GUELPH HYDRO ELECTRIC SYSTEMS INC.

APPLICATION FOR APPROVAL OF ELECTRICITY DISTRIBUTION RATES

EFFECTIVE JANUARY 1, 2016

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OEB Chapter 2 Filing Requirements- Heading/Sub-heading		Guelph Hydro Application Heading/Sub-heading	
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OEB Chapter 2 Filing Requirements- Heading/Sub-heading		Guelph Hydro Application Heading/Sub-heading	
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LIST OF ABBREVIATIONS

Abbreviation	Definition
Guelph Hydro or GHESI	Guelph Hydro Electric Systems Inc.
GHI	Guelph Hydro Inc.
GMHI	Guelph Municipal Holdings Inc.
ACA	Asset Condition Assessment
ACM	Advanced Capital Module
AcSB	Canadian Accounting Standards Board
AMCD	Advanced Metering Communications Device
AMI	Advanced Metering Infrastructure
AMP	Asset Management Plan
AP	Access Point
APH	Accounting Procedures Handbook
ARC	Affiliate Relationships Code for Electricity Transmitters and Distributors
ARO	Asset Retirement Obligation
ATTC	Apprenticeship Training Tax Credit
BOD	Board of Directors
CAIDI	Customer Average Interruption Duration Index
CBA	Collective Bargaining Agreement
CCA	Capital Cost Allowance
CDD	Cooling Degree Day
CDM	Conservation and Demand Management
CETC	Co-operative Education Tax Credit
CGAAP	Canadian Generally Accepted Accounting Principles
CFF	2015-2020 Conservation First Framework CDM tranche
CFL	Compact Fluorescent Lightbulb
CIA	Connection Impact Assessment
CICA	Canadian Institute of Chartered Accountants
CIS	Customer Information System

Abbreviation	Definition
CLR	Current Limiting Reactor
COO	Chief Operating Officer
CoS	Cost of Service
CPI	Consumer Price Index
CPP	Canadian Pension Plan
CRA	Canada Revenue Agency
CSR	Customer Service Representative
CWMC	Cost Weighted Meter Capital
DLF	Distribution Loss Factor
DNA	Distribution Network Analysis
DR3	Demand Response 3 program
DRC	Debt Retirement Charge
DS	Distribution Station
DSP	Distribution System Plan
DVA	Deferral and Variance Account
EBT	Electronic Business Transactions
EDA	Electricity Distributors Association
EDR	Electricity Distribution Rate
EHT	Employer Health Tax
EI	Employment Insurance
EM&V	Evaluation, Measurement & Verification
ESQRs	Electricity Service Quality Requirements
FAC	Finance and Audit Committee
FAQs	Frequently Asked Questions
FCR	First Contact Resolution
Filing Requirements	Update to Chapter 2 of the Filing Requirements for Transmission and Distribution Applications, July 18, 2014
FIT	Feed-in-Tariff
FMV	Fair Market Value
FTE	Full Time Equivalent

Abbreviation	Definition
GA	Global Adjustment
GATR	Guelph Area Transmission Reinforcement
GDP	Gross Domestic Product
GEA	Green Energy and Green Economy Act
GIS	Geographic Information System
GPS	Geographic Positioning System
GS < 50 kW	General Service Less Than 50 kW
GS > 50 kW	General Service Greater Than 50 kW
GWh	Gigawatt hour
HDD	Heating Degree Day
HONI	Hydro One Networks Inc.
HR	Human Resources
HSMS	Health and Safety Management Systems
HST	Harmonized Sales Tax
IASB	International Accounting Standards Board
IBEW	International Brotherhood Of Electrical Workers – Local 636
ICM	Incremental Capital Module
IEEE	Institute of Electrical and Electronics Engineers
IESO	Independent Electricity System Operator
IFRS	International Financial Reporting Standards
IHD	In-Home Display
IHSA	Infrastructure Health & Safety Association
IP	Internet Protocol
IRM	Incentive Regulation Mechanism
IRM3	Third Generation Incentive Regulation Mechanism
IRM4	Fourth Generation Incentive Regulation Mechanism
IT	Information Technology
ITC	Input Tax Credit
IVR	Interactive Voice Recognition

Abbreviation	Definition
kV	KiloVolt
kW	KiloWatt
kWh	KiloWatt Hour
KWCG	Kitchener-Waterloo-Cambridge-Guelph region
LCBF	Long Canada Bond Forecast
LDC	Local Distribution Company
LDG	Load Displacement Generation
LEAP	Low-Income Energy Consumer Program
LRAM	Lost Revenue Adjustment Mechanism
LRAMVA	Lost Revenue Adjustment Mechanism Variance Account
LTD	Long Term Disability
LTEP	Long-Term Energy Plan
LV	Low Voltage
MAPD	Mean Absolute Percentage Deviation
MAPE	Mean Absolute Percentage Error
MBRR	Market Based Rate of Return
MDM/R	Meter Data Management/Repository
MEARIE	Municipal Electric Association Reciprocal Insurance Exchange
MED	Major Event Day
MIFRS	Modified International Financial Reporting Standards
MIST	Metering Inside the Settlement Timeframe
MOE	Ministry of Energy
MS	Municipal Substation
MSC	Monthly Service Charge
MTS	Municipal Transformer Station
MW	Megawatt
NAICS	North American Industrial Classification System
NAC	Normalized Average use per Customer
NBV	Net Book Value

Abbreviation	Definition
NEER	New Experimental Experience Rating program
NMS	Network Management System
Non-RPP	Non-Regulated Price Plan
NPV	Net Present Value
O&M	Operations and Maintenance
OM&A	Operations, Maintenance and Administration
OCEB	Ontario Clean Energy Benefit
ODS	Operational Data Store
OESP	Ontario Electricity Support Program
OH&S	Occupational Health, Safety and Environment
OMERS	Ontario Municipal Employees Retirement System
OMS	Outage Management System
ONS	Outage Notification System
OPA	Ontario Power Authority
ORDTC	Ontario Research & Development Tax Credit
OT	Operating Technology
PAB	Program Administration Budget
PC	Personal Computer
PCBs	Polychlorinated Biphenyls
PILs	Payments in Lieu of Taxes
PP&E	Property, Plant and Equipment
RA/L	Regulatory Assets and Liabilities
RCVA	Retail Service Variance Account
REG	Renewable Energy Generation
RES	Residential Customer
RFP	Request for Proposal
RFT	Request for Tender
ROE	Return on Equity
RPP	Regulated Price Plan

Abbreviation	Definition
RRFE	Renewed Regulatory Framework for Electricity Distributors
RRR	Reporting and Record Keeping Requirements
RRRP	Rural and Remote Rate Protection
RRWF	Revenue Requirement Work Form
RSVA	Retail Settlement Variance Account
RTSR	Retail Transmission Service Rates
RTU	Remote Terminal Units
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCADA	Supervisory Control and Data Acquisition
SCO	System Control Operator
SFLF	Supply Facility Loss Factor
SL	Streetlight Customer
SM	Smart Meters
SRED	Scientific Research & Experimental Development
SSC	Specific Service Charges
STRs	Service Transaction Requests
The Board or OEB	Ontario Energy Board
The IESO	Independent Electricity System Operator
The OEB Act	Ontario Energy Board Act
TLF	Total Loss Factor
TOU	Time of Use
TS	Transformer Station
TUL	Typical Useful Lives
UCC	Un-depreciated Capital Cost
USL	Unmetered Scattered Load
USoA	Uniform System of Accounts
UTR	Uniform Transmission Rate
UWPC	Utility Work Protection Code

Abbreviation	Definition
VEE	Validation, Estimating and Editing
VP	Vice President
VPN	Virtual Private Network
WCA	Working Capital Allowance
WMP	Wholesale Market Participant
WMP	Wholesale Metering Point
WSIB	Workplace Safety and Insurance Board
WSPS	Workplace Safety and Prevention Services

2.4 EXHIBIT 1: ADMINISTRATIVE DOCUMENTS

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 Guelph Hydro Electric Systems 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.

Background:

1. The Applicant is a corporation incorporated pursuant to the *Business Corporations Act* (Ontario) with its head office in the City of Guelph. The Applicant carries on the business of distributing electricity within the City of Guelph and Village of Rockwood.
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, 2013 (the "RRFE").
3. 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. There are no deviations from the Filing Requirements in this 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 has published 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.

6. **Applicant's Name:** Guelph Hydro Electric Systems Inc.
(the "Applicant" or "Guelph Hydro" or "GHESI").

7. **Applicant's Address:** 395 Southgate Drive
Guelph, Ontario
N1G 4Y1

Kazi Marouf

Chief Operating Officer

Pankaj Sardana

Chief Financial Officer

2.4.1 MANAGEMENT DISCUSSION AND ANALYSIS

Overview

Guelph Hydro is located in Southern Ontario and incorporated pursuant to the Ontario *Business Corporations Act* with its head office in the City of Guelph. The corporation owns and operates electricity distribution infrastructure serving over 53,000 residential and commercial customers in the City of Guelph and the Village of Rockwood, Ontario. The business of Guelph Hydro is regulated by the OEB under the *Ontario Energy Board Act*, 1998 (Ontario).

Until September 6th, 2014, Guelph Hydro Electric Systems Inc. was 100 per cent owned by Guelph Hydro Inc. ("GHI") and was the principal subsidiary of this entity. Guelph Hydro Inc. was, in turn, 100 percent owned by Guelph Municipal Holdings Inc. ("GMHI"), which, in turn, is 100 percent owned by the City of Guelph.

On September 6th, 2014, the City of Guelph amalgamated GHI and GMHI. As a result, Guelph Hydro is now 100 percent owned by GMHI and is the principal subsidiary of the amalgamated body Corporate, accounting for about 95 per cent of Guelph Municipal Holdings Inc.'s capital assets and about 99 per cent of its revenues. GMHI was originally incorporated by the City of Guelph in August of 2011 to hold the City's investment in GHI and other City-owned incorporated bodies.

Guelph Hydro receives electricity from the provincial electricity grid and transports it safely and reliably across a distribution network covering a service territory of over 90 square kilometers, which network includes related distribution equipment including one municipal transformer station, two municipal substations, over 430 kilometers of overhead lines, over 670 kilometers of underground cable, over 5,700 transformers and over 11,000 hydro poles.

As a condition of its distribution license, Guelph Hydro is also required to meet energy conservation and demand management ("CDM") targets established by the OEB.

In this section of the Application, Guelph Hydro provides an overview and explanation of: its business planning process and methodology; how its business objectives and plans align with RRFE objectives; and Guelph Hydro's past and anticipated performance in key areas directly related to the RRFE objectives.

Guelph Hydro normally commences its budgeting and business planning cycle in July-August of each year for the subsequent year with approval typically given by Guelph Hydro's Board of Directors in late-November or early December. The budget and planning process includes a rigorous cost assessment exercise for each Department in the company for the following year and a higher level plan for the next four years (collectively the "Business Plan" or "Plan"). Once Guelph Hydro's Board of Directors approve the Business Plan, it guides Guelph Hydro's operating and capital-related activities for the period for which the Plan was created.

To meet the additional planning and evidence preparation requirements in a Cost of Service filing period, the budget and planning cycle starts further in advance of the period in question (i.e., in this case, preparation began in June 2014) with the development of overall themes by the Senior Executive team, which includes all executives at the Director-level and up, and the budgeting and planning cycle is augmented to produce a rigorous, bottom-up two-year budget – for the "bridge" year (2015) and for the "test" year (2016), along with forecasts for the following three years.

For this rebasing application, the main budgeting themes included the need to hire and train replacement staff for key positions such as control room operators where retirements were imminent; the need to ensure that elements of the distribution system that were heavily loaded and/or at end of life were rehabilitated and/or off-loaded; the need to continue to provide an adequate distribution system to meet the requirements of new development and customer growth; the need to restrain growth in operating costs while meeting new or expanded requirements; and the need to normalize the capital structure of GHESI by issuing substantial new debt. All of these requirements were

expressly considered in the context of moderating (to the greatest degree reasonable) the resulting rate impacts.

In conjunction with focusing on planned operating and capital expenditures for the 2015 Bridge Year ("Bridge Year") and 2016 Test Year ("Test Year"), management's planning review included an extensive assessment to ensure that there was alignment between the OEB's RRFE objectives (Customer Focus, Operational Effectiveness, Public Policy Responsiveness, and Financial Performance) and Guelph Hydro's mission (which captures Guelph Hydro's business objectives), strategic imperatives and business strategy. Guelph Hydro's business plan and business strategy flow from its Strategic Imperatives, which are listed below. Guelph Hydro believes that its mission and strategic imperatives are entirely consistent with the objectives of the RRFE, and the discussion and analysis which follow describe this consistency.

Guelph Hydro's Mission Statement and Strategic Imperatives are reproduced below:

Guelph Hydro's Mission

"Provide superior customer service while investing in energy-related initiatives that benefit the communities in which we operate and align with the energy-related objectives of the Province of Ontario, the City of Guelph and our shareholder, Guelph Municipal Holdings Inc.; thus enabling the Guelph Hydro group of companies to grow and enhance our position as an industry leader.

Strategic Imperatives

- *Lead Ontario in powering community well-being and environmental stewardship with sustainable energy solutions*
    - *Deliver balanced financial and social returns by investing in quality distribution infrastructure*

- *Be a leader in the provision and implementation of an energy conservation and sustainable energy culture to our customers and employees that is consistent with the energy initiatives of our shareholder and Province*
- *Be a leader in efficient, safe, reliable, and economic distribution of energy*
- *Be a great place to work and communicate it to attract and retain employees*
- *Ensure that we enhance our position as an asset to our shareholder and the communities by engaging all stakeholders in our key initiatives and objectives"*

Guelph Hydro's 2015 and 2016 budgets and 2017 to 2019 Business Plan are reproduced in Appendix 1-A of Exhibit 1. In developing the Business Plan, Guelph Hydro was mindful of the need to align its business principles with the objectives of the RRFE, particularly with respect to improvements in productivity, maintenance of safety and reliability, the provision of excellent service to customers, and steady financial returns for its shareholder. Guelph Hydro's Business Plan objectives have only changed from previous years to ensure a closer alignment with the objectives of the RRFE.

As set out in the Business Plan, its underlying principles are as follows:

The Business Plan is based on the following assumptions and constraints:

1. A distribution revenue increase in 2015 of 3% over the 2014 Budget which is dependent on obtaining 1% from a distribution rate increase in the third year of Guelph Hydro's current three-year Incentive Regulation Mechanism (IRM) cycle, and 2% from load growth, or any combination of these two metrics.
2. The expected revenue deficiency which obtains from Guelph Hydro's 2016 Cost of Service rates application being approved by the OEB. This increase is largely based on the following key assumptions: (i) the return on ratebase

and return of ratebase (depreciation) associated with substantial distribution capital spending between the 2012 to 2016 period being added to ratebase and, (ii) an increase in operating, maintenance and administrative ("OM&A") costs that primarily reflects the costs associated with hiring and training employees ahead of retirements.

3. Continued investment in safety and on distribution plant so that ratepayers in Guelph and Rockwood can continue to be provided with excellent service.
4. Organizational capability.
5. Long-term view of return on shareholder investments.
6. Improving productivity.
7. Managing economic and political uncertainty.

Overview of Budgeting Process Methodology

The preparation of the 2015 and 2016 budgets, and the forecast for 2017-2019, was a multi-stage process which began in mid-2014 with a detailed line-by-line assessment by department managers of their respective 2014 OM&A requirements in their cost centers, in conjunction with known or planned requirements for 2015 and 2016. For each new full time or part time position a benefit-risk analysis was performed, in addition to an assessment of the costs. Benefits included the additional capability that would be brought by hiring an appropriate candidate. Risks included the potential that without the hire, required or desirable capabilities would be absent, possibly leading to failure to meet requirements in a timely fashion or other untoward outcomes.

These assessments were informed and guided by the corporate and RRFE objectives, and produced first-round draft OM&A budgets for each department.

The first-round draft OM&A budgets were then reviewed by a senior executive team consisting of the COO, CFO, and Vice President of Human Resources, again with regard to alignment with Guelph Hydro's strategic objectives, RRFE objectives, and the

identified budget themes, all balanced against rate impacts. Adjustments (mostly reductions) were made to departmental budgets as a result of this review, and department managers were then required to re-submit detailed budgets that reconciled with the adjusted totals. As part of this process, the Senior Executive Team considered in detail the potentials for efficiencies in staffing (e.g., through elimination of low-value activities, process improvements, etc.).

Concurrently, the detailed capital budget based on the DSP was developed. The initial draft of this budget was reviewed under the criteria mentioned above, and the plan was moderated particularly with respect to system renewal capital in the years 2017-2019 for the purpose of reducing subsequent rate impacts.

In addition during this time, the forecasts of loads, customers, and revenues at current rates were completed and reviewed.

These budget elements were then combined with budgets of items such as other income to produce the overall budget. This final draft budget and Business Plan produced by management was then reviewed by the Finance and Audit Committee, which recommended to the full Board of Directors that it be approved. The Guelph Hydro Board of Directors approved Guelph Hydro's 2016 budget in November 2014.

Performance in Meeting Corporate Objectives

Guelph Hydro has taken a multi-faceted strategic approach in its Business Plan in order to position itself to deliver on its goals and objectives. This approach is discussed below:

Plan to meet Guelph Hydro's Capital Investment Plan (tied to RRFE Customer Focus and Operational Effectiveness Outcomes)

Guelph Hydro's capital plan is described in detail in the DSP in Exhibit 2, Appendix 2-A, however, to summarize, the DSP provides the OEB and all interested stakeholders with

an overview of Guelph Hydro's asset planning objectives and goals, a review of Guelph Hydro's asset-related operational performance over a five-year historical period, a preview of Guelph Hydro's planned expenditures for the forecast period that illustrates Guelph Hydro's plan for further-improving its asset-related performance to achieve the four RRFE performance outcomes established by the OEB; and a detailed justification of Guelph Hydro's planned capital expenditures in the 2016 Test Year.

Plan to Control Guelph Hydro's Operating Expenses (tied to RRFE Customer Focus and Operational Effectiveness Outcomes and to the Public Policy Responsiveness Outcome)

Operating, Maintenance and Administrative ("OM&A") expenses, as will be further discussed in the DSP and Exhibit 4, Tab 3, 2.7.3 Program Delivery Costs with Variance Analysis, reflect costs required to operate, maintain and sustain electricity distribution operations, including new expenditures to address on-going initiatives in human resources, productivity improvements and risk management.

The compound average annual increase of OM&A expenses over the 2012 to 2016 period was 1.7%, which reflects the combined effects of productivity improvements, cost containment and general inflation. This compares to a corresponding figure of 1.67% for the average "all-items" CPI for Ontario between 2012 and 2014[1].

More specifically, the increase was partially attributable to:

- Base salary increases for:
    - union employees based on Guelph Hydro's 2013 collective bargaining agreement. The agreement reflected cost of living and salary progressions

[1] Source: Statistics Canada: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ09g-eng.htm

based on individual performance for employees paid below 100 percent of their position-job-rate.

  - non-union employees based on individual performance and comparisons to the market after factoring in salary compression with unionized positions.

- An increase in the number of extended sick leaves (6) and maternity leaves (7), and related hiring of temporary employees to overlap employees leaving and/or returning from extended leaves of absence.
- The need for 8 Full-Time Equivalent employees ("FTEs") for succession planning in business-critical roles, and for additional FTEs relating to regulatory requirements.
- An increase in current benefit premium costs, particularly OMERS premiums in 2013 from 8.3% to 9.0% for earnings up to the Canada Pension Plan ("CPP") earnings limit and from 12.8% to 14.6% for earnings greater than the CPP earnings limit.
- An increase in accrued benefit costs respecting post-employment benefit liabilities, despite the impact of removing post-age-65 retiree benefits for all employees hired after 2001.

Please also refer to Exhibit 4, Tab 3, Schedule 1, 2.7.3.1 Employee Compensation Breakdown, for more details on compensation cost increases between 2016 relative to 2012. Guelph Hydro has been diligent in offsetting the increases by making necessary cuts in other areas of its operations, and a detailed listing of efficiencies can be found in Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness. It is Guelph Hydro's belief that these efficiencies will endure and provide benefits in the years ahead.

Plan to meet Guelph Hydro's Service Quality Objectives (tied to RRFE Customer Focus Outcome)

Guelph Hydro has consistently exceeded the OEB's Service Quality Indicator standards and, as set out in Exhibit 2, Tab 2, Schedule 8, 2.5.2.8 Service Quality and Reliability Performance, it is targeting to maintain its performance at levels equal to or above the OEB's standards in 2015 and 2016.

The City of Guelph is one of Ontario's fastest growing communities, attracting new residents at a steady pace along with new commercial and industrial investments. In 2013 alone, Guelph Hydro connected seven new residential subdivisions, adding 751 residential and commercial customers to the electricity distribution network. To meet the need to serve this growth in customers and load, over the past five years Guelph Hydro built a new transformer station and invested in upgrades and expansion of the infrastructure to ensure reliability, resiliency, efficiency and security of the distribution system.

During the December 2013 ice storm, Guelph Hydro employees restored power to 99.9% of customers who experienced an outage within 48 hours. Guelph Hydro's conscientious maintenance programs, including tree trimming, resulted in fewer outages than would otherwise have occurred and prompt power restoration during the ice storm.

Responding to the increasing customer demand for up-to-the-minute information, in 2013 Guelph Hydro improved outage communication with the addition of an outage map on its website and mobile site, and used Twitter to keep customers better informed of Guelph Hydro's outage response.

In 2014, Guelph Hydro continued to improve the manner in which service quality was improved for its customers, and details of the myriad outreach initiatives are provided in Exhibit 1, Tab 3, Schedule 2, 2.3.3.2 Customer Focus. Guelph Hydro intends to continue these initiatives in 2015 and beyond.

Plan to meet Guelph Hydro's Health, Safety and Wellness Objectives (tied to RRFE Customer Focus and Operational Effectiveness Outcomes)

In keeping with its vision to pursue health and safety as a top priority, Guelph Hydro uses injury prevention procedures within the corporation, and organizes programs to promote safety in the community.

Internally, Joint Health and Safety Committee members conduct workplace inspections, in addition to formal reviews of all accident reports. This committee supplements active participation in the Ontario Health and Safety Act's Internal Responsibility System.

Within the industry, Guelph Hydro participated in safety events throughout 2014. In October 2014, Guelph Hydro joined with neighboring utilities (Waterloo North Hydro, Kitchener Wilmot Hydro, and Cambridge & North Dumfries Hydro) to promote electrical safety and the sharing of best practices between their operations personnel at a Joint Utility Safety Meeting. Over 200 employees from the four utilities plus guests from six other hydro utilities met at 2 sessions in Kitchener. Guelph Hydro's Manager of Loss Prevention & Environmental Compliance provided two presentations to peer groups, speaking twice at Workplace Safety and Prevention Services (WSPS) meetings. Guelph Hydro also sponsored the October 2014 WSPS Regional Safety Conference.

Externally, Guelph Hydro organizes workshops to educate local contractors and first responders about handling electricity safely in their professions. For instance, Guelph Hydro presented four "Electrical Safety for First Responders" seminars to the Guelph Police Service 911 Operators, and offered various Electrical Safety presentations and seminars to several Guelph businesses.

In addition, since 2002, Guelph Hydro has sponsored and participated in Electrical Safety and Conservation presentations in the forty elementary schools (JK-8) in Guelph and Rockwood. This program educates one third of the students in the company's service territory annually. In 2014, Guelph Hydro offered a Basic Electricity presentation to the Grade 6 science classes at a Guelph elementary school.

Additionally, Guelph Hydro welcomed elementary school students, teachers and parent volunteers to its table at the City of Guelph's annual Emergency Preparedness Day function held in May 2014. The utility also had a table at the Guelph Eramosa Emergency Preparedness Open House at the Rockwood Fire Hall that month.

Guelph Hydro's commitment to health and safety has been recognized by several organizations. In 2013, the Infrastructure Health & Safety Association (IHSA) awarded Guelph Hydro the ZeroQuest Sustainability Award, the highest level of recognition a company can achieve in the ZeroQuest program. The ZeroQuest Program is a safety management system that is sponsored by the Infrastructure Health & Safety Association that uses a system of progressive audits on processes to manage safety and wellness programs and matches them with outcomes such as corporate goals, engineering designs, work procedures and accident prevention. It typically takes approximately nine years to accomplish the various stages of the program. Guelph Hydro has achieved the highest level of Platinum in 2013 and now continues with a successor program known as Certificate of Recognition ("COR").

The Manager of Loss Prevention & Environmental Compliance received a Community Partner Award from the Guelph Police Service at their annual awards ceremony in May 2014 to recognize his contributions to promoting safety in the community. In March 2014 Guelph Hydro received its 11th President's Award from the Infrastructure Health & Safety Association for completing three consecutive years, or 500,000 person hours, without any lost time injuries.

In 2014, Guelph Hydro completed the highest level of sustainability (Platinum) in adopting IHSA's ZeroQuest Safety Management System. In 2015 and beyond, Guelph Hydro will undertake a more rigorous system of process audits now that the company subscribes to IHSA's COR (Certificate of Recognition). This system of process audits keeps records of proficiency training, re-certification and results of workplace audits. Any Ministry of Labour orders and regulation 22-04 compliance records can also be tracked along with relevant Notices of Projects held by Operations and contractors. The

same tool will be used to track and keep all employees that are affected by the Ministry of Transportation's hours of work and time balance for System Control Room Operators under the *Employment Standards Act* up-to-date in their training.

Guelph Hydro will also continue with all public safety education programs in schools, and intends to play an advocacy role with the Electric Safety Authority on safe limits of approach and preserving adequate barriers on high voltage system to restrict public access. Guelph Hydro is hosting a contractor's safety seminar in May 2015 and continuing training of first responders. Guelph Hydro will also participate in the Eramosa Township "Emergency Preparedness Days" and will incorporate a safety element into its CDM functions (e.g., at Home Shows).

<u>Plan to meet Guelph Hydro's Conservation and Demand Management Objective (tied to RRFE Customer Focus and Public Policy Responsiveness Outcomes)</u>

Guelph Hydro has been a leader in delivering CDM programs to its customers from the start of the Province's CDM initiative in 2004, first under the OEB 2004-2006 CDM program, followed by the Ontario Power Authority (OPA) "Every Kilowatt Counts" 2007-2010 CDM program, and most recently the 2011-2014 OPA "saveONenergy" CDM program. Currently Guelph Hydro is preparing for CDM program design and delivery for the 2015-2020 Conservation First Framework (CFF) CDM program.

Over these years Guelph Hydro has worked closely with many commercial, industrial, and institutional customers, vendors and service providers, and has partnered with local agencies, to deliver innovative CDM programs. Since 2007, the company has successfully offered its customers OPA conservation programs across all customer segments. For residential customers, these have included: Heating & Cooling Incentive; *peaksaver* PLUS®[2] Residential Demand Response Program; Energy

[2] ***peaksaverPLUS***® is a registered trademark of Toronto Hydro Corporation. Used under license.

Efficiency Product Coupons; and Fridge & Freezer Pickup, as well as the Home Assistance Program for Low Income customers.

Programs for businesses included Small Business Lighting; Audit Funding; High Performance New Construction; and Retrofit, Guelph Hydro's most successful program. Through the Process and Systems Program, Industrial customers could undertake Preliminary and Detailed Engineering Studies, participate in the Demand Response (DR3) program, or apply for Energy Managers or Capital Incentives to support larger process-related energy efficiency improvement projects.

Throughout the delivery of these programs, Guelph Hydro had exceeded its 2014 cumulative persistent energy savings target by the end of 2013 as confirmed by the OPA's 2013 Verified Results Report, and has provided customers with over $5.5 million in incentives towards their energy conservation projects. By year-end 2014, Guelph Hydro expects to have achieved over 135% of its 4-year energy savings target, and close to 100% of its demand target. These results which are subject to IESO confirmation later in 2015 are better than the anticipated provincial average results for both categories.

Guelph Hydro's successful CDM delivery has generated additional revenues for the utility through various Performance Payment mechanisms. Exceeding targets under the "Every Kilowatt Counts" 2007-2010 CDM Program generated close to $775,000 in performance payments. Under the 2011-2014 "saveONenergy" CDM Program Guelph Hydro received a $1.23M performance incentive in 2014, with an additional $450-$500k in Cost Efficiency and Performance Incentives anticipated when the 2011-2014 results have been validated and finalized later in 2015. Guelph Hydro itself has also directly participated in CDM programs, through lighting efficiency upgrades and enrolling its natural gas fired generator in the Demand Response 3 (DR3) program. DR3 program participation is expected to generate over $20k in annual payments over the life of the participation contract, with over $10k received in 2014.

In addition to delivering the provincial saveONenergy conservation programs, Guelph Hydro continued to support other local conservation programs such as the City of Guelph's "SmartWash Rebate" and "Royal Flush" water and energy efficiency programs, as well as provide local libraries with "Kill-a-Watt" meters to lend out to residents to assist them in conducting their own home energy audits.

Guelph Hydro has been fortunate that its ultimate owner, the City of Guelph, has taken a community-wide approach to CDM through its Community Energy Initiative which is a comprehensive, long-term City-wide plan that is intended to create a healthy, reliable and sustainable energy future by continually increasing the effectiveness with which energy and water resources are used and managed. Guelph Hydro considers that this City-wide initiative has been critical in fostering a culture of conservation which has assisted it to deliver its share of the Province's CDM targets.

The CDM results enjoyed by Guelph Hydro customers have been attained in part through collaborative efforts with a number of local and regional partners. These partners include local agencies and non-profit organizations such as the Chamber of Commerce, the Salvation Army, and eMerge Guelph, as well as various municipal departments for joint promotion of energy and water efficiency programs. Guelph Hydro has collaborated with neighbouring as well as regional LDCs for program delivery cost sharing, joint marketing and promotion, sharing best practices, as well as identifying and removing barriers to program participation. Guelph Hydro has also explored potential conservation program opportunities with Union Gas, the gas distribution utility servicing Guelph and Guelph Township.

Guelph Hydro intends to continue to lead in delivering CDM programs to its customers.

Plan to meet Guelph Hydro's Financial Goals (tied to RRFE Financial Performance Outcome)

Guelph Hydro's financial goal is to position the company to meet its allowed return on equity over the medium term, while continuing to provide good value and excellent distribution service for ratepayer dollars. There are three main reasons for Guelph Hydro's (average accounting) return on equity being below its deemed return on equity in recent years: (i) its under-leveraged balance sheet, (ii) an under-recovery of depreciation expense in its 2012 rebasing application, and (iii) an under-recovery of capital costs in its 2012 rebasing application.

Balance Sheet Structure: Guelph Hydro last undertook a long-term debt issue in December 2010. Part of the proceeds of this debt issue was used to retire notes with its municipal shareholder and with its parent company. The balance of the proceeds was used to fund the roll out of the smart meter program, and to fund the construction of the Arlen Transformer Station which was commissioned at the end of 2011. Since that time, Guelph Hydro has continued with a steady program of making necessary investments in distribution infrastructure and distribution plant maintenance, where capital expenditures have been financed using operating cash flows. While capital investments could have been deferred or reduced, practical considerations including quality of service delivery and safety spoke strongly against deferring such items. Because Guelph Hydro made the necessary capital investments out of operating cash flows, there has been a steady deterioration of its actual debt-to-equity structure which has led to a commensurate deterioration in the company's accounting ROE. Guelph Hydro plans to adjust its capital structure by undertaking a $30 million long-term debt issue as soon as practical (but no later than mid-2016).

Under-Recovery of Depreciation Expense Due to IFRS Transition: Following Guelph Hydro's 2012 rebasing application, the OEB permitted Guelph Hydro to set up a deferral account to track the rate impact of PP&E valued under Canadian Generally Accepted Accounting Principles (CGAAP), compared to PP&E valued under IFRS. The period

affected by this review was from the effective date of the adoption of IFRS to the period in which the IFRS-valued PP&E could be brought into the ratebase. For Guelph Hydro this period was from 2010 to 2011. For the two years in question, it was determined that the change to IFRS accounting had the impact of increasing the Net Book Value of PP&E by $1.53 million. Because the revenue requirement consequence of the write up of the NBV of the PP&E had already been recovered from ratepayers, the write up of NBV should not and did not attract a corresponding increase in distribution rates. The OEB proposed a mechanism to amortize this $1.53 million and its associated returns, out of the rates over the entire rate period (2012-2015). This resulted in a $381,500 per year reduction in both revenue and depreciation expense for regulatory purposes, and a $104,000 per year reduction in the return on ratebase, both as stated under IFRS. Under IFRS, Guelph Hydro continued to recognize the full amount of depreciation expense in its financial statements, but the full amount of depreciation and its associated return on ratebase was not being recovered in distribution revenue due to the rate adjustments noted above. As a result, the higher accounting depreciation expense reported under IFRS which led to lower net income, and therefore a lower ROE.

Under-Recovery of Depreciation Expense Due to Understatement in 2012 Rebasing Application: In addition to the PP&E issue described above, under IFRS, fixed assets are required to be componentized. In its 2012 rebasing application, Guelph Hydro had not completed the componentization of its head office building (395 Southgate Drive) and the depreciation expense that was calculated for the 2012 rebasing application was based on an estimated useful life of 50 years for this building. Under IFRS, depreciation on Southgate is approximately $126,000 higher per year than what was submitted in the 2012 rate application.

Under-recovery of Capital Costs in 2012 Rebasing Application: Lastly, approximately $4.8 million in additional capital expenditures were incurred for the Arlen TS after the 2012 rebasing application was submitted due to higher overall projects costs and higher

costs from Hydro One. Hydro One scope of work was not adequately factored into the 2012 rate filing due to changes with standard of connection to the transmission system; additional resources, primarily labour, had to be deployed to bring the project in service on time. These incremental costs became known substantially after Guelph Hydro's 2012 application had been filed with the OEB. As a result, Guelph Hydro's actual depreciation expense was about $131,000 over that which is currently reflected in rates. The additional depreciation expense is reflected in Guelph Hydro's 2016 Test Year expenses. Please see Exhibit 1, Tab 2, Schedule 4, page 6, 2.4.2.D Rate Base and Capital Plan.

With respect to its overall financial position, Guelph Hydro expects that OEB approval of actual 2016 opening ratebase and actual 2016 depreciation expense, and the reflection of the cost consequences of those items in rates, will materially assist Guelph Hydro to move toward a normalized level of ROE. In 2017, Guelph Hydro's financial position will also be assisted by the full year's revenue requirement consequences of capital expenditures undertaken in the Test year being reflected in distribution rates.

Summary

In summary, Guelph Hydro's 2015 to 2019 Business Plan was developed by taking a balanced view towards continuing with the Company's mission and strategic imperatives and the important outcomes expected by the OEB from its RRFE. All costs and projected revenues have been closely examined and reasonable assumptions respecting growth have been used. The 4th Generation IRM framework will challenge Guelph Hydro's management to continue to find operational savings and efficiencies throughout the organization in order to achieve reasonable financial results. Nevertheless, management remains confident that the financial challenges will not hinder the delivery of excellent distribution service to its customers nor Guelph Hydro's continued focus on safety and reliability.

2.4.2 EXECUTIVE SUMMARY

Below, Guelph Hydro presents summarized information on the following key elements of its application:

A. Revenue Requirement
B. Budgeting and Accounting Assumptions
C. Load Forecast Summary
D. Rate Base and Capital Plan
E. Operations, Maintenance and Administration Expense
F. Cost of Capital
G. Cost Allocation and Rate Design
H. Deferral and Variance Accounts
I. Bill Impacts

2.4.2.A REVENUE REQUIREMENT

a) Guelph Hydro requests a Service Revenue Requirement for 2016 in the amount of $34,319,428 which provides for the recovery of the following:

- Operations, Maintenance, and Administration Expenses;
- Property Taxes;
- Depreciation/Amortization Expense;
- Payments in Lieu of Income Taxes; and
- Return on Rate Base (Debt Interest Expense + Return on Equity)

b) The 2016 Service Revenue Requirement represents an increase of $6,347,116 or 22.69% over the 2012 Board-approved amount of $27,972,312.

Based on the projected load forecast and customer growth for the 2016 Test Year, Guelph Hydro has estimated a revenue deficiency of $4,084,908 based on its current rates. The computation of the revenue deficiency is shown in Exhibit 6, Tab 5, Schedule 1, 2.9.5 Gross Deficiency or Sufficiency in Revenue.

Therefore, Guelph Hydro seeks the OEB's approval to revise its electricity distribution rates. The rates proposed to recover its projected revenue requirement and other relief sought are set out in Exhibit 8, Tab 10, Schedule 1, Page 15, 2.11.10 Tariff of Rates and Charges to this Application.

The information presented in this Application sets out Guelph Hydro's forecasted results for its 2016 Test Year. Guelph Hydro is also presenting the historical actual information for fiscal years 2012, 2013, and 2014, and forecast results for the 2015 Bridge Year.

The main drivers of the revenue deficiency, as outlined in Exhibit 6, Tab 6, Schedule 1, 2.9.6 Summary of Drivers of Test Year Deficiency are:

- An increase in Operations, Maintenance and Administration expense (including property taxes) of approximately $1.4M, due mainly to cost increases from the current collective bargaining agreement with its union, the IBEW, from market-based salary increases for its management employees, and from the need to hire new employees in critical areas ahead of retirements,
- A net increase in FTE count of 14.13 over the 2012 figure,
- A net increase in benefit-related costs,
- Increase in depreciation expenses of $1.2M, mainly resulting from net increases in ratebase of $23.3 million over the 2012 figure,
- Incremental return on rate base of $0.7M as result of the increase in rate base since Guelph Hydro's last Cost of Service Application in 2012 of approximately 23.3M,
- Increase in PILs of $0.9M arising from the increase in taxable income.

2.4.2.B BUDGETING AND ACCOUNTING ASSUMPTIONS

Guelph Hydro compiles budget information for the three major components of the budgeting process: revenue forecasts, operating, maintenance and administration expense forecast, and capital budget forecast. This budget information is compiled for both the 2015 Bridge Year and the 2016 Test Year, and also includes a *pro forma* Business Plan for the next three years, 2017 to 2019. Guelph Hydro's 2015 and 2016 Business Plan is provided in Appendix 1-A of this Exhibit. Please note that the Business Plan budget narrative and the financial estimates references in the narrative are based on Guelph Hydro's financial reporting accounts and may not tie precisely to the financial numbers in Guelph Hydro's revenue requirement model and related schedules. Additionally, Guelph Hydro's financial reporting includes revenues from non-rate regulated operations which could also lead to differences between the financial reporting accounts and the revenue requirement model and related schedules.

Economic Overview

Guelph Hydro used both general inflation and specific cost drivers for its 2015 Bridge Year and 2016 Test Year forecast of operating costs. Labour costs reflect the annual wage rate adjustments that Guelph Hydro is required to pay under its collective agreement for its unionized employees. For non-unionized employees, the labour cost forecast is largely driven by increases that reflect market-competitive compensation. Further details are provided in the sections below and in Appendix 1-A with respect to Guelph Hydro's Business Plan.

With respect to forecasts of interest and inflation rates for the Test Year, Guelph Hydro relied on a consensus forecast of these financial metrics from three Schedule I Chartered Banks (Royal Bank, CIBC and Bank of Montreal). With respect to economic growth as a determinant of load, Guelph Hydro's load forecast relies upon economic, weather, and seasonal variables. Guelph Hydro believes that these sources are credible and widely accepted for purposes of business planning.

Test Year Accounting Standard

Guelph Hydro transitioned to International Financial Reporting Standards (IFRS) January 1, 2011 and applied for 2012 rate rebasing under MIFRS. There have been no significant changes to accounting standards or practices since that time, and Guelph Hydro is applying for 2016 Test Year rebasing under MIFRS.

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

The OM&A expenses for the 2015 Bridge Year and the 2016 Test Year have been based on an in-depth review of operating priorities and requirements and are strongly influenced by the prior year experience, year-to-date results, and expected changes for the forecast periods. OM&A expenses for the company are also influenced by the wage increases built into the company's Collective Agreement with its union, the IBEW. The current Collective Agreement was successfully negotiated at the start of 2013 and extends to March 31, 2017. Annual wage increases under the current Collective Agreement are as follows:

- April 1, 2013: 2.75%
- April 1, 2014: 1.75%
- September 29, 2014: 1.0%
- April 1, 2015: 2.75%
- April 1, 2016: 2.5%

Efficiencies achieved, but which are not factored into the compensation increases above include, a whole-scale move to implementing electronic time sheets and pay stubs, and Lunch on the job site. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers. Please refer to Efficiencies and Cost Improvements listed at Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness.

Guelph Hydro continues to work on finding efficiencies throughout the organization, and apart from the wage increases noted above, the balance of the OM&A budget reflects an average increase of 2.0% in 2015 and 1.50% in 2016.

Guelph Hydro's Budget Process

1. *Summary of Budget Process*

Guelph Hydro's annual budget process normally commences in July-August with a final approved by the Board of Directors ("BOD") by the end of the fiscal year. For this Application, Guelph Hydro prepared and the BOD approved its 2016 budget in November 2014. Gross revenues were determined using assumptions respecting cost of power costs, load growth, and the estimated revenue deficiency. For the purposes of determining OM&A expenses, Guelph Hydro used an extensive department-by-department budgeting process as follows:

- Blank Budget templates were prepared and issued to individual departments to the respective department manager
- Departments completed their budgets with explanatory notes based on their best forecast of (2015 and) 2016 expenses at the time. As part of the departmental budget process:
    - A benefit – risk analysis was required for each new full or part time position.
    - An analysis of employee efficiencies was conducted by the senior management team that examined historic as well as future possibilities.
- Each departmental budget was reviewed in detail by their respective directors and/or managers.
- The CFO also reviewed the individual budgets and analyzed variances to the 2015 budget and followed up on significant changes with each department.

- The CFO and the COO reviewed each departmental expense and advised for any changes or concerns.
- The CFO reviewed the final results and reviewed all significant changes in the budget.
- The Board Of Directors (BOD) – Finance Audit Committee reviewed the 2016 Budget and provided a recommendation to the BOD to approve it.

2. *Summary of Budget Assumptions*

Guelph Hydro's Budgets are prepared within the context of the Corporation's long term strategic plan as well as the OEB's RRFE Outcomes, and contain the following five key imperatives:

1. Deliver balanced financial and social returns by investing in quality energy production and distribution infrastructure
2. Be a leader in the provision and implementation of an energy conservation and sustainable energy culture to our customers and employees that is consistent with the energy initiatives of our shareholder and Province
3. Be a leader in efficient, safe, reliable, and economic distribution of energy
4. Be a great place to work and communicate to attract and retain employees
5. Ensure we enhance our position as an asset to our shareholder and the communities by engaging all stakeholders in our key initiatives and objectives

In addition to the context of the Corporation's strategy, consideration in the budgeting process was also given to major new business requirements such as the installation of an interval meter (MIST) on any new installation that was forecast to have a monthly average peak demand during a calendar year of over 50 kW (amendment to Distribution System Code issued on May 21, 2014 and came into force on August 21, 2014).

Distributors have until August 21, 2020 to install a MIST meter on any existing installation that has a monthly average peak demand during a calendar year of over 50 kW.

Capital Budget

The capital budget forecast for 2015 and 2016 is influenced, among other factors, by Guelph Hydro's urgency of maintaining a safe and reliable distribution system. All proposed capital projects are assessed within the framework of its capital budget priority and are outlined in Exhibit 2, Tab 2, Schedule 2, 2.5.2.2 Required Information. The budgets for both 2015 and 2016 were prepared in accordance with Modified IFRS.

Operational Budget Assumptions:

- Wages and Benefits
    - A total of seven additional employees are required in 2015, and three additional employees are required in 2016 to meet the corporation's requirements as noted in the table below:

Table 1-1: New Required FTEs

New 2015 FTEs	New 2016 FTEs	Summary Comments
1 Lineperson 1 Meterperson	1 Lineperson	Transitional costs to train apprentices before employees retire. Approximately 34% of this cost is capitalized once apprentices are fully trained.
1 Engineering Technician		To complete ongoing design work; which can be more effectively managed in-house, resulting in anticipated higher quality/productivity. Approximately 34% of the cost is capitalized and offset by not outsourcing work estimated to be $100K/year.
1 SCADA Technologist		For LDC Smart Grid development and deployment of intelligent monitors, switches, etc.
1 Energy Manager 1 Energy Services Representative		To meet more aggressive CDM delivery obligations. Both positions are expected to be fully funded through a future CDM program funding mechanism and are only included in this table for information.
1 Regulatory Accountant		Required to manage the increased regulatory accounting requirements and regulatory accounting policies as issued by the OEB. Responsible for enhancing and maintaining the regulatory reporting and regulatory accounting systems.
	1 System Control Operator (SCO) 1 Control Room Supervisor	This cost is to move to an expanded 24/7 Control Room and a shared services model with other LDCs. In the latter instance, the costs are expected to be offset by revenue from participating LDCs. This FTE is also needed for succession planning purposes.

- Salary increases are assumed to be 2.75% in 2015 and 2.5% in 2016 for bargaining unit employees (consistent with the current collective agreement) and 2.75% in 2015 and 2.5% in 2016 for management level employees,

based on performance and the market. There are no automatic "economic" increases for management employees.

- According to the Distribution System Code Section 5.1.3, Guelph Hydro has a requirement to install interval Metering Inside Settlement Timeframe ("MIST") meters on any new metering installation that is forecast to have a monthly average peak demand during a calendar year of over 50 kW; and by August 21, 2020 to have installed a MIST meter on any existing installation that has a monthly average peak demand during the calendar year of over 50 kW. Guelph Hydro anticipates the installation of over 500 new interval MIST meters by August 21, 2020. Guelph Hydro anticipates the cost for this work to be accommodated within the normal annual meter capital program, due to the multi-year replacement timeline. Guelph Hydro does anticipate some increase in annual hardware and software systems operating and licensing costs, as well as an impact on daily data processing and settlement costs. However, until detailed project implementation requirements are fully developed, the impact on annual operating costs cannot be quantified.
- For 2015 and 2016, a number of one-time operating costs were budgeted as follows:
    - Third party services for rate filing $234,000 in 2015 and $82,500 in 2016; Guelph Hydro has included 1/5 (i.e. $63,300) of these one-time costs in the 2016 budget (please see Exhibit 4, Tab 3, Schedule 4, 2.7.3.4 One-Time Costs)
- An inflationary factor of 2% was applied to all non-payroll related expense items for 2015 and 2016 budgets.

2.4.2.C LOAD FORECAST SUMMARY

Guelph Hydro's energy sales and revenue forecast model was updated to reflect the most recent information. The multi-factor, single equation regression model was then used to prepare the total throughput volume and revenue forecast at existing rates for fiscal 2015 and 2016. A further allocation of total throughput volume into the various rate classes is done based on a forecast of customers and historical usage patterns per customer. The model uses weather normalized data as outlined in Exhibit 3, Tab 1, Schedule 1, 2.6.1.1 Multivariate Regression Model, and includes such parameters as weather (Heating degree-days, Cooling degree-days), economic output (manufacturing GDP growth), calendar variables (days in month, number of peak hours), and specific dummy variables (blackout flag). Guelph Hydro includes adjustments to the load forecast results as an effect of CDM Energy savings for 2016 Test Year.

Several tests were conducted to determine that the variables included in the 2012 Board-approved load forecast still provide the most accurate prediction of Guelph Hydro's load. Additional variables were tested in place of and in addition to the existing variables, as explained in detail in Exhibit 3, Tab 1, Schedule 1, 2.6.1.1 Multivariate Regression Model. Based on the regression and correlation statistics, Guelph Hydro believes that the same variables used in the 2012 Board-approved model will provide the best prediction of Guelph Hydro's load for the 2015 and 2016 years. Table 1-2 provides the 2016 Test Year consumption and customer growth using the 2012 Board-approved model.

Table 1-2

Load and customer growth from the 2012 Board approved

Year	Billed (kWh)	Growth (kWh)	Percent Change	Customer/ Connection Count	Growth	Percent Change (%)
2012 Board-Approved	1,676,018,424			66,470		
2016 (T) Adjusted for CDM savings	1,780,523,469	104,505,045	6.24%	69,680	3,209	4.83%

Forecasting Method for Customer Numbers and Billed Consumption

The forecast of customers by rate class was determined using a geometric mean analysis (the geometric mean was calculated over 12 years 2003 to 2014 of customers' growth rate). Based upon the geometric mean analysis, the expected number of customers/connections for the 2016 Test Year is of 69,680, or a 4.83% increase over the 2012 Board-approved customers/connections (please see the table above).

The forecast of billed energy by rate class was developed based on a forecast of customers and historical usage patterns per customer. For rate classes that have weather sensitive load, their forecasted billed energy was adjusted to ensure that the total billed energy forecast by rate class is equivalent to the total weather-normalized billed energy forecast that has been derived from the regression model. The forecast of consumption by rate class was determined using a geometric mean analysis (the geometric mean was calculated over 12 years 2003 to 2014 of consumption per customer growth rate). For those rate classes that use kW for the distribution volumetric billing determinant, an adjustment factor was applied to class energy forecast based on the historical relationship between kW and kWh.

2.4.2.D RATE BASE AND CAPITAL PLAN

Summary of the major drivers of the Distribution System Plan

The capital budget forecast for 2015 and 2016 is influenced, among other factors, by Guelph Hydro's priority to maintain a safe and reliable distribution system. All proposed capital projects are assessed within the framework of its capital budget priority and are outlined in Exhibit 2, Tab 2, Schedule 2, 2.5.2.2 Required Information. In summary, Guelph Hydro's capital budget priority continues to be a steady focus on:

- System renewal and expansion;
- Renewable generation connections;
- Customer connections and regulatory requirements;
- System growth and planning criteria;
- General plant in support of daily operations;
- Smart grid development and implementation; and
- Regionally planned infrastructure

Consideration in the budgeting process was also given to major new business requirements such as the installation of an interval MIST meter on any new installation that is forecast to have a monthly average peak demand during a calendar year of over 50 kW (amendment to Distribution System Code issued on May 21, 2014 and came into force on August 21, 2014). Distributors have until August 21, 2020 to install a MIST meter on any existing installation that has a monthly average peak demand during a calendar year of over 50 kW. Guelph Hydro notes that even though it considered the costs of this initiative, deriving a budget for expected costs was too preliminary, and in any case, understands that the OEB will establish a deferral account to capture costs associated with this initiative for disposition at a later date.

