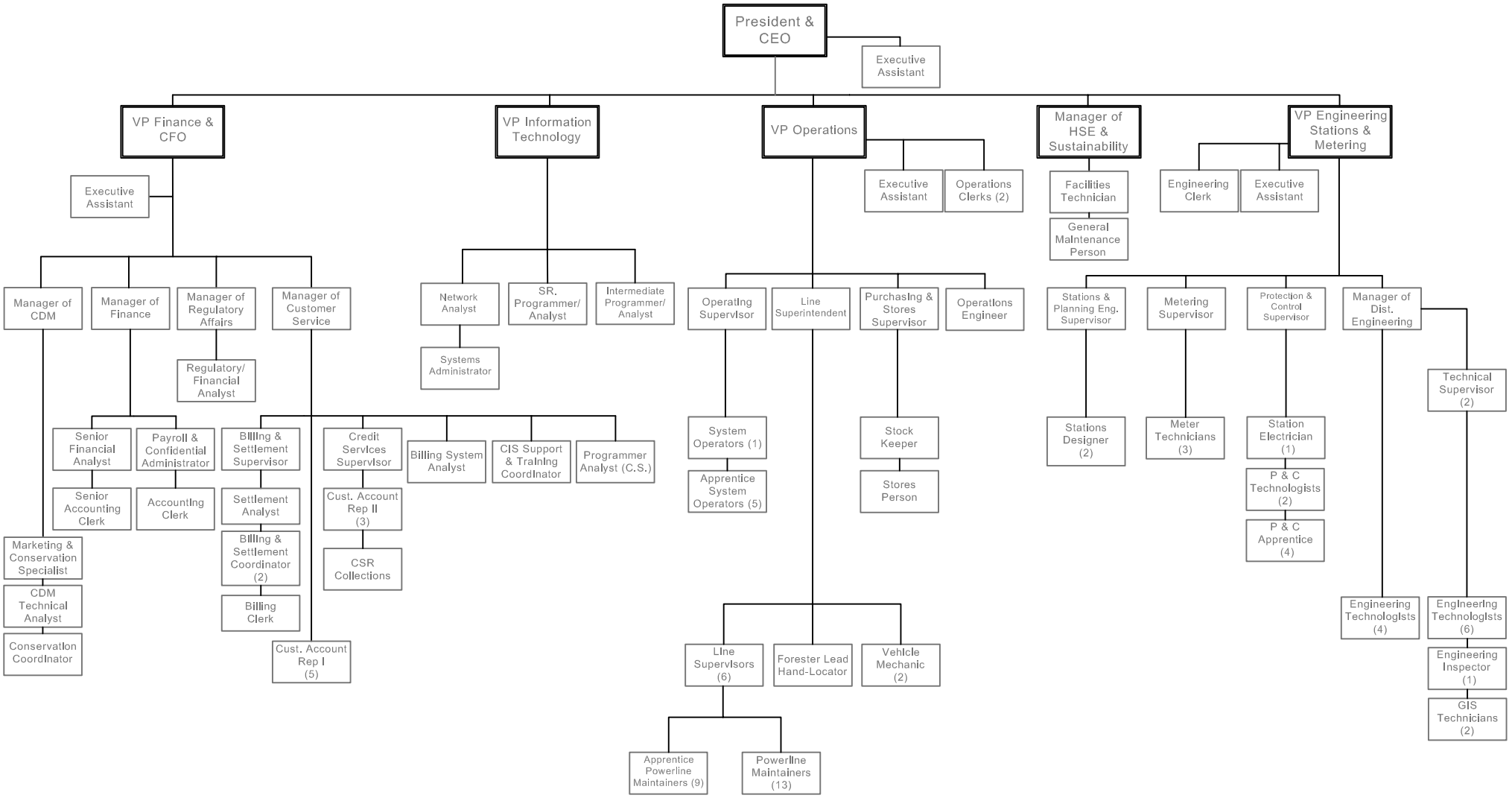
MAP OF
DISTRIBUTION
SERVICE TERRITORY


Waterloo North Hydro Inc.
Service Area
Servive Area
Urban
= Waterloo
Rural
= Wellesley &
Woolwich
WELLESLEY
WOOLWICH
WATERLOO
Floradale
Elmira
West Montrose
Wallenstein
Linwood
Hawkesville
Winterbourne
St. Jacobs
Conestogo
St. Clements
Crosshill
Heidelberg
Maryhill
WNH SERVICE
CENTER
Bloomingdale
Paradise Lake
Wellesley
Bamberg
Breslau
LINE 86
CHURCH ST W
LISTOWEL RD
AMENT LINE
HAWKESVILLE RD
SAWMILL RD
WILLIAM HASTINGS LINE
LOBSINGER LINE
ST CHARLES ST W
VICTORIA ST N
EBYCREST RD
BRIDGE ST E
PERTH LINE
QUEEN'S BUSH RD
GERBER RD
WEIMAR LINE
MANSER RD
HERRGOTT RD
KRESSLER RD
FLORADALE RD
ARTHUR ST N
ARTHUR ST S
NORTHFIELD DR E
KATHERINE ST S
KATHERINE ST N
HUTCHISON RD
MOSER-YOUNG RD
SHANTZ STATION RD
FOUNTAIN ST N
KOSSUTH RD
BEARINGER RD
ERBSVILLE RD
ERB ST W
UNIVERSITY AVE W
WESTMOUNT RD N
WEBER ST N
BRIDGE ST W
UNIVERSITY AVE E

ATTACHMENT 1–13

UTILITY ORGANIZATIONAL CHART

WATERLOO NORTH HYDRO INC.
ORGANIZATION CHART



ATTACHMENT 1–14

OEB ISSUED WNH SCORECARD

Scorecard - Waterloo North Hydro Inc.

9/24/2014

Performance Outcomes	Performance Categories	Measures	2009	2010	2011	2012	2013	Trend	Target: Industry	Target: Distributor
Customer Focus Services are provided in a manner that responds to identified customer preferences.	Service Quality	New Residential/Small Business Services Connected on Time	100.00%	100.00%	100.00%	100.00%	100.00%		90.00%	
		Scheduled Appointments Met On Time	99.80%	96.90%	99.70%	99.80%	99.90%		90.00%	
		Telephone Calls Answered On Time	87.70%	88.70%	91.50%	87.60%	95.10%		65.00%	
	Customer Satisfaction	First Contact Resolution								
		Billing Accuracy					.306			
		Customer Satisfaction Survey Results								
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	Safety	Public Safety [measure to be determined]								
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted	1.11	0.76	0.75	1.66	5.17			at least within 0.75 - 1.66
		Average Number of Times that Power to a Customer is Interrupted	0.95	0.85	0.85	1.39	3.14			at least within 0.85 - 1.39
	Asset Management	Distribution System Plan Implementation Progress								
	Cost Control	Efficiency Assessment				3	3			
		Total Cost per Customer [1]	$577	$617	$695	$673	$728			