Guelph Hydro has developed a Consolidated Distribution System Plan ("DSP") in accordance with Chapter 5 of the Ontario Energy Board's *Filing Requirements for Electricity Distribution Applications, Consolidated Distribution System Plan Filing Requirements* dated March 28, 2013 ("Chapter 5"). Guelph Hydro's Distribution System Plan presents Guelph Hydro's fully integrated approach to capital expenditure planning. Guelph Hydro's DSP in Exhibit 2, Appendix 2-A includes documentation of the asset management process that supports Guelph Hydro's future 5 year capital expenditure plan while detailing the history of its past 5 years' activities.

Guelph Hydro's DSP builds on the Asset Management Plan that formed part of Guelph Hydro's 2012 Cost of Service Rate Rebasing Application (EB-2011-0123) and will continue to evolve over time.

- The 2015 and 2016 capital budgets are prepared based on the projects that are required to sustain a reliable and adequate distribution system.
- Guelph Hydro operates in a city that is experiencing steady growth in customers. As such, a substantial portion (approximately 66%) of its annual capital budget over the next few years relates to distribution infrastructure to support the connections of new homes and businesses.
- Costs for each capital project are based on estimates of labour, equipment and material and, where applicable, contract services.

Guelph Hydro undertakes a detailed and comprehensive process using the results of the Asset Management analysis together with cost estimates to prioritize and formulate its capital expenditures budget.

Rate Base Requested for the 2016 Test Year

Guelph Hydro has provided its rate base calculations for the years 2012 Actual, 2013 Actual, 2014 Actual, 2015 Bridge Year and 2016 Test Year in Table 1-3 below. Guelph

Hydro has calculated its 2016 rate base as $162,960,102 (please see Exhibit 2, Tab 1, Schedule 1, 2.5.1.1 Overview).

Table 1-3: Summary of Rate Base

Description	2012 Actual Year MIFRS	2013 Actual Year MIFRS	2014 Actual Year MIFRS	2015 Bridge Year MIFRS	2016 Test Year MIFRS
Opening Balance Gross Fixed Assets	$122,576,198	$131,947,307	$138,073,015	$146,798,079	$164,161,260 *
Closing Balance Gross Fixed Assets	$131,947,307	$138,073,015	$146,798,079	$163,560,606	$174,943,260
Average Gross Fixed Assets	$127,261,753	$135,010,161	$142,435,547	$155,179,343	$169,552,260
Opening Balance Accumulated Depreciation	($9,690,632)	($15,060,711)	($20,601,182)	($26,338,513)	($32,544,287)
Closing Balance Accumulated Depreciation	($15,060,711)	($20,601,182)	($26,338,513)	($32,325,338)	($38,846,473)
Average Accumulated Depreciation	($12,375,672)	($17,830,946)	($23,469,847)	($29,331,925)	($35,695,380)
Average Net Fixed Assets	$114,886,081	$117,179,214	$118,965,700	$125,847,417	$133,856,880
Working Capital	$164,758,517	$182,851,859	$197,135,779	$222,319,897	$223,870,940
Working Capital Allowance - 2012 to 2015 at 15%; 2016 at 13%	$24,713,778	$27,427,779	$29,570,367	$33,347,985	$29,103,222
Rate Base	$139,599,859	$144,606,993	$148,536,067	$159,195,402	$162,960,102

*** Note:** Inclusion of the Zigbee Chip in 2016 Opening Gross Fixed Assets balance explains the deviation from 2015 Closing Gross Fixed Assets balance.

Guelph Hydro has provided a summary of its calculations of the cost of power and controllable expenses used in the calculations for determining working capital for the years 2012 Board-approved, 2012 Actual, 2013 Actual, 2014 Actual, 2015 Bridge Year and 2016 Test Year in Table 1-4, below.

Details of Guelph Hydro's calculation of its working capital allowance are provided in Table 1-4 below. Details of Guelph Hydro's Cost of Power calculations are provided in Exhibit 2, Tab 1, Schedule 3, Page 8, 2.5.1.3 Allowance for Working Capital.

Table 1-4: Summary of Working Capital

Description	2012 Approved	2012 Actual	2013 Actual	2014 Actual	2015 Bridge Year	2016 Test Year
Cost of Power	153,524,605	151,498,276	167,693,661	183,149,271	207,164,311	207,681,446
Operations	4,003,069	3,818,692	4,091,889	4,608,958	4,889,213	5,439,342
Maintenance	1,850,075	1,522,912	2,042,953	1,453,878	1,733,255	1,891,630
Billing & Collecting	2,684,296	2,792,596	2,623,970	2,189,614	1,671,102	2,094,042
Community Relations	271,158	31,494	55,086	111,711	105,928	94,998
Administration & General Expense	5,413,903	5,039,759	6,273,693	5,740,105	6,933,569	6,884,849
Property Taxes	0	492,351	478,647	327,567	330,126	335,074
Less: Adjustment for fully allocated depreciation		437,562	408,041	445,324	507,608	550,440
Working Capital	167,747,105	164,758,517	182,851,859	197,135,779	222,319,897	223,870,940

In the letter dated April 12, 2012, the Board provided an update to electricity distributors and transmitters on the options established in the June 22, 2011 Cost of Service Filing Requirements for the calculation of the allowance for working capital for the 2013 rate year. The distributors may take one of the two approaches for the calculation of their allowance for working capital: (1) the 13% allowance approach; or (2) the filing of a lead/lag study.

Guelph Hydro has taken 13% allowance approach for the 2016 Test Year in this Application.

Change in Rate Base from the last Board Approved

Guelph Hydro has analyzed in detail the rate base variances in Exhibit 2, Tab 1, Schedule 1, 2.5.1.1 Overview. A summary of the change in rate base from the last Board-approved ($ and %) is presented in the tables below.

The cumulative change in Guelph Hydro's 2016 Test Year rate base over the Board-approved 2012 rate base is $23,283,383. Of this amount, 83% or just over $19 million reflects Guelph Hydro's steady investments in its distribution system over this period. The remaining 17% or $3.9 million reflects the change in the working capital allowance

stemming from the significant increase working capital of $224 million forecast for the 2016 Test Year compared to a working capital requirement of $168 million in 2012. The increase in working capital is largely being driven by the significant increase in commodity costs of power over this period.

Guelph Hydro's 2012 Rate Base variances are presented in Table 1-5 below.

Table 1-5: 2012 Actual vs 2012 Approved Rate Base Variances

Rate Base Variances ($ and %)

Description	2012 Approved	2012 Actual Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (Average)	177,044,156	$127,261,753	($49,782,403)	-28.12%
Accumulated Depreciation (Average)	$62,545,027	$12,375,672	($50,169,356)	-80.21%
Net Book Value	114,499,128	$114,886,081	$386,953	0.34%
Average Net Book Value	$114,499,128	$114,886,081	$386,953	0.34%
Working Capital	$167,747,105	$164,758,517	($2,988,588)	-1.78%
Working Capital Allowance	$25,177,591	$24,713,778	($463,813)	-1.84%
Rate Base	**$139,676,719**	**$139,599,859**	**($76,860)**	**-0.06%**

As part of the transition to IFRS, Guelph Hydro elected to re-set the gross capital cost of its asset base back to the net book value as of the date of transition, January 1, 2010. This re-set explains the variance of the gross fixed assets and the accumulated depreciation. In order to explain the drop on actual gross fixed assets and accumulated depreciation, Guelph Hydro presented in Table 1-6 below the gross assets transition from CGAAP to IFRS.

Table 1-6: Gross Fixed Assets Transition from CGAAP to IFRS

Gross Fixed Assets under CGAAP	$141,595,382
Accumulated Depreciation under CGAAP	($49,741,295)
NBV under CGAAP/ Gross Cost under IFRS Jan 1, 2010	$91,854,087
Gross Additions 2010	$17,754,658
Gross Disposals 2010	($4,481,888)
Gross Cost IFRS, Dec. 31, 2010	$105,126,857
Gross Additions 2011	$25,925,230
Gross Disposals 2011	($133,069)
Gross Cost IFRS, Dec. 31, 2011	$130,919,018
Gross Additions 2012	$11,492,445
Gross Disposals 2012	($21,761)
Gross Cost IFRS, Dec. 31, 2012	$142,389,702
Add: Gross Cost Intangible Asset	$331,204
Less: Construction Work-in-process (Distribution system)	($1,061,348)
Less: Construction Work-in-process (Non distribution system)	($129,274)
Add: Reclassification Disposed Stranded meters Accumulated Depreciation - Audit FS	$2,208,232
Less: Gross Cost of Contributed Capital that was previously disclosed separately as Deferred Revenue	($11,190,555)
Less: Gross Cost of Zigbee Chip that was removed in 2012	($600,655)
Gross Cost IFRS Dec. 31, 2012 for OEB purposes	**$131,947,306**

Table 1-7(a) shows a detailed summary of Guelph Hydro's 2012 actual net book value variances from 2012 Board-approved

Table 1-7 (a)

Reconciliation 2012 Board-Approved vs. 2012 Actual Net Book Value Variance

CCA Class	OEB	Description	Actual Avg NBV	Approved Avg NBV	Variance
N/A	1805	Land	4,416,883	2,641,987	1,774,896
CEC	1806	Land Rights	0	0	0
1	1808	Buildings and Fixtures	14,978,436	16,691,170	(1,712,734)
N/A	1810	Leasehold Improvements	0	0	0
	1815	Transformer Station Equipment - Normally Primary above 50 kV	14,253,885	9,500,343	4,753,542
47	1820	Distribution Station Equipment - Normally Primary below 50 kV	1,529,546	1,475,946	53,599
	1825	Storage Battery Equipment	0	0	0
47	1830	Poles, Towers and Fixtures	15,334,306	15,608,411	(274,105)
47	1835	Overhead Conductors and Devices	11,981,620	12,535,118	(553,498)
47	1840	Underground Conduit	28,124,129	26,827,549	1,296,581
47	1845	Underground Conductors and Devices	25,246,067	26,099,063	(852,996)
47	1850	Line Transformers	11,500,471	11,955,544	(455,072)
47	1855	Services	4,674,509	4,738,904	(64,395)
47	1860	Meters	12,160,902	11,016,755	1,144,147
	1865	Other Installations on Customer's Premises	0	0	0
N/A	1905	Land	0	0	0
CEC	1906	Land Rights	0	0	0
1	1908	Buildings and Fixtures	0	0	0
	1910	Leasehold Improvements	0	0	0
8	1915	Office Furniture and Equipment	523,445	402,909	120,536
45	1920	Computer Equipment - Hardware	625,605	1,391,923	(766,318)
45.1	1925	Computer Software	0	1,064,880	(1,064,880)
10	1930	Transportation Equipment	1,644,694	1,712,280	(67,586)
	1935	Stores Equipment	0	0	0
8	1940	Tools, Shop and Garage Equipment	366,605	415,158	(48,553)
	1945	Measurement and Testing Equipment	0	0	0
	1950	Power Operated Equipment	0	0	0
	1955	Communication Equipment	0	0	0
	1960	Miscellaneous Equipment	13,074	179,041	(165,967)
	1970	Load Management Controls - Customer Premises	109,195	(0)	109,195
	1975	Load Management Controls - Utility Premises	0	0	0
47	1980	System Supervisory Equipment	513,985	530,467	(16,482)
	1985	Sentinel Lighting Rentals	6,157	6,158	(1)
	1990	Other Tangible Property	0	0	0
47	1995	Contributions and Grants	(33,387,833)	(30,294,744)	(3,093,088)
	1611	Intangible Assets - Computer software	270,078	0	270,078
	2070	Other Utility Plant	321	270	51
		Total before Reallocations	**114,886,081**	**114,499,128**	**386,953**

Additional Cost of Arlen TS: Capacity deficiencies of existing transformer stations within reach of the South service area of Guelph Hydro, necessitated the construction of Arlen TS and rational for this investment was presented at the 2012 CoS filing. The City of Guelph along with two other land developers cleared approximately 275 ha of land for an industrial business park serviced from the Hanlon Expressway. The growth of new developments and therefore electrical load is at the expected pace and Arlen TS is the

main supply station for this building activity. Arlen TS is the only bulk connected and IESO controlled station owned and operated by Guelph Hydro and the growth of the station moves across the threshold of needing 24/7 operational response in the Control Room. This will be covered in the evidence in Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness.

At the 2012 CoS filing, a projected cost was estimated at $14.8 million, but the final landed costs were $19.6 million and therefore the under-recovered value of the difference of $4.8 million in capital investment paid in 2012. The primary reasons for the variance are as follows:

The grid connection requirements were specific to standards that existing at the time on the two transmission circuits operated by Hydro One. At about the same time, additional work was done on the protection systems for these two circuits by Hydro One to improve contingency supply to the region that materially affected the design requirements of Arlen TS and needed to be incorporated to be consistent with the new Hydro One connection requirements. As a result, new high voltage breakers in addition to protection system with communication abilities to the source of the circuits which is at Hydro One Burlington TS, needed to be added and commissioned to connect Arlen TS. The distinction was that Arlen TS was LDC owned instead of being owned and operated as other TS`s supplying load into Guelph. This extra work contributed partly to additional cost including the upgraded protection systems, communications, breakers, engineering design changes and commissioning philosophy changes. The other reason for the extra cost was striving to respect a project commissioning date by the end of the year. Additional field resources were required and Arlen TS was connected to the transmission system on December 29th, 2011.

The costs for Arlen MTS are summarized in Table 1-7(b) below.

Table 1-7(b): ARLEN TS COST BREAKOUT in $ million

	2012 Filing	Final Costs	2016 recovery
Property	$1.9	$1.9	$0
Engineering and Environmental	1.1	2.2	1.0
Major Equipment	6.0	7.1	1.1
Construction and Commissioning	5.0	5.9	1.0
Bulk Supply Connection	0.5	2.2	1.7
Feeder Egress	0.3	0.3	0.0
Total	$14.8	$19.6	$4.8

Guelph Hydro's 2013 Rate Base variances are presented in Table 1-8 below.

Table 1-8: 2013 Actual vs. 2012 Approved Rate Base Variances

Rate Base Variances ($ and %)

Description	2012 Approved	2013 Actual Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (Average)	177,044,156	$135,010,161	($42,033,995)	-23.74%
Accumulated Depreciation (Average)	$62,545,027	$17,830,946	($44,714,081)	-71.49%
Net Book Value	114,499,128	$117,179,214	$2,680,086	2.34%
Average Net Book Value	$114,499,128	$117,179,214	$2,680,086	2.34%
Working Capital	$167,747,105	$182,851,859	$15,104,754	9.00%
Working Capital Allowance	$25,177,591	$27,427,779	$2,250,188	8.94%
Rate Base	**$139,676,719**	**$144,606,993**	**$4,930,274**	**3.53%**

Guelph Hydro's 2014 Rate Base variances are presented in Table 1-9 below.

Table 1-9: 2014 Actual vs. 2012 Approved Rate Base Variances

Rate Base Variances ($ and %)

Description	2012 Approved	2014 Actual Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (Average)	177,044,156	$142,435,547	($34,608,609)	-19.55%
Accumulated Depreciation (Average)	$62,545,027	$23,469,847	($39,075,180)	-62.48%
Net Book Value	114,499,128	$118,965,700	$4,466,571	3.90%
Average Net Book Value	$114,499,128	$118,965,700	$4,466,571	3.90%
Working Capital	$167,747,105	$197,135,779	$29,388,674	17.52%
Working Capital Allowance	$25,177,591	$29,570,367	$4,392,776	17.45%
Rate Base	**$139,676,719**	**$148,536,067**	**$8,859,348**	**6.34%**

Guelph Hydro's 2015 Rate Base variances are presented in Table 1-10 below.

Table 1-10: 2015 Bridge Year vs. 2012 Approved Rate Base Variances

Rate Base Variances ($ and %)

Description	2012 Approved	2015 Bridge Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (Average)	177,044,156	$155,179,343	($21,864,813)	-12.35%
Accumulated Depreciation (Average)	$62,545,027	$29,331,925	($33,213,102)	-53.10%
Net Book Value	114,499,128	$125,847,417	$11,348,289	9.91%
Average Net Book Value	$114,499,128	$125,847,417	$11,348,289	9.91%
Working Capital	$167,747,105	$222,319,897	$54,572,793	32.53%
Working Capital Allowance	$25,177,591	$33,347,985	$8,170,394	32.45%
Rate Base	**$139,676,719**	**$159,195,402**	**$19,518,683**	**13.97%**

Guelph Hydro's 2016 Rate Base variances are presented in Table 1-11 below.

Table 1-11: 2016 Test Year vs. 2012 Approved Rate Base Variances

Rate Base Variances ($ and %)

Description	2012 Approved	2016 Test Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (Average)	177,044,156	$169,552,260	($7,491,896)	-4.23%
Accumulated Depreciation (Average)	$62,545,027	$35,695,380	($26,849,647)	-42.93%
Net Book Value	114,499,128	$133,856,880	$19,357,752	16.91%
Average Net Book Value	$114,499,128	$133,856,880	$19,357,752	16.91%
Working Capital	$167,747,105	$223,870,940	$56,123,836	33.46%
Working Capital Allowance	$25,177,591	$29,103,222	$3,925,632	15.59%
Rate Base	**$139,676,719**	**$162,960,102**	**$23,283,383**	**16.67%**

Capital Expenditures requested for the 2016 Test Year

Guelph Hydro will continue to expand and reinforce its distribution system in order to meet the demand of new and existing customers in its service territory.

Guelph Hydro is requesting capital expenditures in amount of $10,782,000, net of capital contributions, for the following major distribution projects (please see more details in Exhibit 2, Tab 2, Schedule 2, 2.5.2.2 Required Information).

While detailed information on Guelph Hydro's capital investments and plans is contained in the Distribution System Plan in Exhibit 2, Appendix 2-A, at a high level, two capital investment categories — System Access investments and System Renewal investments — account for 71% of the total capital investments planned to be undertaken in 2016. The balance of Guelph Hydro's capital investments are made up of investments in System Service and General Plant.

System Access investments account for the highest portion of the capital expenditures for the Test Year and Forecast Period averaging 40% of total capital budget. These expenditures are an integral part of the distribution system and the most challenging to plan as they include a number of outside influences that contribute to the overall investment, including:

- Consultations with municipal officials to better understand future projects that could require the relocation of distribution system assets in support of System Access investments;
- Examination of City of Guelph forecasts of residential developments in support of System Access investments;
- Consultation with existing customers, specifically industrial and large use customers, to gain their perspective on current and future electrical needs to help plan the system accordingly in support of System Access investments.

System Renewal investments contribute the second largest portion of overall capital expenditures averaging approximately 33% of the investments in the 2016 Test year. Renewable expenditures are primarily dependent on the condition of distribution system assets and play a crucial role in the overall sustainment of the distribution system.

Change in Capital Expenditures from the last Board Approved ($ and %)

The total variance between 2012 actual project costs compared to 2012 Board-approved project costs related to projects in all 4 major investment categories (System Access, System Renewal, System Services and General Plant) was $341,116. Table 1-12 below summarizes Guelph Hydro's 2012 Actual vs. 2012 Board-approved capital expenditure variances. Please see more details in Exhibit 2, Tab 2, Schedule 2, 2.5.2.2 Required Information.

Table 1-12: 2012 Actual vs. 2012 Approved Capital Expenditure Variances

Change in Capital Expenditures ($ and %)

Description	2012 Approved	2012 Actual Year	Variance from 2012 Board approved ($)	Variance from 2012 Board approved (%)
Gross Fixed Assets (ending balance)	$181,385,806	$131,947,307	($49,438,499)	-27.26%
Gross capital expenditures (additions only excluding capital contributions)	$13,533,300	$12,234,250	($1,299,050)	-9.60%
Investment Categories (Sum of projects above materiality thresold)				
System Access	$4,521,093	$5,018,365	$497,272	11.00%
System Renewal	$2,804,344	$2,536,522	($267,822)	-9.55%
System Service	$2,827,857	$3,139,974	$312,116	11.04%
General Plant	$1,185,188	$984,738	($200,450)	-16.91%
Total Investment	**$11,338,482**	**$11,679,598**	**$341,116**	**3.01%**

Note: Please see previous explanation of the gross fixed assets variance (**Change in Rate Base from the last Board Approved** section).

Recovery of costs for renewable energy connections/expansions, smart grid, and regional planning initiatives

Guelph Hydro uses a comprehensive approach to its distribution system planning which includes all categories of investments including renewable generation connection, smart grid development initiatives, and regional planning as required.

<u>Renewable energy connections/expansions</u>

Guelph Hydro does not expect any capital expenditures related to renewable energy generation in its Distribution System Plan. There are no additional OM&A costs proposed related to renewable generation as Guelph Hydro is able to process both microFIT and FIT applications using existing employees. Therefore, Guelph Hydro is

not seeking any cost recovery to make eligible investments as described in section 79.1 of the OEB Act and O.Reg. 330/09 under the Act.

Smart Grid

In relation to Smart Grid development, Guelph Hydro expects minimal investment in this area over the forecast period aside from its continued investment into existing SCADA technology as it relates to its SCADA master system, communication infrastructure and line sensor technology which is contained in the system service portion of investments. Guelph Hydro continues to employ smart remotely operable switches in order to improve system reliability, system switching for planned and unplanned events and to assist in the real time monitoring of load levels within the system (for more details, please see Exhibit 2, Appendix 2-A - Distribution System Plan, Section 5.4.1.7).

Regional Planning Initiatives ("RPP")

As a result of the regional planning process within the Kitchener- Waterloo-Cambridge-Guelph ("KWCG") area, the Hydro One Guelph Area Transmission Refurbishment ("GATR") project was put forward and approved by the OEB in 2013 as a solution to area constraints. The GATR project is currently being constructed by Hydro One and planned to be in-service in Q2 of 2016.

As an indirect result of the RPP, there is the need for a solution at Guelph Hydro Arlen TS in order to mitigate high levels of short circuit due to the Hydro One GATR project which itself came out of the RPP process (for more details, please see Exhibit 2, Appendix 2-A - Distribution System Plan, Section 5.2.1.6 and 5.4.1.5).

2.4.2.E OPERATIONS, MAINTENANCE & ADMINISTRATION EXPENSE

Guelph Hydro is proposing recovery through distribution rates of $16,404,861 in Operating, Maintenance and Administration ("OM&A") costs for the 2016 Test Year.

OM&A change from 2012 Board-approved ($ and %)

OM&A expenditures totalling $16,404,861 in the 2016 Test Year represent an increase of $2,182,361 or 15.34% over the 2012 Board-approved OM&A expenditures of $14,222,500 or an annual average increase of 3.63%.

Summary of overall drivers and costs trends

The main factors causing the increase in costs are related to Human Resource requirements and payroll factors as follows:

1. The need for additional staff in accordance with a well-developed succession plan to accommodate the retirement of a significant portion of Guelph Hydro's employee complement in the next five years;
2. Increases in current and accrued benefit costs arising from added staff and higher costs per FTE; and
3. Cost of living and salary progression increases arising from the recent collective bargaining agreement with the union and percentage increases for management staff based on market.

These cost pressures were offset by cost reductions, as set out and explained in Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness, in areas including distribution operations, communications, and employee benefits.

The OM&A expense forecasts for the 2015 Bridge Year and the 2016 Test Year have been based on an in-depth review of operating priorities and requirements and are strongly influenced by prior year experience, year-to-date results, anticipated

productivity improvements, and expected changes in workload and input costs for the forecast periods.

OM&A expenses are also heavily influenced by the wage increases built into the company's Collective Agreement with its union, the IBEW. The current Collective Agreement was successfully negotiated at the start of 2013 and extends to March 31, 2017. Annual wage increases under the current Collective Agreement are as follows:

- April 1, 2013: 2.75%
- April 1, 2014: 1.75%
- September 29, 2014: 1.0%
- April 1, 2015: 2.75%
- April 1, 2016: 2.5%

Under the terms of the Collective Agreement, these wage increases are accompanied by significant productivity gains, most notably including the implementation of electronic time sheet entry and pay statements, and the new practice of crews taking lunch break on the job site rather than returning to the Operations Center. Guelph Hydro estimates that the direct cost savings and improved job site time of these measures amount to approximately $125,000 per year, as set out in greater detail in Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness.

These savings in direct cost and in capitalized labour are embedded in the Test Year cost estimates and will go to the benefit of ratepayers in 2016 and future years.

Please also refer to Efficiencies and Cost Improvements listed at Exhibit 1, Tab 3, Schedule 3, page 3, 2.3.3.3 Operational Effectiveness.

For non-union employees, Guelph Hydro estimates that wage rates will also increase by approximately 2.75% in 2015 and 2.5% in 2016.

The analysis of requirements noted above indicated that a total of six additional employees are required in 2015, and three additional employees are required in 2016, to meet purposes as noted in Table 1-1 in this Exhibit, Tab 2, Schedule 2, 2.4.2.B Budgeting and Accounting Assumptions.

For 2015 and 2016, one-time operating costs were budgeted for third party services in support of this rate filing in the amounts of $234,000 in 2015 and $82,500 in 2016. Guelph Hydro has included 1/5 (i.e. $63,300) of these one-time costs in the 2016 budget (please see Exhibit 4, Tab 3, Schedule 4, 2.7.3.4 One-Time Costs).

Guelph Hydro continues to work on finding efficiencies throughout the organization, and apart from the wage increases noted above, the balance of the OM&A budget reflects an average increase of 2.0% in 2015 and 1.50% in 2016. These increases were based on a detailed examination of the OM&A needs of the entire organization, and take into account efficiencies as well as inflation.

Inflation rates used for OM&A forecasts

Payroll-related inflation rates are set out above. An inflation factor of 2% was applied to all non-payroll related expense items for 2015 and 2016 budgets. However, as noted above the actual increase in OM&A for the Test Year is 1.5% after productivity improvements which offset both payroll and non-payroll inflation.

Total compensation for the Test Year and the change from 2012 Board-approved ($ and %)

Table 1-13

Total Compensation (Salary, Wages, and Benefits)

2012 Board Approved	2016 Test Year	Change	
		$	%
$18,914,812	$26,224,932	$7,310,120	38.65%

There is a $7,310,120 increase in Total Compensation from 2012 to 2016. This can be broken down as follows (also please refer to the detailed year over year variance analysis relating to Appendix 2-K in Exhibit 4, Tab 3, Schedule 1, 2.7.3.1 Employee Compensation Breakdown).

Table 1-14: 2016 vs. 2012 Board Approved Total Compensation Variance

	Last Rebasing Year – 2012-Board Approved	2016 Test Year	Variance between 2016 Test Year and 2012 Board Approved	% Variance between 2016 Test Year and 2012 Board Approved
Number of FTEs including Part-Time	116.7	130.83	14.13	12.11%
Total Salary and Wages including overtime and incentive pay	$9,299,464	$12,444,182	$3,144,719	33.82%
Total Benefits (Current + Accrued)	$9,615,348	$13,780,750	$4,165,402	43.32%
TOTALS	$18,914,812	$26,224,932	$7,310,120	38.65%

The largest increase was in total benefit costs, which can be further broken down as follows:

Table 1-15: Variance of Benefits

	Variance between 2016 Test Year and 2012 Board Approved
Current Benefits Increases	$639,534
Accrued Benefits Increases	$3,525,867
Total Benefits (Current + Accrued)	$4,165,402

The increase in current benefits of $639,534 was due to increases in FTEs, overall increases in benefit premiums between 2012 and 2016 (even with the premium freeze negotiated in 2014), and updating of some benefits such as Ontario Dental Association (ODA) fee schedules. Refer to Human Resources efficiencies in this Exhibit, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness and Appendix 2-K Year-over-Year Variance Analysis in Exhibit 4, Tab 3, Schedule 1, 2.7.3.1 Employee Compensation Breakdown for full details.

The balance of $4,165,401 is due to accrued benefit costs relating to post employment retiree and extended sick leave/LTD liabilities. Increases in accrued post-employment non pension benefit costs, related to actuarial tables assuming longer lives, an aging employee population where more employees are expected to retire, and a decrease in the discount rate used to determine the present value of future liabilities and the related expenses from 4.5% in 2012 to 4.05% in 2016. These costs have been mitigated by ending post age 65 retiree benefits in 2001 for all new employees hired after October, 2001. Guelph Hydro has 49 retirees with retiree benefits as of March 19th, 2015, and as of the end of 2014, only 39% of employees remain grandfathered and eligible for post age 65 retiree benefits (down from 41% in the last Cost of Service filing). The costs have also been mitigated by capping sick leave starting April 1, 2015. Guelph Hydro has experienced an increase in extended sick leaves, related to an aging employee population and an increase in mental illness since 2012. Refer to Human Resources efficiencies in this Exhibit, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness, Employee Trends and Appendix 2-K Year over Year variance analysis in Exhibit 4, Tab 3, Schedule 1, 2.7.3.1 Employee Compensation Breakdown for full details.

The second largest increase of $3,144,719, is due to an increase of 14.13 full time employee equivalents (FTE), combined with wage increases. Details relating to each year's increase in FTEs and wages can be found under the variance analysis for

Appendix 2-K found at Exhibit 4, Tab 3, Schedule 1, 2.7.3.1 Employee Compensation Breakdown.

Of the $7.3 million increase in total compensation over this period, as shown in Table 1-15 above, $3.5 million related to the increase in accrued benefits, which increase, Guelph Hydro submits, is largely outside its control. Guelph Hydro estimates that, of the remaining balance of $3.8 million, 32 percent or $1.2 million is reflected in capitalized labour, with the balance of $2.6 million reflected in OM&A.

2.4.2.F COST OF CAPITAL

Guelph Hydro has used the Board's cost of capital parameters, excepting the Long Term Debt rate which is calculated at a rate of 5.18% as explained in Exhibit 5, Tab 1, Schedule 1, page 3, 2.8.1 Capital Structure.

Summary of deviations from the Board's cost of capital methodology

There are no deviations from the Board's cost of capital methodology in this Application.

In 2016, Guelph Hydro intends to issue an additional $30 million in long-term debt to fund distribution capital expenditures that were incurred in the 2012 to 2015 period (which had been funded out of cash from operations) and to fund on-going capital expenditures in 2016 and beyond. With the incremental $30 million in long-term debt, Guelph Hydro's actual (or "book") capital structure will closely approximate the deemed 60% debt-to-40%-equity capital structure.

Guelph Hydro is requesting a return on deemed Long Term Debt for the 2016 Test Year of $4.27 million, which amount has been determined based on a weighted average interest rate:

($65,000,000 X 5.264% + $30,000,000 X 4.85% X 7/12) = $4,270,276 total interest for 2016 Test Year

The rate of 4.85% incorporates issuance/floating costs of $250,000.

Table 1-16

Addition to Debt Rate for Issuance (Floatation) Costs

Total Issuance Costs	$250,000
Principal amt of debt	$30,000,000
Less Issuance costs	$29,750,000
Assumed Interest Rate	4.81%
Interest Expense	$1,442,750
Effective Debt Rate	**4.85%**

$4,270,276/ ($65,000,000 + $30,000,000 X 7/12) X 100 = 5.18% weighted interest rate for 2016 Test Year.

Capital Structure

Guelph Hydro has prepared this Application with a deemed capital structure of 56.00% Long Term Debt, 4.00% Short Term Debt, and 40.00% Equity to comply with the Cost of Capital Report.

Table 1-17: Capital Structure

2016 - Test Year		
Description	**Deemed Portion**	**Effective Rate**
Long-Term Debt	56.00%	5.18%
Short-term Debt	4.00%	2.16%
Return On Equity	40.00%	9.30%
Weighted Debt Rate		4.98%
Regulated Rate of Return		6.71%

Return on Equity

Guelph Hydro is requesting a return on equity ("ROE") for the 2016 Test Year of 9.30% in accordance with the formulaic methodologies documented in the Cost of Capital Report and the Cost of Capital Parameter Updates for 2015 Cost of Service Applications issued by the OEB on November 15, 2014. Guelph Hydro understands that the OEB will finalize the ROE for 2016 rates based on the formulaic methodology in the Cost of Capital Report on or about November 2015, and Guelph Hydro will rely on the OEB's 2016 ROE to determine its final revenue requirement. Guelph Hydro's use of an ROE of 9.30% is without prejudice to any revised ROE that may be adopted by the OEB.

2.4.2.G COST ALLOCATION AND RATE DESIGN

Guelph Hydro's Cost Allocation filing follows the cost allocation policies outlined in the Board's report of March 31, 2011 *Review of Electricity Distribution Cost Allocation Policy* (EB-2010-0219) (the "Cost Allocation Review"). Details of Guelph Hydro's Cost Allocation study are provided in Exhibit 7. There are no deviations from the Board's cost allocation and rate design methodologies.

Summary of significant changes proposed to revenue to cost ratios and fixed/variable splits

The data used in the updated cost allocation study is consistent with Guelph Hydro'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 Guelph Hydro, 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, in which the Board stated that "default weighting factors should now be utilized only in exceptional circumstances, Guelph Hydro 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 resulting from Guelph Hydro's weighting factors.

Guelph Hydro has used the load profiles provided by Hydro One scaled to match the load forecast as it relates to the respective rate classes.

Guelph Hydro has been encouraging commercial customers to have sentinel lights connected behind the main load meter. The majority of these customers had the

sentinel lights removed. Therefore the number of sentinel lighting connections dropped to six at the end of 2014.

Guelph Hydro has directly allocated LEAP Funding costs to the specific classes as follows:

Table 1-18

Direct Allocation of Costs			
Account	**Description**	**Amount**	**Class**
6205	Sub-account LEAP Funding	$41,000	Residential

The Board-approved 2012 revenue-to-cost ratios and revenues follow:

Table 1-19: Guelph Hydro's 2012 Approved Revenue-to-Cost Ratios and Revenues

Rate Class	2012 Cost Allocation Study Results	2012 Board-Approved Revenue-to-Cost Allocation	Target range	Board-approved Service Revenue	Miscellaneous Revenue	2012 Board-approved Base Rev Requirement Excl Transformer Allowance and Miscellaneuos Revenue
Residential	97.83%	97.83%	85 - 115	$15,924,979	$1,449,054	$14,475,924
General Service Less Than 50 kW	139.29%	120.00%	80 - 120	$2,750,920	$198,428	$2,552,492
General Service 50 to 999 kW	150.66%	120.00%	80 - 120	$3,658,774	$184,879	$3,473,895
General Service 1000 to 4999 kW	57.15%	83.70%	80 - 120	$3,970,927	$280,802	$3,690,126
Large Use	110.73%	110.73%	85 - 115	$1,202,296	$46,251	$1,156,045
Street Lighting	55.88%	83.70%	70 - 120	$352,729	$37,749	$314,980
Unmetered Scattered Load	110.03%	110.03%	80 - 120	$107,326	$9,461	$97,865
Sentinel Lighting	103.02%	103.02%	80 - 120	$4,359	$375	$3,983
Total				**$27,972,312**	**$2,207,000**	**$25,765,312**

Guelph Hydro is filing a completed cost allocation study using the Board-approved methodology. This filing reflects 2016 Test Year loads and costs. Guelph Hydro has adapted its 2016 Cost Allocation study to reflect 2016 future load and cost responsibility.

The load profiles of the classes are the same as those used in the 2012 Cost Allocation Informational Filing, scaled to match the load forecast as it relates to the respective rate classes (see Exhibit 3, Tab 2, Schedule 1, 2.6.2 Accuracy of Load Forecast and Variance Analysis).

Guelph Hydro is not proposing to change its customer classifications.

Proposed Revenue to Cost Ratios

In order to bring certain revenue to costs ratios into the target ranges and balance to the revenue requirement, Guelph Hydro adjusted downwards to 120.00% the ratios for four classes (General Service Less Than 50 kW, General Service 50 to 999 kW, Unmetered Scattered Load, and Sentinel Lighting classes), and upwards to 89.17% for two classes (General Service 1000 to 4999 kW and Street Lighting). The ratios for Residential and Large Use classes have been kept at the 2016 Cost Allocation results: 97.77% and 103.24%, respectively. The following table reflects the 2016 Cost Allocation results and the 2016 proposed revenue-to-cost ratios.

Table 1-20: 2016 Proposed Revenue to Cost Ratios

Rate Class	2016 Cost Allocation results	Proposed Adjustment to revenue-to-Cost Allocation ratios	2016 Proposed Revenue-to-Cost Ratios	Target range
Residential	97.77%	0.00%	97.77%	85 - 115
General Service Less Than 50 kW	127.38%	-7.38%	120.00%	80 - 120
General Service 50 to 999 kW	135.84%	-15.84%	120.00%	80 - 120
General Service 1000 to 4999 kW	78.79%	10.38%	89.17%	80 - 120
Large Use	103.24%	0.00%	103.24%	85 - 115
Street Lighting	84.53%	4.64%	89.17%	70 - 120
Unmetered Scattered Load	157.02%	-37.02%	120.00%	80 - 120
Sentinel Lighting	122.01%	-2.01%	120.00%	80 - 120

Guelph Hydro applied the following principles when developing its cost allocation proposal:

1. Consistency with the last practice used in the previous Cost of Service application
2. Rate stability;
3. The avoidance of rate shock;

The following table compares the allocated costs by rate class from Guelph Hydro's 2012 Cost Allocation study with the 2016 Test Year Cost Allocation study:

Table 1-21: 2012 Approved and 2016 Test Year Allocated Cost

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	$ 16,277,687	58.19%	$ 19,587,729	57.07%
GS < 50 kW	$ 2,292,434	8.20%	$ 2,593,154	7.56%
GS > 50 kW to 999 kW	$ 3,048,979	10.90%	$ 3,293,839	9.60%
GS 1000 kW to 4,999 kW	$ 4,744,238	16.96%	$ 6,889,244	20.07%
Large User	$ 1,085,777	3.88%	$ 1,405,361	4.09%
Street Lighting	$ 421,421	1.51%	$ 483,906	1.41%
Sentinel Lighting	$ 4,231	0.02%	$ 980	0.00%
Unmetered Scattered Load (USL)	$ 97,545	0.35%	$ 65,214	0.19%
Other class, if applicable		0.00%		0.00%
		0.00%		0.00%
Embedded distributor class		0.00%		0.00%
Total	$ 27,972,312	100.00%	$ 34,319,428	100.00%

Table 1-22 provides the revenue-to-cost ratios from Guelph Hydro's approved 2012 Rate application (EB-2011-0123), Guelph Hydro's proposed ratios for 2016 Test Year, as well as the Board's approved ranges.

Table 1-22: Revenue-To-Cost Ratios compared with the Board's Approved Ranges

Class	Previously Approved Ratios Most Recent Year: 2012	Status Quo Ratios (7C + 7E) / (7A)	Proposed Ratios (7D + 7E) / (7A)	Policy Range
	%	%	%	%
Residential	97.83%	97.77	97.77	85 - 115
GS < 50 kW	120.00%	127.38	120.00	80 - 120
GS > 50 kW to 999 kW	120.00%	135.84	120.00	80 - 120
GS 1000 kW to 4,999 kW	83.70%	78.79	89.17	80 - 120
Large User	110.73%	103.24	103.24	85 - 115
Street Lighting	83.70%	84.53	89.17	70 - 120
Sentinel Lighting	103.02%	122.01	120.00	80 - 120
Unmetered Scattered Load (USL)	110.03%	157.02	120.00	80 - 120
Other class, if applicable				
Embedded distributor class				

Further details with respect to the 2016 Cost Allocation study are provided in Exhibit 7.

Guelph Hydro has calculated its proposed distribution rates by rate class based on the proposed Rate Design model in Exhibit 8. Table 1-23 sets out Guelph Hydro's proposed 2016 electricity distribution rates based on (i) the cost allocation methodology and proposed revenue-to-cost ratios, (ii) the proposed fixed-variable ratios, and (iii) the proposed transformer allowance.

Table 1-23: Proposed 2016 Electricity Distribution Rates (excluding proposed rate riders and rate adders)

	Proposed Fixed Distribution		Proposed Volumetric	
Customer Class	**Customer**	**Connection**	**kWh**	**kW**
Residential	$16.60		$0.0202	
GS < 50 kW	$16.75		$0.0141	
GS 50 to 999 kW	$170.12			$2.5943
GS 1000 to 4999 kW	$841.42			$4.4988
Large Use	$1,079.70			$2.6980
Sentinel Lights		$7.94		$8.7840
Street Lighting		$0.49		$11.6263
USL		$5.09	$0.0232	
microFIT Charge	$5.40			
Transformer Allowance				-$0.72

Guelph Hydro has based customer fixed and variable rates upon its Base Revenue Requirement of $32,112,227.

Table 1-24 summarizes the proposed fixed vs. variable rate split for each customer class. Guelph Hydro is proposing to retain the existing fixed vs. variable rate split.

Table 1-24: Proposed Fixed and Variable Proportion

Customer Class	Current Volumetric Charge Split	Current Fixed Charge Spilt
Residential	43.46%	56.54%
GS < 50 kW	71.97%	28.03%
GS 50 to 999 kW	69.58%	30.42%
GS 1000 to 4999 kW	92.72%	7.28%
Large Use	95.74%	4.26%
Sentinel Lights	48.06%	51.94%
Street Lighting	78.97%	21.03%
USL	54.25%	45.75%

In preparing this Application, Guelph Hydro has considered the impacts on its customers, with a goal of minimizing those impacts. Guelph Hydro has applied the cost allocation methodology and rate design methodologies in accordance with the Board's methodologies.

On April 2, 2015, the Board released its Policy "A New Distribution Rate Design for Residential Electricity Customers" (the "Policy"), file number EB-2012-0410, by which it decided that the delivery costs will be recovered from residential customers of a distributor through a monthly service charge. The Board determined the new rate design policy will be implemented across all distributors' service areas over a four year period to manage any customer bill impact.

In its Policy, the OEB stated that there is one situation which may warrant an exception: distributors filing for Custom IR or for rebasing as of January 1, 2016, as the

implementation details and filing guidelines may not be ready in time for the filing deadline April 24, 2015.

Guelph Hydro is seeking approval for an exception to submit the Application maintaining the current fixed/variable proportions for all classes, including Residential class, and to update its Application reflecting the new rate design during its 2016 Cost of Service proceedings, after the filing guidelines are ready and more details of the new rate design are available.

Summary of proposed mitigation plans

Based upon the customer bill impacts, as summarized in this Exhibit, Tab 2, Schedule 9, 2.4.1.I Bill Impacts, Guelph Hydro is not proposing rate mitigation.

2.4.2.H DEFERRAL AND VARIANCE ACCOUNTS

Total disposition ($) including split between RPP and non-RPP customers

Guelph Hydro has included in this Application a request for approval for the disposition of deferral and variance account balances at December 31, 2014 and the forecasted interest through December 31, 2015 for the deferral and Regulatory Settlement Variance Accounts (RSVAs) listed below. The total amount of the variance requested for disposition, including interest, is $2,919,074. This amount includes 1598 RSVA-Global Adjustment balances, and it excludes 1568 LRAMVA balance and 1555 - Smart Meter Capital – Sub-account Zigbee Chip.

Actual interest has been calculated based on the Board's prescribed rates. Forecasted interest for the period January 1, 2015 to December 31, 2015 is based upon a weighted average of the 2015 Board prescribed rates, by applying the Q1 2015 Board-approved rate of 1.47% for three months and the Q2 2015 Board-approved 1.10% for 9 months, divided by 12 to achieve a weighted average interest rate of 1.1925% ((3 x 1.47%) + (9 x 1.10%)/12).

List of all outstanding deferral and variance accounts and sub-accounts requested for disposition:

Table 1-25

Account Description	USoA #
Group 1 Accounts	
LV Variance Account	1550
Smart Metering Entity Charge Variance Account	1551
RSVA - Wholesale Market Service Charge	1580
RSVA - Retail Transmission Network Charge	1584
RSVA - Retail Transmission Connection Charge	1586
RSVA - Power (excluding Global Adjustment)	1588
RSVA - Global Adjustment	1589
Disposition and Recovery/Refund of Regulatory Balances (2008)	1595
Disposition and Recovery/Refund of Regulatory Balances (2010)	1595
Disposition and Recovery/Refund of Regulatory Balances (2014)	1595
Group 2 Accounts	
Other Regulatory Assets - Sub-Account - Deferred IFRS Transition Costs	1508
Retail Cost Variance Account - Retail	1518
Renewable Generation Connection OM&A Deferral Account	1532
Renewable Generation Connection Funding Adder Deferral Account	1533
Retail Cost Variance Account - STR	1548
LRAM Variance Account	1568
PILs and Tax Variance for 2006 and Subsequent Years (excludes sub-account and contra account below)	1592
Smart Meter OM&A Variance	1556
PILs and Tax Variance for 2006 and Subsequent Years	1592

Statement regarding the IESO Global Adjustment Charge proration

Guelph Hydro has pro-rated the IESO Global Adjustment Charge into RPP and non-RPP portions (please see Exhibit 9, Tab 1, page 10, 2.12 Exhibit 9: Deferral and Variance Accounts). The purpose of this split is to allocate the 1586 Global Adjustment balances to non-RPP customers (i.e. contributors to the Global Adjustment balance).

Disposition of the LRAMVA account 1568

In accordance with the Filing Requirements last updated July 18, 2014, Guelph Hydro is seeking the disposition of the balance in the LRAMVA as part of its Application; the LRAMVA amount requested for disposition is $467,344.98 principal and $17,009.65 interest (including January 1 to December 31, 2015 interest).

The 1568 LRAMVA balance reflects 2011 to 2013 OPA Final Verified Results and a Guelph Hydro forecast of 2014 OPA CDM savings. Guelph Hydro expects to receive the 2014 OPA Final Verified Results report from the OPA in the fall of 2015 and it plans to update the 1568 LRAMVA account balance when the 2014 final results are received.

Disposition of 1555-Smart Meter Capital, and 1556 – Smart Meter OM&A

Guelph Hydro is requesting inclusion in the rate base of the 1555 – Smart Meter Capital – Sub-account Zigbee Chip initiative $451,671 and the disposition of 1556 - Smart Meter OM&A accounts – Sub-account Zigbee Chip depreciation $186,845 (please see Exhibit 9, Tab 7, Schedule 1, 2.12.7 Disposition of Deferral and Variance Accounts for more details).

Disposition period:

Guelph Hydro is requesting the recovery of all outstanding deferral and variance account balances over a period of one year, commencing January 1, 2016.

New Deferral and Variance Accounts:

Guelph Hydro is not requesting any new deferral or variance accounts as part of this Application.

2.4.2.I BILL IMPACTS

In preparing this Application, Guelph Hydro has considered the impacts on its customers, with a goal of minimizing those impacts subject to the requirements of the system.

Monthly customer impacts including the average percentage Total Bill Impact and Average Dollar Impact, which include revised distribution rates (monthly service charge, volumetric rates and proposed retail transmission service rates), revised loss factors, proposed LRAMVA Rate Riders, and Regulatory Asset Recovery Rate Riders to dispose of the balances in the Deferral and Variance Accounts requested in this Application, are set out in Table 1-26 and Table 1-27 below.

Guelph Hydro considers these bill impacts to be moderate and in keeping with system requirements.

Guelph Hydro recognizes that the termination of the Ontario Clean Energy Benefit for Residential and General Service below 50kW classes, the termination of the Debt Retirement Charge for Residential customers, and the initiation of the Ontario Electricity Support Program will all have bill impacts starting on January 1, 2016. Table 1-26 and Table 1-27 below indicate the rate changes proposed only by Guelph Hydro in this Application.

In Exhibit 8, Tab 12, Schedule 1, 2.11.12 Bill Impact Information Guelph Hydro has provided an analysis of the bill impact that Guelph Hydro's customers would experience as of January 1, 2016 should all of the changes to the OCEB, DRC, OESP, and the rate increase proposed by Guelph Hydro in this application be approved by the OEB.

Table 1-26

2016 Total Bill Impact Summary

Residential	kWh	100	250	500	800	1,000	1,500	2,000
	Bill Impact $	$2.07	$2.20	$2.42	$2.68	$2.85	$3.28	$3.71
	Bill Impact %	6.64%	4.14%	2.69%	2.00%	1.75%	1.38%	1.20%

Loss Factor 1.0260

General Service Less than 50 kW	kWh	1,000	2,000	5,000	10,000	15,000
	Bill Impact $	$0.90	$0.76	$0.33	($0.40)	($1.11)
	Bill Impact %	0.58%	0.26%	0.05%	-0.03%	-0.05%

Loss Factor 1.0260

General Service 50 to 999 kW	kWh	22,776	37,960	189,800	379,600
	kW	60	100	500	1,000
	Bill Impact $	($76.16)	($127.79)	($646.31)	($1,293.90)
	Bill Impact %	-2.05%	-2.10%	-2.22%	-2.23%

Loss Factor 1.0260 Load Factor 52%

General Service 1000 to 4999 kW	kWh	48,910	244,550	489,100
	kW	100	500	1,000
	Bill Impact $	$222.84	$221.64	$220.15
	Bill Impact %	2.81%	0.60%	0.30%

Loss Factor 1.0260 Load Factor 67%

Large Use	kWh	3,035,340	4,215,750	5,621,000	8,431,500
	kW	5,400	7,500	10,000	15,000
	Bill Impact $	$298.62	$354.45	$420.93	$553.87
	Bill Impact %	0.07%	0.06%	0.05%	0.05%

Loss Factor 1.0036 Load Factor 77%

Unmetered Scattered Load	kWh	325
	Bill Impact $	($4.37)
	Bill Impact %	-6.72%

Loss Factor 1.0260

Sentinel Lighting	kWh	365
	kW	1
	Bill Impact $	($0.74)
	Bill Impact %	-1.06%

Loss Factor 1.0260 Load Factor 50%

Street Lighting	kWh	946,080	63
	kW	2,400	0.16
	Bill Impact $	$3,015.62	$0.12
	Bill Impact %	1.89%	1.07%

Loss Factor 1.0260 Load Factor 54%

Table 1-27: Residential and General Service less than 50 kW Bill Impacts

		Selected Delivery Charge and Bill Impacts								
		Subtotal A - Monthly Delivery Charge					Total Bill			
		Current	Proposed	Change			Current	Proposed	Change	
				$	%				$	%
Residential	**800 kWh/month**	$ 29.51	$ 33.56	$ 4.05	13.74%		$ 133.91	$ 136.59	$ 2.68	2.00%
GS < 50 kW	**2000 kWh/month**	$ 42.35	$ 45.84	$ 3.49	8.25%		$ 296.55	$ 297.32	$ 0.76	0.26%

2.3.3 PERFORMANCE EVALUATION

Guelph Hydro has taken efforts to improve its performance, both prior to and since the implementation of the RRFE. Guelph Hydro describes below its efforts directed to performance improvement under the four RRFE objectives in Exhibit 1, Tab 3, Schedules 2 to 5 (2.3.3.2 Customer Focus, 2.3.3.3 Operational Effectiveness, 2.3.3.4 Public Policy Responsiveness and 2.3.3.5 Financial Performance).

In its Application, Guelph Hydro has presented its performance for each of the Board's performance outcomes over the last five years, its current performance, and its projections for continuous improvements over the term of the Application. The Application discusses how Guelph Hydro's self-assessment has informed its Business Plan and the Application, particularly the need to issue new long-term debt so that GHESI's actual capital structure will reflect the OEB's deemed capital structure, and the careful planning being undertaken with respect to hiring new employees to key positions ahead of retirements to ensure an orderly transfer of knowledge. Guelph Hydro believes that its self-assessment of the performance scorecard has allowed a rigorous introspective examination of the company's operations as well as a ready scan of the operations of its neighbouring utilities. Guelph Hydro believes that these internal and external scans of the performance scorecard results present unique information sets that will allow the company to focus its efforts on developing measures to achieve further continuous improvement.

2.3.3.1 RENEWED REGULATORY FRAMEWORK FOR ELECTRICITY DISTRIBUTORS (RRFE)

The Board introduced a new approach to rate setting at the end of 2012 with the Renewed Regulatory Framework. The Renewed Regulatory Framework is a performance based approach to regulation that focuses on the achievement of outcomes such as efficiency, reliability, sustainability, and financial viability. The Report of the Board, *Renewed Regulatory Framework for Electricity Distributors: A Performance Based Approach* ("RRFE

Report") issued on October 18, 2012, outlines the following four (4) performance outcomes the Board expects distributors to achieve:

1. **Customer Focus**: services are provided in a manner that responds to identified customer preferences;
2. **Operational Effectiveness:** continuous improvement in productivity and cost performance is achieved; and utilities deliver on system reliability and quality objectives;
3. **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
4. **Financial Performance:** financial viability is maintained; and savings from operational effectiveness are sustainable.

Scorecard

On March 5, 2014, the Board issued a report for the *Performance Measurement for Electricity Distributors: A Scorecard Approach* (EB-2010-0379). The report details the scorecard measures approach which the Board expects to use in order to monitor and assess a distributor's effectiveness and improvement in achieving the four performance outcomes mentioned above, and to eventually facilitate distributor benchmarking. During the implementation period of the scorecard, the Board recognized that new measures may not have uniform definitions and therefore the Board has not yet determined industry targets for these measures. The Board intends for all measures on the scorecard to be uniform and have industry targets by 2018 for comparability and benchmarking purposes.

Guelph Hydro has published its most recent scorecard for public viewing on its website at. http://www.guelphhydro.com/en/aboutus/OEB-Scorecard-for-Ontario-s-Electricity-Distributors-.asp?_mid_=1245.

Guelph Hydro's scorecard for 2009-2013 is presented below in Table 1-28 (a).

Table 1-28 (a)
Scorecard - Guelph Hydro Electric Systems Inc.

9/23/2014

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%	99.80%	99.90%	100.00%	100.00%	up	90.00%	
		Scheduled Appointments Met On Time		96.50%	98.90%	98.60%	99.00%	97.10%	up	90.00%	
		Telephone Calls Answered On Time		70.60%	80.00%	92.90%	80.00%	83.70%	up	65.00%	
	Customer Satisfaction	First Contact Resolution									
		Billing Accuracy									
		Customer Satisfaction Survey Results						96%			
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		0.21	0.33	1.70	0.31	2.21	down		at least within 0.21 - 1.70
		Average Number of Times that Power to a Customer is Interrupted		0.50	0.75	1.51	1.49	3.36	down		at least within 0.50 - 1.51
	Asset Management	Distribution System Plan Implementation Progress									
	Cost Control	Efficiency Assessment					3	3			
		Total Cost per Customer [See Note below]		$633	$663	$696	$587	$608			
		Total Cost per Km of Line [See Note below]		$29,341	$31,284	$32,650	$27,427	$28,952			
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)				20.00%	30.00%	36.50%			16.71MW
		Net Cumulative Energy Savings (Percent of target achieved)				72.00%	107.00%	127.40%			79.53GWh
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time				83.33%	80.00%	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)		0.97	3.00	1.97	1.64	1.33			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio		0.95	1.38	1.10	1.13	1.04			
		Profitability: Regulatory Return on Equity	Deemed (included in rates)			8.57%	9.42%	9.42%			
			Achieved			8.41%	7.50%	7.29%			

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

Note
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.

2.3.3.2 CUSTOMER FOCUS

Service Quality

New Residential/Small Business Connected On Time

Guelph Hydro's experience with connecting New Residential/Small Business Services on time continues to be above the industry target of 90% through a continued commitment to Guelph Hydro's customers and Guelph Hydro's process for new connections. Guelph Hydro plans to maintain this performance indicator above the industry target.

Scheduled Appointments Met On Time

Guelph Hydro's experience with meeting Scheduled Appointments on time continues to be above the industry target of 90% through a continued commitment to Guelph Hydro's customers and Guelph Hydro's process for completing appointments within the 5 day window. Guelph Hydro offers its customers appointment scheduling within a window that is no greater than three hours.

In 2014, Guelph Hydro did not meet the industry target of 90% of appointments met on time due to issues related to locate appointments. Guelph Hydro experienced a larger than normal volume of locate requests that were received in April to May of 2014. Guelph Hydro experienced an increase of over 30% of locates requests within the month of May 2014, which proposed a challenge to the Guelph Hydro contractors completing the scheduled locates within the 5 day allowance. Along with the increase in locate requests, Guelph Hydro was also transitioning to a new locate contractor beginning in the month of April which further added to the challenges and lower than average response time. Issues with this metric were promptly resolved by Guelph Hydro's efforts and transition to new locate contractor. Specifically, Guelph Hydro met on a regular basis with its locate contractor to work through any issues and continually

monitored performance. Guelph Hydro will continue to monitor the metric and consider the need to act accordingly to meet the requirement.

Telephone Calls Answered On Time

Guelph Hydro's Customer Engagement Strategy is informed by monitoring Guelph Hydro's overall customer service experience. Calls answered within 30 seconds improved from 83.65 percent in 2013 to 87.93 percent in 2014. Guelph Hydro achieved 100 percent first call resolution at the end of 2014, and 95 percent of the customers who participated in the VOICE survey rated their Guelph Hydro customer service experience as 'exceptional'. By studying phone system and website metrics Guelph Hydro was able to determine trends in customer behavior. These analytics indicated that peaks in spring and fall occur due to the large number of university students moving in and out of Guelph, and that the web pages visited most frequently were related to accounts and billing, and move-service requests. Guelph Hydro was able to determine that customers required "low-touch" or self-directed customer service solutions, such as online forms and self-serve options. By shifting to online services for move-in and move-out requests Guelph Hydro's focus shifted to providing customers with an enhanced customer service experience. Guelph Hydro introduced more online tools, including forms and online chat, and information packages and programs. Guelph Hydro's "Welcome Package" explains deposits, billing schedules and payment options and provides helpful links and tips for water and hydro conservation, and the "High Bill Analysis" program provides customers with a comprehensive assessment of their energy consumption along with tools they can use to help manage their electricity use. The availability of online tools and packages has moved routine requests off the phones and allowed customer service representatives to spend more time on complex calls, such as high-bill enquiries.

Customer Satisfaction

First Contact Resolution ("FCR")

As with other contact center metrics, one of the main advantages of tracking FCR is to help measure the effectiveness of new initiatives. When implementing a new procedure or initiative, a baseline can be established by measuring FCR. This baseline can then be compared to subsequent measurements taken after the procedural change, training or coaching. If an improvement in FCR is observed, progress can be tracked; if not, the training or procedural change may need to be revisited. In April 2014 Guelph Hydro made changes to its CIS system to start tracking First Contact Resolution by using call notes within the CIS system. By using special codes the customer service representatives ("CSR") can query the call-type on a monthly basis. CSRs are educated with strict criteria for what 2nd or 3rd calls may encompass. For example, if a call is a high-bill (call note HB) and the customer calls back about the same issue in the same billing period, CSRs code it 2ND. These call notes also are used for any query from a customer that was not resolved.

Billing Accuracy

Guelph Hydro started measuring Billing Accuracy in April of 2014 using call-notes. Any bill adjustment or cancelled bill after the bill is issued and sent to customer is coded with a call note Correction ("PCOR"). Guelph Hydro also uses an arrears notice (Post Bill Correction/Account; "PCCR") code for the Credit Department to be notified if the bill cancelled is in delinquency status.

Prior to April 2014, billing accuracy reports relied on an examination of all cancelled bills and the reasons as to why they were cancelled over a two-year span. Without using the call-note measurement Guelph Hydro still achieved 99.9 percent billing accuracy rate. With the move to call-notes, Guelph Hydro was able to submit 100 percent billing accuracy rate for 2014 to the Board's scorecard for billing accuracy.

Customer Satisfaction Survey

Active engagement with customers helps Guelph Hydro to understand its customer preferences and determine how the organization needs to shift, in order to deliver services in alignment with customers' needs.

Guelph Hydro is committed to customer satisfaction and measures its customer satisfaction through bi-annual customer telephone surveys conducted by UtilityPULSE, a division of Simul Corporation. This Electric Utility Customer Satisfaction Survey gauges the satisfaction of customers with the quality and timeliness of information they receive as well as the professionalism, attitude and helpfulness of staff.

In April 2013, telephone interviews were conducted for Simul Corporation by Corsential with 400 respondents who pay or look after the electricity bills from a list of residential and small and medium-sized business customers supplied by Guelph Hydro. The sample of telephone numbers was chosen 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.

Results of the 2013 Customer Satisfaction Survey indicated that 96% of the 400 respondents reported ratings of "very" or "fairly" satisfied. This is a three percent increase from the previous customer survey conducted in 2011.

As a result of the satisfaction score of 96%, Guelph Hydro was ranked #1 in customer satisfaction among 14 similarly-sized Ontario utilities. Notably, this score was higher than the national and provincial customer satisfaction averages. Guelph Hydro's 2013 Customer Satisfaction Survey is in Appendix 1-B of this Exhibit.

The survey identified that understanding the new Time-of-Use bill was one of the highest rated customer concerns. As a result, Guelph Hydro began empowering its Customer Service Representatives (CSR) to adopt more of an analytical approach by

learning Time-of-Use concepts in billing. Training sessions on the relationship between the Customer Information System (CIS) and the Meter Data Management and Repository system (MDM/R) educated the CSRs on the complexities of billing in a smart meter environment compared to a basic meter reading environment. This enhanced knowledge of Guelph Hydro's CSRs contributed to higher First Call Resolution with Guelph Hydro customers.

Today, emphasis is put on handling every individual element of an interaction with a customer. To ensure future development within the Customer Service department, Guelph Hydro created a tool to measure customer satisfaction. A Customer Satisfaction survey was implemented within Guelph Hydro's Interactive Voice Recognition ("IVR") in April 2014. This tool will ensure Guelph Hydro has metrics to improve future customer centric strategies.

Customer satisfaction was further measured in focus groups and a telephone survey that were conducted in April 2015 by Innovative Research Group Inc. as part of the 2016 Distribution System Investment Plan review. Results from this customer consultation as shown below indicate that customers in both the Residential and General Service customer classes are highly satisfied. (Please refer to Tab 4, 2.4.3 Customer Engagement of this Exhibit for further detail about this consultation and see Appendix 1-I for the entire summary report.)

Of note is the fact that General Service customers seem to be particularly satisfied with none of this class of customers expressing dissatisfaction in the focus groups and only 4% of the 186 General Service customers who participated in the telephone survey expressing any level of dissatisfaction.

Table 1-28 (b) Overall Satisfaction across Consultation Activities – April 2015

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	General Service	Residential	General Service	Residential
Very satisfied	2	2	48%	40%
Somewhat satisfied	7	9	47%	46%
Somewhat dissatisfied	0	0	3%	6%
Very dissatisfied	0	0	1%	5%
Don't know / Refused	0	0	1%	3%
TOTAL	**n=9**	**n=11**	**n=186**	**n=514**

Customer Engagement

Please refer to Tab 4 (2.4.3 Customer Engagement) of this Exhibit for details of Guelph Hydro's Customer Engagement activities.

2.3.3.3 OPERATIONAL EFFECTIVENESS

In the Board's Scorecard Report (EB-2010-0379), Board staff recommended seven measures to assess a distributor's operational effectiveness: one safety measure, two system reliability measures, one asset management measure, and three overall cost performance measures.

Safety

According to the *Report of the Board on Performance Measurement for Electricity Distributors* (EB-2010-0379), a public safety measure has not been established. Guelph Hydro's safety activity, mission and vision are detailed in this Exhibit, Tab 1, Schedule 1, 2.4.1 Management Discussion and Analysis.

System Reliability

SAIDI and SAIFI

In 2013, Guelph Hydro's system reliability statistics for both System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) fell outside Guelph Hydro's target of 0.21-1.70 and 0.50-1.51 respectively. Guelph Hydro has reviewed the interruption data for 2013 along with previous years going back to 2009 in order to determine the root causes for the outages. Based on the data it was evident that Guelph Hydro experienced a higher number of significant events (major event days, MED's) in 2013 as compared to previous years causing the statistics to fall outside Guelph Hydro's normal rate. From the analysis of the interruption data, Guelph Hydro determined that in 2013 the distribution system alone experienced 5 major event days removing loss of supply from the analysis. In comparison to previous years' major event days [1(2009), 1(2010), 4(2011), 1(2012)], it was clear that the reason for the increase in Guelph Hydro's reliability numbers in 2013 was caused by a number of major events. The major event day calculation was done

using the IEEE 1366-2003, "IEEE Guide for Electric Power Distribution Reliability Indices". Of the five major event days in 2013, four were directly related to storms which are outside the control of Guelph Hydro. By removing the effects of the four storms from the reliability calculation the new SAIDI and SAIFI statistics would be 0.60 and 1.66 respectively. Guelph Hydro's annual system reliability indicators were back within target ranges for both SAIDI (0.74) and SAIFI (1.23) in 2014.

Distribution System Maintenance

The reliable performance of Guelph Hydro's electricity distribution network during normal operation as well as in the face of severe weather is the direct result of:

- Continual investments in new electricity distribution infrastructure including smart grid technologies;
- Use of high quality engineering design standards;
- Proactive upgrading of equipment;
- Preventative maintenance including infrared scanning, pole testing and underground inspections;
- Smart grid technologies that automate elements of the network, and;
- Diligent tree-trimming program

Asset Management

Distribution System Plan Implementation Progress

Performance metrics added by the OEB in 2014 include monitoring the cost efficiency and effectiveness with respect to planning quality and DSP implementation. Guelph Hydro has historically not tracked these metrics and will be developing processes to monitor and report in these areas. Metrics will include:

- Physical project progress vs plan;
- Financial project progress vs. plan; and
- Actual vs. planned cost of work completed.

Guelph Hydro's Distribution System Plan is completed and filed with this Application in Exhibit 2, Appendix 2-A.

Cost Control

In 2012, Guelph Hydro's total costs per customer of $587 showed a marked decline from 2011 ($696). In 2011 as a first-time adopter of IFRS, Guelph Hydro elected to use the carrying amount of its fixed and intangible assets as valued under Canadian GAAP as the deemed cost of the assets as at January 1, 2010. The effect of this change was to reduce accumulated depreciation to zero, and to reduce the gross cost of the assets by a corresponding amount. For the same reason, Guelph Hydro's cost per km of line in 2012 of $27,427 was significantly lower than the $32,650 in 2011. The OM&A portion of total costs increased relatively slightly from 2011 to 2012, and was largely reflective of general inflationary pressures and cost increases attendant with load growth.

In 2013, Guelph Hydro Inc. (GHI), the parent company of Guelph Hydro Electric Systems Inc., actively began exploring whether mergers, acquisitions or divestitures fit with the utility's long-term strategy and overall vision. This required additional effort by the Executive Team and the Board in the holding company to work on Guelph Hydro's strategy. In recognition of this effort, the Boards of Directors of both GHI and Guelph Hydro authorized the replacement of two regularly scheduled dividend payments from Guelph Hydro to GHI, with an equivalent amount of management fees repayable via a short-term inter-company promissory note. The impact of this was higher operating expenses in Guelph Hydro which resulted in an increase in Total Cost per Customer of $21 and Total Cost per KM of Line in 2013. Guelph Hydro did not incur the same expenses in 2014, and does not expect to in 2015 or 2016.

Efficiencies and Cost Improvements

Guelph Hydro has been working diligently to improve its performances, to reduce costs, and to be more efficient. With a focus on customer satisfaction, Guelph Hydro lists below some of initiatives which all align with the objectives of the RRFE.

It is Guelph Hydro's business strategy to continue finding innovative ways to respond to its customers' needs, to be a leader in energy industry, and to add more values to its services.

The savings achieved have contributed to meeting the annual stretch factor included in rate adjustments during the IRM period, and to maintaining the performance indicators at the OEB's standards and above.

Control Room 24/7 Operation and Shared Services Project

In an effort to respond to customers' needs and upcoming regulatory requirements, including Arlen MTS Operation within IESO requirements and recent changes to the Utility Work Protection Code (UWPC) that require logging of all work, including after hours, in proximity (10 feet or less) to primary (>750V) lines). Guelph Hydro is endeavouring to expand its operational services to 24/7 coverage. Helping accelerate this process, Guelph Hydro has entered into an agreement with another LDC to provide shared operational services. The rationale, further details, and agreement are provided in Appendix 1-J of this Exhibit. At the time Guelph Hydro prepared this Application, shared services were being provided on a 16 hours/ five normal business day per week basis (16/5). Revenue from the shared service arrangement is incorporated into rates and will help offset the additional cost associated with expanded hours of coverage.

Please see the Control Room Services Agreement in this Exhibit, Appendix 1-J for more information. Guelph Hydro's Control Room currently operates on a 5-days per week schedule and is fully staffed with daytime coverage. After hours coverage (including

evenings, weekends and statutory holidays) is provided by on-call System Control Operators (SCOs), who answer calls from Hydro One and the IESO, and a telephone answering service that processes calls from customers and the general public in accordance with instructions from Guelph Hydro.

Recent changes to the Utility Work Protection Code (UWPC), increased customer counts, and distribution automation are all necessitating Guelph Hydro's intention to commence 24/7 Control Room coverage. Guelph Hydro believes that, by the time 24/7 coverage is fully implemented, the utility will have attained the amount of LDC-owned transmission connected station load (Arlen MTS – commissioned in 2012) to warrant the planned 24/7 shift expansion. Load growth includes distribution system growth in addition to North-to-South load transfers to relieve adjacent congested areas/stations. Enhanced response requirements include feedback from key customer engagement(s) and IESO/NERC transmission system code compliance.

Guelph Hydro intends to stage its move to 24/7 Control Room coverage. Commencing in 2015, the first step will be to move from 5 days to 7 days per week of daytime coverage, by using utilizing existing staff and incorporating succession planning SCO staff. The next stage will be to commence 24/7 coverage as load and regulatory requirements increase.

<u>Operations Technology Implementation Efficiencies:</u>

1. Operations Technology/SCADA

Guelph Hydro, like many LDCs, has for many years implemented "Operations Technology" to provide better, more refined and timely distribution system field device operational information. This greater visibility into distribution system operation has helped drive improved customer service and operational effectiveness through cost containment, better and more timely decision making, as well as reduced restoration times.

The following tables reflect conservative estimates of labour time efficiencies achieved since 2007 in:

- Blocking reclosures (i.e., preventing re-energization of circuits being worked on) for line crews performing work on equipment through Remote Control Room communication, to minimize down time for line crews to continue field work;
- using remotely operable switches for switching operations instead of truck rolls; and
- using remote disconnect switches at residential customer and small commercial meter bases to facilitate service disconnects instead of truck rolls.

The labour time savings calculations are based on analysis of the number of actual line crew requests for blocking reclosures through the ICCP Remote Hold-Off Gateway, as well as the number of actual remote field switch operations by year. The cost calculations use average annual hourly labour rates and burdens as provided in Guelph Hydro's Work Order & Facilities Management system. Similarly for the use of Remote Service Disconnect, we have tracked the number of remote disconnects during normal business hours and outside of normal business hours, and calculated an annual time savings as well as estimated cost savings using the same methodology as for avoided line crew "truck roll" operations.

Since 2007 Guelph Hydro estimates cost savings of over $430,000 through the use of ICCP Remote Hold-Off Gateway, over $406,000 through remote SCADA Switch operations, and almost $123,000 through the use of Remote Service Disconnects. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

Table 1-29

Operational Savings from Technology Implementation

2015-Mar-18

P:\DistSysInfo\ScadaInfo\Admin\[DA-CostSavingsStudyPresentation-2015-Mar-18.xls]Technology Savings

Estimated Savings Using ICCP Remote Hold-Off Gateway

(Estimate savings of 5-15min, immediately, instead of wait for OGCC phone call)

Year	Hold-Offs	5min/Hold-Off*	Total Time	Total Line**
	[#]	[min]	[hours]	[$]
2007	2,878	14,390	240	56,121
2008	2,771	13,855	231	54,035
2009	2,989	14,945	249	60,044
2010	2,451	12,255	204	50,352
2011	2,687	13,435	224	46,118
2012	2,406	12,030	201	42,538
2013	2,727	13,635	227	48,213
2014	3,914	19,570	326	73,153
Total [$]	***22,823***	***114,115***	***1,902***	***430,573***
Average/Year [$]	***2,853***	***14,264***	***238***	***53,822***
Average/Year [FTE]				***0.45***

Estimated Savings Using SCADA Switches for Remote Switch Operations

(Estimate savings of 25min for each remote switch operation for "planned", 50min for after-hours "emergency", instead of truck roll)

	SCADA Switch		Hours		Savings		Total
Year	Planned	Emergency	Planned**	Emergency**	Planned	Emergency	
	[#]	[#]	[hours]	[hours]	[$]	[$]	[$]
2007	255	96	106	80	24,863	24,000	48,863
2008	171	53	71	44	16,673	13,250	29,923
2009	195	58	81	48	19,586	14,888	34,474
2010	203	116	85	97	20,851	30,450	51,301
2011	245	138	102	115	21,025	31,853	52,878
2012	321	103	134	86	28,376	24,490	52,866
2013	291	265	121	221	26,239	64,267	90,505
2014	328	107	109	71	24,447	21,415	45,862
Total [$]	***2,009***	***936***	***809***	***762***	***$182,059***	***$224,612***	***$406,671***
Average/Year [$]	***251***	***117***	***101***	***95***	***$22,757***	***$28,077***	***$50,834***
Average/Year [FTE]							***0.42***

Estimated Savings Using Remote Service Disconnects

(Estimate savings of 40min during "regular business hours" and 1.5 hrs for "after-hours" disconnects, instead of truck roll)

	Meter Sleeves		Hours		Cost		Total
Year	Planned	After Hours	Planned	After Hours	Planned**	After Hours**	Disconnect
	[#]	[#]	[hours]	[hours]	[$]	[$]	[$]
2007	20	10	13	15	3,120	6,750	9,870
2008	75	43	50	65	11,700	29,025	40,725
2009	74	48	49	72	11,892	33,266	45,158
2010	75	21	50	32	12,326	14,884	27,210
System discontinued in 2010 due to loss of Paging network and lack of Measurement Canada approved smart meter remote disconnect.							
Total [$]	***244***	***122***	***163***	***183***	***$39,038***	***$83,925***	***$122,963***
Average/Year [$]	***61***	***31***	***41***	***46***	***$9,760***	***$20,981***	***$30,741***
Average/Year [FTE]							***0.26***

Estimated Total Savings	
2007	**114,854**
2008	**124,682**
2009	**139,676**
2010	**128,863**
2011	**98,996**
2012	**95,404**
2013	**139,682**
Total [$]	***842,157***
Average/Year [$]	***120,308***
Average/Year [FTE]	***1.00***

* use conservative estimate of 5 minutes
** use conservative estimate of 1 line truck + 2 linepersons, actual cost

2. Guelph Hydro Outage Notification System

Following the deployment and stabilization of Guelph Hydro's smart metering Advanced Metering Infrastructure (AMI), Guelph Hydro sought to advance its operational effectiveness by leveraging one of the features of Guelph Hydro's AMI.

Guelph Hydro's smart meters, wireless mesh field communications and in-house expertise facilitated the development of an Outage Notification System ("ONS"). This system utilizes "Last Gasp" technology (i.e., the ability to send a signal upon losing power) embedded in Guelph Hydro's smart meters, and takes advantage of Guelph Hydro's existing Geographic Information System (GIS) distribution system model, existing Customer Information System (CIS) data, and in-house strength in technology integration. Use of all three technologies enables Guelph Hydro to detect customer outages at the transformer level within minutes of the outage occurring. The ONS application provides email notification to internal operations and support staff to facilitate

improved customer restoration as well as social media messaging updates. The ONS also updates Guelph Hydro's customer facing real-time outage web map.

Development of the ONS has greatly improved Guelph Hydro's ability to identify outages, triage customer calls, estimate outage duration, correlate and prioritize outage restoration efforts, and enable improved customer outage communication. Although these customer service operational improvements have not been quantified, Guelph Hydro estimates a 50% improvement in customer restoration response times prior to implementation of the ONS.

Development of this application has avoided the purchase of a third party solution with a one-time cost of $138,000 USD for software licensing and system set-up, installation, configuration, and commission testing. In addition, Guelph Hydro has avoided ongoing annual software license support and maintenance expenses of $25,000 USD, as well as avoided annual remote operational application support expenses of $75,000 USD.

This system was developed in 2012, and has been further refined in 2013 and 2014. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

3. Operations Technology Wireless Data Gateway Fees

Guelph Hydro had several years' experience working with wireless communications for SCADA device field operations prior to its smart metering Advanced Metering Infrastructure (AMI) deployment. For the AMI, Guelph Hydro chose to leverage this investment in wireless communication knowledge and equipment through the expansion and integration of the SCADA communications network with its private wireless AMI communications network.

This integration has resulted in ongoing wireless communication cost savings compared with maintaining separate systems for field Data Gateways for SCADA, the AMI, and FIT embedded generation metering installations as further described below. The

following table identifies the number of field deployed SCADA, AMI and FIT data gateways by calendar year. Guelph Hydro's per unit Wholesale Metering average monthly cellular modem charges are used in the estimation of monthly data gateway cost avoidance for each calendar year.

The following table summarizes the annual cost savings estimates by year, for a total of over $205,000 for the period 2011-2014. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

Table 1-30

Estimated Savings Using Guelph Hydro Wireless Network for Wireless Data Gateways

(Estimate average cost savings of $100/month per device based on Wholesale Metering cell modem charges)

	Data Gateways			Annual Cost			Total
Year	SCADA	AMI	FIT	SCADA	AMI	FIT	Cost
	[#]	[#]	[#]	[$]	[$]	[$]	[$]
2011	7	10	1	8,400	12,000	1,200	21,600
2012	7	17	20	8,400	20,400	24,000	52,800
2013	7	20	27	8,400	24,000	32,400	64,800
2014	7	20	28	8,400	24,000	33,600	66,000
Total [$]	*28*	*67*	*76*	*$33,600*	*$80,400*	*$91,200*	*$205,200*
Average/Year [$]	*7*	*17*	*19*	*$8,400*	*$20,100*	*$22,800*	*$51,300*
Average/Year [FTE]				*0.07*	*0.17*	*0.19*	*0.43*

Table 1-31: Operations Technology Efficiencies

Functional Area	Description of Efficiencies or Cost Improvements	Costs Saved	Implementation Date
Operations Technology	Operations Technology/ SCADA	$960,207 since 2007	2007
Operations Technology	Outage Notification System	$75,000 annually	2012
Operations Technology	Wireless Data Gateway Fees	$205,200 since 2011	2011

Customer Service Efficiencies:

1. Interactive Voice Recognition and Online Services

Guelph Hydro's Customer Service strategy entailed adding E-functionality (i.e. electronic functionality without the need to speak with a customer service representative) and Interactive Voice Recognition (IVR) for basic Customer inquiries. After IVR was implemented in January 2013, Guelph Hydro was able to identify cost savings. A key benefit of self-service IVR is to remove and automate the simple repetitive calls, allowing CSR's to handle the more varied and complex calls. Very often some of the simplest calls are also some of the most frequent and can take up a large portion of the CSR's time over the day. To determine the benefits an IVR could bring, Guelph Hydro: created a list of each type of call handled by CSR's; counted the number of calls of each type; measured the average call duration of each type; calculated the total call handling cost of each type of call; and considered the customer impact of automating each service. Shifting move calls to online forms for move in/move outs and enabling the online forms to automatically populate the Customer Information System (CIS) permitted the Customer Service Representatives (CSR) to focus on First Call Resolution with Guelph Customers. CSRs spent more time educating customers on conservation and helped customers understand how to reduce their energy costs.

Despite an increase in the number of customers in 2013, Guelph Hydro was able to maintain the amount of FTEs in its Customer Service Department without compromising service level. By shifting basic inquires to online services and IVR, the CSRs were able to increase call handle time to promote first call resolution and overall Customer satisfaction.

In addition, when the phone queue is busy the phone system gives the customer an option to leave their phone number, account number and brief summary of their inquiry. When a CSR becomes available the phone system lets the CSR navigate to the customer's account and then press 1 to be connected to the customer. This

improvement has reduced the abandonment rate during peak call times. Table 1-32 summarizes these results.

Table 1-32

	2013	**2014**	**OBSERVATIONS**
Average# of incoming calls	4033	3600	Decreased # of calls due to introduction to online tools, IVR and chat functions
Calls answered within 30 seconds	83%	88%	Increased efficiencies due to shifting of customer interaction to online tools, IVR and chat functions
Average# of move in/move out calls	1600	900	Decreased # of move in, move out calls due to availability of move in/move out online forms
Average# of move in/move out online requests	70	200	Increased volume due to successful deployment of online forms
Average# of online chats	N/A	330	Increased volume due to successful customer uptake of chat services
Average# of IVR requests	N/A	200	Increased volume reflects customer usage of account balance enquiries

2. Metering Data Management/Repository ("MDM/R") Smart Meter Performance and Efficiencies

The LDC Performance Metrics Report ("the LDC Report") has been designed by the Independent Electricity System Operator ("IESO") to provide information to LDCs regarding their interface performance with the MDM/R. The LDC Report assists in the identification, analysis and resolution of problems and behaviours that could be negatively affecting LDC business processes and/or the operation of the MDM/R. The IESO generates and distributes the monthly LDC Report.

Data for the LDC Report is presented in four sections:

i. Meter Read Data
ii. Synchronization
iii. Billing Request Data and
iv. Ticket Reporting

Each section is intended to allow LDCs an opportunity to review their own metrics, identify potential issues and compare their performance to other members of the LDC community. All metrics include a combined average of all LDCs enrolled in the MDM/R. Additionally, the Meter Data Performance metrics include the five lowest and five highest ranking LDCs in the context of the specified metric.

Since November 2012, Guelph Hydro monitors its LDC Report and plans to meet and exceed all performance expectations. This is a result of Guelph Hydro's effort, innovative thinking, and desire to provide accurate metering and billing data.

In addition, Guelph Hydro through its Information Systems group has designed, implemented and operates an in-house Operational Data Store ("ODS") system to manage the smart meter interval data for all smart metered accounts. This system,

when compared with a third party service provider cost, provides a cost saving of about $312,000 per year.

These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

Table 1-33: Customer Service Efficiencies

Functional Area	Description of Efficiencies or Cost Improvements	Costs Saved	Implementation Date
Customer Service	Interactive Voice Recognition and Online Services	$14.95 per call	January 2013
Customer Service	MDM/R Smart Meter – in-house ODS system operation	$312,000 per year	November 2012

<u>IT Efficiencies:</u>

1. IP Phone System

Guelph Hydro's original analog phone system was installed in 2005. The annual operating costs were in the range of $50,000 to $60,000 without performing any major system upgrades. In 2012 Guelph Hydro hired a third party consultant to look at the current phone system costs and annual long distance charges. Based on the consultants suggestions Guelph Hydro found $30,000 per year operating cost savings by switching over existing phone lines and long distance carrier. The vendor also recommended that Guelph Hydro change its existing phone system to an IP (internet protocol) phone system.

Guelph Hydro sourced a number of vendors and all of them came with a significant purchase price outlay of over $500,000 dollars and an annual operating cost of $74,000 dollars a year. The savings could not justify the cost for the newer technology.

In the fall of 2013 Guelph Hydro was approached by the City of Guelph to see if there were any areas within the IT department that they may be able to help Guelph Hydro with. Guelph Hydro asked if the City of Guelph would consider allowing Guelph Hydro onto their IP phone system. Since the City of Guelph phone system was due for a system upgrade in 2014, the City of Guelph would add the extra phones onto their system and charge Guelph Hydro for the full cost difference. The agreement between the City of Guelph and Guelph Hydro was done in compliance with the Affiliate Relationship Code guidelines. Guelph Hydro's conversion cost was $230,000 in comparison to the original estimate of $500,000 for a new system and an operating cost (paid to the City) of $30,000 per year. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

Since the City of Guelph has a larger number of technical staff to support the technology along with redundant sites throughout the city, Guelph Hydro is now in a unique position of having to pay a lower yearly maintenance cost for the phone system and is also receiving the benefit of having a redundant phone system (because the old analog phone system can still be used) in case of a disaster or sabotage.

The system has been installed and operating since spring of 2014. Guelph Hydro's long distance charges are now less than a penny per minute resulting in a significant operational savings to the utility and ultimately ratepayers (please see the following Table 1-34).

2. Reduced Phone Line Charges

Over the last 2 years, Guelph Hydro has hired a consultant to look at the number of phone lines charges. Guelph Hydro has now removed over 20 dedicated phone lines and reduced long distance charges with an annual savings of $35,000. These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

3. Remote Connection

A number of improvements added to Guelph Hydro's IT system to enable users to work remotely. This added functionality has given users the opportunity to work from home when needed and is helping others to stay connected to Guelph Hydro's network while away from the office. Lag time in responding in emergencies has been greatly improved.

Table 1-34: IT Efficiencies

Functional Area	Description of Efficiencies or Cost Improvements	Costs Saved	Implementation Date
IT	IP Phone System	$500,000 cost for a secondary site and $30,000 annual operating costs. Additional man power requirement	March 2014
IT	Reduced Phone Line Charges	$35,000/year*	June 2013
IT	Remote Connection	No direct cost saving	August 2013

***Cost savings are based on comparisons with previous monthly bills.

<u>Regulatory Affairs Efficiencies:</u>

1. In-house Settlement

Regulatory Affairs developed an in-house settlement model to calculate the weighted average prices that were calculated by a third-party service provider. In September 2012, new software was acquired to be used in conjunction with the in-house settlement model which further improved the billing process. The change to an in-house process for weighted average price calculations resulted in an annual savings of $69,000.

2. Merge Guelph Hydro and Rockwood Settlements and Reporting

Regulatory Affairs has worked diligently with the IESO and the Ministry of Energy ("MOE") to merge Guelph Hydro and Rockwood settlements and reporting. The merger completed successfully, and now Guelph Hydro only receives one IESO invoice and files one Ontario Clean Energy Benefit ("OCEB") report with the Ministry of Energy each month. The benefits include:

i. Regulatory Affairs works with one IESO monthly settlement and one MOE report instead of two
ii. Accounting enters only one journal entry instead of two
iii. Regulatory accounting for cost of power entries are reduced by 50%
iv. The merger has simplified the audit process

Table 1-35: Regulatory Efficiencies

Functional Area	Description of Efficiencies or Cost Improvements	Costs Saved	Implementation Date
Regulatory	In-house Settlement	$69,000	November 2012
Regulatory	Merge Guelph Hydro and Rockwood Settlements and Reporting	Gaining efficiency and increasing productivity	September 2012

These savings are now fully incorporated into Guelph Hydro's cost structure, and flow directly to the benefit of ratepayers.

Human Resources Efficiencies:

1. Employee Benefits Efficiencies

In 2014, as part of benefit contract renewals, negotiations with all Benefit Providers resulted in a decrease in all benefit premiums and an agreement to freeze these decreased premiums until January 1, 2017 for Life Insurance and LTD, and May 1, 2016 for Health and Dental. This resulted in a total cumulative saving of $281,000 from 2014 to 2016, without negative impacts to the benefits provided or disruption to employees.

Table 1-36

BENEFIT PREMIUMS – ESTIMATED COST SAVINGS			
	2014	**2015**	**2016**
LTD/ Life Insurance	$24,000 savings with January 1, benefit contract renewal, guaranteeing lowers rates for 3 years	$24,000	$24,000 Benefit Contract to be renewed on January 1, 2017
Health and Dental	$60,000 savings with May 1, 2014 benefit contract renewal guaranteeing lower rates for 2 years	$112,000	$37,000 savings up to Benefit Contract Renewal on May 1, 2016
Total Savings	**$84,000**	**$136,000**	**$61,000**
Cumulative Savings	**$281,000**		

2. Mutual Gains Relationship with International Brotherhood of Electrical Workers (IBEW) and Collective Bargaining Efficiencies

One grievance/arbitration can cost as much as $100,000 or more when factoring in legal costs, disruption and time, and negative impacts on morale and labour negotiations. Poor labour relations can often lead to strikes, which directly impact Guelph Hydro customers.

To avoid these costs and produce benefit for employees, Guelph Hydro and customers, Guelph Hydro and IBEW have been working very hard to maintain a productive and pro-active "mutual-gains" relationship since 2006, have succeeded in avoiding grievances and arbitrations

A "mutual-gains" four year Collective Agreement was reached at Conciliation in 2013. The following increases were balanced with agreement to efficiencies, also noted below:

- April 1, 2013: 2.75% increase across the board
- April 1, 2014: 1.75% increase across the board
- September 29, 2014: 1.0% increase across the board
- April 1, 2015: 2.75% increase across the board
- April 1, 2016: 2.5% increase across the board

Efficiencies which continue well beyond the life of this Collective Agreement were achieved including the following:

- Eating lunch at the job site versus driving back to the Operations Centre for Linepersons is now year round (achieved the last 6 weeks in the winter in this settlement), which means that unproductive time relating to breakdown of the job and resetting of the job, as well as driving to and from the Operations Centre for lunch has been replaced with productive time at the job site. This last 6 weeks in

the winter months, was the last 6 weeks to bargain in. Year round lunch at the job site is a productivity gain achieved over several rounds of "mutual-gains" bargaining. This last 6 weeks increases productive hours in Guelph Hydro's line department by the equivalent of 0.26 Full Time Equivalents per year (equivalent of $23,000/year) and also results in direct actual savings of $1,000 per year relating to less driving and less gas. Over the course of 2013 negotiations and previous negotiations, "eating lunch at the job site" went from zero days to year round, achieving the equivalent of 2.25 FTEs per year or $200,000/year. Using less gas also has an environmental benefit, which supports the City's Community Energy Initiative.

- Removal of Collective Agreement language that has restricted Guelph Hydro for years from implementing electronic payroll (paystubs and timesheets). This is expected to result in an increase in productive hours equivalent to 0.08 Full Time Equivalents per year and in a direct actual savings of $1,434 per year relating to paper, ink, printer maintenance, etc. This also provides Guelph Hydro flexibility to operate out of more than one location, if required in the future. Electronic paystubs were implemented in 2014 across all of Guelph Hydro as a result of this negotiated change, and electronic timesheets was implemented with 80% of Guelph Hydro employees in 2014, and continues into 2015.

Table 1-37

EFFICIENCIES OVER THE 4 YEAR TERM OF THE COLLECTIVE AGREEMENT				
	Direct Savings	**Increase in Productive Hours**	**Value of Increase in Productive Hours to be used for other Work**	**FTE Equivalent**
Electronic Timesheets/ Paystubs	$5,735.32	624	$24,180.00	0.30
Lunch on the Job Site (last 6 weeks in winter)	$3,989.32	2,160	$91,735.20	1.04
Grand Total for 4 Years	**$9,724.64**	**2,784**	**$115,915.20**	**1.34**

Other Collective Agreement terms agreed to in 2013, which will result in future efficiencies, include:

- Introduction of night shifts language that will provide the ability in the future to move to a 24/7 Control Room, which was needed in order to move to the 24/7 Control Room operations/ shared services model described in this section as another efficiency

- Capping of Sick Leave Benefit starting in 2015 for all new IBEW (and Management employees), which is expected over the long term to help control employee future benefit liabilities. The Employee Trends section in Exhibit 4, Tab 3, Schedule 1, Page 81, 2.7.3.1 Employee Compensation Breakdown shows a marked increase in extended sick leave and Long Term Disability cases since 2012 due to an aging employee population and increase in mental health issues.

- Introduction of prior authorization for IBEW (and Management employees) for the payment of certain very high cost "specialty drugs", where a "preferred" drug will be tried first. This change is expected over the long term to help stabilize costs related to high cost "specialty drugs".

3. Organizational Changes and Reorganization of Work Efficiencies

Organizational changes and reorganization of work has resulted in efficiencies relating to increases in productive hours, and decreased costs and risks. For example:

- Guelph Hydro and Guelph Municipal Holdings Inc. (GMHI) share common functions such as Financial, Accounting, Information Systems, Human Resources, and Payroll, in accordance with the Affiliate Relationship Code. These shared corporate services are governed by inter-company agreements between Guelph Hydro and GMHI. Guelph Hydro provides corporate services to GMHI on a cost plus 10% basis, and in return receives corporate services from GMHI on a cost basis only. The sharing of corporate services creates efficiencies between the affiliated companies as they share functional expertise contained in each company.
- In 2012, the Director of Corporate Communications was transferred from Guelph Hydro to Guelph Hydro Inc. (now GMHI), but continues to provide services to Guelph Hydro on a cost basis as part of shared services.
- In 2012, the Executive Assistant to the CEO was transferred to Guelph Hydro Inc. (now GMHI), and ceased to provide services to Guelph Hydro as part of shared services.
- In 2013, Guelph Hydro transferred the Communications Specialist vacancy to Guelph Hydro Inc. (now GMHI). The Communications Specialist continues to provide services to Guelph Hydro on a cost basis as part of shared services.

- The hiring of students is part of a Human Resources strategy, which provides students with industry and Guelph Hydro experience at a time this industry and Guelph Hydro are facing high levels of retirements across the province in the next five to ten years (see Employee Trends report in Exhibit 4, Tab 3, Schedule 1, Page 81, 2.7.3.1 Employee Compensation Breakdown). This has the added benefit of allowing the company to assess potential future hires, as a very low risk and cost. This has a positive impact on Guelph Hydro's ability to attract and retain employees, by minimizing turnover relating to terminations (see Employee Trends report in Exhibit 4, Tab 3, Schedule 1, Page 81, 2.7.3.1 Employee Compensation Breakdown), while bolstering the image of the industry and Guelph Hydro at colleges and universities, as a "great place to work". Students perform meaningful work, at a cost effective price, that would have to be done by other resources, and provide a future pool of potential employees.

- As part of past negotiations with IBEW, hours or work for all IBEW employees (and management) are now 40 hours/week, including all office employees. Increasing hours per week is an efficient way of increasing resources for increased workloads while managing costs relating to benefits, overtime, etc. There are now only four unionized employees left who work 36.25 hours/week, as they were grandfathered under the Collective Agreement (down from six in the last Cost of Service filing).

- As part of past negotiations with IBEW, as of October 2001, post age 65 retiree benefits for all IBEW employees (and management) are no longer provided to new employees. As of the end of 2014, only 39% of employees now remain grandfathered and eligible for post age 65 retiree benefits (down from 41% in the last Cost of Service filing).

4. Training Efficiencies

- In 2014, one System Control Operator completed the "Train the Trainer" program specific to the Infrastructure Health and Safety Association (IHSA) "Utility Work

Protection Code" (UWPC) training. This is an annual requirement for all trades employees that costs up to $5,000/year. Savings will be realized beginning in the first quarter of 2015 by having this System Control Operator train all Guelph Hydro trades employees.

- Guelph Hydro has regular communications with other LDC's to create or seize opportunities for shared training where common needs arise. The amount of shared training offered or received along with associated cost savings varies from year to year, depending on needs. Savings result from efficiencies in shared training, as well as savings relating to mileage and overnight accommodation. Examples include:
    - 2013 IHSA Cable Splicing and Electrical Safety Course. Guelph Hydro's costs relating to 3 employees were shared with 8 external local contractors resulting in a saving of $1,150 for Guelph Hydro. Since this one day course was held in-house expenses relating to mileage were also avoided.
    - 2013 Electric Project Management Course. Guelph Hydro's costs relating to 15 employees were shared with 5 external participants from local LDCs resulting in a saving of $2,695 for Guelph Hydro. Since this two day course was held in-house expenses relating to mileage and/or overnight accommodation were also avoided.

5. WSIB New Experimental Experience Rating Programs (NEER) Efficiencies

The Workplace Safety and Insurance Board's (WSIB) NEER program rewards employers whose injury/illness and WSIB's claims management performance is better than expected for the industry. In the NEER program, firms can either earn a lump sum refund or attract a surcharge. The NEER program compares the "expected cost" of claims to the actual "NEER cost" which is made up of total benefits paid to date, the projected future cost of claims over their expected lifetime and an administrative cost. Guelph Hydro earned a refund of $3,398.40 in 2014, a refund of $2,512.21 in 2013, a

refund of $2,500.81 in 2012, and a refund of $3,435.39 in 2011, as a reflection of its proactive WSIB claims management and also its proactive safety programs and culture.

Infrastructure Health & Safety Association Efficiencies:

Guelph Hydro participated during 2013 in the Infrastructure Health & Safety Association (IHSA) sponsored WSIB Safety Groups program. The program involves companies from the respective WSIB rate groups working together to develop working Health and Safety Management Systems (HSMS). Rebates on participants' premiums are awarded to the rate group as a whole and divided among the participating companies. Participation is limited to 5 years, with the rebates awarded the year following active participation. The maximum rebate allowed is 6% of participant's premium. Selected companies are audited in each calendar year to determine HSMS achievement and overall accident numbers must decrease (Guelph Hydro was audited in 2011). Guelph Hydro received a rebate for each of the five years that it participated. On December 8, 2014, Guelph Hydro received a rebate of $3,834.81 for its good experience rating under WSIB.

2.3.3.4 PUBLIC POLICY RESPONSIVENESS

In the Board's Scorecard Report, Board staff recommended four measures to assess a distributor's public policy responsiveness: two CDM measures and two measures for connection of renewable generation.

Conservation and Demand Management

Since 2006, through two previous generations of CDM programming, Guelph Hydro has consistently demonstrated a strong commitment to serving its customers. For 2011-2014, Guelph Hydro was allocated 4-year targets of 16.71 MW of Net Summer Peak Demand Savings and 79.53 GWh of Net Cumulative Energy Savings.

By the end of 2013, Guelph Hydro successfully met and exceeded its 2014 energy savings target of 79.53 GWh and continued to pursue its 16.71 MW demand savings target established by the OPA, through the use of province-wide saveONenergy CDM programs.

Since 2011, Guelph Hydro's efforts in promoting and encouraging customer participation in CDM programs, educating customers in their energy use electricity billing, as well as looking for electricity savings opportunities, has paid substantial benefits for Guelph Hydro's customers. This is validated through Guelph Hydro's OPA Final Verified Annual 2013 CDM Results Reporting, which at year-end 2013 indicated Guelph Hydro had achieved over 127% of its 2014 cumulative energy savings target and just under 50% of its 2014 net summer peak demand savings target, under the OPA's "Scenario 1" Reporting.

Scenario 1 reporting assumed that demand response resources had a persistence of only one year, and were therefore excluded from the 2011, 2012 and 2013 results reporting against 2014 target. "Scenario 2" reporting assumed that demand response resources remained in Guelph Hydro's service territory until 2014. As reported in Guelph Hydro's Final Verified Annual 2013 CDM Results Report, under Scenario 2

Guelph Hydro's demand savings were calculated as 77.6% of 2014 target achieved, placing Guelph Hydro in the top 4 of all LDCs for 2013 life-to-date results. Although the 2011-2014 CDM delivery was completed December 31, 2014, the process of finalizing, verifying and reporting on 2014 results would not be completed until August 2015. For year-end 2014, Guelph Hydro has forecasted achieving over 135% of its 4-year energy savings target, and close to 100% of its demand target, but will need to wait until later in 2015 to confirm the final verified results.

A sampling of some of the success stories of the 2013 campaign include the following: 968 households upgrading their home's heating and cooling system with a saveONenergy^{OM} Heating & Cooling incentive; 76 small commercial customers upgraded their lighting systems and received incentives totaling more than $116,000, and over 80 Retrofit projects were completed by industrial, commercial and institutional customers through the support of over $1M in customer incentives.

Connection of Renewable Generation

Guelph Hydro supports the efficient processing of requests for connections by embedded renewable and non-renewable generation. As of December 31, 2014, Guelph Hydro has connected a total of 281 microFIT and 28 FIT generation customers with a connected capacity of 8.537 MW.

<u>Renewable Generation Connection Impact Assessments Completed on time</u>

In 2014, Guelph Hydro completed three Connection Impact Assessments (CIA) and all were completed within the prescribed time limit. In 2013, Guelph Hydro completed one CIA and it was done within the prescribed time limit. In 2012, Guelph Hydro completed five CIAs in which four were completed within the prescribed time limit. Guelph Hydro outsources the CIA work to an engineering consultant. Historically, the reason for any delays is mainly due to the consultant's workload and unexpected delays associated with getting more information from the customer. Since then, Guelph Hydro has

developed and implemented measures, to ensure that the CIAs are done within 50 days instead of 60 days and set strict guidelines on the information required from the customer even before the CIA work begins.

New Micro-embedded Generation Facilities Connected on time

In 2014, Guelph Hydro connected 70 microFIT projects on time. In 2013, Guelph Hydro connected 73 microFIT projects and 7 FIT Projects on time within the prescribed industry target of 90%. This was a decrease from 2012, where Guelph Hydro connected 83 microFIT projects and 18 FIT Projects. The workflow to connect these projects is very streamlined and transparent for Guelph Hydro customers. Guelph Hydro works closely with customers and their contractors to address any connection issues and ensure the project is connected on time.

Government Obligations

In addition to the obligations above, the table below presents a brief list of government obligations Guelph Hydro has integrated into its business operations in prior years.