		Total Cost per Km of Line [1]	$19,140	$20,721	$23,717	$23,080	$25,066			
Public Policy Responsiveness 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 Annual Peak Demand Savings (Percent of target achieved) [2]			13.00%	16.00%	17.60%			15.79MW
		Net Cumulative Energy Savings (Percent of target achieved)			39.00%	62.00%	81.80%			66.49GWh
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time			77.78%	100.00%	100.00%			
		New Micro-embedded Generation Facilities Connected On Time					100.00%		90.00%	
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.06	0.94	0.96	0.83	0.97			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.58	0.69	0.92	1.07	1.06			
		Profitability: Regulatory Return on Equity — Deemed (included in rates)			9.58%	9.58%	9.58%			
		Profitability: Regulatory Return on Equity — Achieved			10.04%	7.41%	8.70%			

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 do not include any persisting peak demand savings from the previous years.

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

Service Quality

Customer Satisfaction

Billing Accuracy is the number of bills cancelled and rebilled per 1,000 bills issued. This can be stated otherwise that approximately 3 bills are cancelled and rebilled out of every 10,000 bills issued by Waterloo.

Safety

System Reliability

Waterloo's Average Number of Hours that Power to a Customer is Interrupted and the Average Number of Times that Power to a Customer is Interrupted were impacted by three major storms in 2013. This is a highly unusual occurrence.

Asset Management

Cost Control

The Board has provided the Total Cost per Customer and Total Cost per Km of Line figures to the electricity distributors using the distributor's reported filing information as a starting point. Total cost amounts used in the scorecards are then computed by the total cost benchmarking analysis conducted by the Board's Consultants.

Conservation & Demand Management

The Annual Net Peak Demand Savings (Percent of target achieved) and Net Cumulative Energy Savings (Percent of target achieved) percentages have been provided by the Ontario Power Authority (OPA). Waterloo is in disagreement with the OPA on these numbers.

Connection of Renewable Generation

Financial Ratios