Table 1-38: Government Obligations

Government Obligation	Description	Compliance
Smart Meter Deployment	Directive of the Minister of Energy, Smart Meters provide accurate energy consumption and allow utilities to respond quickly to power interruptions.	100% - achieved on January 2011
Time-of-Use Pricing	On August 4, 2010, the Board determined Guelph Hydro's mandated date for implementation of time-of-use rates was June 2011. Guelph Hydro received two extensions from the Board (EB-2011-0086 and EB-2011-0365) which related to the delay of implementing time-of-use rates for two small groups. Implementation was completed in July 2012.	100% - achieved in July 2012

Government Obligation	Description	Compliance
Conservation and Demand Management	On March 31, 2010, the Minister of Energy issued a directive to the Board to amend licences of all electricity distributors to include a condition to meet electricity consumption reduction targets through CDM programs.	Forecast as of Dec. 31, 2014: Demand (MW) = over 95% Energy (GWh) = 135%
Adoption of IFRS	Required by the Canadian Accounting Standards Board (AcSB), publicly accountable enterprises must transition from CGAPP to IFRS by January 1, 2012. Guelph Hydro adopted IFRS for financial reporting and MIFRS for regulatory reporting in 2011. Guelph Hydro's 2012 rates were approved under MIFRS.	100%
HST	The Ontario Provincial Government combined the GST and PST taxes to implement HST on July 1, 2010. Guelph Hydro met the implementation date for the bill print.	100%
Low-income Energy Assistance Program (LEAP)	The Board determined that the funds to be distributed by distributors to LEAP should be the greater of $2,000 or 0.12% of a distributor's Board-approved distribution revenue requirement.	100% - achieved every year starting 2011
Ontario Clean Energy Benefit (OCEB)	Effective January 1, 2011, a credit of 10% of the base invoice amount applies to the electric charges on each residential or GS<50 customer bill. Effective September 1, 2012, OCEB was limited to the first 3000 kWh consumption per month. Guelph Hydro submits monthly online OCEB reports to the Ministry of Energy.	100% - achieved starting January 2011 up to date
	O.Reg 275/04 "INFORMATION ON INVOICES TO LOW-VOLUME CONSUMERS OF ELECTRICITY" specifies how electricity costs are to be presented on bills. Until June 30, 2013, line	

Government Obligation	Description	Compliance
Bill Print changes to include Line Losses	losses were reflected in the "Electricity" subheading on low-volume customer bills. O.Reg 405/12 amends O.Reg 275/04, and requires that charges related to losses as of July 1st, 2013 are to be included under the "Delivery" subheading for non-retailer customers. Retailer bills will be required to make this change for July 1st, 2015.	100% - achieved July 2013
Industrial Conservation Initiative (Class "A" Global Adjustment)	The period of July 1 to June 30 is used to determine Class A Large User eligibility, where the average monthly consumption during the twelve (12) month period is greater than 5 MW. For the period of May 1 to April 30, the Class A eligible consumer is billed for Global Adjustment based upon their Peak Demand Factor (percentage contribution to the top five peak demand hours each year). Beginning July 2013, Class B consumers who were previously above the 5 MW average demand threshold and were eligible Class A consumers, but who have since dropped below 5 MW average demand due to participation in an eligible CDM program, are still eligible to be billed the Global Adjustment portion of their bill based on their Peak Demand Factor. In 2015, the ICI will be expanded to include eligible customers with a peak demand above 3 MW and less than or equal to 5 MW. A customer in this range must have an NAICS code commencing with '21', '31', '32', '33', '518', or '1114' in order to be eligible for the program. These customers must opt-in to the initiative.	100% - achieved starting July 2011 up to date
Distribution System Code Amendments	Amendments impact billing issuance and payment revisions, disconnections and payment procedures, disconnections for non-payments, and arrears payment agreements.	100% - achieved on or before the effective date specified by the Code

Government Obligation	Description	Compliance
Revised Electricity Reporting and Record Keeping Requirements	On March 7, 2014, the Board issued a notice amending the Electricity RRR to implement an electricity distributor scorecard, to support the Board's continued benchmarking of electricity distributor total costs, and to facilitate the Board's continued monitoring of electricity distributor financial viability. New financial viability reporting on large customers (new Sections RRR 2.1.17 and 2.1.18), as well as five new performance measures were established to new Section RRR 2.1.19.	100%- achieved August 2014
Accessibility for Ontarians with Disabilities Act, 2005	Effective January 1, 2012, the rules associated with the Act came into effect for all Ontario businesses and organizations. Guelph Hydro has ensured that material presented on its website is entirely accessible.	100% - achieved December 2014
Ontario One Call	All owners and operators of underground infrastructure, including municipalities are required to be members of ON1Call and to respond to locate requests.	100% - achieved October 2008

2.3.3.5 FINANCIAL PERFORMANCE

In the Board's Scorecard Report, Board staff recommended three measures to assess a distributor's financial viability: current ratio, total debt to equity ratio, and achieved regulated return on equity.

Financial Ratios

Current Ratio

Guelph Hydro's 2012 current ratio of 1.64 was reflective of a strong cash position, following the company's long-term debt issue in late-2010. As this cash began to be used up (in 2013), the company's current ratio declined. Guelph Hydro's 2013 current ratio of 1.33 was reflective of cash outflows to meet generally higher costs of power relative to previous years. In 2013, the sum of the Global Adjustment and Energy charges were significantly higher than in previous years, and this caused the company's cash balances to trend lower on monthly basis. There was no discernible trend in the other accounts that factor into current assets and current liabilities. In 2014, the company's current ratio declined further to 1.06, which was confirmation of the company's depletion of its cash reserves. As noted in Exhibit 5, Tab 1, Schedule1, 2.8.1 Capital Structure, Guelph Hydro intends to issue new long-term debt as soon as practical to remedy the current situation whereby operating cash is being used to fund distribution capital expenditures. The company expects its current ratio, along with other key financial metrics, to improve following this debt issue.

Total Debt to Equity Ratio

In 2012, Guelph Hydro's total debt to equity ratio showed that the company's total debt-to-equity ratio remained below its deemed debt to equity ratio, despite the issuance of $65 million in long-term debt in late-2010.

In 2013 and 2014, Guelph Hydro's total debt-to-equity ratio of just over 1.0 was reflective of the need for the company to undertake a long-term debt issue to finance long-term distribution plant. Guelph Hydro's previous long-term debt issue for $65 million was carried out in 2010. The proceeds of this issue were used to fund the smart meter installation project, to repay a promissory note with its municipal parent, and to fund the new Arlen transformer station. However, since that time, the bulk of capital expenditures on distribution plant have been funded out of operating cash flows, and this is underpinning the company's current capital structure which is not reflective of the deemed capital structure. Guelph Hydro intends to carry out a second long-term debt issue for the purposes of funding distribution capital as soon as possible, which debt issue will improve the company's actual debt-to-equity ratio relative to its deemed debt-to-equity ratio.

Return on Equity

Guelph Hydro's achieved ROE of 7.5% in 2012 largely reflects three factors:

1. the low debt-to-equity ratio relative to its deemed capital structure noted in the explanation of the debt to equity ratio which has caused the ROE to deteriorate on a year-over-year basis. A debt-to-equity position that is in line with the company's deemed capital structure will lead to a pick-up in ROE, other things being equal.
2. an under-estimation of depreciation expense in the 2012 Cost of Service (CoS) rates application primarily due to the company's conversion to IFRS. The under-estimation of depreciation expense was also the result of understating construction costs for the Arlen transformer station due in a large part to receiving cost information from Hydro One much after the rates application had been filed.
3. the adverse impact on earnings due to the mechanics of the half-year rule on overall return when the LDC is rebased in one year but then enters a multi-year

IRM cycle. This is particularly true when net fixed assets are growing faster than depreciation which is the case in Guelph Hydro's situation. The first two of these three aspects meant that Guelph Hydro's distribution rates did not properly reflect the company's actual costs in 2012 and beyond, and this manifested in lower achieved ROEs when compared to deemed ROEs. The third aspect also adversely impacted Guelph Hydro's achieved ROE in 2013. Guelph Hydro's achieved ROE of 7.29% in 2013 largely reflects the same three aspects noted in the explanation for the achieved ROE in 2012. In 2014, Guelph Hydro's achieved ROE of 10.91% was primarily due to higher distribution and Other Revenues of $1.2 million combined with lower OM&A and depreciation expenses of $1.2 million.

2.3.3.6 SCORECARD PERFORMANCE ANALYSIS

Performance for each of the Board's performance outcomes over the last five years (2009 to 2013), and current performance (2014)

The table below presents a comparison of the Score Card results between Guelph Hydro and other LDCs similar in size or in Guelph Hydro's neighbouring region over the last five years 2009 to 2013.

Service Quality Performance

Over the five historical years, 2009 to 2013, Guelph Hydro connected, on average, 99.94% of new Residential and Small Business customers on time. This is above the industry standard of 90% for all LDCs in Ontario. In 2013, Guelph Hydro ranked 1st (along with three other LDCs) among twelve similar mid-sized LDCs with connection measures ranging from 92.7% to 100% (as seen in Table 1-39 and Chart 1-1). Guelph Hydro recognizes this achievement is a result of efficient connection procedures and aggressive connection deadline targets.

Guelph Hydro also met, on average, 98.02% of scheduled appointments on time. This is above the industry standard of 90% for all LDCs in Ontario. In 2013, Guelph Hydro ranked 7th among twelve similar mid-sized LDCs with scheduled appointment measures ranging from 94.9% to 100% (as seen in Table 1-39 and Chart 1-2). Guelph Hydro has continually demonstrated improvement with meeting appointments on time. Guelph Hydro meets with a locate contractor on a regular basis to review progress and discuss any improvements needed to maintain high standard of appointments met on time.

Throughout the five historical years, 2009 to 2013, Guelph Hydro answered, on average, 81.44% of telephone calls on time. This is above the industry standard of 65% for all LDCs in Ontario. In 2013, Guelph Hydro ranked 3rd among twelve similar mid-sized LDCs with answered telephone call measures ranging from 67.5% to 95.1% (as seen in Table 1-39

and Chart 1-3). Guelph Hydro's goal is to improve overall the customer service experience by implementing online services and providing customers other channels such as online chat, Interactive Voice Recognition (IVR) and improved email services to promote a culture of first contact resolution with Guelph Hydro customers.

Table 1-39: Service Quality

				2009	2010	2011	2012	2013
Customer Focus **Services are provided in a manner that responds to identified customer preferences**	**Service Quality**	**New Residential/Small Business Services Connected on Time** **Industry Standard: 90%**	Kitchener-Wilmot Hydro Inc.	93.50%	93.10%	94.30%	91.30%	91.30%
			Oshawa PUC Networks Inc.	100.00%	92.30%	91.00%	91.00%	97.60%
			Oakville Hydro Electricity Distribution Inc.	97.20%	95.00%	95.40%	96.60%	95.40%
			Waterloo North Hydro Inc.	100.00%	100.00%	100.00%	100.00%	100.00%
			Cambridge and North Dumfries Hydro Inc.	99.20%	98.50%	99.40%	99.20%	99.30%
			Milton Hydro Distribution Inc.	93.60%	99.10%	99.00%	98.60%	98.00%
			Newmarket - Tay Power Distribution Ltd.	99.40%	95.90%	100.00%	100.00%	100.00%
			Brantford Power Inc.	99.60%	100.00%	98.70%	99.60%	99.70%
			Guelph Hydro Electric Systems Inc.	100.00%	99.80%	99.90%	100.00%	100.00%
			Whitby Hydro Electric Corporation	100.00%	100.00%	100.00%	100.00%	100.00%
			Burlington Hydro Inc.	97.20%	96.30%	94.90%	98.30%	96.70%
			Halton Hills Hydro Inc.	100.00%	100.00%	100.00%	100.00%	100.00%
			ANNUAL AVERAGE	**98.31%**	**97.50%**	**97.72%**	**97.88%**	**98.17%**
		Scheduled Appointments Met on Time **Industry Standard: 90%**	Kitchener-Wilmot Hydro Inc.	98.40%	97.20%	96.00%	96.70%	96.10%
			Oshawa PUC Networks Inc.	100.00%	99.10%	99.90%	99.90%	98.90%
			Oakville Hydro Electricity Distribution Inc.	99.90%	93.70%	100.00%	100.00%	100.00%
			Waterloo North Hydro Inc.	99.80%	96.90%	99.70%	99.80%	99.90%
			Cambridge and North Dumfries Hydro Inc.	100.00%	99.90%	99.90%	98.70%	99.50%
			Milton Hydro Distribution Inc.	100.00%	100.00%	100.00%	100.00%	99.70%
			Newmarket - Tay Power Distribution Ltd.	100.00%	100.00%	98.20%	98.60%	94.90%
			Brantford Power Inc.	100.00%	100.00%	100.00%	99.50%	100.00%
			Guelph Hydro Electric Systems Inc.	96.50%	98.90%	98.60%	99.00%	97.10%
			Whitby Hydro Electric Corporation	99.00%	100.00%	100.00%	98.80%	99.50%
			Burlington Hydro Inc.	97.60%	99.80%	97.30%	97.90%	99.30%
			Halton Hills Hydro Inc.	99.70%	99.20%	96.00%	100.00%	100.00%
			ANNUAL AVERAGE	**99.24%**	**98.73%**	**98.80%**	**99.08%**	**98.74%**
		Telephone Calls Answered on Time **Industry Standard: 65%**	Kitchener-Wilmot Hydro Inc.	78.00%	75.40%	76.90%	76.40%	78.60%
			Oshawa PUC Networks Inc.	56.10%	59.20%	71.30%	71.30%	71.50%
			Oakville Hydro Electricity Distribution Inc.	74.70%	86.20%	81.10%	83.70%	82.10%
			Waterloo North Hydro Inc.	87.70%	88.70%	91.50%	87.60%	95.10%
			Cambridge and North Dumfries Hydro Inc.	77.40%	74.30%	66.20%	88.10%	87.30%
			Milton Hydro Distribution Inc.	70.00%	79.00%	76.80%	82.60%	74.60%
			Newmarket - Tay Power Distribution Ltd.	89.30%	85.20%	87.80%	88.50%	83.60%
			Brantford Power Inc.	75.90%	71.20%	72.20%	64.70%	67.50%
			Guelph Hydro Electric Systems Inc.	70.60%	80.00%	92.90%	80.00%	83.70%
			Whitby Hydro Electric Corporation	94.50%	95.50%	95.60%	54.50%	68.00%
			Burlington Hydro Inc.	72.80%	70.70%	66.80%	77.70%	74.80%
			Halton Hills Hydro Inc.	85.60%	86.20%	85.50%	87.70%	83.20%
			ANNUAL AVERAGE	**77.72%**	**79.30%**	**80.38%**	**78.57%**	**79.17%**

Chart 1-1

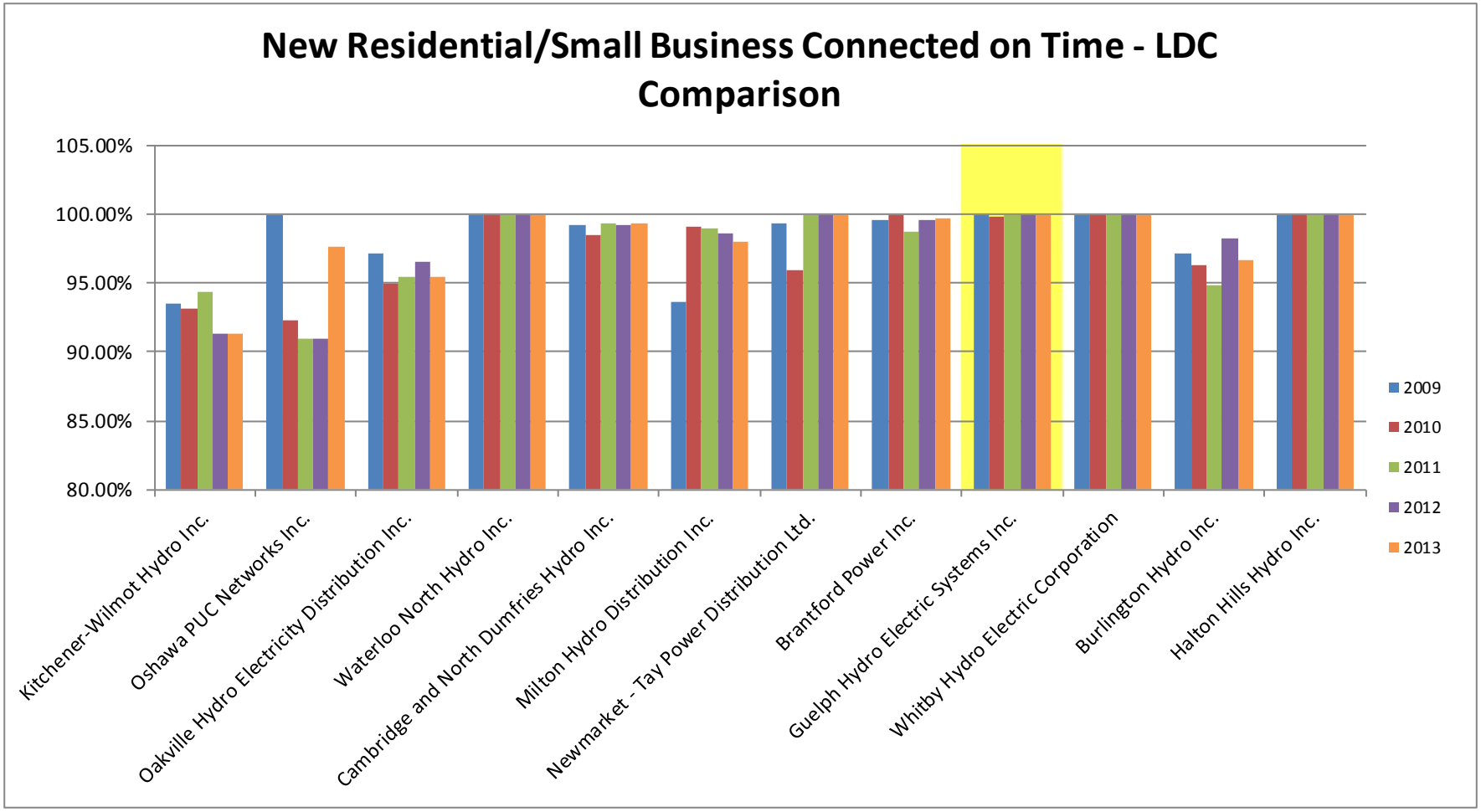

New Residential/Small Business Connected on Time - LDC Comparison
105.00%
100.00%
95.00%
90.00%
85.00%
80.00%
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-2

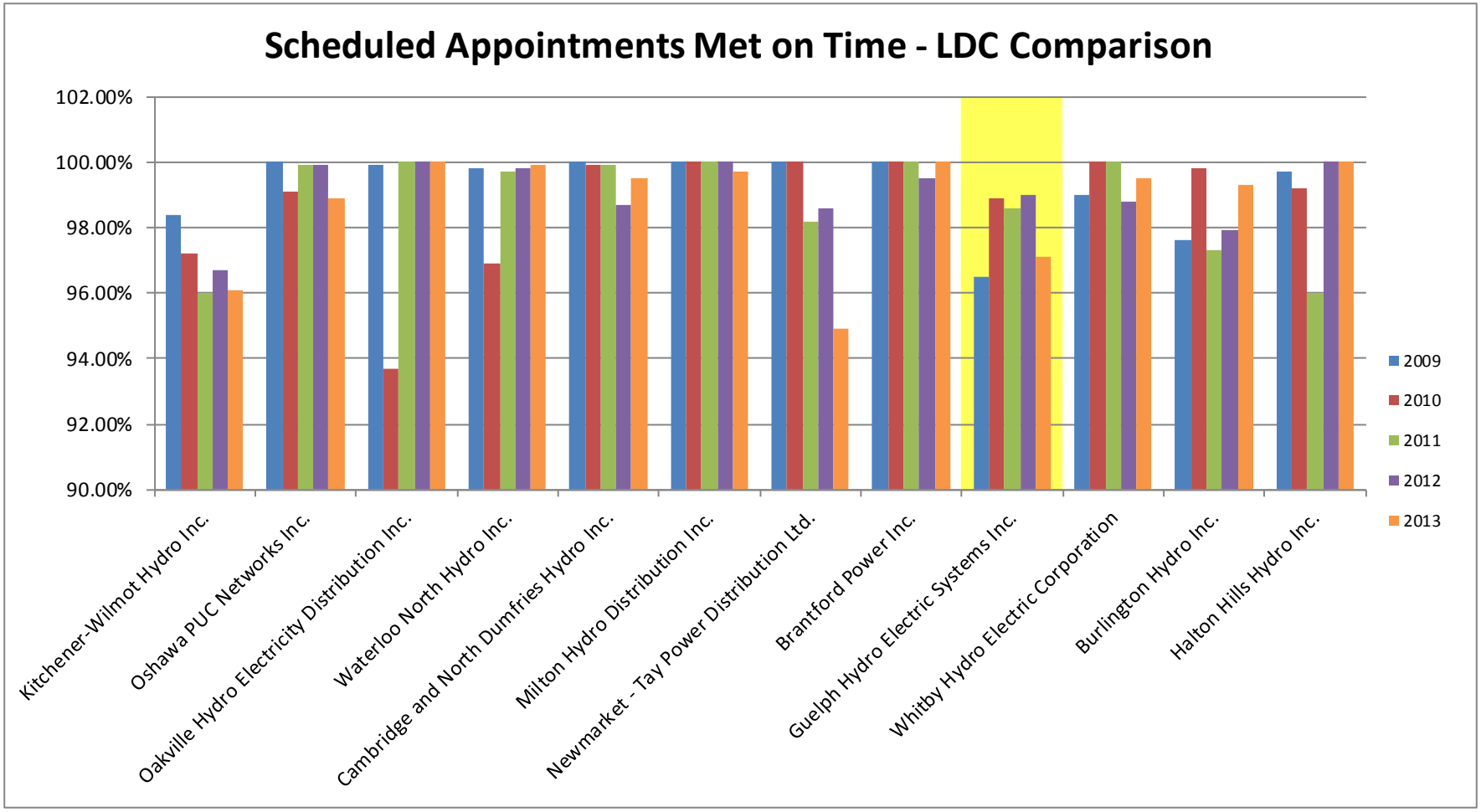
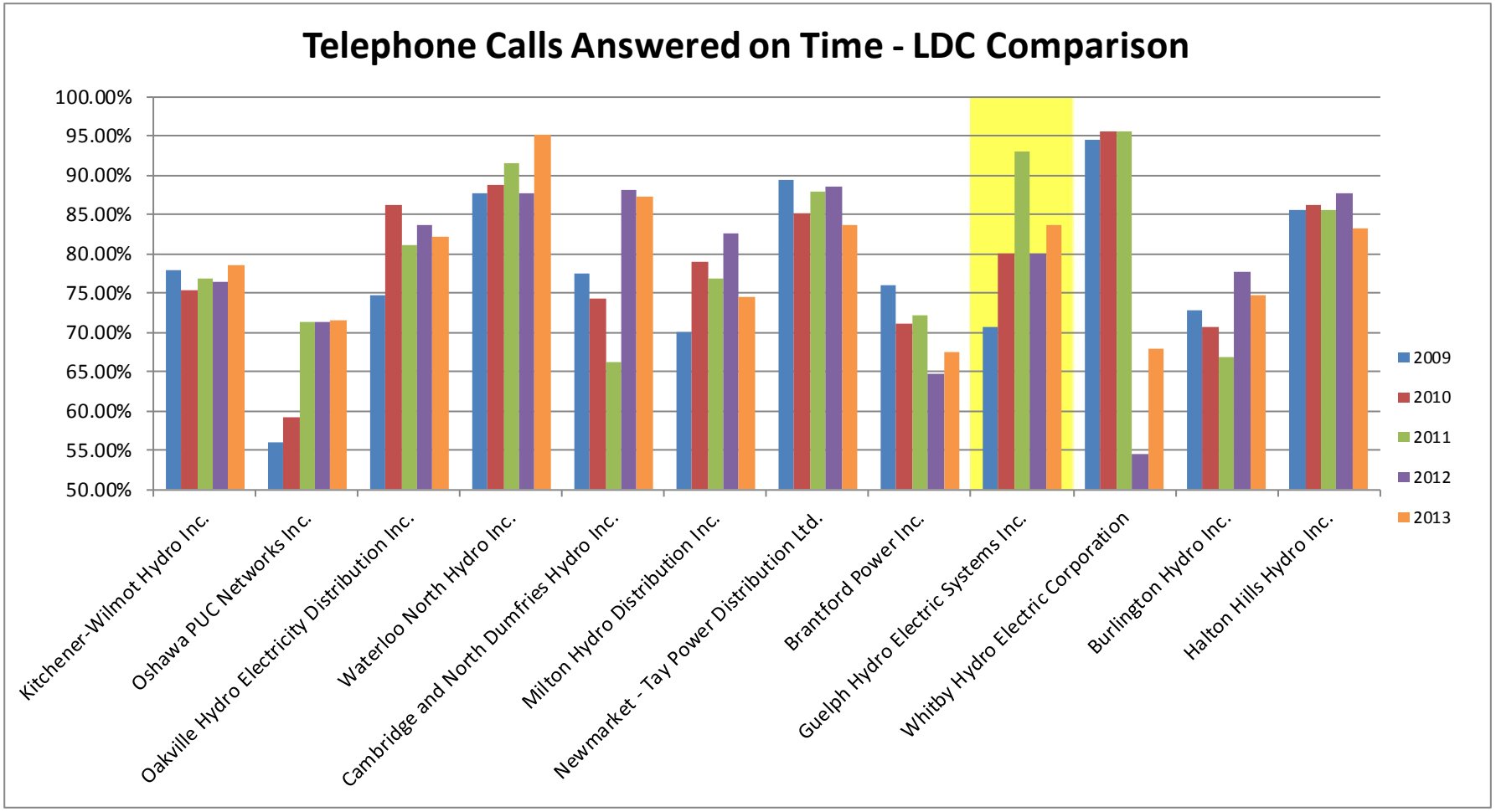

Scheduled Appointments Met on Time - LDC Comparison
102.00%
100.00%
98.00%
96.00%
94.00%
92.00%
90.00%
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-3


Telephone Calls Answered on Time - LDC Comparison
100.00%
95.00%
90.00%
85.00%
80.00%
75.00%
70.00%
65.00%
60.00%
55.00%
50.00%
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

System Reliability Performance

Over the five historical years, 2009 to 2013, Guelph Hydro customers experienced annual service interruption, on average, of 57.12 minutes or 0.952 hours in duration. In 2013, Guelph Hydro ranked 7th among twelve similar mid-sized LDCs with outage duration measures ranging from 0.56 to 7.94 hours (as seen in Table 1-40 and Chart 1-4). The main cause of Guelph Hydro's interruptions in 2011 and 2013 was a greater number of significant events as compared to previous years. Guelph Hydro experienced 4 major event days in 2011 and 5 in 2013. Most of these event days can be directly related to storms outside of Guelph Hydro's control. If the effects of the undergone in 2013 are removed the annual service interruption would be 0.60 hours in duration, down from 2.21 hours.

Over the five historical years, 2009 to 2013, Guelph Hydro customers experienced interruptions, on average, 1.5 times annually. In 2013, Guelph Hydro ranked 12th among twelve similar mid-sized LDCs with service interruption frequencies ranging from 0.54 to 3.36 times (as seen in Table 1-40 and Chart 1-5). The main cause of the greater number of service interruptions in 2011 and 2013 was a greater number of significant events as compared to previous years. Guelph Hydro experienced 4 major event days in 2011 and 5 in 2013. Most of these event days can be directly related to storms outside of Guelph Hydro's control. If the effects of the storms in 2013 are removed, the frequency of interruptions would be 1.66 times annually, down from 3.36 times.

Table 1-40: System Reliability

			2009	2010	2011	2012	2013
System Reliability	Average Number of Hours that Power to a Customer is Interrupted	Kitchener-Wilmot Hydro Inc.	1.39	0.79	1.00	0.97	0.87
		Oshawa PUC Networks Inc.	1.31	0.62	1.88	1.27	6.86
		Oakville Hydro Electricity Distribution Inc.	0.77	0.74	0.46	0.81	0.83
		Waterloo North Hydro Inc.	1.11	0.76	0.75	1.66	5.17
		Cambridge and North Dumfries Hydro Inc.	0.51	0.97	0.70	1.00	2.67
		Milton Hydro Distribution Inc.	1.02	0.55	1.05	0.81	7.94
		Newmarket - Tay Power Distribution Ltd.	0.26	0.30	0.93	0.72	0.78
		Brantford Power Inc.	0.00	0.12	0.49	0.21	0.56
		Guelph Hydro Electric Systems Inc.	0.21	0.33	1.70	0.31	2.21
		Whitby Hydro Electric Corporation	0.68	0.48	1.47	0.96	4.95
		Burlington Hydro Inc.	1.08	1.13	1.06	0.90	0.91
		Halton Hills Hydro Inc.	1.75	1.78	1.38	1.23	2.08
		ANNUAL AVERAGE	**0.84**	**0.71**	**1.07**	**0.90**	**2.99**
	Average Number of Times that Power to a Customer is Interrupted	Kitchener-Wilmot Hydro Inc.	1.34	1.10	0.89	0.88	0.69
		Oshawa PUC Networks Inc.	1.17	0.61	1.66	1.08	2.39
		Oakville Hydro Electricity Distribution Inc.	1.57	1.15	1.01	0.97	1.09
		Waterloo North Hydro Inc.	0.95	0.85	0.85	1.39	3.14
		Cambridge and North Dumfries Hydro Inc.	0.97	0.85	1.30	1.43	2.35
		Milton Hydro Distribution Inc.	0.86	0.40	1.12	1.05	0.99
		Newmarket - Tay Power Distribution Ltd.	0.25	0.21	0.73	0.50	0.54
		Brantford Power Inc.	0.00	0.33	1.24	0.81	0.71
		Guelph Hydro Electric Systems Inc.	0.50	0.75	1.51	1.49	3.36
		Whitby Hydro Electric Corporation	1.17	0.54	1.62	1.29	2.8
		Burlington Hydro Inc.	1.17	1.72	0.95	0.95	0.68
		Halton Hills Hydro Inc.	1.22	2.75	1.49	1.34	1.48
		ANNUAL AVERAGE	**0.93**	**0.94**	**1.20**	**1.10**	**1.69**

Chart 1-4

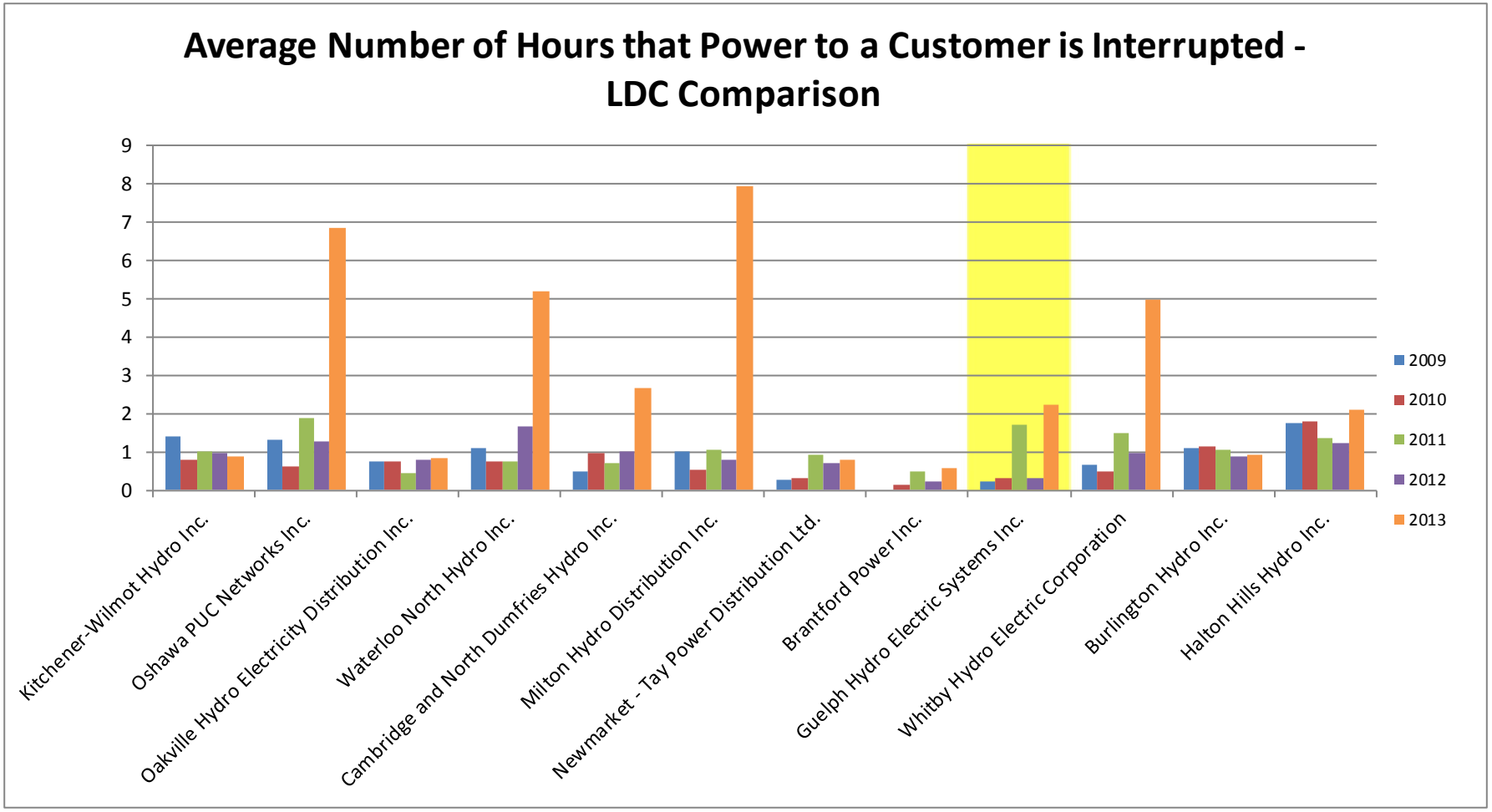
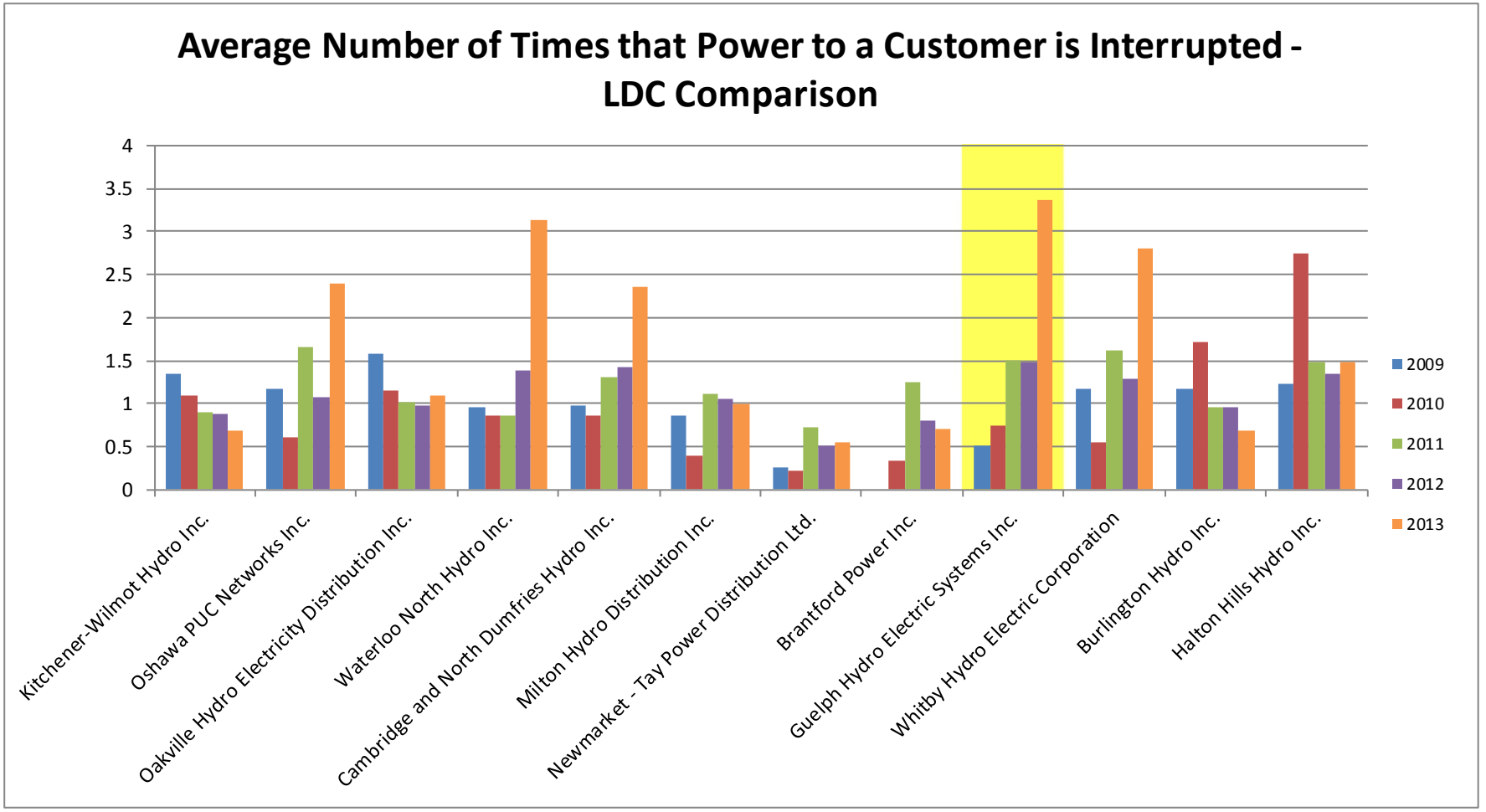

Average Number of Hours that Power to a Customer is Interrupted - LDC Comparison
9
8
7
6
5
4
3
2
1
0
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-5


Average Number of Times that Power to a Customer is Interrupted - LDC Comparison
4
3.5
3
2.5
2
1.5
1
0.5
0
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Cost Control Performance

Total Cost per Customer

There are two factors driving Guelph Hydro's historical Total Cost per Customer performance. First, in 2011 as a first-time adopter of IFRS, Guelph Hydro elected to use the carrying amount of its fixed and intangible assets as valued under Canadian GAAP as the deemed cost of the assets as at January 1, 2010. The effect of this change was to reduce accumulated depreciation to zero, and to reduce the gross cost of the assets by a corresponding amount. The second factor influencing Total Costs per Customer in 2013 was Guelph Hydro's replacement of half of its regularly scheduled dividend to its then parent company, Guelph Hydro Inc., with higher management fees to recognize the significant increase in effort from Guelph Hydro Inc. employees to address potential mergers and consolidations in light of the Provincial report on the same subject released at the end of 2012. The impact of this was a reduction in Guelph Hydro's dividend payment by $1.5 million and a commensurate increase in operating expenses of $1.5 million. Because of these cost drivers, Guelph Hydro ranked 8th overall when compared to the subset of its peers in the table above. When examined over the five-year period, however, on a compound annual average basis, Guelph Hydro's Total Cost per Customer declined by 1 percent in 2013 compared to 2009 which is the second best when compared to this subset of LDCs.

Total Cost per kilometer of Line

The same two factors that drove Guelph Hydro's Total Cost per Customer served to influence Guelph Hydro's Total Cost per kilometer of Line — the adoption of IFRS, and the replacement of half of the regularly scheduled dividend in 2013 with higher management fees. Because of these necessary costs, Guelph Hydro's Total Cost per kilometer of Line were the second highest when compared to the sub-set of LDCs in the table above. Similar to the Total Cost per Customer analysis, on a compound annual average basis, Guelph

Hydro's Total Cost per kilometer of Line declined by 0.33% in 2013 compared to 2009, which is the third-best when compared to this subset of LDCs.

Table 1-41: Cost Control

				2009	2010	2011	2012	2013
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives	**Cost Control**	**Efficiency Assessment**	Kitchener-Wilmot Hydro Inc.				2	2
			Oshawa PUC Networks Inc.				2	2
			Oakville Hydro Electricity Distribution Inc.				4	4
			Waterloo North Hydro Inc.				3	3
			Cambridge and North Dumfries Hydro Inc.				3	3
			Milton Hydro Distribution Inc.				3	2
			Newmarket - Tay Power Distribution Ltd.				2	2
			Brantford Power Inc.				3	3
			Guelph Hydro Electric Systems Inc.				3	3
			Whitby Hydro Electric Corporation				3	3
			Burlington Hydro Inc.				3	3
			Halton Hills Hydro Inc.				1	1
			ANNUAL AVERAGE				**2.67**	**2.58**
		Total Cost per Customer	Kitchener-Wilmot Hydro Inc.	$ 438	$ 444	$ 450	$ 450	$ 466
			Oshawa PUC Networks Inc.	$ 456	$ 473	$ 500	$ 510	$ 505
			Oakville Hydro Electricity Distribution Inc.	$ 619	$ 664	$ 710	$ 695	$ 730
			Waterloo North Hydro Inc.	$ 577	$ 617	$ 695	$ 673	$ 728
			Cambridge and North Dumfries Hydro Inc.	$ 532	$ 547	$ 571	$ 593	$ 624
			Milton Hydro Distribution Inc.	$ 665	$ 659	$ 676	$ 644	$ 654
			Newmarket - Tay Power Distribution Ltd.	$ 584	$ 559	$ 534	$ 536	$ 543
			Brantford Power Inc.	$ 499	$ 505	$ 484	$ 496	$ 507
			Guelph Hydro Electric Systems Inc.	$ 633	$ 663	$ 696	$ 587	$ 608
			Whitby Hydro Electric Corporation	$ 604	$ 632	$ 628	$ 600	$ 612
			Burlington Hydro Inc.	$ 557	$ 557	$ 594	$ 587	$ 587
			Halton Hills Hydro Inc.	$ 611	$ 622	$ 647	$ 684	$ 642
			ANNUAL AVERAGE	**$ 564.58**	**$ 578.50**	**$ 598.75**	**$ 587.92**	**$ 600.50**
		Total Cost per Km of Line	Kitchener-Wilmot Hydro Inc.	$ 20,132	$ 20,606	$ 21,079	$ 21,225	$ 22,062
			Oshawa PUC Networks Inc.	$ 25,074	$ 26,116	$ 26,901	$ 27,330	$ 27,050
			Oakville Hydro Electricity Distribution Inc.	$ 26,937	$ 28,912	$ 31,053	$ 29,135	$ 26,377
			Waterloo North Hydro Inc.	$ 19,140	$ 20,721	$ 23,717	$ 23,080	$ 25,066
			Cambridge and North Dumfries Hydro Inc.	$ 24,147	$ 25,037	$ 26,301	$ 27,417	$ 28,714
			Milton Hydro Distribution Inc.	$ 20,977	$ 20,478	$ 21,698	$ 21,166	$ 22,402
			Newmarket - Tay Power Distribution Ltd.	$ 17,990	$ 17,180	$ 21,464	$ 21,830	$ 22,272
			Brantford Power Inc.	$ 34,343	$ 37,440	$ 28,324	$ 37,066	$ 39,373
			Guelph Hydro Electric Systems Inc.	$ 29,341	$ 31,284	$ 32,650	$ 27,427	$ 28,952
			Whitby Hydro Electric Corporation	$ 22,841	$ 23,853	$ 23,887	$ 23,109	$ 23,643
			Burlington Hydro Inc.	$ 20,587	$ 21,474	$ 22,425	$ 25,247	$ 25,773
			Halton Hills Hydro Inc.	$ 9,441	$ 9,208	$ 9,382	$ 9,542	$ 9,034
			ANNUAL AVERAGE	**$ 22,579**	**$ 23,526**	**$ 24,073**	**$ 24,465**	**$ 25,060**

Chart 1-6

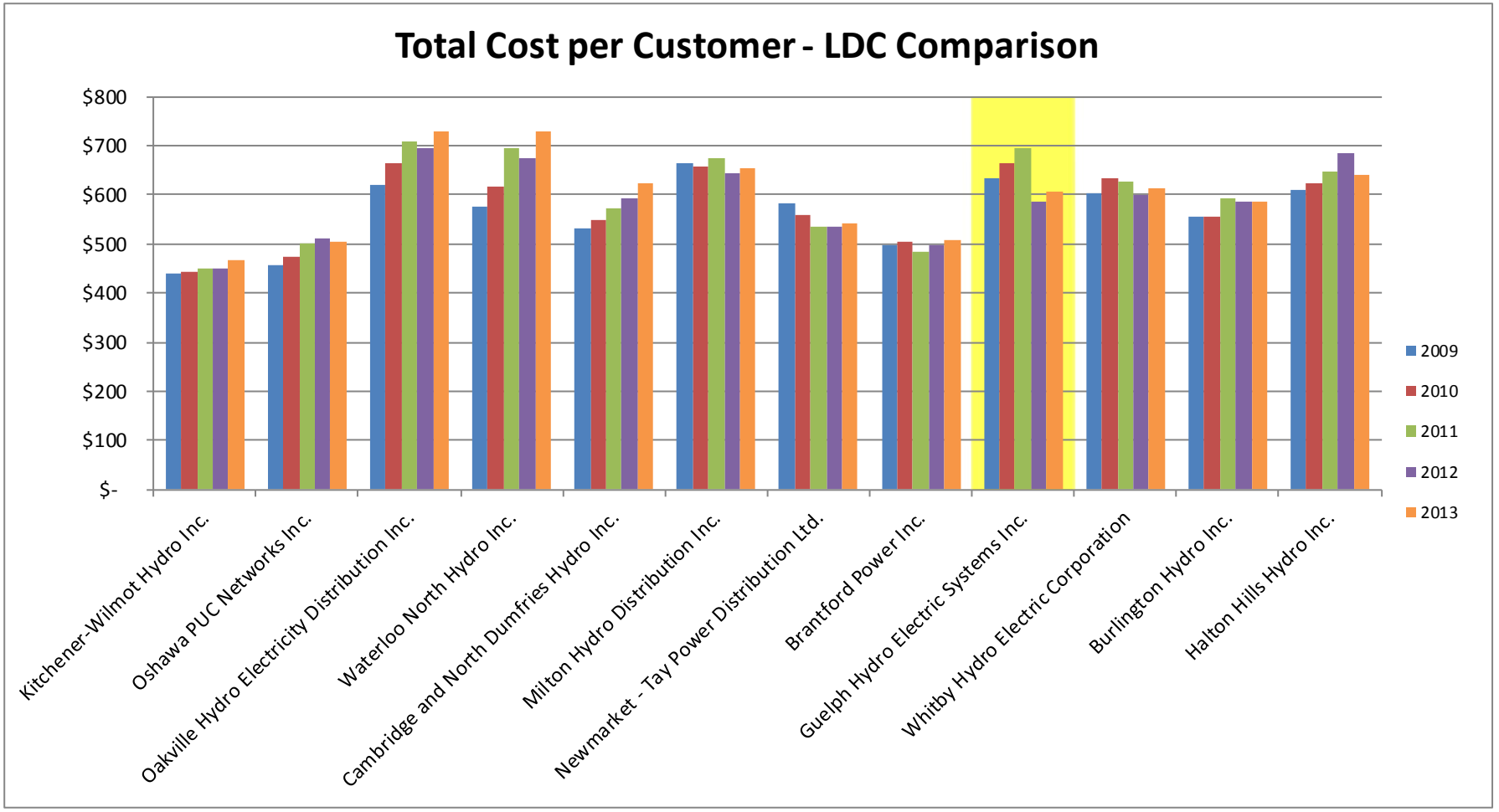
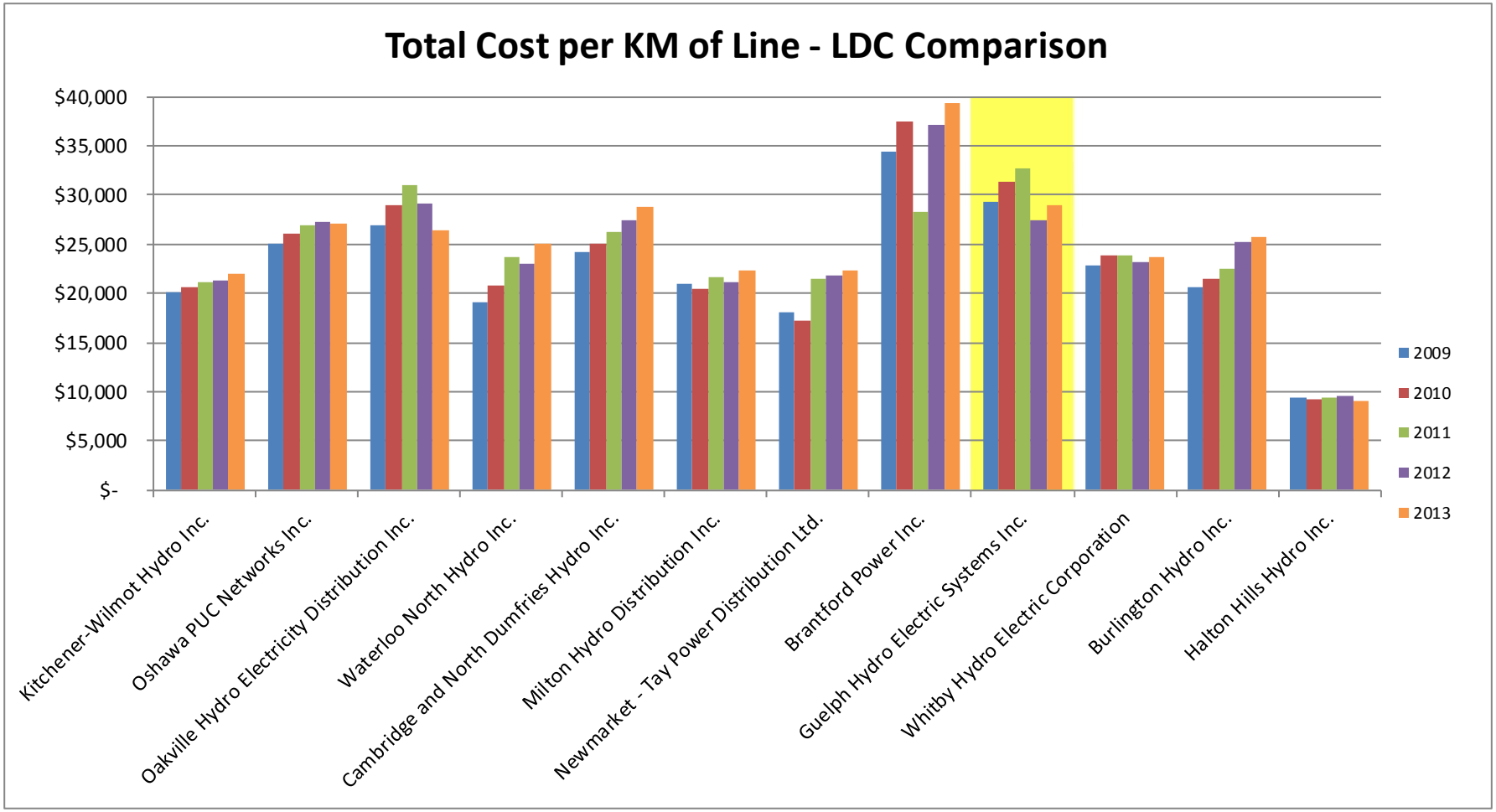

Total Cost per Customer - LDC Comparison
$800
$700
$600
$500
$400
$300
$200
$100
$-
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-7


Total Cost per KM of Line - LDC Comparison
$40,000
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$-
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

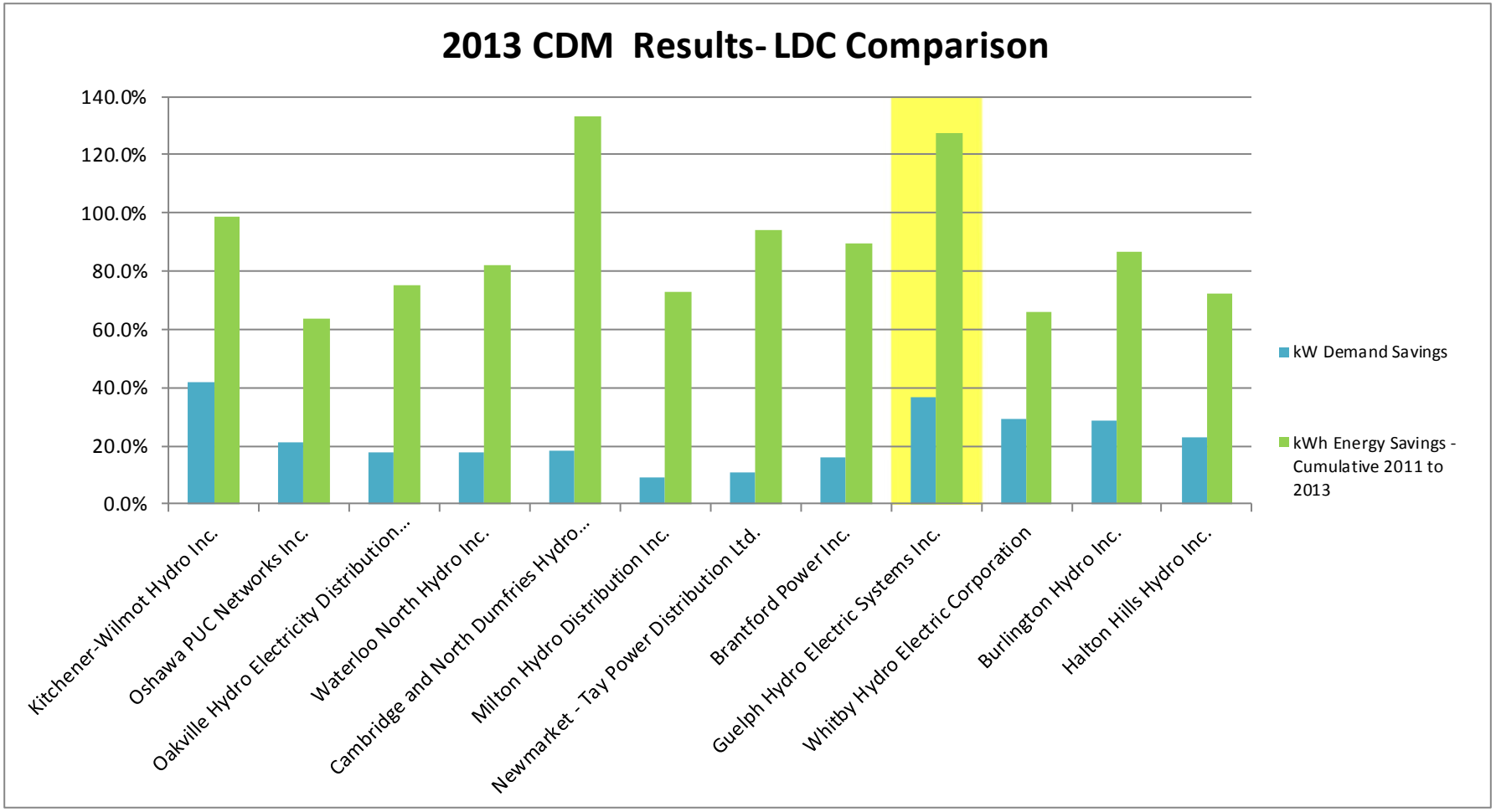
Conservation and Demand Management Performance

Guelph Hydro's OEB CDM scorecard energy savings achievement represents cumulative net persistent energy savings for 2011-2013. By December 31, 2013, Guelph Hydro had achieved 127.4% of its 2014 target. The OEB CDM scorecard demand savings achievement represents incremental net non-persistent demand savings by year for 2011-2013. The cumulative effect of the incremental annual demand savings would suggest Guelph Hydro has achieved 86.5% of its four year target by December 31, 2013. However, all LDCs including Guelph Hydro will be measured against net persistent demand savings over the 4 year period. When the incremental annual demand savings is adjusted for persistence, Guelph Hydro's achievement over 2011-2013, including Demand Response resources anticipated to remain in service in 2014, is reduced to 77.6% of its 2014 target, as reported in Guelph Hydro's OPA Final Verified 2013 CDM Results Report. In 2013, Guelph Hydro ranked 2nd in energy savings targets among twelve similar mid-sized LDCs (as seen in Table 1-42 and Chart 1-8). Guelph Hydro is one of the top 5 LDCs in Ontario to achieve and exceed the energy savings target in 2013. Since 2011, Guelph Hydro's CDM team has made great efforts in promoting CDM programs and educating customers in their energy use, understanding their electricity bill as well as electricity savings opportunities including the province-wide saveONenergy CDM programs.

Table 1-42: Conservation & Demand Management

				2009	2010	2011	2012	2013
Public Policy Responsiveness Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Minisiterial directives to the Board)	**Conservation & Demand Management**	**Net Annual Peak Demand Savings (Percent of target achieved)**	Kitchener-Wilmot Hydro Inc.			21%	16%	41.6%
			Oshawa PUC Networks Inc.			11%	12%	21.1%
			Oakville Hydro Electricity Distribution Inc.			11%	9%	18%
			Waterloo North Hydro Inc.			13%	16%	17.6%
			Cambridge and North Dumfries Hydro Inc.			18%	14%	18.2%
			Milton Hydro Distribution Inc.			13%	7%	9%
			Newmarket - Tay Power Distribution Ltd.					10.8%
			Brantford Power Inc.			12%	11%	16.2%
			Guelph Hydro Electric Systems Inc.			20%	30%	36.5%
			Whitby Hydro Electric Corporation			10%	14%	29%
			Burlington Hydro Inc.			13%	22%	28.9%
			Halton Hills Hydro Inc.			17%	15%	22.9%
			ANNUAL AVERAGE			**14%**	**15%**	**22%**
		Net Cumulative Energy Savings (Percent of target achieved)	Kitchener-Wilmot Hydro Inc.			57%	79%	98.5%
			Oshawa PUC Networks Inc.			19%	42%	63.8%
			Oakville Hydro Electricity Distribution Inc.			36%	61%	75.3%
			Waterloo North Hydro Inc.			39%	62%	81.8%
			Cambridge and North Dumfries Hydro Inc.			70%	103%	133.3%
			Milton Hydro Distribution Inc.			49%	60%	72.9%
			Newmarket - Tay Power Distribution Ltd.					93.9%
			Brantford Power Inc.			37%	69%	89.5%
			Guelph Hydro Electric Systems Inc.			72%	107%	127.4%
			Whitby Hydro Electric Corporation			31%	48%	65.8%
			Burlington Hydro Inc.			35%	66%	86.8%
			Halton Hills Hydro Inc.			33%	61%	72.2%
			ANNUAL AVERAGE			**43%**	**69%**	**88%**

Chart 1-8


2013 CDM Results- LDC Comparison
140.0%
120.0%
100.0%
80.0%
60.0%
40.0%
20.0%
0.0%
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution...
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro...
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.
kW Demand Savings
kWh Energy Savings - Cumulative 2011 to 2013

Financial Ratio Performance

Liquidity: Current Ratio Performance

Over the five year period from 2009 to 2013, Guelph Hydro maintained a healthy current ratio of 1.78 on average. While the current ratio declined markedly in 2013 to 1.27 and continued to weaken in 2014 to 1.07, this was not unexpected as Guelph Hydro has been (and continues to) finance distribution capital expenditures from working capital. This aspect also manifests in the leverage ratio analysis which is described below. At the same time, commodity costs of power in 2013 and 2014 increased significantly compared to the 2010 to 2012 period. Guelph Hydro has included a long-term debt issue of $30 million as part of its current Business Plan, and the company expects this issuance to remedy a continued deterioration in the current ratio.

Leverage: Total Debt-to-Equity Ratio Performance

Guelph Hydro's total debt-to-equity ratio has averaged 1.12 over the 2009 to 2013 period. While this average ratio is the 9th highest when compared to the subset of LDCs in Table 1-44 below, the ratio provides further evidence that Guelph Hydro has been financing long-term assets with working capital. Guelph Hydro intends to issue $30 million in new long-term debt in either late-2015 or in 2016 to meet ongoing expenditures on distribution capital. Following this long-term debt issue, Guelph Hydro's total debt-to-equity ratio will reflect the Board's deemed ratio of 1.50.

Financial Viability:

Financial viability is one of the performance measurements defined in the Board's RRFE for electricity distributors. The four financial metrics included are liquidity, leverage, deemed return on equity and achieved return on equity. Guelph Hydro's metrics for the historical years 2009 to 2014, the 2015 Bridge Year and the 2016 Test Year projection based on current rates is shown in Table 1-43 below. Explanations for current and expected levels of

the liquidity ratio and the debt-to-equity ratio have been provided above, and an explanation of the achieved return on equity follows.

Table 1-43: Profitability- Liquidity, Leverage and Return on Equity

Performance Metric	2009	2010	2011	2012	2013	2014	2015 Bridge Year	2016 Test Year Prior to rate increase
Liquidity Ratio	0.97	3.00	1.97	1.64	1.33	1.07	1.19	2.35
Leverage Debt to Equity Ratio	0.95	1.38	1.10	1.13	1.04	1.09	1.02	1.46
Deemed rate of Return on Equity	8.57%	8.57%	8.57%	9.42%	9.42%	9.42%	9.42%	9.30%
Achieved/Projected Rate of Return on Equity	7.49%	8.71%	8.41%	7.50%	7.29%	10.91%	6.99%	4.63%

Table 1-44: Financial Ratios

				2009	2010	2011	2012	2013
Financial Performance Financial viability is maintained; and saivings from operational effectiveness are sustainable	**Financial Ratios**	**Liquidity: Current Ratio (Current Assets/Current Liabilities)**	Kitchener-Wilmot Hydro Inc.	2.70	2.39	2.18	2.05	2.14
			Oshawa PUC Networks Inc.	3.66	2.70	2.16	1.71	1.19
			Oakville Hydro Electricity Distribution Inc.	1.09	1.12	0.83	1.83	1.80
			Waterloo North Hydro Inc.	1.06	0.94	0.96	0.83	0.97
			Cambridge and North Dumfries Hydro Inc.	2.13	2.39	2.06	3.00	2.32
			Milton Hydro Distribution Inc.	1.25	1.64	1.56	1.59	1.68
			Newmarket - Tay Power Distribution Ltd.	3.56	2.43	4.70	3.13	2.69
			Brantford Power Inc.	1.99	2.01	2.23	2.15	2.05
			Guelph Hydro Electric Systems Inc.	0.97	3.00	1.97	1.64	1.33
			Whitby Hydro Electric Corporation	2.09	1.56	1.97	1.89	1.65
			Burlington Hydro Inc.	1.78	1.53	2.07	2.05	2.30
			Halton Hills Hydro Inc.	1.31	1.15	1.69	1.25	1.06
			ANNUAL AVERAGE	**1.97**	**1.91**	**2.03**	**1.93**	**1.77**
		Leverage: Total Debt to Equity Ratio (includes short-term and long-term debt)	Kitchener-Wilmot Hydro Inc.	0.77	0.85	0.78	0.74	0.69
			Oshawa PUC Networks Inc.	0.96	0.92	0.84	0.80	0.77
			Oakville Hydro Electricity Distribution Inc.	1.41	1.88	1.27	1.26	1.18
			Waterloo North Hydro Inc.	0.58	0.69	0.92	1.07	1.06
			Cambridge and North Dumfries Hydro Inc.	0.66	0.66	0.62	0.59	0.57
			Milton Hydro Distribution Inc.	0.53	0.72	0.79	0.90	0.92
			Newmarket - Tay Power Distribution Ltd.	0.70	0.61	0.66	0.65	0.61
			Brantford Power Inc.	1.13	1.25	1.23	1.30	1.20
			Guelph Hydro Electric Systems Inc.	0.95	1.38	1.10	1.13	1.04
			Whitby Hydro Electric Corporation	0.69	0.65	0.76	0.74	0.72
			Burlington Hydro Inc.	0.85	0.93	0.93	0.95	0.93
			Halton Hills Hydro Inc.	0.83	0.91	0.87	0.90	1.04
			ANNUAL AVERAGE	**0.84**	**0.95**	**0.90**	**0.92**	**0.89**

Chart 1-9

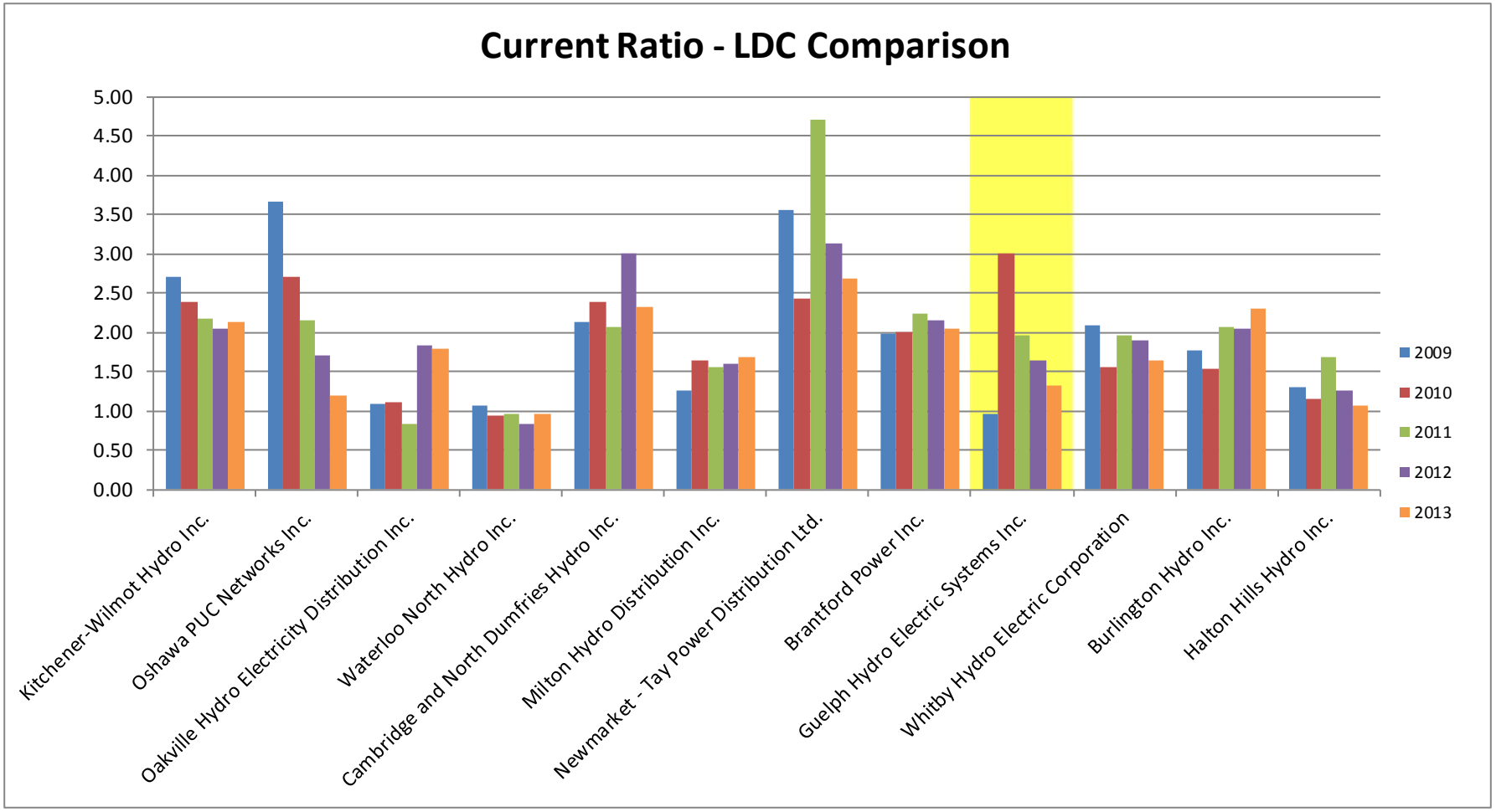
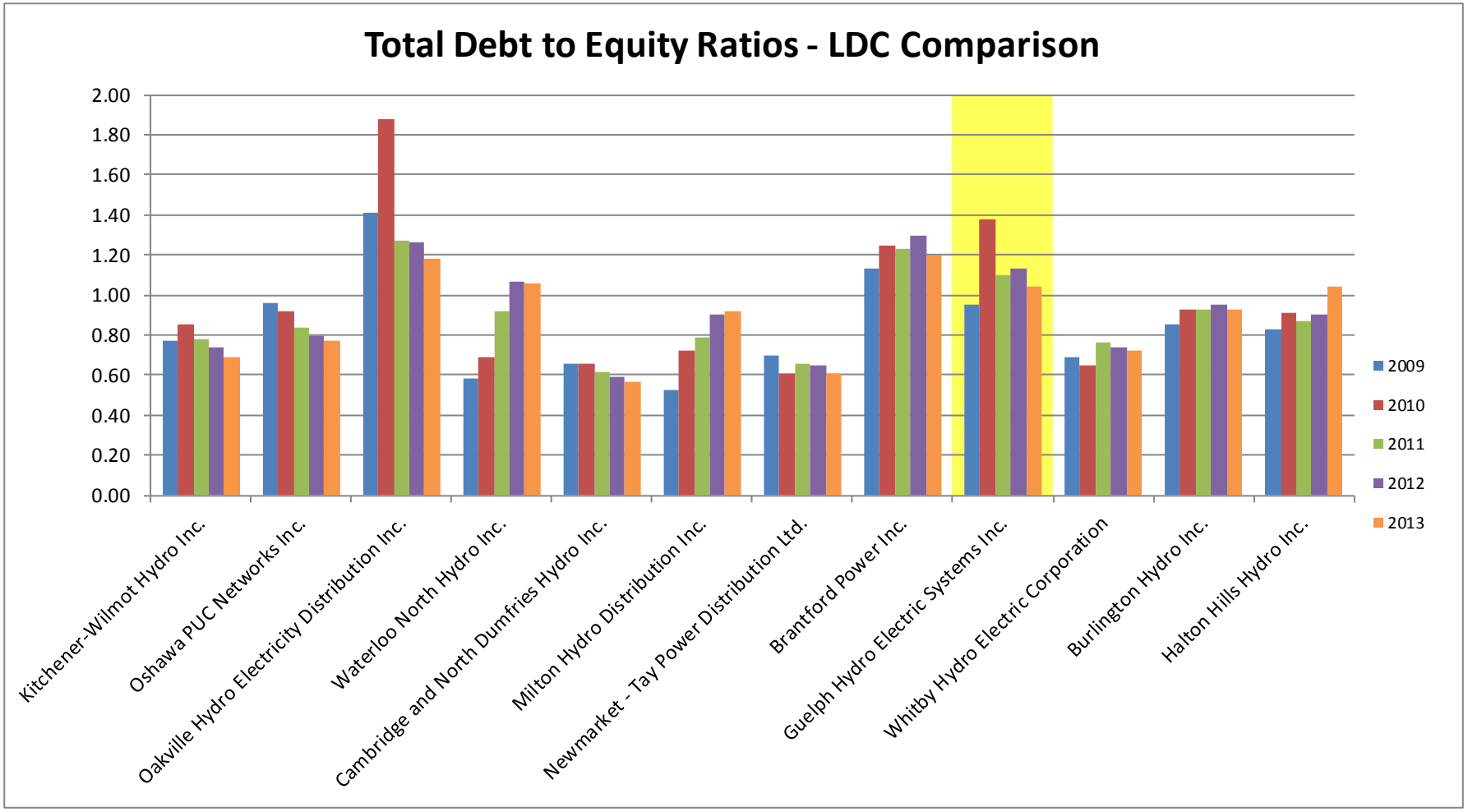

Current Ratio - LDC Comparison
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-10


Total Debt to Equity Ratios - LDC Comparison
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
2009
2010
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Profitability Performance: Regulatory Return on Equity

Guelph Hydro's profitability based on the achieved rate of return on equity for historical years 2009 to 2014 and the 2015 Bridge Year is within the OEB-established dead band of ±300 basis points. The 2016 Test Year prior to the requested rate increases is 4.67% below the dead band (please see Guelph_Rev_Reqt_Work_Form file in Excel version, tab 8, cell F44).

Over the 2009 to 2013 period, Guelph Hydro's achieved return on equity averaged 7.88%, which is below the Board's allowed average ROE of 8.91% over this same period, and compares relatively unfavourably with the subset of LDCs in Table 1-45 below. However, the ROE comparison to other LDCs may not be apt as Guelph Hydro switched to IFRS in 2010, which change adversely impacted operating expenses. While the other LDCs in Table 1-45 may have switched to IFRS more recently, Guelph Hydro believes that it was one of a handful of LDCs in Ontario on IFRS until 2012.

For Guelph Hydro, the main factors driving its lower achieved ROE over the 2009 to 2013 period were its actual capital structure being below its deemed capital structure, implying that long-terms assets were financed by operating cash flows, an under-recovery of depreciation expense (in 2011, 2012 and 2013), and under-recovery of capital costs for the Arlen transformer station in its 2012 Cost of Service rates application. As noted above, Guelph Hydro intends to address its capital structure as part of this rates application. The under-recovery of depreciation expense emerging from Guelph Hydro's 2012 rebasing application was due to the transition to IFRS and an understatement of actual 2012 ratebase, both as earlier described.

Lastly, Guelph Hydro's costs for the Arlen transformer station in its 2012 Cost of Service application excluded charges that were sent to the company by Hydro One after its rates application had been submitted and sufficiently late for the company to contemplate filing an update. Hydro One scope of work was not adequately factored into the rate filing primarily due to changes with standard of connection to the transmission system. Respecting the

commissioning timeline for the end of 2011, additional resources primarily labour had to be deployed to bring the project in on time by year end and in line with a customer connection requirement early in January 2012.

In 2014, Guelph Hydro's achieved ROE was 10.91%, and this swing in profitability was driven by two factors: higher distribution and other revenues compared to 2013, and lower OM&A and depreciation expenses compared to 2014. The main factor contributing to lower OM&A expenses in 2014 was a $600k reduction in maintenance expenses due to an absence of significant storms, and lower administrative and general expenses. The combination of higher overall revenues and lower overall costs resulted in higher net income in 2014 compared to 2013, and therefore a higher ROE.

Table 1-45: Profitability

					2009	2010	2011	2012	2013
Financial Performance Financial viability is maintained; and saivings from operational effectiveness are sustainable	**Financial Ratios**	**Profitability: Regulatory Return on Equity**	**Deemed (included in rates)**	Kitchener-Wilmot Hydro Inc.			9.85%	9.85%	9.85%
				Oshawa PUC Networks Inc.			9.66%	9.42%	9.42%
				Oakville Hydro Electricity Distribution Inc.			9.85%	9.85%	9.85%
				Waterloo North Hydro Inc.			9.58%	9.58%	9.58%
				Cambridge and North Dumfries Hydro Inc.			9.85%	9.85%	9.85%
				Milton Hydro Distribution Inc.			9.58%	9.58%	9.58%
				Newmarket - Tay Power Distribution Ltd.			9.66%	9.66%	9.66%
				Brantford Power Inc.			8.57%	8.57%	8.98%
				Guelph Hydro Electric Systems Inc.			8.57%	9.42%	9.42%
				Whitby Hydro Electric Corporation			9.66%	9.66%	9.66%
				Burlington Hydro Inc.			9.85%	9.85%	9.85%
				Halton Hills Hydro Inc.			8.57%	9.12%	9.12%
				ANNUAL AVERAGE			**9.44%**	**9.53%**	**9.57%**
			Achieved	Kitchener-Wilmot Hydro Inc. (1)	4.70%	7.67%	11.02%	10.91%	8.94%
				Oshawa PUC Networks Inc.(1)	9.34%	9.46%	12.40%	10.18%	6.47%
				Oakville Hydro Electricity Distribution Inc.(1)	7.04%	11.70%	6.78%	5.49%	6.03%
				Waterloo North Hydro Inc.(1)	7.84%	7.96%	10.04%	7.41%	8.70%
				Cambridge and North Dumfries Hydro Inc.(1)	4.27%	8.06%	9.57%	9.78%	7.80%
				Milton Hydro Distribution Inc.(1)	8.73%	12.15%	8.90%	8.15%	10.60%
				Newmarket - Tay Power Distribution Ltd.(1)	9.72%	5.30%	9.48%	9.39%	11.10%
				Brantford Power Inc.(1)	6.83%	5.58%	7.50%	3.20%	11.60%
				Guelph Hydro Electric Systems Inc.(1)	7.49%	8.71%	8.41%	7.50%	7.29%
				Whitby Hydro Electric Corporation(1)	4.91%	5.76%	12.15%	12.35%	14.54%
				Burlington Hydro Inc.(1)	7.09%	7.95%	11.40%	11.37%	8.15%
				Halton Hills Hydro Inc.(1)	8.40%	6.18%	9.14%	13.30%	14.97%
				ANNUAL AVERAGE			**9.73%**	**9.09%**	**9.68%**

Note: (1) Source for 2009 and 2010 Achieved Return on Equity from the 2009 Yearbook of Electricity Distributors and 2010 Yearbook of Electricity Distributors

Chart 1-11

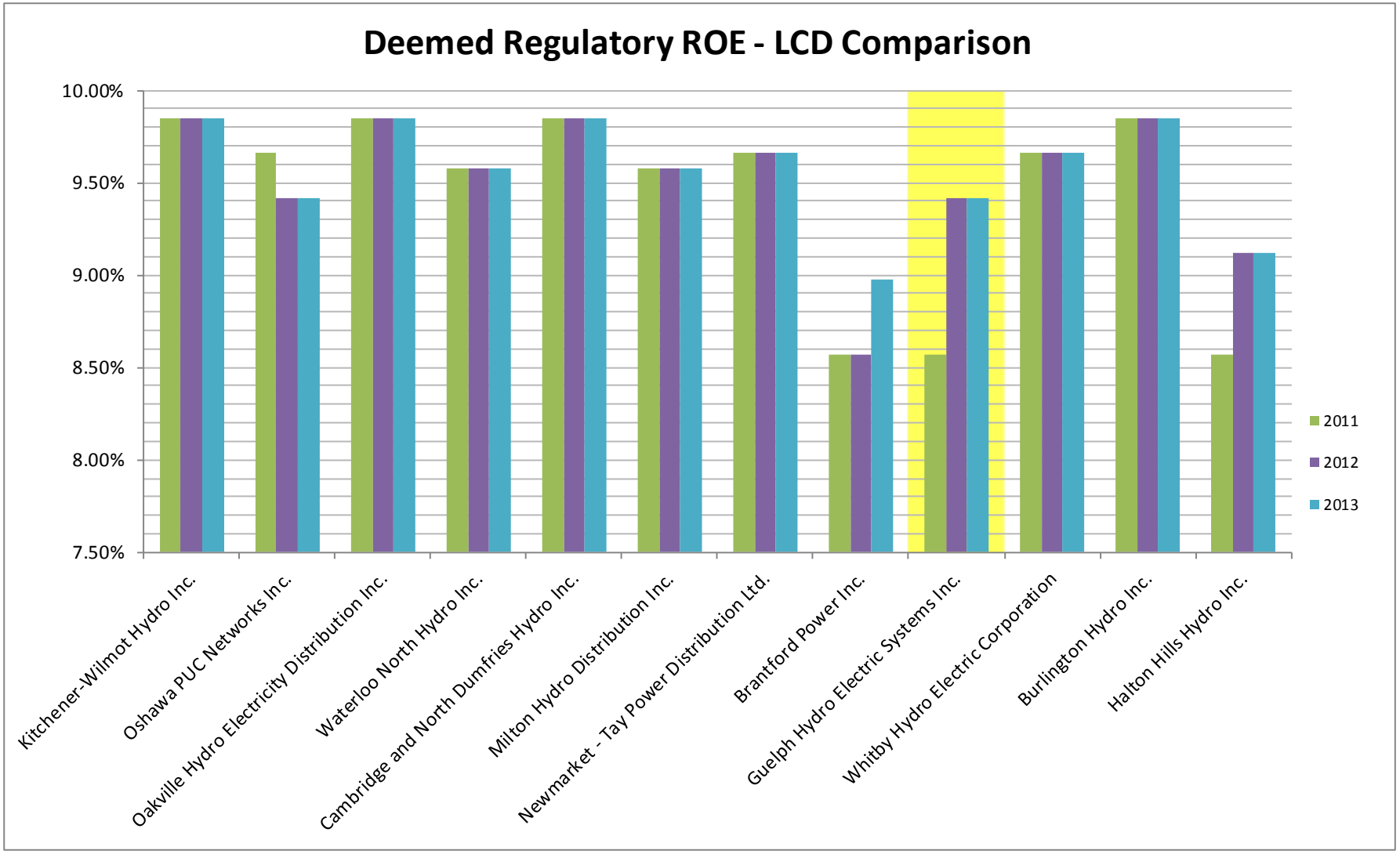
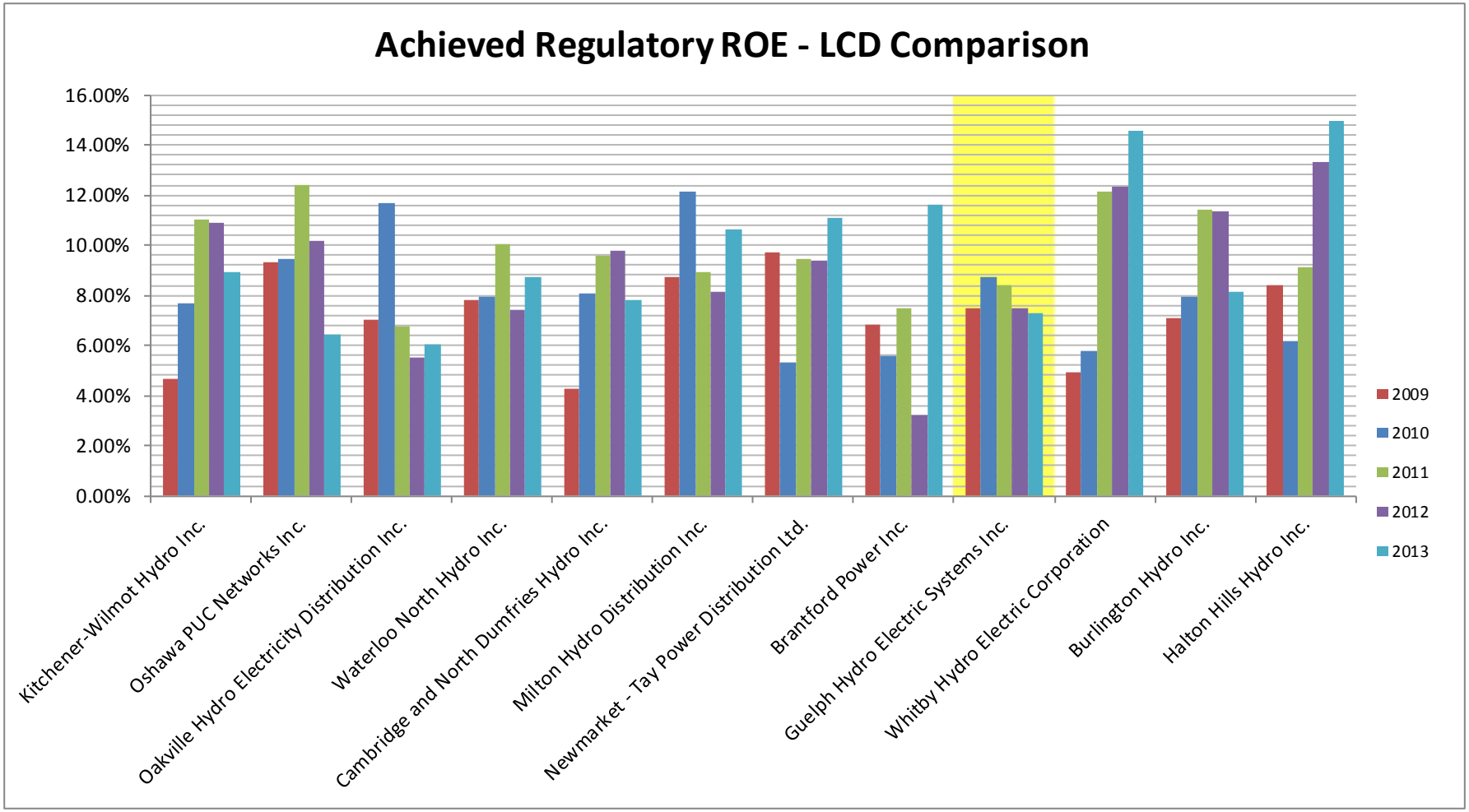

Deemed Regulatory ROE - LCD Comparison
10.00%
9.50%
9.00%
8.50%
8.00%
7.50%
2011
2012
2013
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.

Chart 1-12


Achieved Regulatory ROE - LCD Comparison
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
Kitchener-Wilmot Hydro Inc.
Oshawa PUC Networks Inc.
Oakville Hydro Electricity Distribution Inc.
Waterloo North Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Milton Hydro Distribution Inc.
Newmarket - Tay Power Distribution Ltd.
Brantford Power Inc.
Guelph Hydro Electric Systems Inc.
Whitby Hydro Electric Corporation
Burlington Hydro Inc.
Halton Hills Hydro Inc.
2009
2010
2011
2012
2013

2.4.3 CUSTOMER ENGAGEMENT

The RRFE Report contemplates enhanced engagement between distributors and their customers to provide better alignment between distributor operational plans and customer needs and expectations. In this section, Guelph Hydro has provided an overview of customer engagement activities that it has undertaken with respect to its daily operations and illustrates how customer feedback has been used to continually improve the customer experience.

With regard to this Application, Guelph Hydro specifically discusses in this section how it informed customers on the proposals being considered for inclusion in this Application and the value of those proposals to customers (i.e. costs, benefits and the impact on rates). Feedback provided by Guelph Hydro's customers during this process is included in this section with comments about how this feedback shaped the Application.

Guelph Hydro has completed Appendix 2-AC Customer Engagement Activities Summary (please see Table 1-47 of this Exhibit, Tab 4, Schedule 1, Section 2.4.3.4.5 Implementation: Summary of Customer Engagement Activities).

The planning elements of customer engagement activities have been filed as part of the DSP (please see Exhibit 2, Tab 2, Schedule 1, 2.5.2.1 Planning).

2.4.3.1 ENGAGING CUSTOMERS - INTRODUCTION

In today's utility environment, changing customer preferences and behaviour are playing a major role in transforming how utilities and customers interact. Guelph Hydro understands it must be seen to be accessible, responsive, accountable, transparent and trustworthy. A customer centric focus with a strong emphasis on lowering costs must be a strategic priority. This is in keeping with the requirements of the RRFE which contemplates enhanced engagement between distributors and their customers to better align a distributor's operational plans with its customers' needs and expectations.

Guelph Hydro has focused a great deal of effort over the last few years in engaging customers to better understand their needs. Insight into customer needs and preferences was obtained through a variety of communication vehicles including telephone and online surveys, face-to-face interactions, telephone discussions and social media.

As a result, Guelph Hydro established a Customer Service Strategy that has responded to the rising customer demand for self-service options, 24/7 accessibility, dynamic power outage reporting, mobile connectivity and social media interaction while improving processes; thereby simultaneously enhancing customer service, increasing productivity and containing costs.

Looking forward, Guelph Hydro's Customer Engagement Strategy and Customer Service Strategy will continue to be focused on achieving the following goals:

1. Engaging customers using a variety of methods and channels to understand their needs and preferences
2. Enhancing the customer service experience for Guelph Hydro customers by offering services that meet or exceed their expectations
3. Improving billing accuracy and timeliness
4. Increasing operational efficiencies; lowering costs
5. Contributing to creating a culture of energy conservation in Ontario
6. Contributing to increased consumer energy literacy

2.4.3.2 ENGAGING CUSTOMERS – METHODS

Guelph Hydro employs a multi-faceted communications platform to communicate and engage with all classes of customers. Customer touch points include:

- **Telephone - Call Centre**
  - Inbound calls
  - Outbound calls
  - Interactive voice response
  - Automated customer call-back
  - On-hold messaging
- **Emails**
  - Inbound
  - Outbound
- **Letters**
  - Including hand-delivered letters to customers who will be impacted by planned outages and capital improvement projects
- **Website / Mobile site**
  - Live online chat function on website
- **Bills**
  - Paper / electronic bills
  - Bill messages, envelope messages
  - Bill inserts

- **Social media**
    - Twitter
- **Surveys**
    - Bi-annual Customer Satisfaction Survey
    - Post Call Centre transaction survey
    - Customer Survey – on website and hard copy
- **Face-to-face**
    - Interactions with staff - one-on-one or group settings
    - Customer meetings with key staff
    - Information sessions for specific customer segments
- **Community outreach activities**
    - Booths at community events
    - Displays at local retail stores
    - Presentations to community groups
    - School presentations
- **Media releases and information alerts**
- **Advertising**
    - Newspaper advertising – holiday hours, conservation and demand management programs, regulatory notices
    - Electronic – community televisions
    - Radio – safety messages
- **In-home displays**

- **Sustainability Report**
    - Customers are informed about the availability of the company's annual Sustainability Report via bill inserts, tweets and information on the website

2.4.3.3 CUSTOMER ENGAGEMENT AND CUSTOMER SATISFACTION – EVALUATING PAST PERFORMANCE

Guelph Hydro is and has been strongly concerned about customer needs, preferences and satisfaction levels as evidenced by the fact that ten times in the last 14 years, the company has participated in the ***Annual Electric Utility Customer Satisfaction Survey*** conducted by an independent third party, UtilityPULSE, a division of Simul Corporation.

This survey gauges the satisfaction of residential and commercial customers with Guelph Hydro's performance within the following categories:

- Price and value
- Customer service
- Company leadership
- Corporate stewardship
- Operational effectiveness
- Power quality and reliability

Over the years, information collected through these surveys has been used to address issues or weaknesses and continually improve the company's performance in the customers' eyes.

The most recent Customer Satisfaction survey was conducted in the spring of 2013. The summary report (Appendix 1-B of this Exhibit) includes a "Report Card" (Chart 1-13) for Guelph Hydro which represents the sum total of respondents' ratings on six categories of attributes that research has shown are important to customers for influencing satisfaction and affinity levels with their utility. Guelph Hydro received high marks on this Report Card, rating higher than or equal to the National and Ontario comparators.

Chart 1-13

Guelph Hydro's UtilityPULSE Report Card®

Performance

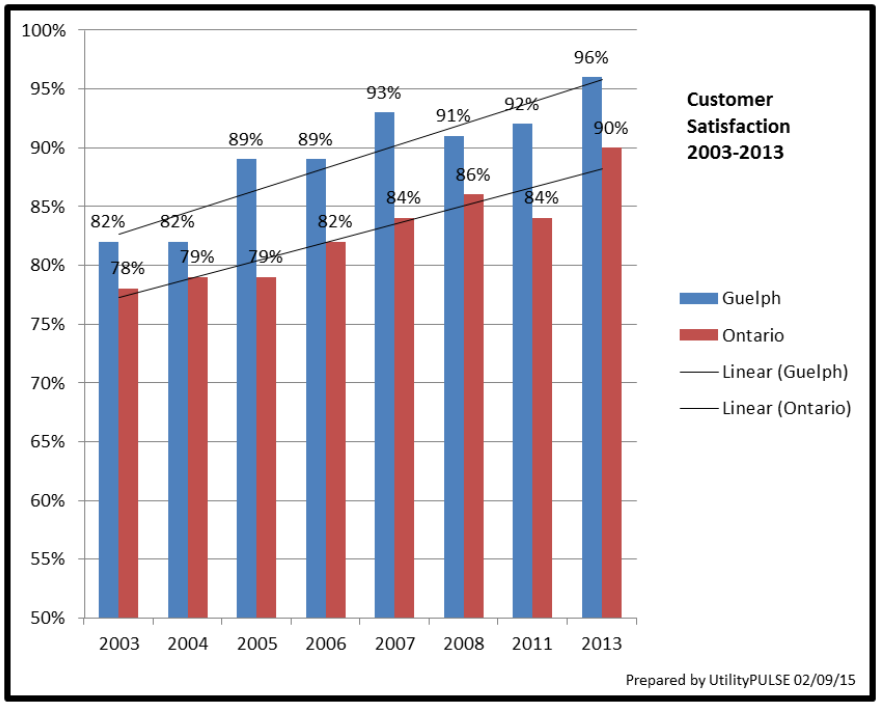
	CATEGORY	Guelph Hydro	National	Ontario
1	**Customer Care**	**A**	**B+**	**B+**
	Price and Value	B+	B	B
	Customer Service	A	B+	A
2	**Company Image**	**A**	**A**	**A**
	Company Leadership	A	A	A
	Corporate Stewardship	A	A	A
3	**Management Operations**	**A**	**A**	**A**
	Operational Effectiveness	A	A	A
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

Base: total respondents

As illustrated in Chart 1-14 below, results from these formal surveys show a steady increase in customer satisfaction culminating in 2013[3] with a Customer Satisfaction score of 96 percent. This ranked Guelph Hydro as number one in customer satisfaction among 14 Ontario electric utilities that took part in the survey. This outstanding score, which was higher than both the national and provincial customer satisfaction averages for utility companies, suggests that Guelph Hydro has a good understanding of customer needs and preferences and providing services that meet or exceed customer expectations.

[3] The Annual Electric Utility 2013 Customer Satisfaction Survey conducted in April 2013 was based on telephone interviews with 400 respondents (85% residential / 15% commercial) who pay or look after the electricity bills for Guelph Hydro. This sample size provides a confidence level of 95% (+/-4.9%).

Chart 1-14



Guelph Hydro's commitment to continually improving the customer experience is further evidenced by a significant four percent increase in customer satisfaction in 2013 over the results from the previous customer survey conducted in 2011. This improvement was the result of listening to customers and implementing the service improvements outlined in Exhibit 1, Tab 4, Schedule 4, Section 2.4.3.4.4 Implementation: CDM Outreach and Engagement that responded directly to customer needs and wants as revealed in the 2011 Customer Survey.

The 2013 Customer Survey also provides a Customer Engagement Index which evaluates the company on the following measures:

- 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 a way which allows customers to stay connected?
- Do customers get inspired by the way the utility conducts business?
- Is the utility forward thinking; thus 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?

Guelph Hydro's score on the Customer Engagement Index was 86 percent, which is five percent higher than either the provincial or national score.

In keeping with our commitment to transparency, the results of the 2013 Customer Satisfaction Survey were communicated to customers in a media release in July 2013 and a full report was posted on the company website under 2013 Customer Satisfaction Survey Results. These documents are included in Appendix 1-B.

In addition, scores achieved on the UtilityPULSE Customer Satisfaction Surveys are reported on Guelph Hydro's scorecard.

Despite Guelph Hydro's high scores in customer satisfaction, the company is committed to continually improving customer service, customer communication and customer engagement as evidenced by the many initiatives described below. The next Customer Satisfaction Survey has been budgeted to take place in 2015.

2.4.3.4 GUELPH HYDRO'S CUSTOMER FOCUS APPROACH TO OPERATIONAL IMPROVEMENT

Guelph Hydro recognizes that high scores in customer satisfaction do not just happen. They are the outcome of a strong, consistent and coordinated customer focus which, at Guelph Hydro, involves a four-step process:

Research and Analysis

- Research into industry trends
- Analysis of qualitative and quantitative data

Planning

- Development of a Customer / Stakeholder Engagement Plan and a "We are Listening" Customer Service Strategy

Implementation

- Implementation of operational improvements and other initiatives that respond directly to customer needs and preferences

Evaluation

- Annual performance metrics as reported on the Guelph Hydro scorecard
- Results of surveys and other qualitative and quantitative data

1 The effectiveness of Guelph Hydro's approach is detailed in the following sections:

2.4.3.4.1 **Research and Analysis**	An outline of the research and analysis that has taken place to help understand customer needs and preferences and an explanation of how the findings have been incorporated into Guelph Hydro's plans.
2.4.3.4.2 **Planning**	An outline of Guelph Hydro' Customer Service Strategy and Customer/Stakeholder Engagement Plan
2.4.3.4.3 **Implementation** **Customer Service Strategy**	An overview detailing some of the many improvements that have been made to respond to customer needs and preferences under the "We are Listening" Customer Service Strategy
2.4.3.4.4 **Implementation** **Customer Engagement Activities**	A summary of customer engagement activities, a list of customer needs and preferences identified through each engagement activity and actions taken to respond to identified needs and preferences captured on the Customer Engagement Activities Summary – Appendix 2-AC (Table 1-47)
2.4.3.4.5 **Implementation** **Customer Engagement - Proposed Application**	An explanation of how customers were informed about the proposed application, the value of the proposals in terms of costs and benefits and the impact on rates as well as a summary of feedback received from customers and how this feedback was incorporated into the final application.
2.4.3.4.6 **Evaluation**	An overview of how Guelph Hydro's Customer Engagement and Satisfaction efforts are evaluated.

2.4.3.4.1 RESEARCH AND ANALYSIS

The energy industry is changing dramatically. The rising cost of electricity, smart grid technologies, embedded generation, on-line and mobile communications, and social media are all transforming the industry at a fast pace.

Guelph Hydro believes it has an important role to play providing information to help customers make sense of the complex changes facing Ontario consumers as the electricity industry evolves.

In order to gain a better understanding of the needs and expectations of customers, Guelph Hydro undertook the following research and analysis initiatives:

- Studied the 2014 report entitled: "*The New Energy Consumer: Architecting for the Future", published by* Accenture, a global management consulting, technology services and outsourcing company (the "Accenture Report"). This report compiles five years' of survey data to define the "new energy consumer" and what utilities need to do to better serve the evolving needs of these consumers. (See Appendix 1-C)
- Conducted an analysis of qualitative and quantitative data including:
    - Results of bi-annual Customer Satisfaction Survey conducted by UtilityPULSE in the spring of 2013
    - Results of in-depth in-house-designed on-line residential and commercial Customer Survey in the winter of 2014 – (See Appendix 1-D)
    - Results of Interactive Voice Recognition (IVR) post-transaction survey
    - Summary of Call Centre tracking of inbound call statistics, customer inquiries (topics), complaints and feedback
    - Website analytics
    - Feedback from customers obtained through outreach activities

- Anecdotal feedback from employees handling Guelph Hydro's Twitter account
- Signups for CDM programs

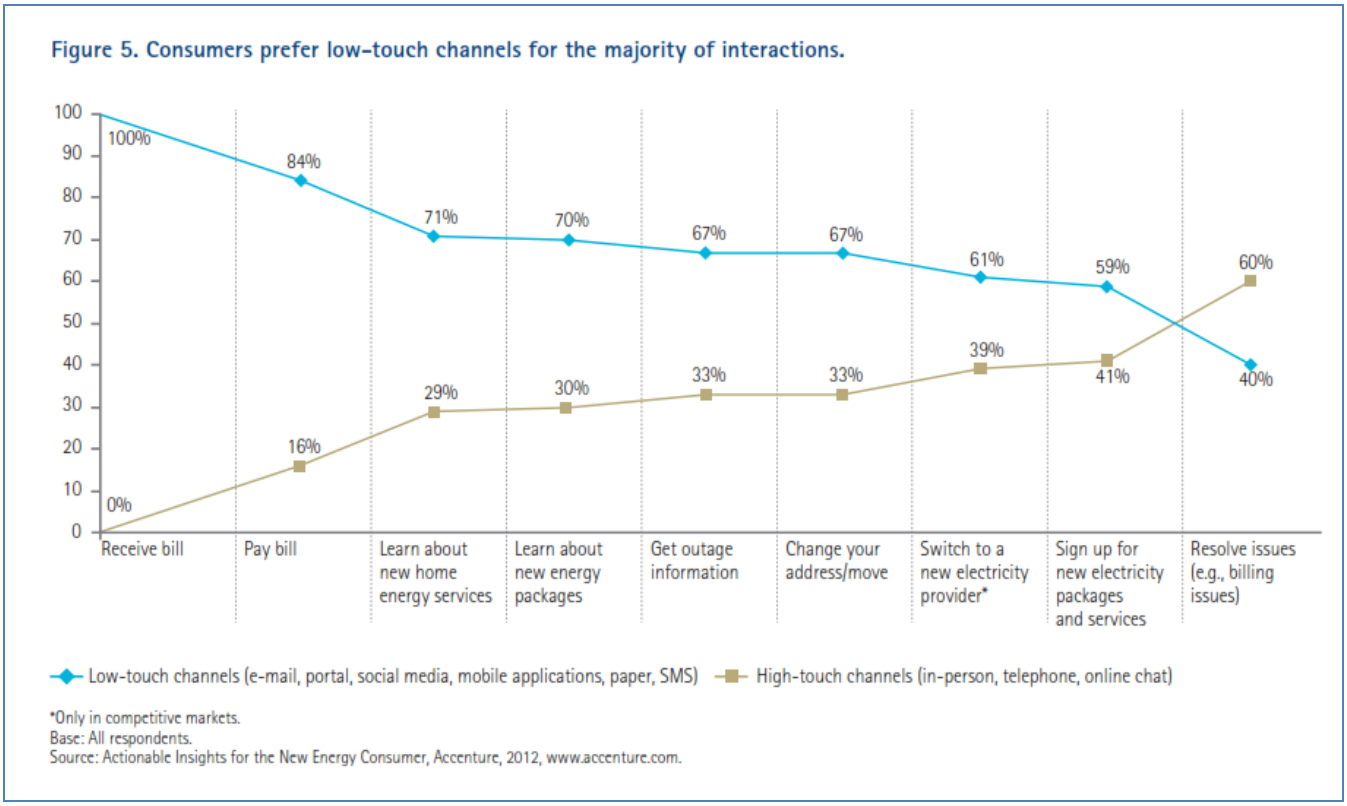
RESEARCH AND ANALYSIS CONCLUSION

Customers Prefer "Low-Touch" Interactions and 24/7 Mobile Access

Guelph Hydro concluded that as detailed in the Accenture Report (see Chart 1-15 below) and corroborated both by results in the UtilityPULSE survey summary and feedback received directly from customers, the new residential energy consumer:

- Prefers more "low-touch" (self-directed) customer service options for the majority of interactions
- Is increasingly using multiple channels and devices to interact with their utility
- Expects information from their utility to be always accessible, anytime, anywhere
- Expects to be able to conduct basic transactions online 24/7 with easy-to-use online forms
- Expects to be able to use any mobile device to obtain the information they need
- Expects that outage information will be available almost immediately

Chart 1-15



1 Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014

In alignment with these findings, Guelph Hydro has focused efforts over the last two years on improving the customer's online and mobile experience as detailed in Exhibit 1, Tab 4, Schedule 4, Section 2.4.3.4.3 Implementation: Customer Service Strategy and will continue to devote resources to making further improvements in this area in coming years.

Commercial and Industrial Customers Prefer "High Touch" Interactions

Although formal research specific to commercial and industrial customers is more difficult to come by, Guelph Hydro has asked business customers about their preferences in one-on-one meetings and information sessions. Comments from these customers seem to indicate that due to the complexity of their bills and their desire to have in-depth discussions regarding their specific energy challenges, they prefer a more

personalized approach consisting of on-site visits by energy conservation experts and discussions with knowledgeable Customer Service Representatives.

Although Guelph Hydro's commercial and industrial customers have not indicated they would like more online or mobile tools, Guelph Hydro is monitoring advances in the area of "building dashboards" with a view to providing this class of customers with new tools in the future.

These dashboards, currently in use in other jurisdictions, display real-time smart meter or interval meter data on desktop computers, mobile devices or kiosks to drive behavioural change and improve building efficiencies. They can be used to enable energy reduction competitions, showcase real-time building performance and green features, and provide opportunities to engage and empower tenants or occupants in energy management.

2.4.3.4.2 PLANNING

After analyzing the research materials, Guelph Hydro developed a customer centric **"We are listening": Customer Service Strategy** to focus improvement efforts on areas of most importance to customers. Details of the initiatives that were implemented are provided in Exhibit 1, Tab 4, Schedule 4, Section 2.4.3.4.3 Implementation: Customer Service Strategy.

With a view to continual improvement, a **Customer/Stakeholder Engagement Plan** (See Appendix 1-E covering all classes of customers and other stakeholders was developed and is detailed in Exhibit 1, Tab 4, Schedule 4, Section 2.4.3.4.4 Implementation: CDM Outreach and Engagement). The purpose of this plan was to help concentrate efforts on increasing energy literacy and to determine customer needs and preferences for use in developing future customer service strategies, operational plans, the 2016 Distribution System Plan and the 2016 Cost of Service application.

2.4.3.4.3 IMPLEMENTATION: CUSTOMER SERVICE STRATEGY

In early 2014, Guelph Hydro introduced the *"We Are Listening*" Customer Service Strategy developed by a task force made up of key Customer Service staff. The goal of the task force was to determine the best way to effectively and efficiently address the areas that generated the most calls and emails to Guelph Hydro's Customer Call Centre and reduce costs.

Suggestions for actions that could be taken to improve the customer experience were evaluated and prioritized. Improvements that were implemented in 2014 fall under the following areas of focus and are detailed in this section (2.4.3.4.3 Implementation: Customer Service Strategy):

I. Improved Billing Accuracy and Timelines
II. Increasing Energy Literacy – Understanding Bills
III. Increasing Call Centre Efficiency and Effectiveness
IV. Improving Customer Communications
V. Improving Online services – Website and Mobile Site
VI. Improving Outage Reporting
VII. Engaging Using Social Media

Impact of Improvements

Preliminary results of an Interactive Voice Response ("IVR") customer survey conducted immediately following calls to the Customer Care Centre indicate that customer satisfaction has increased in 2014 from "satisfactory" to "exceptional." This increase would seem to indicate that the initiatives implemented and detailed below have already had a positive impact on customer satisfaction. Looking forward, Guelph Hydro is committed to seeking out new ways to continually improve the customer experience.

I. IMPROVED BILLING ACCURACY AND TIMELINESS

Accurate billing is a service imperative for all utilities. Metering electric use and preparing billing statements for various customer classes using a variety of rate calculations is a complex process that can result in severe customer dissatisfaction if not done in a timely and accurate manner.

Despite the fact that 89 percent of customer surveyed in the 2013 UtilityPULSE Customer Satisfaction Survey indicated that Guelph Hydro's bills are accurate and only nine percent of customers surveyed indicated they had experienced a billing concern or problem in the past year (down from 11 percent in 2011), Guelph Hydro recognizes the importance of this service and has taken the following steps to improve billing accuracy and timeliness.

Billing Accuracy

In November 2012, Guelph Hydro was one of the LDCs with the highest number of intervals estimated as per the IESO MDM/R monthly LDC Report. Recognizing that this was not an ideal situation, Guelph Hydro met with representatives from the IESO to investigate the root cause and develop a solution. Subsequent to the investigation, the Validation, Estimation and Editing (VEE) parameters on both residential and small commercial accounts were modified to improve the smart meter data synchronization process. As a result, in November of 2013, Guelph Hydro moved into the number one position with the lowest number of estimations.

Billing Timeliness

Over the years, the City of Guelph has grown in size but new billing cycle routes had not accommodated this growth. Some cycle routes in the older parts of Guelph had 1,000-2,000 meter reads while others in new subdivisions had in excess of 10,000 reads. This created delays in issuing bills as well as fluctuations in revenues, workloads, customer calls and collections. To solve this problem, the billing schedule was revamped in 2013

to read 1,500-2,000 accounts per day. Evening out the billing cycle has resulted in more timely bills, a steady revenue flow and more manageable workloads for meter readers, billing personnel, Customer Service Representatives and credit and collection staff.

II. INCREASING ENERGY LITERACY - UNDERSTANDING BILLS

Smart Meter / Time-of-Use Rates Protocols for Customer Service

The 2011 Customer Satisfaction Survey indicated that 10 percent of customers who responded had concerns about smart meters and only seven percent had viewed their smart meter data online. In addition, only 70 percent of customers understood they were on Time-of-Use billing. In response, Guelph Hydro provided additional training for Customer Service Representatives in order to assist customers in interpreting their smart meter data. Due to the success of this approach, Customer Service Representatives continue to receive ongoing training on energy usage and smart meter data as well as rates to ensure they have the skills and knowledge required to best serve our customers.

High Bill Call Protocol and Home Energy Survey

An analysis of Customer Service call logs in 2012 indicated that Customer Service Representatives had been fielding an increasing number of high bill calls. These calls take a great deal of time to handle due to their complexity. To address this issue, the Customer Service Department initiated a High Bill Call Protocol and Home Energy Survey to ensure consistency and efficiency in responding to these types of calls.

As a first step, the Customer Service Representative co-browses with the customer to access their Green Button Time-of-Use smart meter data, conducts a Home Energy Survey and engages the customer in a discussion in order to systematically analyze their usage pattern to determine the cause of the high bill.

By taking this personalized approach, customers are educated about Time-of-Use rates, their household's energy usage profile, the highest energy using appliances in their homes and how certain energy-wasting behaviours can directly impact their bill; thereby contributing to increased energy literacy. Customers have responded very favourably to this approach.

To reinforce behavioural change, an email containing energy conservation tips is sent out following the telephone call.

Annual Reconciliation of Equal Payment Plan Billing Protocol

In the past, when year-end payment balances were applied to Equal Payment Plan bills, the Customer Service Department experienced an uptick in calls from customers who did not understand how the payment balance was calculated. In an effort to provide enhanced customer service and reduce call volume, a new process was put in place whereby Customer Service Representatives call customers ahead of time to explain how the credits work. A follow-up letter is sent out after the telephone call.

III. INCREASING CALL CENTRE EFFICIENCY AND EFFECTIVENESS

First Contact Resolution and Call Escalation Strategy

According to the 2013 UtilityPULSE Customer Satisfaction Survey, *"Time-pressed customers – whether real or imagined by customers – appreciate fast service and first call resolution. Companies that deal quickly and thoroughly with customers' problems tend to enhance customer loyalty in their customers just as surely as companies that never create problems at all."*

As reported in the survey, 72 percent of customers who contacted Guelph Hydro had their problem solved with one call. With this in mind, Guelph Hydro's Call Centre began tracking First Contact Resolution and put in place a new protocol that involved having Customer Service Representatives stay on the call when escalating a call to a

supervisor for resolution. This avoids the customer from having to make a second call and provides a valuable learning opportunity for the Customer Service Representative.

Website Co-Browsing with Customers

Although the Guelph Hydro website provides customers with a great deal of information at their fingertips, customers do not always take the time to learn how to access the information they need online. For this reason, the Customer Service Department installed new software that provides Customer Service Representatives with the ability to co-browse the website with customers while they have them on the telephone; educating customers on the wide variety of information that is available to them online and adding value to the customer interaction. The reaction of customers to co-browsing has been very positive.

Online Chat with Customer Service Representatives

Guelph Hydro expanded its service offering in 2014 by adding online chat functionality to the channels by which customers can be engaged. Using online chat, customers can "converse" back and forth online with Customer Service Representatives; thereby, avoiding long queue wait times on the telephones and the delayed responses associated with emails. Since launching in March 2014, customers have been engaged in 5,000 chats with numbers sharply increasing each month.

An added benefit associated with online chat functionality is being able to provide customers with a disability an alternate channel for communication with a live agent. In the past, customers with disabilities had limited options. Many mobile devices have voice-to-text options that may be used in conjunction with online chat which can be helpful for a person with a disability.

Online chat provides the potential for Customer Service Representatives to service customers 24/7 from a remote location. This will be explored in coming years with the thought that this approach could significantly improve our service to customers by

providing access to a full complement of Customer Service Representatives to respond to customers by eliminating the need for these staff members to travel into the office during severe weather events that result in power outages.

Interactive Voice Recognition for Account Balance Calls

In an effort to improve operational efficiency and provide expanded service, the Customer Service Department implemented Interactive Voice Recognition to handle account balance calls. On average, 400 customers per month utilize the Interactive Voice Recognition system to access their account balances.

Automated Customer Call Back

Nothing frustrates customers more than having to wait on hold to speak to a Customer Service Representative. In order to reduce the number of abandoned calls during busy times in the Call Centre, the Customer Service Department initiated a new system in 2014 that enables the customer to record their phone number and a brief description of their inquiry. When the queue is available, the phone system automatically dials the free Customer Service Representative, plays the message from the customer and then dials the customer. In this way, the Customer Service Representative is well prepared to respond quickly to the customer's inquiry. As a result, customers' wait times have been reduced and a lower call abandonment rate has been achieved. Calls answered within 30 seconds improved by five percent over 2013.

IV. IMPROVING CUSTOMER COMMUNICATIONS

Welcome Package Email

When a customer calls Guelph Hydro to sign up for a new account, they want to do it as quickly and as efficiently as possible. Guelph Hydro meets this need by, on average, signing new customers up for hydro service in three minutes. However, an analysis of Call Centre statistics in 2012 revealed that new customers often call Guelph Hydro after

they receive their first bill to ask questions. In addition, it was noted that only a small number of customers were signing up for Accounts Online, Equal Payment Billing and Preauthorized Payments.

In order to help educate new customers, improve efficiency by reducing call volume and increase customer satisfaction, Guelph Hydro created an electronic Welcome Package Email that is sent out following the opening of a new account. The Welcome Package Email explains payment options, billing schedules and deposits; provides helpful website links; and offers tips for water and hydro conservation.

After receiving excellent feedback from customers, the Welcome Package Email has been expanded to include customers who are moving their service as well as any customer wishing information after completing a call with the Call Centre.

Since introducing the Welcome Package Email, Guelph Hydro has seen the following:

- An increase in first call resolution to 100 percent
- A 50 percent increase in sign up for Accounts Online
- A 25 percent increase in sign up for Equal Payment and Preauthorized Payment

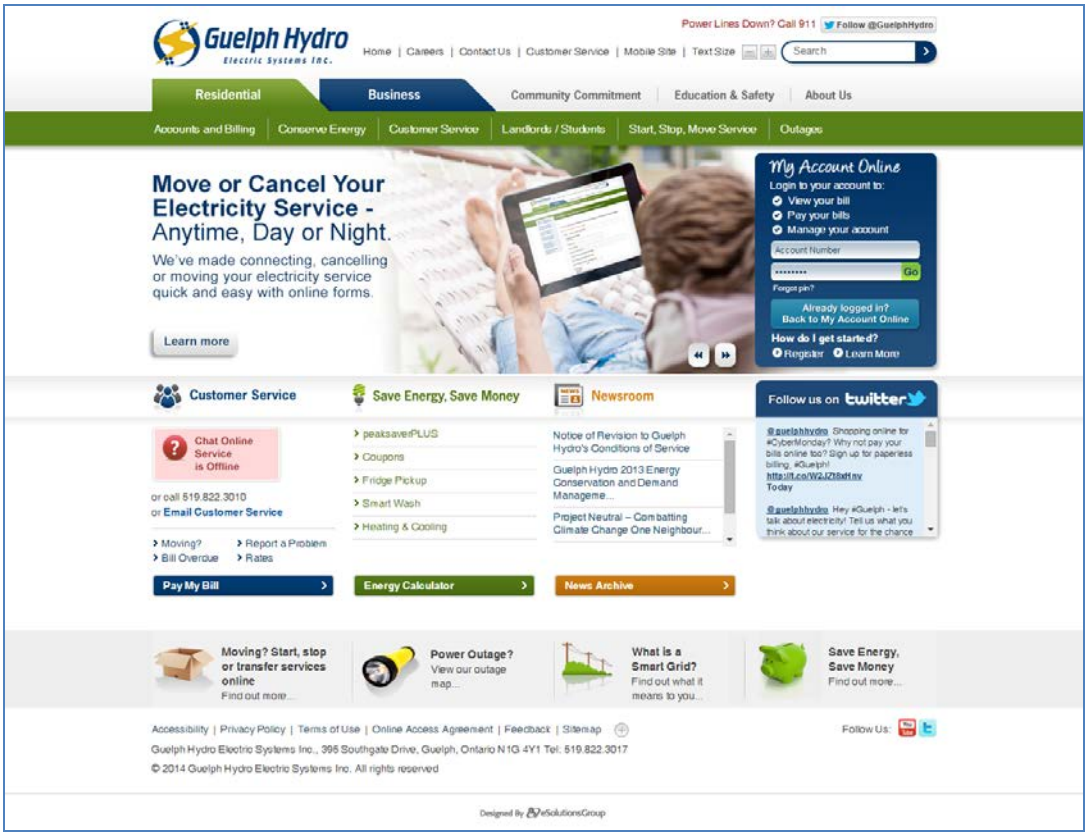
V. IMPROVING ONLINE SERVICES – WEBSITE AND MOBILE SITE

The digital transformation is increasingly influencing customer needs, preferences, behaviours and expectations. With this factor in mind, Guelph Hydro has invested in new technologies and automated systems that enable customers to get information and perform self-service transactions; thereby freeing up Customer Service Representatives to handle more complex customer inquiries and resolve problems. The result, as evidenced by the increase in customer satisfaction scores, is a better customer experience and more satisfied customers.

The following is a summary of some of the online service improvements that have been made over the last three years.

Website Redevelopment and Launch in 2012

A Request for Quote was issued in 2010 for the redevelopment of the Guelph Hydro website. The goal of the new website, launched in 2012 and pictured below, was to improve the customer experience by providing an easy-to-use site containing the information and functionality desired by customers.



Outcome

According to responses received in the online Customer Survey conducted in the winter of 2014, 70 percent of customers find the website useful and easy to understand.

Website analytics indicate that visitors to the website increased 226 percent from 44,000 in 2012 to 143,461 in 2014.

Looking forward

By monitoring advances in website design and functionality and using feedback from customers to ensure their needs are being met, Customer Service and Corporate Communications will continue to work collaboratively to continually update the website with new content and functionality; thus, ensuring a high level of customer satisfaction and engagement.

Launch of Mobile Site in 2012

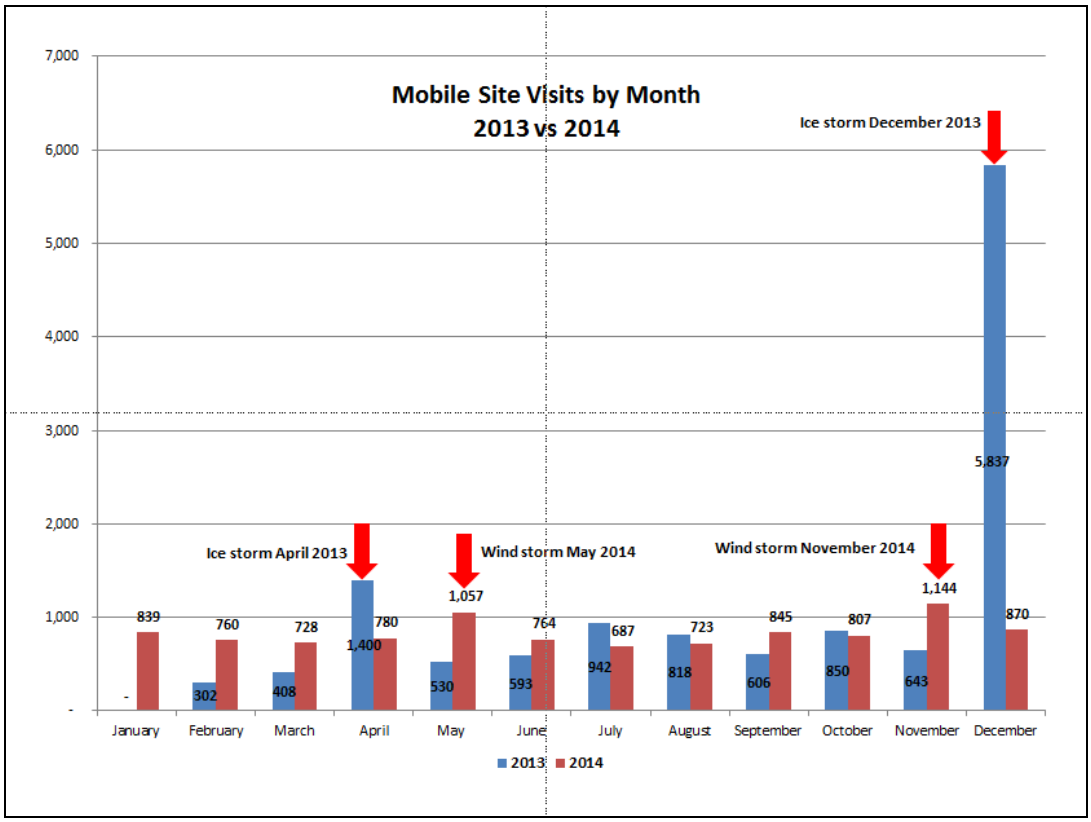
Recognizing the evolving popularity of mobile devices, Guelph Hydro was one of the first LDCs in Ontario to launch a mobile site in 2012.



Outcome

The Guelph Hydro mobile site quickly grew in popularity and has proven to be a valuable tool for our customers during outages as evidenced by the spike in usage during severe weather events such as the ice storm in December 2013 illustrated in Chart 1-16 below.

Chart 1-16



As a result, the mobile site was enhanced in 2013 to improve the quality and quantity of the content and ease of use.

Looking forward

Guelph Hydro continues to monitor advances in mobile technology and will continue to enhance the site on a regular basis with input from customers.

Website Improvements: As a Result of the 2013 Customer Satisfaction Survey

The 2013 Customer Satisfaction Survey (See Appendix 1-B – UtilityPULSE Report - page 93) measured the likelihood of customers using the Internet for a variety of customer care needs as illustrated in the table below. This information was used to help direct and prioritize website improvement activities.

	Likelihood of using the internet for future customer care needs for things such as:	
	Top 2 Boxes: 'very + somewhat likely'	**Guelph Hydro**
1	Setting up a new account	43%
2	Arranging a move	49%
3	Accessing information about your bill	63%
4	Accessing information about your electricity usage	63%
5	Accessing energy saving tips and advice	52%
6	Registering a complaint	41%
7	Registering a compliment	49%
8	Accessing information about Time Of Use rates	59%
9	Maintaining information about your account or preferences	58%
10	Paying your bill through the utility's website	35%
11	Getting information about power outages	47%
12	Paying your bill using a mobile device, tablet or smartphone	27%
13	Setting up an alert to advise you when you reach a set threshold on your electricity bill	47%
14	Reporting a problem such as a power outage, safety hazard, graffiti or a streetlight that is out	45%

Base: 90% of total respondents from the local utility

Ideally, utilities want customers to embrace e-billing and other electronic services; however, a hindrance on the most basic level will discourage customers from considering additional online services, i.e. accessing SMART meter data. The goal is to inform customers of their electricity usage, and make them aware of the potential to conserve electricity.

UtilityPULSE

93
June 2013

Outcome

The following improvements were made to the website and mobile site in 2013 and 2014. Of the 14 functions mentioned above, all but two (12 and 13) are now available on the Guelph Hydro website.

#1 Setting up New Account – New Online Form

43 percent of customers indicated they would likely use the Internet to set up a new account

- User-friendly New Account on-line forms were created so customers can easily set up new



account online from website or mobile site

- The on-line forms were introduced in July 2013. A total of 871 forms were received in 2013 (6 months) with 2,500 forms being received in 2014.
- The New Account online forms work in conjunction with the Customer Information System thereby eliminating the need for Customer Service Representatives to manually set up an account.
- New Account online forms were promoted using a banner ad on the website and a bill insert in 2014

#2 Arranging a Move – New Online Form

49 percent of customers indicated they would likely use the Internet to arrange a move

- Guelph Hydro's Customer Service department opens and closes approximately 12,000 accounts in a year which includes a large university student population that moves in and out of Guelph twice a year. User-friendly Move In / Move Out on-line forms were created so customers can easily arrange for their moves online using a website or mobile site. This new feature particularly appeals to the student population.



- Prior to the launch of these forms in 2013, customers were required to email or fax in forms to the Customer Service Department for manual processing. Since online Move In / Move Out forms work in conjunction with the Customer Information System and eliminate the need for Customer Service Representatives to manually enter data, Guelph Hydro has been able to provide enhanced telephone service by utilizing Customer Service Representative-time to respond in more detail to complex billing inquiries from customers.

- Website banner ads and an icon on the landing page and mobile site were added in 2014 to promote these new online forms.
- A bill insert was sent out in 2014.
- Since being introduced in 2013, online forms are proving to be increasingly popular with customers with 871 applications being submitted online in 2013 and 2,950 in 2014.

#3 Accessing Information about Your bill

63 percent of customers indicated they would likely use the Internet to obtain information about their bill



- Bill information available through My Account Online on website and mobile site
- Banner ad used in 2013 – 2014
- The My Account Online section of the Guelph Hydro website is the most visited section of the website, representing 65 percent of top 20 web pages visited in 2013 and 70 percent of web pages visited in 2014.

#4 Accessing Information about Your Electricity Usage / Green Button

63 percent of customers indicated they would likely use the Internet to access information about electricity usage

- Smart meter data available through My Account Online on website
- Green Button enhancements made in 2014
- Website banner ads used in 2013 and 2014.



#5 Accessing Energy Savings Tips/Advice

52 percent of customers indicated they would likely use the Internet to obtain tips and advice about energy conservation

- Tips, advice and links to OPA/IESO conservation programs all accessible through website and mobile site

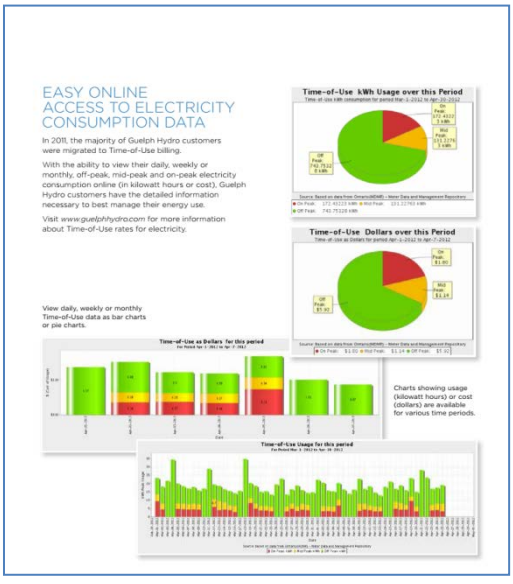
#6 and #7 Registering a Complaint or Compliment

41 percent and 49 percent of customers indicated they would likely use the Internet to register a complaint or a compliment respectively

- Email addresses, problem forms, Twitter account are all available for submitting complaints or compliments online

#8 Accessing Information about Time-of-Use Rates

59 percent of customers indicated they would likely use the Internet to access information about Time-of-Use rates



- General information available online through website or mobile site
- Time-of-use smart meter data available via website and My Account Online
- Availability of time-of-use data promoted through the Guelph Hydro Inc. Sustainability Report
- Banner ad on website promoted availability of smart meter data

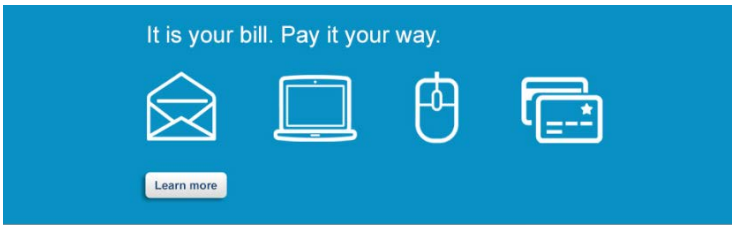
9 Maintaining Information about Your Account or Preferences

58 percent of customers indicated they would likely use the Internet to maintain information about their account

- Available through My Account Online

#10 Paying Your Bill Through the Utility's Website

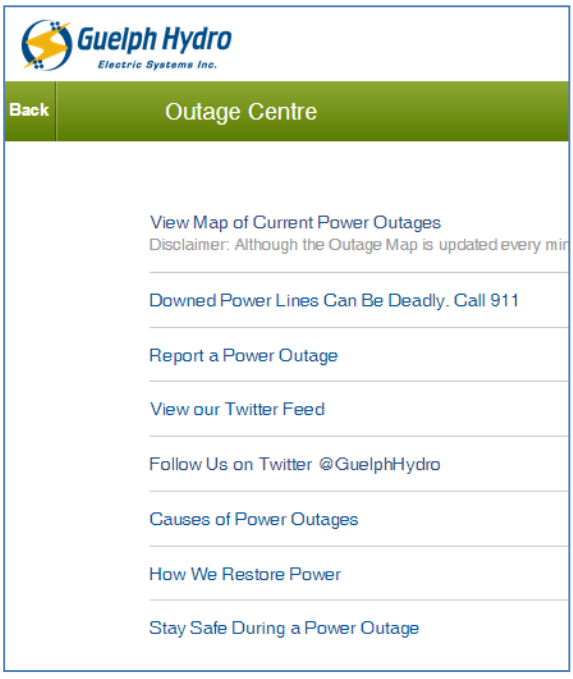
35 percent of customers indicated they would likely use the Internet to pay their bill through the company's website



- Available through Paymentus
- Promoted ways in which customers can pay bill using banner ad on website

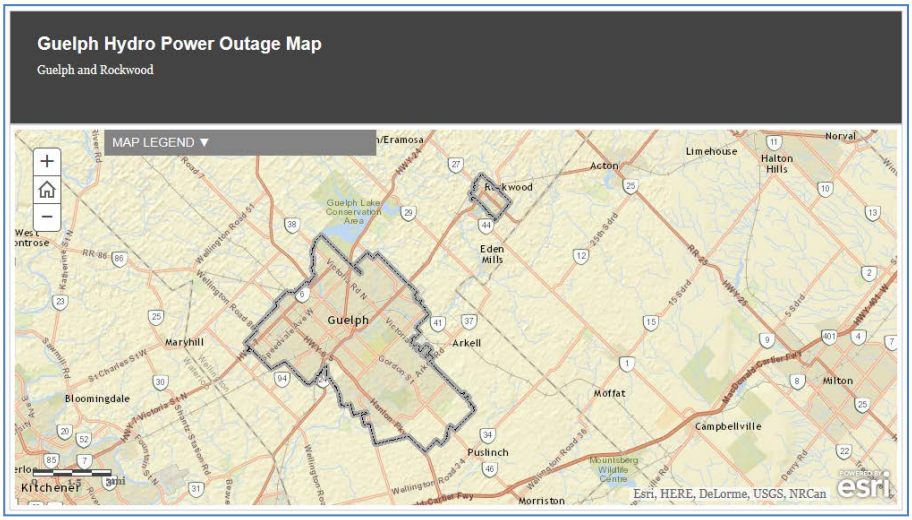
#11 Getting Information about Power Outages

47 percent of customers indicated they would likely use the Internet to get information about power outages



- Addition of power outage map to website and mobile site
- Detailed information provided on website
- Creation of an Outage Centre on the mobile site (see image)
- Twitter account used to post outage updates

- Twitter feed added to home page



#12 Paying Your Bill Using a Mobile Device, Tablet or Smartphone

Only 27 percent of customers indicated they would likely use a mobile device to pay their bill

- This was explored but due to the low demand at this time and the complexity associated with implementing this change, it was not pursued.

#13 Setting up an Alert to Advise You When You Reach a Set Threshold on Your Electricity Bill

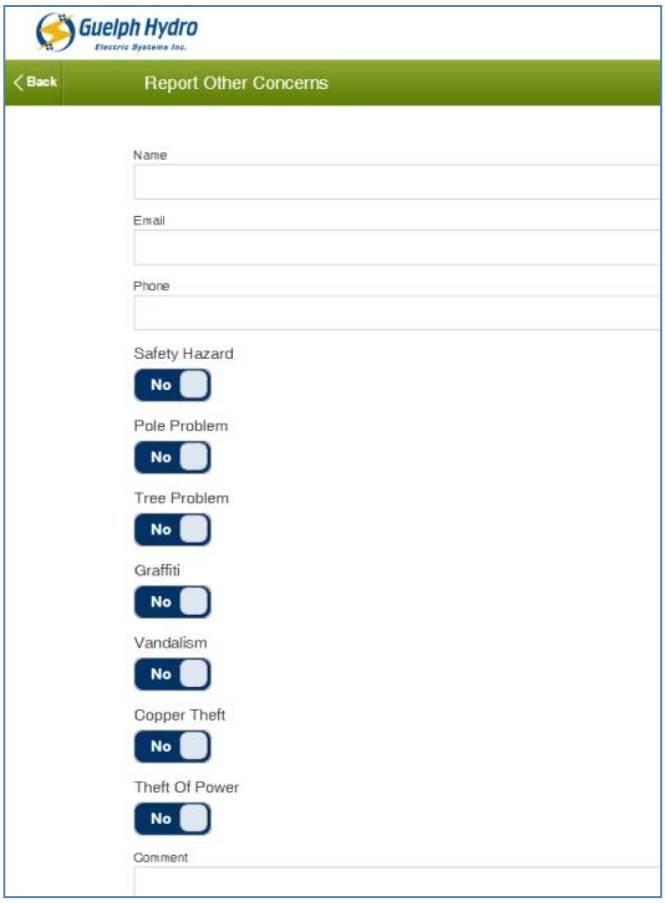
47 percent of customers indicated they would likely use the Internet to set up an alert

- This was explored but, due to system limitations, it is not possible to pursue this idea at this time

#14 Reporting a Problem such as a Power Outage, Safety Hazard, Graffiti or Streetlight Out

45 percent of customers indicated they would likely use the Internet to report a problem

- A simple-to-use form was added to website and mobile site



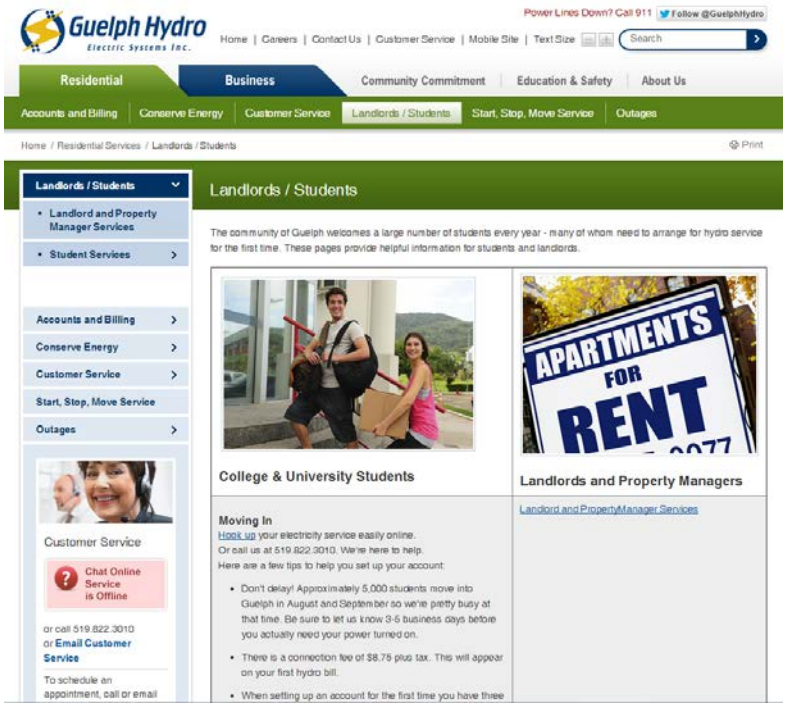
Website Improvements Made in 2014 to Enhance Customer Education and Engagement

A continual analysis of the website, input from customers via the Customer Service Department and monitoring of developments on other utilities' websites provides direction in planning continual website enhancements.

Outcome

The following are just a few of the enhancements were made to the website in 2014 to respond to customer needs and preferences:

- Expanded outage resources
  - Improved outage map
  - Reasons for outages
  - How we restore power
  - Storm damage instructions
  - How to find a licensed electrical contractor (via the Electrical Safety Authority)
  - Backup generators – safety information



- Online functionality
- Understanding electricity charges

- Landlord and Student section
    - Guelph Hydro's customer base includes a significant amount of rental properties for the transient student population. To improve service to this customer segment, a special "Landlords/Students" section was set up on Guelph Hydro's website to provide helpful electricity service information for students and landlords, including the online forms to hook up or discontinue a customer's electricity service account. This website page receives significant traffic, with 3,500 visits in 2013 and 3,600 in 2014.
- Rotating banners to promote online forms for move in/move out, Green Button functionality, online chat functionality, Call Before You Dig, energy retailers, etc.

Looking Forward

Using input from customer surveys and other feedback mechanisms, Customer Service and Corporate Communications will continue to work collaboratively to continually improve the website so that it responds to customer evolving needs and desires.

VI. IMPROVED OUTAGE REPORTING

In 2013, recognizing the rising demand from customers for timely, more detailed information about power outages, Guelph Hydro focused resources on improving outage reporting using a variety of channels.

Over the last two years, the following improvements have been made:

- Expanded outage resources
    - Development of a dynamic, web-based outage map for use by internal staff that includes the GPS positioning of company fleet vehicles enabling staff to see at a glance if field crews are on site making repairs.

- Development of a website outage map that is updated every few minutes during an outage
- Expanded outage resources posted on the website as referenced in section V

- Use of Twitter to communicate outage information
  - Use of Twitter to update customers during outages
  - Pre-written tweets included in the company Crisis Communications Plan
  - Organization of an outage simulation training session for LDC communicators to learn how best to use Twitter and Hootsuite during a major power outage
  - Participation on the Electricity Distributors Association Communicators Council Task Force to develop a Crisis Communications Plan template for all LDCs along with a mutual aid agreement so that LDC communicators can assist each other during an emergency situation.

VII. ENGAGING CUSTOMERS THROUGH SOCIAL MEDIA

Twitter

Recognizing the potential for using social media for immediate, two-way communication to the community at large and potentially for building stronger relationships with a younger demographic, Guelph Hydro began using Twitter in 2012, becoming one of the early adopters of social media in the industry.

The company developed a social media strategy, began tweeting information about conservation and demand management programs, services, electrical safety, outreach events, company news and power outages and developed a comprehensive social media policy that has been used as a model by other LDCs.

Outcome

Since increasing its online presence in 2012, Guelph Hydro has engaged customers online by sending out more than 1,500 tweets (Appendix 1-F) resulting in a steady increase in followers numbering approximately 2,500 by the end of 2014.

Due to the company's early adoption of social media, Guelph Hydro was well prepared to respond to the 2013 ice storm and other severe weather events in 2012, 2013 and 2014 with up-to-date information for customers via Twitter.

Guelph Hydro has received kudos and positive feedback from customers and the City of Guelph for its social media response to power outages.

Guelph Hydro has trained additional staff to send out information on social media on a daily basis and respond promptly to power outages or other crisis situations.

The company spearheaded social media training for communicators in other LDCs and is assisting in developing a mutual aid agreement for LDC communicators through the Communicators Council of the Electricity Distributors Association to provide support for social media in the event of a crisis.

Looking Forward

The company will continue to be active on Twitter and will be exploring the use of Facebook to promote conservation and demand management programs in 2015-2016.

2.4.3.4.4 IMPLEMENTATION: CDM OUTREACH AND ENGAGEMENT

Guelph Hydro is a leader in achieving electricity conservation results. At the time of writing of this report, 2014 Final Verified Conservation and Demand Management (CDM) Results were not available, so the following table reflects cumulative 2011-2013 results against 2014 targets. As noted in the table, by the end of the third year of the four-year targets, Guelph Hydro had exceeded its 2014 energy savings target, and had

achieved over 75 percent of its demand savings target, ranking it in the top four LDCs in the province. By year-end 2014, Guelph Hydro is forecasting to have achieved over 135 percent of its four-year energy savings target, and close to 100 percent of its demand target.

Table 1-46

	Guelph Hydro 2011 – 2014 CDM Targets	2011 – 2013 Final Verified Savings Achieved	% of 2014 Target
Net Incremental Summer Peak Demand (MW)	16.71	12.96*	77.6%*
Net Cumulative Energy (GWh)	79.53	101.3	127.4%

*Reporting under Scenario 2 which assumes that demand response resources remain in service until 2014

These results are evidence of the success of Guelph Hydro's approach in promoting, supporting and delivering Ontario Power Authority (OPA) energy conservation programs between 2011 and 2014.

Further evidence can be seen in the uptake numbers achieved in the various programs between 2011 and 2013. Note that finalized 2014 results are not yet included.

Between 2011 and 2013, more than $5.5 million in incentives has been provided to program participants towards their energy conservation projects.

Residential Programs

- 3,613 customers participated in the Heating and Cooling Rebate Program
- 1,428 appliances, mostly refrigerators, were removed and recycled
- 34,598 Coupons for energy efficient measures were redeemed by Guelph and Rockwood customers through the annual Coupon and Bi-Annual Retailer Events

Business Programs

- 20 customers participated in Audit Funding
- 461 Direct Install Lighting retrofits were completed
- 290 larger business retrofits were completed under the Electricity Retrofit Incentive Initiative
- 39 businesses participated in the Demand Response 3 program

Much of Guelph Hydro's success in delivering OPA programs and meeting provincially mandated targets is the result of the holistic approach Guelph Hydro has employed; engaging residential and business customers in a variety of ways to understand their concerns about rising energy prices, assist in analyzing energy consumption data and provide advice on how to conserve energy by modifying behaviours or taking advantage of OPA saveONenergy conservation programs.

In order to offer this approach, Guelph Hydro assembled a staff of highly skilled energy experts and established strong relationships with channel partner networks, contractors and suppliers. All Guelph Hydro costs associated with delivering CDM programs were funded by the OPA's saveONenergy conservation and demand management funding.

Engagement efforts to promote energy conservation and demand management included:

<u>Residential Customers</u>

- Formation of a specially trained CDM outreach team that spent a total of 95 days out in the community interacting with customers at festivals, home shows, retailer events, movie theatres, etc. between 2012 and 2014 (See Appendix 1-G)
- Use of social media to promote and engage customers in events and programs
- Advertising

Industrial / Commercial Customers

- Meetings and technical discussions
- Energy efficiency customer visits – more than 800
- Large customer symposium
- Chamber of Commerce presentations
- City of Guelph information sessions

Highlights of Guelph Hydro's engagement efforts to promote energy conservation and demand management are detailed below.

RESIDENTIAL CUSTOMER ENGAGEMENT

Formation of an Outreach Team for Time-of-Use Customer Engagement

Following the installation of smart meters and prior to the introduction of Time-of-Use (TOU) rates, Guelph Hydro undertook many preparations to ensure that customers understood the new TOU rates and how to best to manage their electricity use under the new pricing structure.



In addition to providing customers with a variety of print materials delivered as direct mail or bill inserts, in 2011 Guelph Hydro established Time-of-Use Outreach Teams to engage residential and small business customers using a face-to-face "roadshow" approach. A

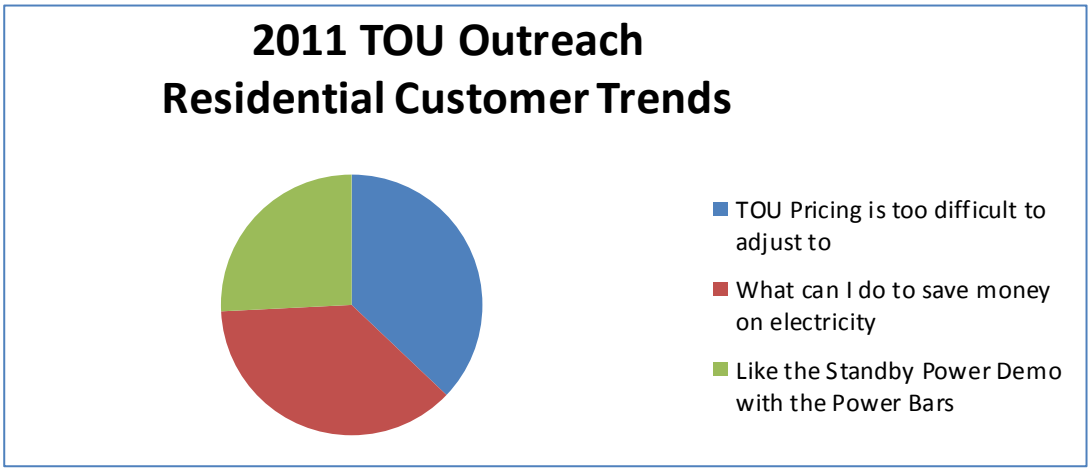
total of 36 days of outreach events, which were advertised on the company website and in local newspapers, were held throughout the community in malls, retail stores, libraries, etc.

Although the primary purpose of the outreach events was to educate customers on the new TOU rates, the Outreach Teams simultaneously promoted energy conservation programs as tools to assist customers in conserving energy.

In addition to materials on TOU rates, the Outreach Teams were armed with a light bulb demonstration unit used to compare the energy usage of an incandescent bulb and a compact fluorescent lightbulb (CFL) and various styles of power bars used to demonstrate how to properly use a power bar. When available through the OPA, coupons were provided to encourage consumers to purchase CFL bulbs and power bars.

During the outreach events, statistical information on the number of visitors, materials handed out and topics discussed was collected. Results of an analysis of the trends in topics discussed in 2011are presented in Chart 1-17 shown.

Chart 1-17



These statistics confirmed that the approach being implemented by the TOU Outreach Teams was clearly addressing key customer concerns of needing to better understand TOU pricing and learning how to better conserve electricity under the TOU pricing structure.

As a result of ongoing feedback gathered by the Outreach Teams, Corporate Communications developed extensive background materials on TOU and the Customer Service Department organized special training sessions for Customer Service Representatives to better prepare Call Centre staff to respond to customer inquiries about TOU.

Expansion of Outreach Team to CDM

Building on the proven success of the TOU Outreach Events, Guelph Hydro's Conservation and Demand Management Department developed a schedule for additional outreach events in 2011 to introduce OPA saveONenergy programs to residential customers. These events were continued in subsequent years achieving a total of 95 days out in the community interacting with customers between 2012 and 2014 (See Appendix 1-G).

The conservation and demand management outreach events concentrated on high traffic areas in the Guelph and Rockwood service territories and used a customized approach depending on the community and the audience. Events ranged from a multi-day presence at the annual Rotary Ribfest in Guelph to a few hours at a local manufacturer during their employee Earth Day fair.

Moving into 2012, the Guelph Hydro Outreach Team found it beneficial to repeat their presence at large community festivals. Additional locations were added to the schedule including spring and fall home shows and weekend retailer events in high traffic stores such as TSC, Home Depot and Canadian Tire.



These events drew crowds from both Guelph and Rockwood, reflected a variety of economic and societal demographics and provided excellent opportunities to engage customers in conversations to learn of their concerns, offer conservation tips and provide access to OPA programs. Customer Service Representatives from the Guelph Hydro Call Centre also attended these events to answer questions, provide customers with information about how to read their bill and promote electricity safety and various services offered by Guelph Hydro.

Incorporating Social Media into CDM Outreach Activities



In response to evolving societal trends around social media, in 2013, Guelph Hydro started using social media, specifically Twitter, to engage its audience at outreach events. The first event was the Firefighters Charity Hockey Game in January 2013. CDM programs were promoted, conservation coupons were included in the event guide, and an onsite *"Tweet Your Seat"* Twitter promotion to win a custom hockey jersey was conducted. Using this vehicle was an effective way to drive up followers to Guelph

Hydro's Twitter account which is used not only to promote conservation ideas and programs but also provide outage information and safety tips and to request customer participation in surveys.



Guelph Hydro expanded this social media outreach into other onsite energy conservation promotional activities including all 2013 Hamilton Tiger Cat Canadian Football League football home games held in Guelph. Guelph Hydro also staffed an onsite booth at these events to provide attendees with the opportunity to interact with staff.

Engaging Customers at Movie Theatres

In 2014 Guelph Hydro engaged with the community in a unique way by interacting with customers at movie theatres.

The Conservation and Demand Management Team produced a humorous commercial to educate customers on the benefits of the saveONenergy *peaksaver*PLUS™ program, and aired it for three months in every movie theatre in Guelph. On weekends, Guelph Hydro supported the airing of these commercials by erecting an onsite exhibit and staffing it with employees to answer questions.

Other Residential Customer Engagement Efforts

Guelph Hydro continued to drive uptake in OPA programs by placing regular print advertising in community based papers, running radio advertisements and displaying television advertisements on display panels in key locations around the community.

Guelph Hydro's efforts to reach possibly underserved sections of the customer base included reaching out to seniors, families, places of worship and small commercial businesses.

"*Lunch & Learns*" and similar events were also held for Guelph and Rockwood residents and homeowners employed by some of Guelph's larger employers.

COMMERCIAL / INDUSTRIAL CUSTOMER ENGAGEMENT

Guelph Hydro takes its outreach efforts to its business (commercial, institutional and industrial) customers just as seriously as its efforts to reach residential customers.

Business customers may be categorized in a variety of ways depending on the need, either by rate class, industry sector, overall consumption, or demand response potential, among other factors. Guelph Hydro's Conservation and Demand Management Team has to keep all these factors in mind when engaging these customers, as their individual business requirements are often mandated by a corporate head office, internal competition for capital, company goals regarding the environment and sustainability and/or the need to continually improve processes and reduce costs.

Energy is a cost that needs to be managed efficiently so that companies can remain competitive in the marketplace. Guelph Hydro understands this and makes great effort to maintain a regular dialogue and a good working relationship with these customers, and, where possible, to support them in their endeavours with two Conservation and Demand Management Energy Managers dedicated to the commercial / industrial market.

Meetings and Technical Discussions with Commercial Customers

Guelph Hydro's Key Account resources are tasked with building, managing and maintaining relationships with key commercial, institutional and industrial customers. This requires a thorough knowledge of applicable regulatory codes and regulations (Ontario

Energy Board, Independent Electricity System Operator, etc.) and an in-depth understanding of complex electricity billing calculations and customer energy purchase options in order to be able to respond to customer inquiries about billing, power quality issues and other related concerns. Customer care elements, including coordinating responses to commercial and industrial customers' technical inquiries, preparing power factor analyses, and assisting customers in their efforts to improve their electrical efficiency, are all vital aspects of this role.

Guelph Hydro's Key Accounts Manager regularly meets with business customers to review rates and billing, provide an understanding of the impact of the Global Adjustment on customer electricity bills, and educate customers on electricity supply in Ontario. These meetings are ideal opportunities to also advise customers regarding local conservation programs as well as provincial programs (i.e. the Industrial Conservation Initiative or "Class A" customers) available to improve their bottom line.

For some customers facing rate group reclassification, the Manager of Customer Service and Billing and the Key Accounts Manager will jointly meet customers to address questions on the rate reclassification, present a bill impact analysis, and explain the makeup of the power bill including Global Adjustment.

Feedback from customers indicates that they find these meetings very beneficial, resulting in requests for additional information sessions. In recent years, this has resulted in Guelph Hydro offering a series of Lunch & Learns to present "*Know Your Bill*" training, and extend offers for customers to visit Guelph Hydro's office for additional personalized education and training.

Energy Efficiency Customer Visits

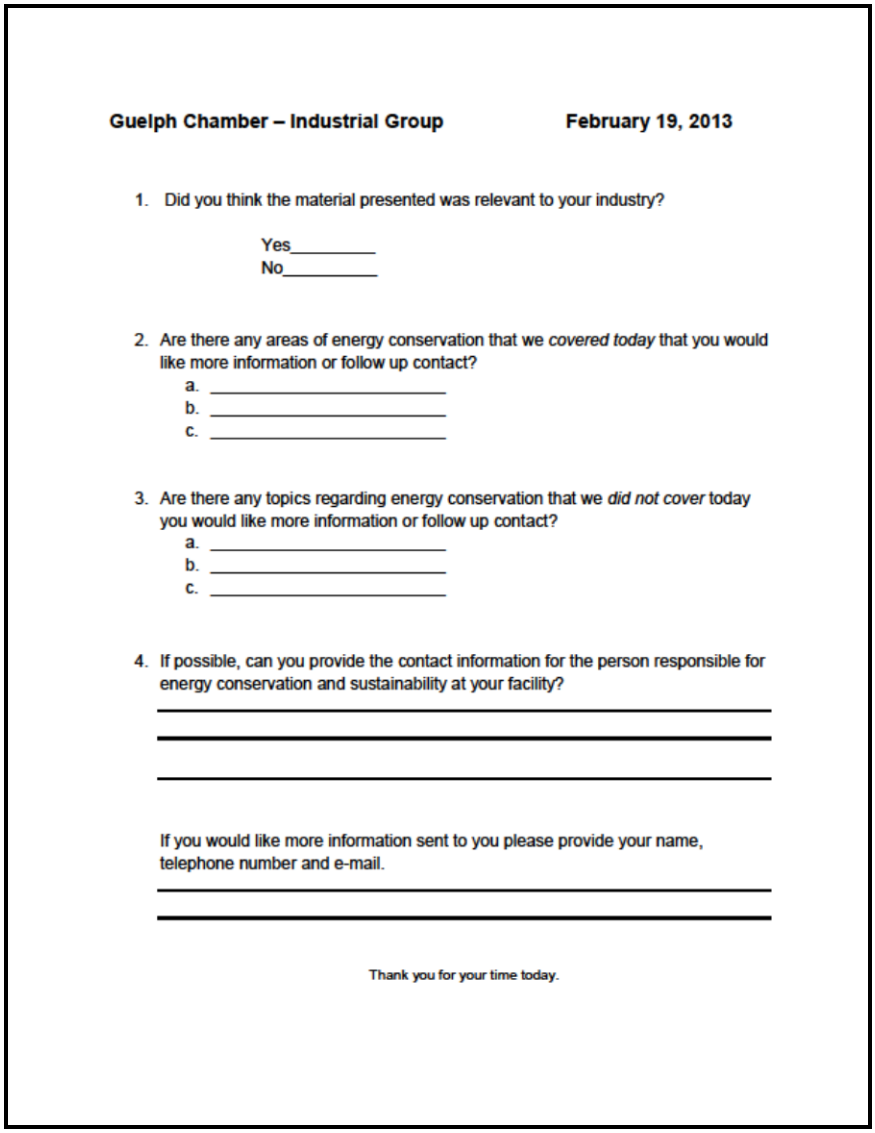
Guelph Hydro's energy managers and conservation specialists made more than 800 business customer visits in 2011-2014. The purpose of these visits was to assist these customers with their energy efficiency needs; to market, promote and support Guelph

Hydro's saveONenergy conservation programs; and to look for opportunities to provide electricity incentives to improve the customer's bottom line.

Engaging with Business Customers Through the Chamber of Commerce

One key business relationship maintained by Guelph Hydro is with the Guelph Chamber of Commerce. Guelph Hydro has participated on several Chamber of Commerce committees, including the Industrial Committee, which is comprised of the top industrial manufacturers in the City. Guelph Hydro annually hosts the Industrial Committee in-house to listen to what industry has to say, and to better understand how Guelph Hydro can support the industrial business community.

The following Exit Survey is a sample of a post-meeting large customer feedback mechanism used by Guelph Hydro.



Guelph Chamber – Industrial Group **February 19, 2013**

1. Did you think the material presented was relevant to your industry?

   Yes_____
   No_____

2. Are there any areas of energy conservation that we *covered today* that you would like more information or follow up contact?
   a. _____
   b. _____
   c. _____

3. Are there any topics regarding energy conservation that we *did not cover* today you would like more information or follow up contact?
   a. _____
   b. _____
   c. _____

4. If possible, can you provide the contact information for the person responsible for energy conservation and sustainability at your facility?

   _____
   _____
   _____

   If you would like more information sent to you please provide your name, telephone number and e-mail.

   _____
   _____

Thank you for your time today.

Feedback on these surveys in 2013, along with verbal comments heard at other Chamber events and customer visits performed by Guelph Hydro's Energy Managers, revealed that Guelph Hydro's larger customers required information on the following topics:

1. Reliability and Quality of Power
2. Know your Bill
3. Energy Efficiency Programs for your Business

4. Technologies / Future services

On March 19th, 2014, Guelph Hydro engaged senior executives and decision makers in this customer class at a Large Customer Breakfast. A total of 156 invitations to the event were issued, resulting in twenty representatives from fourteen organizations accepting the invite. On the day of the event ten representatives from eight organizations representing a cross section of business sectors in Guelph attended the session with featured presentations on the following topics, also included in Appendix 1-H:

- Overview of Guelph Hydro
- Rate Application Process
- Distribution Plan
- Energy Efficiency Programs
- Reliability and Power Quality
- Know Your Bill

At the end of the session attendees were asked to complete a feedback survey which revealed that 71 percent of the attendees found the information session very valuable. Attendees indicated they found the presentations on Know Your Bill, Reliability and Power Quality and Energy Efficiency Programs of most value.

Large Customer Symposiums

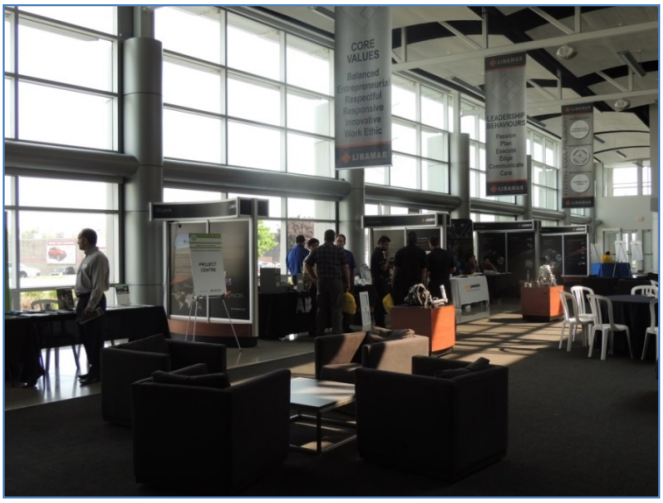
As a result of a need expressed by customers during customer visits, Guelph Hydro developed a series of tradeshows and symposiums entitled *"Mitigating Your Energy Costs."*



These were large events where all of Guelph Hydro's greater than 150 kilowatt load customers were invited to bring their technology experts and decision makers to meet various technology vendors and energy efficiency service providers.

A dedicated break-out room was set up for customers to discuss current or potential project upgrades with one of the attending vendors.

A series of presentations was organized for each symposium, based on the initial customer registration feedback. Customers were able to choose what they wanted to learn about at the events.



More than 450 delegates have attended the three events. For each symposium the presentation topics were modified so that customers could return for the next event and learn something new, ideally with real application at their place of business.

Guelph Hydro's Conservation and Demand Management Team produced these large scale events twice by partnering with regional LDCs. In addition to receiving very positive feedback from customers after the event, a customer who had attended the first two symposiums requested that Guelph Hydro hold a third symposium at a local manufacturing training facility in Guelph. The manufacturer invited 100 of its manufacturing, production and maintenance team members to attend. This same company has requested the event be repeated in 2015.

Engaging Third-Party Channel Partners

Guelph Hydro believes that third-party Channel Partners such as contractors, engineering firms, suppliers, manufacturers and consultants are a vital extension of the

saveONenergy education and outreach workforce. In order for Channel Partners to deliver the OPA programs successfully to their customers, they need to understand and know the programs as well as the LDC's Outreach Team members. For this reason Channel Partners were invited to attend the Symposiums.

Channel Partners who attended the Symposiums were then surveyed to determine if Guelph Hydro provided a valuable experience for this important audience with the potential for new business and key personnel contacts.

Guelph Hydro has also hosted joint LDC as well as standalone Channel Partner training sessions to educate companies and individuals in the trades on how to showcase the OPA programs with the goal of securing more sales.

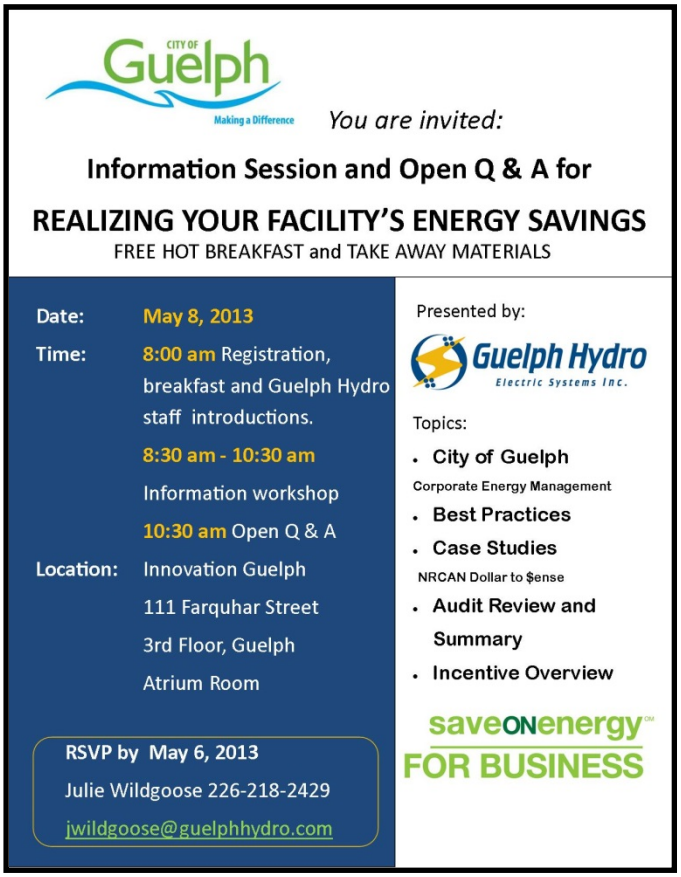
Feedback from this group indicates that this type of training was helpful for the success of their own businesses. Guelph Hydro has hosted over 300 individuals at the Channel Partner training sessions held in 2012-2014.

Engagement Efforts with City of Guelph

Another key relationship maintained by the Conservation and Demand Management Team is with the City of Guelph. The City is very innovative in its approach to the environment and sustainability.

In 2011/2012, Guelph Hydro assisted the City in completing saveONenergy energy audits of 11 of its most significant facilities, with the intent to further translate the savings potential identified in the audits into completed projects.

To further support these efforts, Guelph Hydro hosted two separate extended information sessions for the City. This was to not only share opportunities available to them under the saveONenergy programs, but also for Guelph Hydro to better understand the City's internal processes and their energy efficiency objectives, in order to better help in achieving their goals.



In 2013 Guelph Hydro hosted City of Guelph employees at an event with presentations on best practices by Guelph Hydro's Key Accounts Manager and a representative from Natural Resources Canada.

Approximately 45 City staff representing various facilities and all City departments, such as business development, building infrastructure and procurement attended. It was a great success with 100 percent of the attendees who completed feedback forms saying it was worth their while and they learned new information.

Engaging Guelph Hydro's Largest Single Load Customer

Guelph Hydro regularly reaches out to the utility's largest single load customer to obtain feedback on the services they require to improve energy utilization, to gauge how Guelph Hydro is performing as a service provider, to conduct onsite energy audits and identify potential saveONenergy opportunities, and work with team members to assist with achieving efficiency targets.

Recognizing Success with Incentive Cheque Presentations

Guelph Hydro regularly organizes saveONenergy incentive cheque presentations to celebrate the successes of companies who have participated in saveONenergy programs for business. In many cases, these cheque presentations were followed up by case studies that appeared in Guelph Business Venture magazine or other local publications, generating further interest in the programs.



2.4.3.4.5 IMPLEMENTATION: SUMMARY OF CUSTOMER ENGAGEMENT ACTIVITIES

A summary of customer engagement activities, a list of customer needs and preferences identified through each engagement activity and actions taken to respond to identified needs and preferences is detailed on the Customer Engagement Activities Summary – Appendix 2-AC (Table 1-47).

1

Table 1-47

Appendix 2-AC
Customer Engagement Activities Summary

Provide a list of customer engagement activities	Provide a list of customer needs and preferences identified through each engagement activity	Actions taken to respond to identified needs and preferences. If no action was taken, explain why.
DISTRIBUTION SYSTEM INVESTMENT PLAN REVIEW FOCUS GROUP SESSIONS AND TELEPHONE SURVEY		
Focus Group Sessions - April 2015 - Distribution System Investment Plan Review - One residential group and one small commercial group - See Appendix 1-I for consultation workbooks and final report from Innovative Research Group Inc. **Telephone Survey - April 2015 - Rate Application Customer Consultation - 500 residential customers and 150 general service customers - See APPENDIX __ for survey questions and final report from Innovative Research Group Inc.**	1. Affordable electricity costs / Operational efficiency 2. Increasing efficiency through the adoption of "Best Practices" 3. Reliability of Service – Momentary Outages 4. Investing in New Technologies and Infrastructure 5. Helping Customers Find Ways to Reduce Their Electricity Consumption and Costs	**1. Affordable electricity costs / Operational efficiency** As outlined in this Application, Guelph Hydro is taking a prudent "spend to maintain" approach to capital investment that is in keeping with customer preferences as stated in the customer consultations. As part of its ongoing efforts to contain costs, Guelph Hydro will continue to explore shared service arrangements with other LDCS for example for 24/7 Control Room services, SCADA services, GIS services, etc. Internally, Guelph Hydro has plans to form a Cost Improvement Task Force that will explore the use of processing mapping and "lean", Six Sigma or other efficiency methodologies to eliminate waste in company processes and procedures in order to reduce costs. With regard to rates, Guelph Hydro is proposing a cost of service Application that will maintain the current high level of customer satisfaction by investing prudently to maintain reliability and responsiveness, and provide a continued high level of customer service. Recognizing that any rate increase will be a hardship for financially strained customers, Guelph Hydro will continue to support this customer segment through the LEAP Program as well as through expanded outreach programs for new Canadians and low income customers that will help them to better understand their electricity bills and provide advice on how to conserve energy to save money. **2. Increasing efficiency through the adoption of "Best Practices"** Guelph Hydro is continually seeking new ways to drive down costs. This is one reason why Guelph Hydro employees participate on a variety of councils of the Electricity Distributors Association as well as Ministry of Energy task forces, special industry working groups and belong to professional associations. Through these efforts, employees are able to meet and exchange ideas about operational efficiencies, innovative technologies and other topics. Guelph Hydro will continue to explore "best practices" though these avenues and will pay special attention to encouraging younger employees to participate. Guelph Hydro will actively seek out other ways to exchange ideas on operational efficiencies with other LDCs, in Ontario and elsewhere. In recognition of the fact that customers have indicated that exploring "best practices" is important, Guelph Hydro has budgeted for selected staff members, including young, high-potential developing staff, to attend conferences to exchange ideas with their peers and learn about new and different ways of doing things. **3. Reliability of Service – Momentary Outages** Guelph Hydro regularly monitors the occurrence of momentary interruptions to identify areas of concern. However, many parts of Guelph are covered with a lush tree canopy that supports a seemingly ever-increasing population of squirrels, raccoons and birds that are often the cause of momentary outages. As the result of the feedback received from the customer consultations, Guelph Hydro's Engineering Department will start taking a closer look at momentary outages in an effort to identify areas, particularly in the south end of Guelph, that require more focused attention. **4. Investing in New Technologies and Infrastructure**
SURVEYS		
Bi-Annual Customer Satisfaction Survey - Residential and Commercial Customers	A telephone survey conducted in 2013 by the independent third party, UtilityPULSE, revealed that customers expressed the need for: 1. Better prices / lower rates 2. Concerns about smart meters / information 3. Improve / simplify / clarify billing 4. Better communication with customers 5. Information and incentives on energy conservation	A full list of improvements that were implemented subsequent to the Customer Satisfaction Survey is included in Section 2.4.3 Customer Engagement. These included but are not limited to: - New Customer Service protocols for high bill analysis and Time-of-Use rates - Website enhancements - more information, additional online forms, special sections for students and landlords - Smart meter data available / Green Button added in 2014 - Increased bill inserts - "Make it Easy / We are Listening" Customer Service strategy which included co-browsing, chat function which have increased efficiency - Energy conservation promoted via website, bill messages, bill inserts, community events, television and radio
Voice Survey (IVR) - Post-transaction with Customer Service	Customers need to have a way to to provide feedback immediately after speaking with a Customer Service Representative in order to help Guelph Hydro determine if customer's needs were met in a satisfactory manner and, if not, how to improve service.	Input received via this channel is discussed with Customer Service Representatives during their weekly "huddle" where service and cost improvements are discussed and implemented.

2

Online Customer Survey for Residential and Commercial Customers	Residential and commercial customers need to have a method of offering input on the following topics for use by Guelph Hydro in developing the 2016 Cost of Service Application and Distribution System Plan: • Customer service • Your hydro bill • Rates • Reliability, power outages & safety • Energy conservation • Renewable energy & new technologies • Future investments A copy of the questionnaire designed in-house for this survey is included in Section 2.3.4.	In 2014, Guelph Hydro developed in-house and launched an extensive online (and paper) Customer Survey to collect feedback from residential and commercial customers on a wide variety of topics for use in developing the Distribution System Plan and Cost of Service application. Copies of the survey are included in Appendix 1-D. Results of the survey were studied and used in developing the 2016 Cost of Service Application and Distribution System Plan to ensure both documents are meeting the needs and preferences of customers.
Surveying Customers at CDM Outreach Events	Customers need to better understand how to use power bars effectively to save energy, how to take advantage of OPA coupons for energy-saving devices, etc.	Guelph Hydro ensured staff at outreach events could respond to customer concerns.
ISSUES AND NEEDS IDENTIFICATION MEETINGS AND DISCUSSIONS		
Shareholder (Customer) Engagement Municipal Government Consultation	The Shareholder, a key customer of Guelph Hydro, requires regular business updates including issues identification, reasons for power outages, energy consumption data for municipal buildings, etc.	In 2013 and 2014, senior management staff met on a regular basis with the shareholder (Mayor and Chief Administrative Officer of the City of Guelph), City of Guelph staff including City facilities managers and Energy Manager and representatives from the Village of Rockwood. Guelph Hydro was also involved in discussions regarding growth areas and economic development of the community. This information was used in capital planning. In addition, the Energy Services group responds regularly to requests regarding municipal building
Large Customers & Commercial Customers Engagement	Customers require a streamlined process for requesting a temporary disconnection of service for planned outages for use by customers and contractors. Large customers need to control electricity consumption, need to understand the bill and need to reduce electricity costs.	Guelph Hydro representatives from the Engineering and Metering Departments speak frequently with large customers and commercial customers to answer questions, address issues, determine needs and provide expert advice on metering, supply and power quality issues Created an online form and automated process for requesting the temporary disconnection of electrical service for planned maintenance outages Provide services of Conservation and Demand Management staff to analyze energy consumption and help
Residential & Commercial Customers Engagement	Customer service representatives in our Call Centre responded to more than 42,000 calls, 8,139 written requests for information and 5,000 online chats from residential, commercial and industrial customers in 2014. Call Centre tracking compiles data regarding customer inquiries, complaints and feedback. The following recurring service issues were identified: 1. Customers having to contact Guelph Hydro repeatedly or be transferred between departments to get an issue resolved 2. Customers having to switch from one service channel to another, such as having to call because they couldn't resolve an issue through the website 3. Customers having to wait on hold during peak call periods 4. Customers not understanding why a bill is high 5. New customers not being made aware of services - i.e. not signing up for e-billing 6. Need for contractors to arrange for temporary disconnection of service for home renovations	The Customer Service Department rolled out the "Make it Easy/We are Listening" strategy, which focused on the following goals: - Making it easy to engage with Customer Service - Being available and present in the channels where customers are conversing (website, telephone, email) - First call resolution As a result of studying the conversations Customer Service Representative were having with customers, the following major improvements were made: - Co-browsing functionality added to enable Customer Service Representatives to browse the website alongside customers to educate them on material available online - Online chat function was added to the website - Call back function was added to the telephone queue to enable customers to leave a message for a callback so they don't have to wait on hold - Introduction of a welcome package email for new customers that informs them of a variety of services - Development and implementation of a high bill analysis protocol for use by Customer Service Representatives - Creation of online form for requests for temporary disconnections of electrical service

1

City of Guelph - Street Lighting Unmetered Load Customer	The City of Guelph is a unique Guelph Hydro customer in that it has a number of traditional electricity accounts for their buildings and facilities, but also provides community services which are settled as "Unmetered Loads", more specifically street lighting. Since street lighting contributes a significant portion of the City's energy expenses, the City requires extensive support regarding the street lighting infrastructure.	Both Guelph Hydro's Engineering / Technical Services and Conservation & Demand Management teams communicate with the City's various departments and at various levels. Departmental outreach includes regular meetings, support for and participation in joint energy efficiency events, as well as routine phone and email communications. This regular outreach includes discussion items such as: • How are streetlights identified, tracked and mapped; • How is streetlight electricity consumption settled, including the use of NRCan Sunrise/Sunset tables adjusted throughout the year to reflect streetlight burning hours; • "Rates and Billing 101", including Global Adjustment impacts and line-by-line bill breakdown; • Forecasting of future annual energy budgets; • Forecasting of operating, maintenance and capital budgets; • Impacts of street light group relamping; • Opportunities for energy efficiency improvements, including conservation program incentives, LED roadway lighting and controls systems potential; • Coordinating road allowance and distribution system changes; • Other related discussion items as issues or concerns are raised. As is typical, in 2014, the Engineering / Technical Services groups met or communicated with City staff frequently
INFORMATION SESSIONS		
Large Customer Engagement	Large customers need information about system capacity, system reliability, how to read a hydro bill, energy conservation programs for industrial customers, outage communications and their unique needs. This important customer segment must also have the opportunity to discuss their needs and provide input to the Distribution System Plan.	On March 19, 2014, Guelph Hydro hosted a Large Customer Information Session and Breakfast to learn more about the needs and preferences of Guelph Hydro's large customers to inform the development of our Distribution System Plan. Attendees included representatives from eight companies including schools, manufacturing and health care, one observer, and representatives from Guelph Hydro including members of the Board of Directors and Senior Management Team. The format of the meeting included presentations, and facilitated breakout sessions regarding system reliability, how to read your hydro bill, conservation programs and communications. Feedback was solicited from the group at the end of the session. Attached in Appendix 1-H of this Exhibit are the Large Customer Breakfast Powerpoint presentation, flipchart notes and survey results.Customer comments and feedback from the session were taken into consideration during the preparation
Industrial Customers Engagment via Chamber of Commerce	Industrial customers need information on: - localized power generation - high energy costs in Ontario as compared to other areas of North America - conservation programs for industrial customers - best practices for predictive maintenance of transformers and other customer-owned electrical apparatus	On April 15, 2014, Guelph Hydro hosted a Chamber of Commerce Industrial Committee meeting to respond to the concerns of the Chamber of Commerce regarding localized power generation and high energy costs in Ontario compared to other areas of North America. Guelph Hydro also viewed this as an opportunity to learn more about the wants and needs of industrial customers to assist in the development of the Distribution System Plan. Attendees at this Information Session included three Chamber of Commerce representatives and four commercial customer representatives. After the session, CDM staff contacted customers regarding conservation programs and Guelph Hydro staff
Industrial Customers - In partnership with the IESO	Industrial customers require information about the Global Adjustment, how it is calculated, and what customers can do to manage its effect on their bill	On June 18, 2014, Guelph Hydro partnered with the IESO to provide an information session tailored to industrial customers with special emphasis on information pertaining to the Global Adjustment. Feedback received from the industrial customers who attended the event was considered when developing the Distribution System Plan and this Cost of Service application. Looking ahead, further information sessions and one-on-one meetings with customers will be held.
Commercial Customers Engagement via Chamber of Commerce	Commercial customers need to have a better understanding of Guelph Hydro's services, outage response protocols, conservation programs and the value Guelph Hydro provides to the community	On September 24, 2013, Guelph Hydro hosted more than 100 individuals from businesses in Guelph at a Business After Five Chamber of Commerce Event. This event provided an excellent opportunity to acquaint commercial customers with Guelph Hydro's operation, provide a tour of the Control Centre, distribute information about conservation and demand management
Regional Planning Public Information Session Hydro One Guelph Area Transmission Refurbishment Project	Need for Guelph Hydro customers to understand impact of Hydro One's Guelph Area Transmission Refurbishment Project	Guelph Hydro participated in a number of planning meetings with Hydro One with regard to their planned Guelph Area Transmission Refurbishment Project. In 2014, Hydro One advertised and held a Public Information Session to generally provide information to the Guelph community about their plans for improving the supply of electricity to the area and, specifically, talk to residential customers in the immediate area of the Guelph Area Transmission Refurbishment project about
Inauguration of Arlen Municipal Transformer Station	Need for industrial customers to better understand the electrical distribution system, electricity supply, reliability and the advanced technology embedded in the new Arlen Municipal Transformer Station.	In 2012, Guelph Hydro's Arlen Municipal Transformer Station went into service. In June 2012, Guelph Hydro held an inauguration event for key industrial customers, community partners and industry representatives that included a presentation of the features and benefits of the new transformer station, tours and a questions and answer session. Information gleaned from these informal discussions was used in preparing the Distribution System Plan.
ONLINE COMMUNICATIONS		
Website / mobile site	Research conducted into customer preferences (see Section 2.4.3.3.1) revealed that Residential customers prefer "low touch" interactions and 24/7 mobile access	Guelph Hydro has a modern, easy-to-use website and mobile site which feature online forms, online chat with a live agent, feedback mechanisms, a dynamic outage map and a myriad of other features as described in Section 2.4.3.3.4.

Social media	Customer behaviour during power outages has indicated their strong desire for up-to-the minute outage information and an almost immediate Twitter response to outages, 24 hours a day. Safety information prior to severe weather events appears to be greatly appreciated by customers. Information about scams, energy conservation tips, safety information, etc. are retweeted by followers indicating a strong level of interest in these topics.	Guelph Hydro has trained a number of staff to respond via Twitter during an outage. Although 24-hour coverage is not the norm, coverage during a major power outage is handled remotely either by Communications staff and/or Control Room staff. The company has received many kudos from customers for its social media outage response. Guelph Hydro generally tweets a minimum of once per day, seven days a week.
CALL CENTRE / CUSTOMER SERVICE ACTIVITIES		
41,529 telephone calls, 15,489 emails to Call Centre in 2014	Call Centre tracking of customer inquiries, complaints and feedback reveals that the top two areas of concern for customers are: 1. High bills - Lack of understanding of bills and the Ontario energy system / Energy literacy 2. Power outages - Where to get up-to-date information	1. Expanded training for Customer Service Representatives 2. Implemented new high bill protocol and included High Bill Analysis section on website 3. Implemented Time-of-Use rates protocol as add-on to website information 4. Created "How to Read Your Bill" Infographic - Posted on website and tweeted 5. Expanded website information to include reasons for outages, how we restore power, storm damage instructions and how to find a licensed electrician. 6. Promoted the Guelph Hydro Sustainability Report through a bill insert and website information with emphasis on the "How to Read Your Bill" infographic
Community Outreach	Customers and their families need information about energy conservation programs, how to read a bill, causes of high bills, electrical safety, etc.	Customer Service Representatives attend selected community events to provide information and answer questions.
Low income customers	Low-income customers in need of assistance require information about low income programs available to them.	Participation in the Low Income Energy Assistance Program Training for Customer Service Representatives
Services for disabled customers	Disabled customers need to receive the same level and quality of service as non-disabled customers, regardless of any barriers there may be.	Guelph Hydro is firmly committed to providing accessible, quality service to all customers and visitors in compliance with the Accessibility for Ontarians with Disability Act (AODA). The company has in place an Integrated Accessibility Standards Policy and a Guelph Hydro Multi-Year Accessibility Plan. Customer Service staff other employees have been trained to accommodate the needs of customers with disabilities. Guelph Hydro offers disabled customers a variety of services to simply interaction including: - Online chat function on website - Website is AODA compliant
Customers Impacted by Capital Improvements, Reconstruction Projects or Tree-Trimming	Customers need to be informed of planned outages or tree-trimming.	Customers who will be impacted by a planned outage or tree-trimming receive a hand-delivered notice that outlines details of the project and provides a number to call for questions.
Business Customers	Business customers need to understand their billing	Guelph Hydro's Key Accounts Manager meets regularly with business customers to review rates and billing, provide information on the impact of the Global Adjustment and educate customers on the electricity supply in Ontario. These visits are also used to advise customers on local conservation programs as well as provincial programs (i.e. Industrial Conservation Initiative or "Class A" customers) available to improve their bottom line. In cases of rate group classification, the Manager of Customer Service and Billing and the Key Accounts Manager will jointly meet with customers to address questions on the rate reclassification, present a bill impact analysis and explain the makeup of the hydro bill including Global Adjustment. These meetings resulted in
ADVERTISING, PUBLIC RELATIONS		
Bill messages, bill inserts, envelope messages, advertising	Customers require information on rate changes, conservation programs, etc. Some customers prefer to receive information in print form.	Regular bill messages, bill inserts, envelope messages and print advertising informs customers about changes in rates, conservation programs, electrical safety topics, customer surveys, holiday hours, etc. The parent company's annual Sustainability Report and financial information was promoted to customers on the website, via a bill insert and through print advertising.
Media Releases, information alerts	Customers require information on material issues such as power outages, new services and price increases as well energy conservation initiatives.	Guelph Hydro regularly sends out media releases and information alerts to keep customers informed.

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ELECTRICAL SAFETY		
General Public: Community Outreach Events and Advertising	Customers need to be made aware of electrical safety hazards and how to keep themselves safe around electricity.	Guelph Hydro regularly participates in electricity safety events in the community to help raise awareness about the importance of staying safe around electricity and how to stay safe during weather-related outages. Guelph Hydro tweets safety information, places electrical safety public service announcements on local radio stations and in local newspapers, publishes press releases, provides detailed informatio on the company website, records on-hold messages and distributes print materials in an effort to keep customers informed.
Emergency First Responders: Fire, police, ambulance	Emergency first responders must be made aware of electrical hazards they may encounter when responding to emergencies and taught how to keep themselves safe.	Guelph Hydro provides electrical safety training for first responders and participates in the community's Emergency Preparedness Day.
Elementary School Children: Energy Conservation and Electrical Safety	Elementary children need to understand electrical system hazards and how and why to conserve energy.	Electrical safety and energy conservation school presentations offered via a third-party contractor to 1/3 of schools in the service territory every three years. First utility to hold a web-based energy conservation comic challenge for Grade 5 students. Included in Guelph Hydro's educational material are "Electricity Matters" activity books for children, which provide colouring pages, puzzles and activities to help children learn about electricity. The Guelph Hydro Health and Safety Team joined the Conservation and Demand Management Team on a visit to an elementary school and at a three-day outdoor fair for school children. Hazard Hamlet, a child-friendly electrical hazard simulator, was demonstrated and materials were handed out. As a token of community engagement, all line crews carry a supply of toy bucket trucks for handing out to
PROMOTING CAREERS IN THE ELECTRICITY INDUSTRY		
High School Students: Electricity and Careers	Educators, high school students and their parents need information about electricity and careers in the electricity sector in order to encourage students to pursue careers in the sector.	Participated in the Upper Grand District School Board Student Senate Conference which paired industry experts with Grade 12 students to help them prepare a 45-minute presentation on the topic of their choice. Guelph Hydro provided information, mentorship and resources to a student who was doing a presentation on the evolution of electricity generation and transmission in Ontario. Skills Ontario Skills Work! Camp Tours: In the summer 2014 Guelph Hydro hosted two camps for the Skills Ontario Skills Work! camps for boys and girls ages 12-13. The goal of the camps is to provide the children with hands-on experience in a skills trade. Guelph Hydro gave the students a tour of its facility, a hands-on demonstration of what it is like to work on a line crew, and a presentation about how electricity is generated and
Powerline Technician Students	Students in the Conestoga College Powerline Technician program require access to equipment and knowledgable trainers in order to learn the trade and develop their skills.	Guelph Hydro supports the Conestoga College Powerline Technician program by providing trainers and obsolete equipment.
CONSERVATION AND DEMAND MANAGEMENT ACTIVITIES		
All Customer Classes: Advertising	Need to be made aware of saveONenergy programs	saveONenergy programs were promoted using the following channels: - Printed materials - advertising (newspapers, magazines,), brochures, bill inserts, displays - Local mass marketing (radio, bus advertising) - Advertorials - Media releases
Commercial and Industrial Customer Visits	Commercial and industrial customers need technical expertise to identify and implement complex commercial or industrial energy conservation projects.	More than 800 commerical and industrial customer visits were made between 2011-2014 by Guelph Hydro's energy managers and conservation specialists. The purpose of the visits was to assist these customers in identifying and implementing complex commercial or industrial energy conservation projects as well as in submitting applications saveONenergy programs.
Community Outreach Activities and Events	Customers need to be made aware of saveONenergy programs, how to read their hydro bill and ways to conserve energy	Conservation and Demand Management staff and Customer Service staff participated in 95 days of community outreach between 2012 and 2014 (See CDM Outreach Schedule in Appendix 1-G) to answer customer questions and promote saveONenergy programs. Information gleaned from these face-to-face interactions with customers was fed back to the Customer Service Department and used to continually improve customer service.
Residential Customer Outreach Through eMerge Home Visits	Customers need help understanding how to read their bills and how to reduce their bills through energy conservation.	Guelph Hydro has partnered with a grassroots community organization called eMerge Guelph to conduct home energy audits , teach residential customers how to read their hydro bill, provide them with tips on energy conservation and promote CDM programs. By the end of 2014, eMerge Guelph had conducted 350 home visits.

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2.4.3.4.6 IMPLEMENTATION: CUSTOMER ENGAGEMENT

How Feedback From the Online Customer Survey Shaped the Application

Online Customer Survey Results

Guelph Hydro conducted an online survey that ran from November 17, 2014 to January 30, 2015 to gain further insight into the needs and wants of customers.

Results of the approximately 350 responses received were compiled (Appendix 1-D) and confirm that Guelph Hydro continues to maintain high levels of customer satisfaction.

An analysis of the survey results reveals that customers have no major areas of concern with 77 percent of survey respondents indicating that they feel Guelph Hydro provides excellent or good value.

Additional services that might be of interest to customers include emails containing energy conservation tips and outage updates, a method for homeowners to compare their energy usage to others in the neighbourhood, on-bill financing for energy conservation initiatives and additional investments in materials for schools to use to teach children about electrical safety.

Guelph Hydro will be conducting feasibility studies on each of these items in the next year. Any costs incurred in implementing these ideas would be included under normal operational budgets.

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 the spring of 2015 Guelph Hydro retained Innovative Research Group Inc. ("INNOVATIVE") to design, collect feedback and document its *Distribution System Investment Plan Review* customer engagement and

consultation process as part of the development of this Application. Guelph Hydro asked that residential and general service customers be engaged on both Guelph Hydro's capital infrastructure and operational plans.

The following *Distribution System Investment Plan Review* activities were undertaken as part of the process. A complete copy of the INNOVATIVE Customer Consultation Report is attached as Appendix 1-I.

- Focus Groups - Two Focus Group Consultations were conducted by INNOVATIVE using specially developed Consultation Workbooks, included as an appendix in the INNOVATIVE Customer Consultation Report (Appendix 1-I)
- Telephone Survey – A 35-question telephone survey was conducted with 514 randomly selected residential customers and 186 randomly selected General Service <50 kW ratepayers. The telephone questionnaires are included as an appendix to the INNOVATIVE Customer Consultation Report (Appendix 1-I)

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

1. **General Service under 50 kW and Residential Consultation Groups:** 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 groups were randomly recruited and held in Guelph. A workbook was used to provide the participants with core information about both the provincial and local electricity system, Guelph Hydro'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.
2. **Random Telephone Surveys**: INNOVATIVE conducted telephone surveys with residential and general service (GS < 50kW) customers to provide a quantitative assessment of key aspects of the system plan. Customer lists for both

respondent groups were provided by Guelph Hydro and the sample was randomly selected by INNOVATIVE.

The outcome of the consultations resulted in findings on the needs and the preferences of Guelph Hydro's general service and residential customers. The overview below includes feedback from 20 customers who participated in the *qualitative* stage of the consultation where INNOVATIVE explored the range of issues related to Guelph Hydro's rate application, as well as feedback from another 700 customers who contributed to the *quantitative* stage where we documented the incidence of needs and preferences across the customer population.

Results Indicate Customers are Highly Satisfied

Table 1-48: Overall Satisfaction across Consultation Activities

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	General Service	Residential	General Service	Residential
Very satisfied	2	2	48%	40%
Somewhat satisfied	7	9	47%	46%
Somewhat dissatisfied	0	0	3%	6%
Very dissatisfied	0	0	1%	5%
Don't know / Refused	0	0	1%	3%
TOTAL	**n=9**	**n=11**	**n=186**	**n=514**

There is an exceptionally high level of satisfaction among Guelph Hydro customers, as was demonstrated across all consultation activities and both customer rate classes. This result corroborates feedback regarding customer satisfaction levels received via the UtilityPULSE Customer Satisfaction Survey conducted in 2013 and the Online Customer Survey conducted in 2014/2015 and indicates that Guelph Hydro continues to do an excellent job meeting customer needs and expectations.

Results of the telephone survey indicated:

- A strong majority (86%) of residential customers are satisfied, while almost all (95%) general service customers felt the same.
- Two-in-five (40%) residential customers and almost half (48%) of general service customers are *very satisfied* with the service.
- When stratified by consumption, residential customers with the highest level of consumption are the least satisfied (77%). There is no statistically significant difference among these groups for general service customers.
- 82% of those who are under financial strain due to their electricity bill are satisfied with the job Guelph Hydro is doing, compared to 93% of those who are not under financial strain.

Feedback received during the focus groups aligned with the results of the telephone survey with four of twenty participants stating they were *very satisfied* with the service they receive, while the remaining participants were *somewhat satisfied*. This sentiment is so prevalent that when asked, the majority of ***participants had no suggested improvements to offer.*** In both groups, there were mentions of instances where Guelph Hydro had addressed an issue quickly and efficiently.

Comments from residential customers expressing satisfaction included:

"Understanding they only deliver, I can say the delivery is excellent."

"Service wise, I'm very pleased. Blackouts and brownouts are exceptionally rare."

"If the service didn't change one iota I'd be okay with that. That'd be great."

Similarly, general service participants in the focus group expressed great satisfaction with the service they receive from Guelph Hydro.

> *"I'm perfectly satisfied. I don't know if I've ever really had an issue. I don't understand the efficiency of the entire system so I can't comment on that, but I'm happy."*

Notably, in the focus group workbook, ***not a single general service participant expressed dissatisfaction***.

Customer Experience / Responsiveness

In the General Service focus group, there was no mention of a negative customer experience over the duration of the consultation. One participant, while satisfied with the service at their business, related a personal experience that was quite positive.

> *"I've never had a problem at the business, but last year my neighbor had an issue and Guelph Hydro came very quickly. It affected the power at my house and I appreciated the Guelph Hydro worker coming over and telling me how and when my service would be affected. I was impressed. They knocked on my door; told me exactly what was going on. There were no surprises. Everything was well looked after."*

Similar to general service participants, interaction with Guelph Hydro has been positive for residential customers. Participants are satisfied with how quickly and efficiently unexpected issues are managed.

> *"Guelph Hydro was so quick to come fix the transformer that blew just around the corner from me. I went out and bought a flashlight and that was my only expense."*

With regard to responsiveness during the most adverse conditions, in the telephone surveys, INNOVATIVE found that most residential (54%) and general service (56%) were *not* impacted by the ice storm of December 2013, and that – whether they were affected or not – most (83% residential, 88% general service) were satisfied with Guelph Hydro's response to the storm.

Reliability of Service

In the qualitative research, there was some discussion about reliability and, for the most part, participants in the focus groups indicated being satisfied with the reliability of their electrical service and not being overly inconvenienced by outages.

Although outages did not seem to be an issue, participants agreed that fluctuations in power quality, resulting in brief power interruptions (momentary interruptions), were the most concerning / annoying. The impact of these fluctuations however, varied across participants. For some the only indication of a momentary interruption was the need to occasionally reset their clocks, while one individual in particular, who works from home, had to invest in a UPS to mitigate the frequency of outages he experienced.

The issue of momentary interruptions also came up in the generation service focus group. Several general service participants acknowledged that the overall reliability of the service has improved over the years. However, although the number and duration of actual outages is minimal, there was some concern regarding the *quality* of the power.

> *"We have more flickers now than we used to, we may not have long outages, but we have plenty more flickers now."*

In the telephone survey, 43% of residential customers and 44% of general service customers did not experience any outages in the past 12 months aside from those caused by extreme weather. Of residential customers who experienced outages, half (49%) indicated that their outage lasted for less than 15 minutes. General service customers reported longer outages, with 35% saying theirs lasted for less than 15 minutes. In terms of impact, these outages were considered only a minor inconvenience (57% of residential customers) or had barely any cost (45% of business customers).

When it comes to system reliability, a majority of residential and general service customers (62% and 61% respectively) think the utility should spend what is needed to maintain the current number of outages. Similarly, 60% of residential customers, and

65% of general service customers think Guelph Hydro should spend what is required to maintain the current length of outages.

Capital Investments and OM&A Spending

The telephone survey explored respondents' preferences on various aspects of Guelph Hydro's Capital Investment plan and OM&A spending. A summary of INNOVATIVE's findings are below:

1. Investment in Aging Infrastructure

The majority of residential (61%) and general service (69%) customers think Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability. Conversely, 33% or residential customers and 25% of general service customers feel the utility should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of a bill increase.

2. Investment in New Technologies and Infrastructure

More than half (58%) of residential customers and even more (65%) general service customer things the benefits of new technologies and infrastructure are important and should be a priority for Guelph Hydro. Only 37% of residential customers and 31% of general service customers feel these are luxuries more than necessities.

3. Investment in Equipment and Tools

When it comes to general plant spending, 68% of residential customers and the same proportion (68%) of general service customers feel that, while Guelph Hydro should be wise with its spending, it is important that staff have the equipment and tools they need to manage the system efficiently and reliably.

These finding were reflected in comments made by residential customers during the focus group discussions. Residential participants were very much in favour of accepting

an increase to their monthly bill in order to ensure Guelph Hydro invests what is necessary to replace the aging infrastructure (9 participants; *don't know*: 2).

> *"We need to have reliability moving into the future, and as I read this I don't feel so horrible getting my hydro bill. We have to preserve; we have to do things right."*

Nine participants felt that while Guelph Hydro should be wise with its spending, it's important for staff to have the resources necessary to manage the system reliably and efficiently. Only one felt that Guelph Hydro should make do with the existing equipment.

General Service focus group participants were divided regarding the planned capital expenditures. Half felt that Guelph Hydro should make do with the buildings, equipment and IT systems it has. The others felt that while Guelph Hydro should be wise with its spending, it is important that staff have the equipment and tools they need to manage the system efficiently and reliably. (4 participants respectively; *don't know*: 1)

There was the expectation across both groups that Guelph Hydro should consistently do what it can to find efficiencies in all areas of its system.

Acceptance of Guelph Hydro's Proposed Plan and Rate Impact

In conducting the telephone surveys and focus groups, INNOVATIVE provided customers with the following information about Guelph Hydro's proposed plan and rate impact.

RESIDENTIAL CUSTOMER RATE IMPACT

Guelph Hydro believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. **Guelph Hydro's** proposed plan will spend an estimated **$14 million** on capital investments in 2016. This includes:

- **$4.5 million** to replace aging infrastructure;
- **$5.5 million** to serve new communities and connect customers to the grid;
- **$2 million** to invest in equipment needed to maintain and operate the system; and
- **$2 million** to integrate new technologies into the power system.

To fund this plan, **Guelph Hydro** is proposing the **average residential customers' rate increase by approximately $4.05 per month** – or about 13.7% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average residential customer will actually only pay 2% more in 2016, or **$2.68** as other costs are forecasted to come down next year.

Between 2017 and 2020, it is estimated that the average residential customers' rate will increase by about **1%** on the distribution portion of their electricity bill.

GENERAL SERVICE under 50 kW CUSTOMER RATE IMPACT

Guelph Hydro believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. **Guelph Hydro's** proposed plan will spend an estimated **$14 million** on capital investments in 2016. This includes:

- **$4.5 million** to replace aging infrastructure;
- **$5.5 million** to serve new communities and connect customers to the grid;
- **$2 million** to invest in equipment needed to maintain and operate the system; and
- **$2 million** to integrate new technologies into the power system.

To fund this plan, **Guelph Hydro** is proposing the **average small business customers' rate increase by approximately $3.49 per month** – or about 8.25% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average small commercial customer will actually only pay 0.25% more in 2016, or **$0.76** as other costs are forecasted to come down next year.

Between 2017 and 2020, it is estimated that the average small business customers' rate will increase by about **1%** on the distribution portion of their electricity bill.

INNOVATIVE then explored the degree of acceptance that Guelph Hydro's customers expressed for a rate increase. Acceptance is defined as either support for a rate increase or agreement that it is necessary.

Rather than asking customers if they support or oppose a rate increase, we instead provided four responses to choose from:

- 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

This approach allows respondents to express their dislike for the rate increase but, at the same time, acknowledge that they think it is necessary. For the purposes of this analysis, we add together outright support (the first statement) and reluctant support (the second statement) to arrive at a *total acceptance* figure.

As evidenced in both the qualitative and quantitative phases of the customer engagement, customers understand that they need to pay more in order to maintain the reliability they are currently enjoying. Further, they support Guelph Hydro's plans to invest in the system to maintain this reliability.

Referring to the generalizable results from the telephone surveys, **79% of residential customers and 75% of general service customers accept Guelph Hydro's proposed rate increase**. These findings are in line with what INNOVATIVE heard from customers during the initial focus group phase of the research

Among focus group participants, almost every participant (17 of 20) felt that Guelph Hydro is adequately managing cost drivers, while also meeting customer expectations. Furthermore, all twenty participants are confident that Guelph Hydro is planning well for the future. The main concern common in both groups, was that Guelph Hydro should be held accountable in their endeavors to continue finding cost efficiencies in order to avoid future increases of this magnitude.

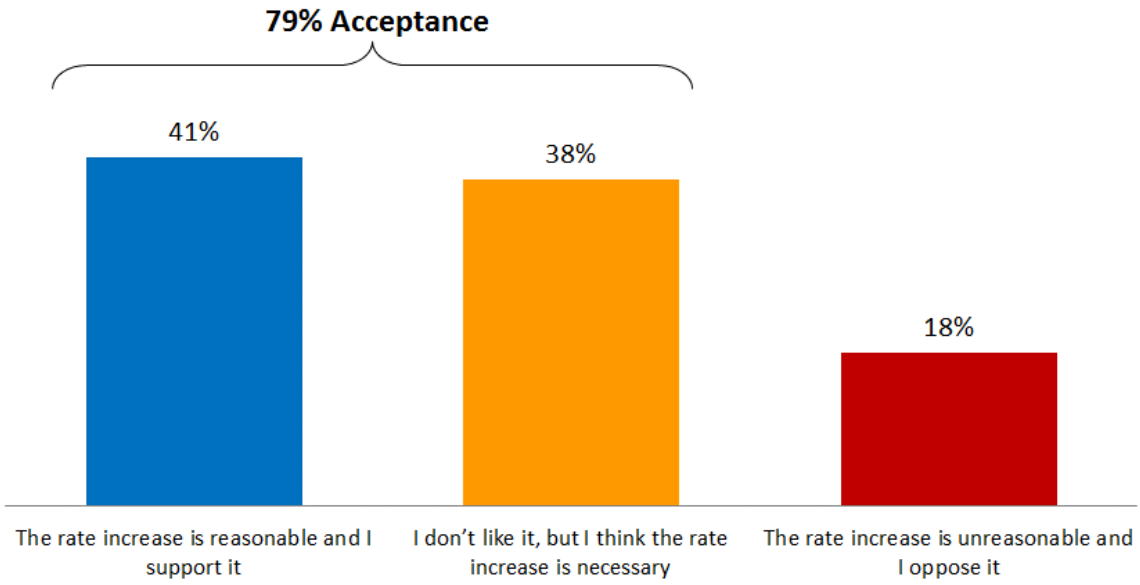
Overall, the proposed increase was found to be acceptable, and is accepted by the majority of focus group participants. Although most would not like to see costs rise, they recognize that it is a necessary investment to ensure the integrity of the system for future generations.

As reported above, telephone survey results indicated that 79% of residential customers and 75% of general service customers accept Guelph Hydro's proposed rate increase.

Chart 1-18

Residential Customers – Telephone Survey Responses

Q Considering the cost of Guelph Hydro's plan, which point of view is closest to your own?
[asked of all respondents; n=514]



Note: 'Don't know'/'Refused' (3%) not shown

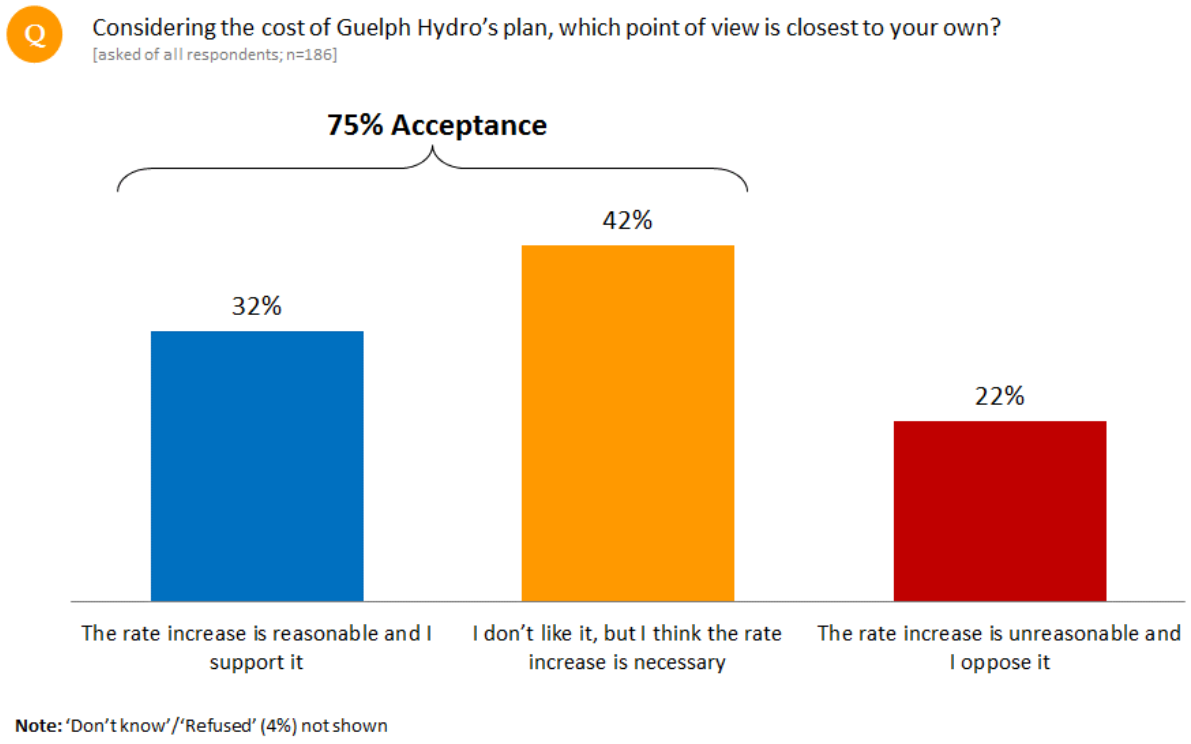
In the residential class, of particular note is the fact that the proportion that supports the increase as being reasonable (41%) is slightly larger than the proportion that offers reluctant acceptance (38%).

Only one-in-five (18%) said the rate increase is unreasonable and they oppose it.

Most likely to *support* the rate increase are those who feel their electricity bill does not have a significant impact on their household finances (62%).

Chart 1-19

General Service Customers – Telephone Survey Responses



In the general service class, while three quarters (74%) are willing to accept a rate increase, one third (32%) say the rate increase is reasonable and support it while 42% don't like it but feel it is necessary.

About one-in-five (22%) say the rate increase is unreasonable and they oppose it.

Those who feel their electricity bill does not have a significant impact on their organization are most likely (50%) to support the proposed rate increase.

Reasons why customers accept or oppose Guelph Hydro's proposed plan and rate increase:

- Among residential customers who support the increase, the main two reasons are that it's "not that big a difference/reasonable" (44%) and "it is necessary/need to invest in system" (44%).
- Residential customers who offer reluctant acceptance agree that "it is necessary/need to invest in system" (42%), but they also say their "bill is already high/pay too much" (21%), or that they "can't afford it" (9%).
- And, among those who oppose the rate increase, 26% say their "bill is already high/pay too much", 20% feel that the "money should come from elsewhere", and 15% say they "can't afford the increase".
- Looking at the breakdown of general service customers, those who support the increase say it's "reasonable/not much of an increase" (53%) or that it is "necessary to invest in the system" (45%).
- Small business customer who reluctantly accept the increase say their "bill is already high" (31%), and that it is "necessary to invest in the system" (28%).
- Opposition in this rate class is based on three main reasons: "they should find other ways to cover the cost" (26%), "unreasonable/increase is too high" (23%) and "increase will affect my business/customers" (21%).

Electricity Affordability

According to INNOVATIVE research, while some customers are feeling financially strained by their electricity bill, there are also those who are willing to pay more for their electricity. It should be noted, however, that due to the confusion on the part of customers with regard to the items included on an electricity bill, when asked about the impact on household finances of their "electricity bill", customers likely consider the entire bill which, in the case of Guelph Hydro customers, includes charges for water.

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

- 60% 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*";
- 66% of general service 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, when considering the cost of reliable electric service, a majority of customers say they are willing to pay a bit more if that means <u>better</u> service reliability.

- 57% of residential and 53% of general service customers agree that "*I'm [my organization would be] willing to pay a bit more for my electricity if it means better service reliability*."

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

- 63% of residential and 62% of general service 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]"*.

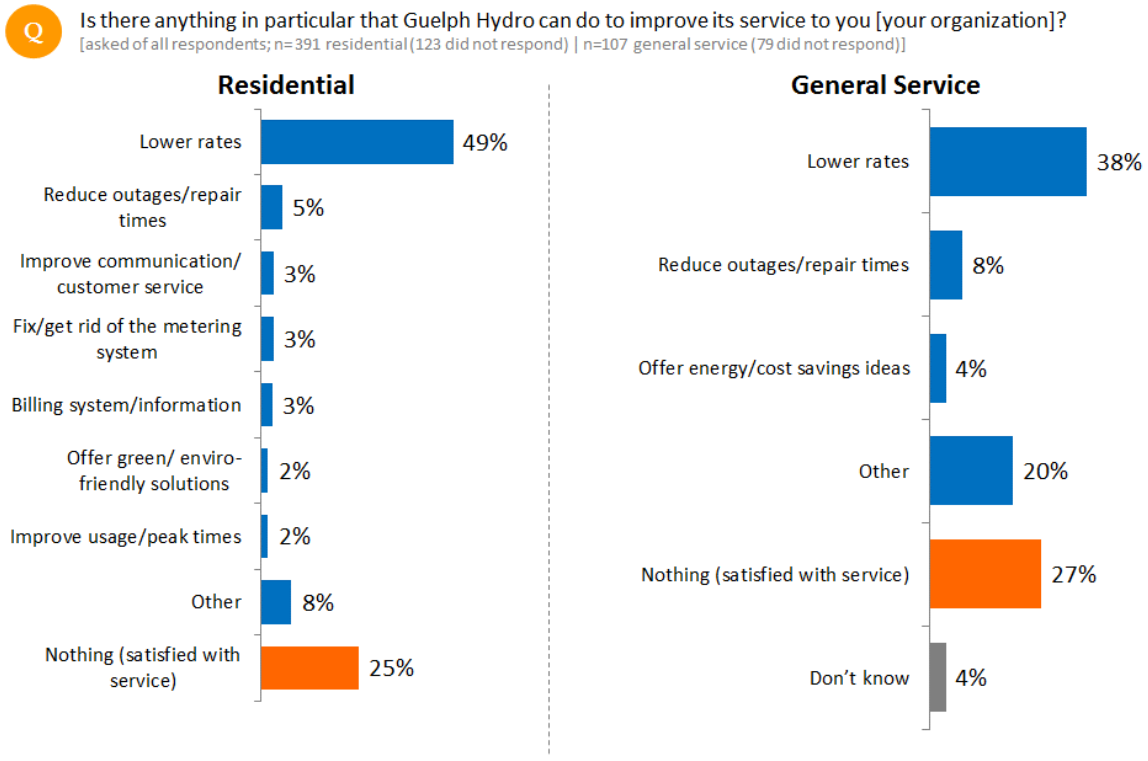
Improving Service of the Local Distribution System

Among both residential and general service clients who responded to the telephone survey, the primary suggestion for improving service is "lower rates" (49% residential, 38% general service).

Notably, 25% of residential customers and 27% of general service customers indicated that they were satisfied with services provided and had nothing to suggest in the way of improvements.

How to Improve Service

Chart 1-20
How Guelph Hydro can Improve Service



Within the focus groups, for residential customers, continuity of service was the most widely agreed upon area of improvement. Very brief outages that resulted in clocks having to be reset were felt to be too commonplace, and customers would prefer to have fewer of them.

"Full blackouts are understandable, but it's the shorter outages for no reason that are unacceptable."

"It's power quality that's become more important. Blackouts aren't so much of a problem, it's the brown outs and the sags that are the problem."

"As long as you flick a switch and the power comes on, what else do you want?"

Other residential customers mentioned lowering rates, investing in renewable sources of energy, and reducing operation costs in order to prevent future rate increases.

General service participants are also very satisfied with the service they receive from Guelph Hydro and the majority could not suggest any improvements. However, they noted that Guelph Hydro should continue to work towards finding efficiencies.

The most common suggestions for improvement presented by the general service participants in the workbook were lower rates and the desire for more information, particularly with regard to energy and cost savings programs.

Several general service customers indicated they would also like to see lines put underground, particularly in the downtown core. They felt that this would be a good investment to ensure reliability in the future. However, there was some discussion and acknowledgement within the group that this could be an expensive option.

Addressing the Frequency of Service Outages

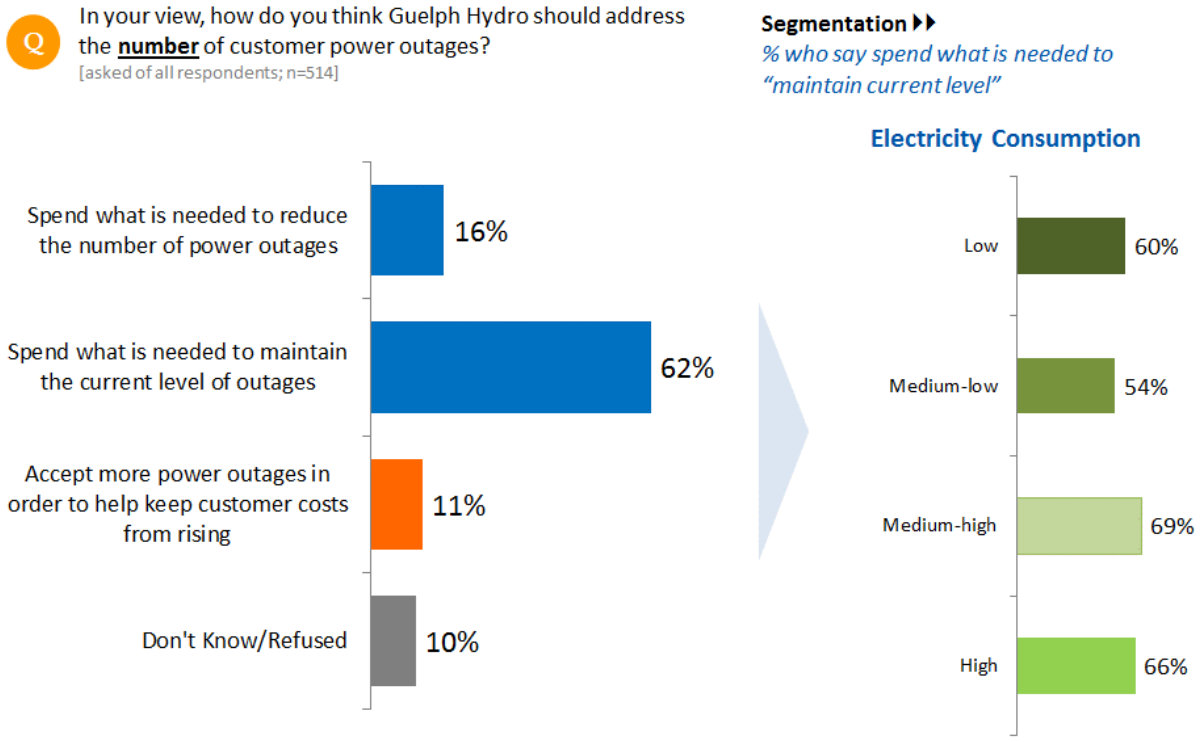
Results from the telephone survey indicate that while 16% of residential customers would like Guelph Hydro to spend what is needed to reduce the number of unexpected power outages, almost four times as many (62%) would like the utility to spend what is needed to maintain the current level of unexpected outages. Only 11% are prepared to accept more power outages in order to keep customer costs from rising.

69% of residential customers who do not feel their electricity bill has a significant impact on their household finances would like Guelph Hydro to spend what is needed to maintain the current level of unexpected outages, compared to 58% who do feel a financial strain as a result of their electricity bill (this latter group is twice as likely as the

former group to say they will accept more outages if it will keep costs down: 14% versus 7%).

Chart 1-21

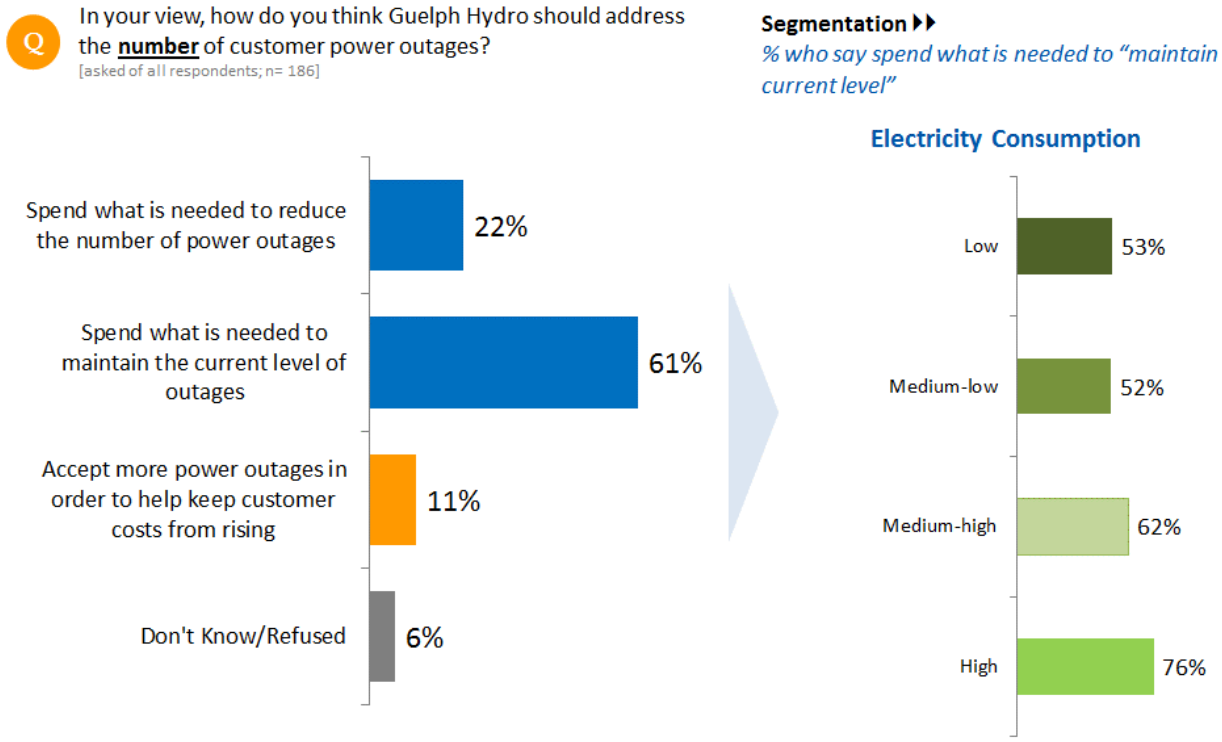
Residential: Addressing the Frequency of Service Outages



It is a similar result among general service customers: 22% would like Guelph Hydro to spend what is needed to reduce the number of unexpected power outages, 61% would like them to spend what is needed to maintain the current number, and 11% are prepared to accept more outages if it will keep customer costs from rising.

Chart 1-22

General Service: Addressing the Frequency of Service Outages

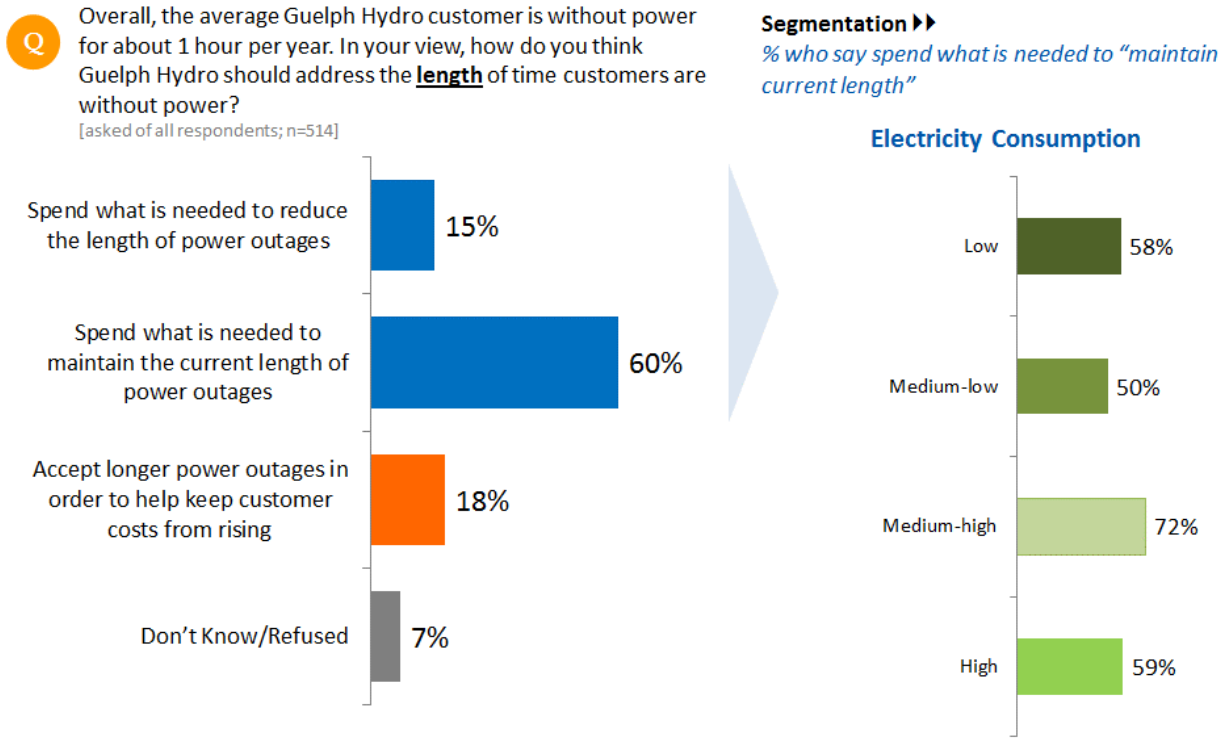


Addressing the Duration of Service Outages

Similar to how they would like Guelph Hydro to address the number of service outages, most (60%) residential customers who responded to the telephone survey prefer a "spend to maintain" approach when it comes to the duration of unexpected outages. About one-in-seven (15%) would like the utility to spend what is needed to reduce the current duration, while slightly more (18%) are willing to accept longer time without power in order to keep customer costs from rising.

Chart 1-23

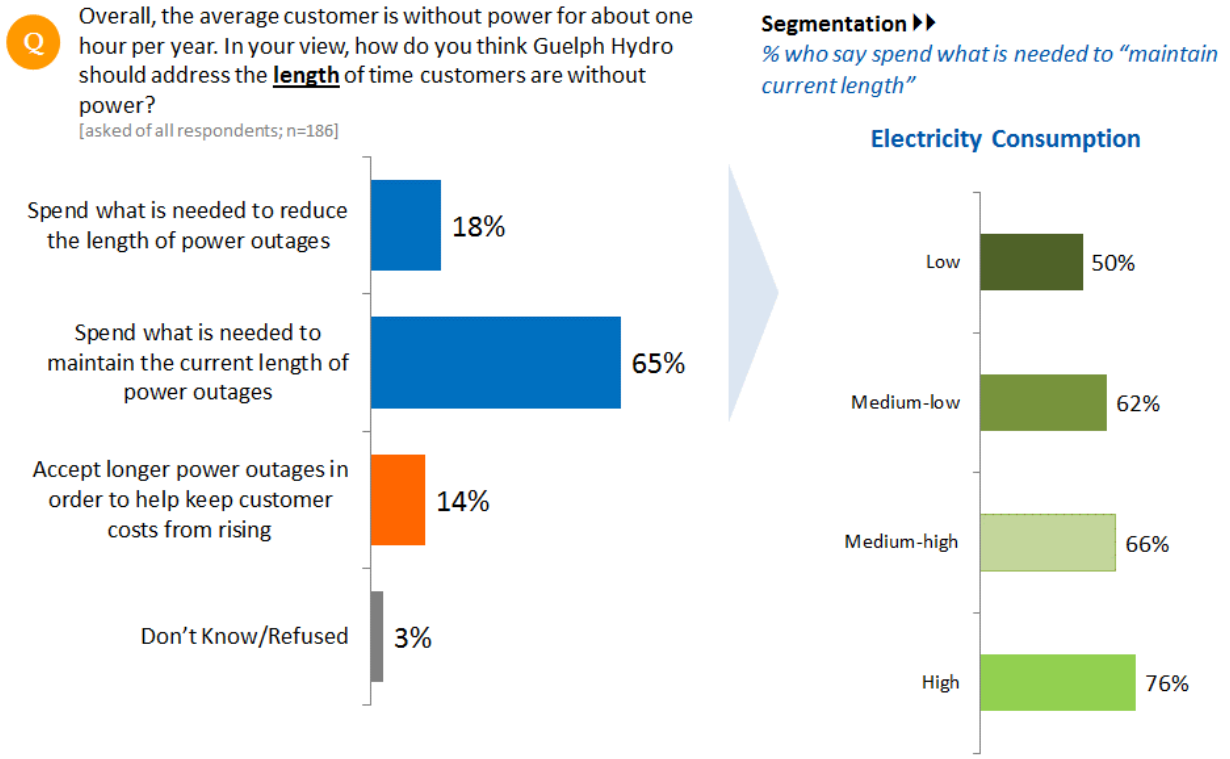
Residential: Addressing the Duration of Service Outages



Once again, the result among general service customers is similar to that of residential customers. Two-thirds (65%) would like Guelph Hydro to "spend to maintain", 18% would like the utility to spend what is needed to reduce the length of outages, and 14% are willing to accept longer outages in order to keep costs from rising.

Chart 1-24

General Service: Addressing the Duration of Service Outages



How Customer Consultation on the Distribution System Investment Plan Shaped the Application

Considering the information on customer preferences gleaned from the customer consultation activities on the Distribution System Investment Plan, along with insights gained through other customer engagement activities detailed in this section and on Appendix 2-AC, Guelph Hydro has identified five key issues that are of material importance to customers.

Below, Guelph Hydro has summarized how it has taken each of these preferences into account in its day-to-day operations and addressed them in this Application.

1. Affordable electricity costs / Operational efficiency

Guelph Hydro is well aware of the importance of providing affordable electricity distribution services. At the same time, customers expect a high degree of reliability, responsiveness and quality customer service.

As evidenced in both the qualitative and quantitative phases of INNOVATIVE's customer engagement, customers understand that they need to pay more in order to maintain the services they are currently enjoying. Although most would not like to see costs rise, they recognize that it is a necessary investment to ensure the integrity of the system for future generations.

As outlined in this Application, Guelph Hydro takes a prudent "spend to maintain" approach to capital investment that is in keeping with customer preferences as stated in the customer consultations.

In a related topic, as reported by INNOVATIVE, customers expect "that Guelph Hydro should consistently do what it can to find efficiencies in all areas of its system" in order to keep rates affordable.

As evidenced in a number of places in this Application (Exhibit 1, Tab 3, Schedule 3, 2.3.3.3 Operational Effectiveness and the DSP in Exhibit 2, Appendix 2-A) Guelph Hydro is continually striving to seek out and achieve efficiencies in its operations in an effort to keep costs down.

Looking forward, as part of its ongoing efforts to contain costs, Guelph Hydro will continue to explore shared service arrangements with other LDCS for example for 24/7 Control Room services, SCADA services, GIS services, etc. Internally, Guelph Hydro has plans to form a Cost Improvement Task Force ("CITF") that will explore opportunities to eliminate waste and seek improvements in company processes in order to reduce or contain costs. The CITF will be required to identify, investigate, review the

opportunities with management (where needed), implement the solutions and evaluate the costs savings.

With regard to rates, Guelph Hydro is proposing a Cost of Service Application that will maintain the current high level of customer satisfaction by investing prudently to maintain reliability and responsiveness, and provide a continued high level of customer service.

As indicated by the responses received in the customer consultations conducted by INNOVATIVE, the proposed rate increase is expected to be considered reasonable and found acceptable by most customers.

Recognizing that any rate increase will be a hardship for financially strained customers, Guelph Hydro will continue to support this customer segment through the LEAP Program as well as through expanded outreach programs for new Canadians and low income customers that will help them to better understand their electricity bills and provide advice on how to conserve energy to save money. In addition, Guelph Hydro will be undertaking expanded conservation programming for low income customers over the next six years.

2. Increasing efficiency through the adoption of “Best Practices”

As mentioned above, INNOVATIVE reports that customers expect “that Guelph Hydro should consistently do what it can to find efficiencies in all areas of its system.” This is reflected in a comment made by one participant in the general service focus group asking “whether Guelph Hydro is looking to utilities with lower costs in order to find efficiencies.”

Guelph Hydro's ability to run an efficient and productive operation can be measured by comparing OM&A costs per customer and Scorecard Performance against those of other utilities (Exhibit 1, Tab 3, Schedule 6, 2.3.3.6 Scorecard Performance Analysis).

With regard to OM&A costs, because Guelph Hydro has invested in smart, cost-efficient technologies and worked hard to keep operating costs down, the bill of a typical residential customer using 800 kilowatt hours of electricity per month compares favourably against those of other utilities.

This fact notwithstanding, Guelph Hydro is continually seeking new ways to drive down costs. This is one reason why Guelph Hydro employees participate on a variety of councils of the Electricity Distributors Association as well as Ministry of Energy task forces, special industry working groups and belong to professional associations. Through these efforts, employees are able to meet and exchange ideas about operational efficiencies, innovative technologies and other topics.

Guelph Hydro will continue to explore "best practices" through these avenues and will pay special attention to encouraging its employees to participate. Guelph Hydro will actively seek out other ways to exchange ideas on operational efficiencies with other LDCs, in Ontario and elsewhere.

In recognition of the fact that customers have indicated that exploring "best practices" is important, Guelph Hydro has budgeted for conferences to exchange ideas with other LDCs and learn about new and more efficient practices.

3. Reliability of Service – Momentary Outages

As evidenced in the qualitative and quantitative research conducted by INNOVATIVE, Guelph Hydro customers are satisfied with the reliability of their electrical service and not being overly inconvenienced by outages.

Although outages did not seem to be an issue, momentary interruptions, particularly in the south end of Guelph are causing customers some concern and inconvenience.

As described in other sections of this Application Exhibit 2, Tab 2, Schedule 8, 2.5.2.8 Service Quality and Reliability Performance and Exhibit 1, Tab 3, Schedule 2, 2.3.3.2 Customer Focus, Guelph Hydro's Engineering and Operations Departments are focused on continually improving the quality of power delivered to customers.

As noted in Guelph Hydro's Distribution System Plan presented in Exhibit 2, Appendix 2-A, Guelph Hydro regularly monitors the occurrence of momentary interruptions to identify areas of concern. Some outages and momentary interruptions are weather related and some result from aging distribution equipment. Many parts of Guelph are covered with a lush tree canopy that supports a seemingly ever-increasing population of squirrels, raccoons and birds that are often the cause of momentary outages. While some of the momentary outages are a result of local conditions, other momentary outages are a result of issues on the high voltage transmission or "bulk" supply to Guelph Hydro, and are noticed by Guelph Hydro distribution customers downstream of the supply.

In the event of repeated momentary outages not caused by bulk supply, Guelph Hydro sends out field crews to investigate the source of the problem to determine whether trees require trimming, squirrel guards need to be installed or aging equipment need to be replaced. As further described in the Distribution System Plan, the regional planning process known as "Integrated Regional Resource Plan" has identified two major projects, currently underway, intended to reinforce the bulk supply to Guelph Hydro, specifically the:

- Guelph Area Transmission Reinforcement ("GATR") project; and
- The second Preston auto-transformer project.

The feedback received from the customer consultations is useful information to supplement the ongoing efforts to maintain service reliability, and will be used by Guelph Hydro's Engineering Department to take a closer look at momentary outages in

an effort to identify areas, particularly in the south end of Guelph, that require more focused attention.

4. Investing in New Technologies and Infrastructure

More than half (58%) of residential customers and even more (65%) general service customers who participated in INNOVATIVE's telephone survey think the benefits of new technologies and infrastructure are important and should be a priority for Guelph Hydro.

Guelph Hydro has a long history of investing in new technologies. For example, the company was the first in Ontario to deploy ZigBee® chip-enabled smart meters throughout its service territory (Exhibit 9, Tab 7, Schedule 1, 2.12.7 Disposition of Deferral and Variance Accounts) and, for many years, has been upgrading its electricity distribution grid with smart grid technologies. In the area of customer service, Guelph Hydro was one of the first utilities to deploy a mobile version of its website, implement a "chat" function on its website and to use Twitter to communicate outage information to customers (Exhibit 1, Tab 4, Schedule 4, Section 3, 2.4.3.4.3 Implementation: Customer Service Strategy).

Guelph Hydro staff monitors industry trends and keeps an eye on rapidly evolving technology. As the company has done in the past, Guelph Hydro will continue to carefully evaluate and adopt new technologies that will result in operational efficiencies or where it makes sense for our customers. Generally speaking, adopting technological advancements are considered a part of the company's normal business processes.

5. Helping Customers Find Ways to Reduce Their Electricity Consumption and Costs

According to INNOVATIVE's report regarding their telephone survey, among general service customers, the statement "I think Guelph Hydro should do more to help customers find ways to reduce their electricity consumption and costs" received the highest level of agreement (54% strongly agree, 33% somewhat agree). Residential numbers were similar with 51% agreeing.

Over the last four years, Guelph Hydro has devoted significant time and effort successfully delivering Conservation and Demand Management outreach activities that have not only assisted customers in saving energy, but also assisted Guelph Hydro in achieving its mandated CDM targets (Exhibit 1, Tab 4, Schedule 4, Section 4, 2.4.3.4.4 Implementation: CDM Outreach and Engagement).

Guelph Hydro believes strongly in the value of these efforts and has plans to implement expanded CDM outreach activities over the next six years including new local conservation pilot projects, as well as new Green Button and Project Neutral functions that will provide customers with greater insight into their energy consumption patterns and allow them to compare their usage against others.

Guelph Hydro will also continue and expand its efforts to educate school children on energy conservation.

Looking Forward

To enhance the customer experience and ensure their evolving needs and expectations are being met, Guelph Hydro will continue to work to become more customer-centric, expanding the channels of customer service and investing in new capabilities, programs, and technologies that allow for more effective and efficient communication more with Guelph customers. By strengthening the channels of communication, Guelph Hydro will maintain a trusting, stronger, and more positive relationship with customers.

Feedback Received – How Feedback Shaped the Application

Online Customer Survey Results

Guelph Hydro conducted an online survey that ran from November 17, 2014 to January 30, 2015 to gain further insight into the needs and wants of customers.

Results of the approximately 350 responses received were compiled (Appendix 1-D) and confirm that Guelph Hydro continues to maintain high levels of customer satisfaction.

An analysis of the survey results reveals that customers have no major areas of concern with 77 percent of survey respondents indicating that they feel Guelph Hydro provides excellent or good value.

Additional services that might be of interest to customers include emails containing energy conservation tips and outage updates, a method for homeowners to compare their energy usage to others in the neighborhood, on-bill financing for energy conservation initiatives and additional investments in materials for schools to use to teach children about electrical safety. Guelph Hydro will be exploring these items in the next year.

2.4.3.4.7 EVALUATION

Call Centre Impacts

In 2013 we received 4,902 email enquiries from customers. As a result of enhancing online forms (move in/out form), introducing online chat and encouraging customers to utilize online resources, email enquiries increased to 15,489 in 2014.

Meanwhile, the number of qualified incoming calls answered within 30 seconds by Customer Service Representatives increased from 83.65 percent in 2013 to 88.02 percent in 2014. The call time per call increased on average by 25 percent because Customer Service Representatives were able to spend more time with customers answering complex telephone enquiries and co-browsing with customers to encourage web tools for future interactions.

Kudos Received from Customers

As evidence of the success of Guelph Hydro's customer centric approach and the high degree of customer satisfaction that exists in our customer base, Guelph Hydro receives compliments and kudos from customers on a regular basis pertaining to the work performed by our field crews, assistance provided by our Customer Service Representatives in our Call Centre, information provided by our Engineering or Conservation and Demand Management staff, and customer communications during outages. Of late, many of these compliments arrive via social media platforms or email.

2.4.4 FINANCIAL INFORMATION

2.4.4.1 NON-CONSOLIDATED AUDITED FINANCIAL STATEMENTS

Guelph Hydro has filed the non-consolidated audited financial statements of the utility for the three most recent historical years i.e. for the years ending December 31, 2012 to 2014 respectively. These statements exclude the operations of affiliated companies that are not rate regulated. In addition, non-utility businesses being conducted by Guelph Hydro have been segregated in the financial reporting from its rate regulated activities.

A copy of Guelph Hydro's 2013 and 2014 audited financial statements are filed in Appendix 1-K and Appendix 1-L respectively.

2.4.4.2 RECONCILIATION BETWEEN FINANCIAL STATEMENTS AND REGULATORY FINANCIAL RESULTS

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

Guelph Hydro's reconciliation between financial statements and regulatory financial results will be reported on April 30, 2015. The uniform system of account balances, mapped and reconciled to the audited financial statements, is shown below.

Table 1-49
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
BALANCE SHEET
December 31, 2014
(in thousands of dollars)

Assets		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2014 Regulatory Filing (MIFRS)	OEB Acct #
Current Assets									
Cash	$	(1,090)				1,233	$	(2,323)	1005
Accounts receivable		17,887			2,455	1,084		19,258	1100,1104,1110,1130
Unbilled revenue		10,889	1,706					12,595	1120
Income taxes recoverable		1,706		226	190	1,670		0	Transferred to Liabilities (Acct # 2294)
Inventory		1,832			23			1,855	1305,1330,1340,1350
Due to related parties		0			858			858	1200
Other current assets		552			400	593		359	1180
Total Current Assets		31,776						32,602	
Property, plant and equipment		141,277				15,882		125,395	1805 - 2105, 2160,2180
Intangible assets		388						388	1611, 2120
Deferred income taxes		2,758			71	2,829		0	Transferred to Liabilities (Acct # 2350)
Total non-current assets		144,423						125,783	
Regulatory assets		0	13,717	3,458	422	373		10,308	1508-1595
Total assets	$	176,199					$	168,693	
Liabilities and Shareholder's Equity									
Current Liabilities									
Accounts payable and accrued liabilities	$	(22,556)	13		1,442	4,034	$	(25,135)	2205,2220,2268,2290,2292, 2250
Deferred Credits - budget billing		(1,142)				10		(1,152)	2208
Customer deposits - current portion		(5,577)			1,308			(4,269)	2210
Payment in Lieu of taxes		0			1,670			1,670	2294
Due to related parties		(711)				858		(1,569)	2240
Total current liabilities		(29,986)						(30,455)	
Senior unsecured debentures		(64,600)				400		(65,000)	2505
Employee future benefits		(10,039)						(10,039)	2306,2310
Customer deposits - long term portion		(2,874)			2,739			(135)	2335
Accumulated provision for rate refunds		0				2,418		(2,418)	2315
Future Income taxes - non current		0			4,550			4,550	2350
Other deferred credits		0			19			19	2425
Deferred revenue		(15,460)			15,460			0	reclass to PP&E
Total non-current liabilities		(92,973)						(73,023)	
Total liabilities		(122,959)						(103,478)	
Shareholder's Equity									
Share capital		(43,374)						(43,374)	3005
Other comprehensive income		933						933	3090
Retained earnings		(10,799)	1,965	13,717	1,233	1,456		(22,774)	3045-3055
		(53,240)						(65,215)	
Total liabilities and shareholder's equity	$	(176,199)	17,401	17,401	32,840	32,840	$	(168,693)	

Table 1-50
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
INCOME STATEMENT
December 31, 2014
(in thousands of dollars)

		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2013 Regulatory Filing (MIFRS)	OEB Acct #
Electricity Sales	$	(212,562)	184,553		(361)	183,149	$	(211,519)	4006-4090
Cost of electricity sold		190,844		190,844	183,149			183,149	4705-4751
		(21,718)						(28,370)	
Other operating revenue		(4,718)			2,873			(1,845)	4210-4380
Net operating revenue		(26,436)						(30,215)	
Expenses									
Operations and maintenance		11,861		5,333		465		6,063	5005-5195
General and administration		9,373		263	112	1,259		7,963	5305-5695
		21,234						14,026	
Earnings before undernoted		(5,202)						(16,189)	
Depreciation and amortization expense									
Property, plant and equipment			5,596			1,060		4,536	5705
Intangibles					106			106	5715
Miscellaneous					3			3	5725
		0						4,645	
Finance and other expenses (income)									
Interest on notes payable, less amount capitalized		3,323						3,323	6005
Interest income		(19)				101		(120)	4405
Other		92			25	35		82	6035
		3,396						3,285	
Loss from operations before income taxes		(1,806)						(8,259)	
Income taxes									
Property taxes		0			328			328	6105
Provision for payments in lieu of corporate taxes		(403)						(403)	6110
Deferred income taxes		767						767	6115
		364						692	
Other Deductions									
Donations		0			79			79	6205
Net loss from operations for the year	$	(1,442)	190,149	196,440	186,314	186,069	$	(7,488)	

Table 1-51
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
BALANCE SHEET
December 31, 2013
(in thousands of dollars)

Assets		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2013 Regulatory Filing (MIFRS)	OEB Acct #
Current Assets									
	Cash	$ 620					$	620	1005
	Accounts receivable	19,501			2,455	1,007		20,949	1100,1104,1110,1130
	Unbilled revenue	9,983	1,706					11,689	1120
	Income taxes recoverable	1,468		226		1,242		0	Transferred to Liabilities (Acct # 2294)
	Inventory	1,504			18			1,522	1305,1330,1340,1350
	Due to related parties	0			608			608	1200
	Other current assets	554			425	802		177	1180
	Total Current Assets	33,630						35,565	
	Property, plant and equipment	134,275				13,975		120,300	1805 - 2105, 2160,2180
	Intangible assets	327						327	1611, 2120
	Deferred income taxes	3,247			1,795	5,042		0	Transferred to Liabilities (Acct # 2350)
	Total non-current assets	137,849						120,627	
	Regulatory assets	0	7,425	3,458	502	1,327		3,142	1508-1595
	Total assets	$ 171,479					$	159,334	
Liabilities and Shareholder's Equity									
Current Liabilities									
	Accounts payable and accrued liabilities	$ (21,160)	13		2,042	2,495	$	(21,600)	2205,2220,2268,2290,2292, 2250
	Deferred Credits - budget billing	(1,059)				5		(1,064)	2208
	Customer deposits - current portion	(3,442)				521		(3,963)	2210
	Payment in Lieu of taxes	0			1,242			1,242	2294
	Due to related parties	(734)				608		(1,342)	2240
	Total current liabilities	(26,395)						(26,727)	
	Senior unsecured debentures	(64,575)				425		(65,000)	2505
	Employee future benefits	(8,549)						(8,549)	2306,2310
	Customer deposits - long term portion	(2,874)			2,748			(126)	2335
	Accumulated provision for rate refunds	0				2,418		(2,418)	2315
	Future Income taxes - non current	0			5,042			5,042	2350
	Other deferred credits	0			19			19	2425
	Deferred revenue	(13,514)			13,514			0	reclass to PP&E
	Total non-current liabilities	(89,512)						(71,032)	
Total liabilities		(115,907)						(97,759)	
Shareholder's Equity									
	Share capital	(43,374)						(43,374)	3005
	Other comprehensive income	159						159	3090
	Retained earnings	(12,357)	1,965	7,425		543		(18,360)	3045-3055
		(55,572)						(61,575)	
Total liabilities and shareholder's equity		$ (171,479)	11,109	11,109	30,410	30,410	$	(159,334)	

Table 1-52
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
INCOME STATEMENT
December 31, 2013
(in thousands of dollars)

		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2013 Regulatory Filing (MIFRS)	OEB Acct #
Electricity Sales	$	(195,186)	168,743		10	167,694	$	(194,127)	4006-4090
Cost of electricity sold		174,871		174,871	167,694			167,694	4705-4751
		(20,315)						(26,433)	
Other operating revenue		(3,243)			1,215	15		(2,043)	4210-4380
Net operating revenue		(23,558)						(28,476)	
Expenses									
Operations and maintenance		11,901		5,476		290		6,135	5005-5195
General and administration		10,350		270	232	1,390		8,922	5305-5695
		22,251						15,057	
Earnings before undernoted		(1,307)						(13,419)	
Depreciation and amortization expense									
Property, plant and equipment			5,746			971		4,775	5705
Intangibles					78			78	5715
Miscellaneous					1			1	5725
		0						4,854	
Finance and other expenses (income)									
Interest on notes payable, less amount capitalized		3,332			114			3,446	6005
Interest income		(62)			9	114		(167)	4405
Other		43			82	24		101	6035
		3,313						3,380	
Loss from operations before income taxes		2,006						(5,185)	
Income taxes									
Property taxes		0			479			479	6105
Provision for payments in lieu of corporate taxes		(1,383)						(1,383)	6110
Deferred income taxes		1,129						1,129	6115
		(254)						225	
Other Deductions									
Donations		0			63			63	6205
Net loss from operations for the year	$	1,752	174,489	180,617	169,977	170,498	$	(4,897)	

Table 1-53
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
BALANCE SHEET
December 31, 2012
(in thousands of dollars)

Assets		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2012 Regulatory Filing (MIFRS)	OEB Acct #
Current Assets									
	Cash	$ 2,274					$	2,274	1005
	Accounts receivable	18,134			2,454	1,206		19,382	1100,1104,1110,1130
	Unbilled revenue	11,645	1,706					13,351	1120
	Income taxes recoverable	1,027		226	1,725	2,526		0	Transferred to Liabilities (Acct # 2294)
	Inventory	1,875			18			1,893	1305,1330,1340,1350
	Due to related parties	0			321			321	1200
	Other current assets	395			450	295		550	1180
	Total Current Assets	35,350						37,771	
	Property, plant and equipment	128,900				11,113		117,787	1805 - 2105, 2160,2180
	Intangible assets	289						289	1611, 2120
	Deferred income taxes	4,376			1,796	6,172		0	Transferred to Liabilities
	Total non-current assets	133,565						118,076	
	Regulatory assets	0	1,296	3,458	502	1,876		(3,536)	1508-1595
	Total assets	$ 168,915					$	152,311	
Liabilities and Shareholder's Equity									
Current Liabilities									
	Accounts payable and accrued liabilities	$ (17,394)	13		1,461	2,473	$	(18,393)	2205,2220,2268,2290,2292, 2250
	Deferred Credits - budget billing	(1,983)				9		(1,992)	2208
	Customer deposits - current portion	(3,689)			22	321		(3,988)	2210
	Payment in Lieu of taxes	0			2,526			2,526	2294
	Due to related parties	(859)				321		(1,180)	2240
	Total current liabilities	(23,925)						(23,027)	
	Senior unsecured debentures	(64,550)				450		(65,000)	2505
	Employee future benefits	(8,513)						(8,513)	2306,2310
	Customer deposits - long term portion	(2,898)			2,781			(117)	2335
	Accumulated provision for rate refunds	0				2,418		(2,418)	2315
	Future Income taxes - non current	0			4,447			4,447	2350
	Other deferred credits	0				19		(19)	2425
	Deferred revenue	(10,611)			10,611			0	reclass to PP&E
	Total non-current liabilities	(86,572)						(71,620)	
Total liabilities		(110,497)						(94,647)	
Shareholder's Equity									
	Share capital	(43,374)						(43,374)	3005
	Other comprehensive income	465						465	3090
	Retained earnings	(15,509)	1,965	1,296	85			(14,755)	3045-3055
		(58,418)						(57,664)	
Total liabilities and shareholder's equity		$ (168,915)	4,980	4,980	29,199	29,199	$	(152,311)	

Table 1-54
OEB Acct. allocation Audited Financial Statement Reconciliation

GUELPH HYDRO ELECTRIC SYSTEMS INC
INCOME STATEMENT
December 31, 2012
(in thousands of dollars)

		Audited Financial Statements (IFRS)	IFRS Adjustments Dr	IFRS Adjustments Cr	Regulatory / Reclassification Adjustments Dr	Regulatory / Reclassification Adjustments Cr		2013 Regulatory Filing (MIFRS)	OEB Acct #
Electricity Sales	$	(144,441)	118,576		97	151,498	$	(177,266)	4006-4090
Cost of electricity sold		119,872		119,872	151,498			151,498	4705-4751
		(24,569)						(25,768)	
Other operating revenue		(2,935)			1,084			(1,851)	4210-4380
Net operating revenue		(27,504)						(27,619)	
Expenses									
Operations and maintenance		10,626		5,015		269		5,342	5005-5195
General and administration		9,176		247	264	1,360		7,833	5305-5695
		19,802						13,175	
Earnings before undernoted		(7,702)						(14,444)	
Depreciation and amortization expense									
Property, plant and equipment			5,262			848		4,414	5705
Intangibles					42			42	5715
Miscellaneous								0	5725
		0						4,456	
Finance and other expenses (income)									
Interest on notes payable, less amount capitalized		3,446						3,446	6005
Interest income		(94)				9		(103)	4405
Other		95			126			221	6035
		3,447						3,564	
Loss from operations before income taxes		(4,255)						(6,424)	
Income taxes									
Property taxes		0			492			492	6105
Provision for payments in lieu of corporate taxes		472						472	6110
Deferred income taxes		30						30	6115
		502						994	
Other Deductions									
Donations		0			65			65	6205
Net loss from operations for the year	$	(3,753)	123,838	125,134	153,668	153,984	$	(5,365)	

2.4.4.3 ANNUAL REPORT AND MANAGEMENT'S DISCUSSION AND ANALYSIS

Guelph Hydro's Management Discussion is filed in Appendix 1-M.

2.4.4.4 RATING AGENCY REPORT

On May 7, 2014, the Standard and Poor's ("S&P") Rating Services assigned an "A" long-term corporate credit rating to Guelph Hydro.

Guelph Hydro's financial risk profile falls within S&P's intermediate category, the same as those of "A"-rated Ontario LDC peers.

A copy of S&P's Rating Report is filed in Appendix 1-N. S&P is expected to issue an update to Guelph Hydro's credit rating in the next few months, and Guelph Hydro will submit the new ratings report to the OEB in a timely manner to assist the Board in its deliberations in this rates application.

2.4.4.5 PROSPECTUSES, INFORMATION CIRCULARS FOR RECENT AND PLANNED ISSUANCES

Guelph Hydro plans to issue $30 million in new long-term debentures in late-2015 or by mid-2016. The prospectuses and information circular attendant with that debt issue will be made available following that debt issue.

2.4.4.6 CHANGES IN TAX STATUS

Guelph Hydro confirms that there are no changes in its tax status.

2.4.4.7 ACCOUNTING ORDERS

Guelph Hydro is not requesting Accounting Orders in this proceeding.

Guelph Hydro has not changed its accounting policies since its last Cost of Service application for 2012 rates (EB-2011-0123), and therefore there are no impacts on revenue requirement to be reflected in Appendix 2-Y.

2.4.4.8 ACCOUNTING STANDARDS

For financial reporting purposes, Guelph Hydro transitioned to International Financial Reporting Standards (IFRS) on January 1, 2011, and to Modified IFRS for rate setting purposes.

All material changes in the adoption of IFRS that were known at the time, were explained and reconciled in the previous Cost of Service application EB-2011-0123.

Changes in tax status

Guelph Hydro has not changed its tax status (i.e. incorporation).

2.4.4.9 NON-UTILITY BUSINESSES SEGREGATION

Guelph Hydro's Application has been prepared to show Guelph Hydro, as a regulated entity, separately from its parent company or any of its affiliates that are not regulated by the Board. Only the amounts attributable to Guelph Hydro have been reflected when determining such matters as the amount of tax recovery, debt costs and the cost of affiliate relationship transactions.

Confirmation that non-utility activities has been segregated from the rate regulated activities

Guelph Hydro confirms that the accounting treatment it has used in this Application has segregated all of non-utility activities from its rate-regulated activities.

2.4.5 MATERIALITY THRESHOLDS

According to the Board's Filing Requirements for Transmission and Distribution Applications issued on July 18, 2014, the materiality threshold to be used in analyzing changes from year to year should be 0.5% of the distribution revenue requirement.

Guelph Hydro has calculated the materiality threshold of its 2016 distribution revenue requirement to be $172,000:

0.5% x $34,319,428 distribution revenue requirement = $171,597

Guelph Hydro rounded the materiality threshold to $172,000.

Guelph Hydro has analyzed the OM&A (in Exhibit 4) and Capital Expenditures (in Exhibit 2) variances above the materiality threshold; where Guelph Hydro believed that more granularity is necessary to support the evidence, the analysis went below the materiality threshold of $172,000.

2.4.6 ADMINISTRATION

2.4.6.1 CONTACT INFORMATION

Guelph Hydro Electric Systems Inc.
395 Southgate Dr.
Guelph, ON
N1G 4Y1

Primary Contact for Electricity Distribution Licence		
Kazi Marouf	Direct Line:	(519) 837-4702
Chief Operating Officer	Direct Fax:	(519) 836-1055
	Email:	KMarouf@GuelphHydro.com

Pankaj Sardana	Direct Line:	(519) 837-4707
Chief Financial Officer	Direct Fax:	(519) 836-1055
and Chief Regulatory Officer	Email:	PSardana@GuelphHydro.com

Primary Contact for the Application:		
Cristina Birceanu	Direct Line:	(519) 837-4735
Director of Regulatory Affairs	Direct Fax:	(519) 836-6115
	Email:	CBirceanu@GuelphHydro.com

Legal and consultant representation:
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Fax: (416) 361-7366
E-mail Bbacon@blg.com

2.4.6.2 ADMINISTRATIVE DOCUMENTS EXECUTIVE SUMMARY

1. Executive Summary

a) The Applicant is Guelph Hydro Electric Systems Inc. (as previously referred to in this Application as the "Applicant" or "Guelph Hydro" or "GHESI"). The Applicant is a corporation incorporated pursuant to the Ontario *Business Corporations Act* with its head office in the City of Guelph. The Applicant carries on the business of distributing electricity within the City of Guelph and Village of Rockwood.

b) The Applicant hereby applies to the OEB pursuant to Section 78 of the *OEB Act* for approval of its proposed distribution rates and other charges, effective January 1, 2016. A list of requested approvals is set out in Exhibit 1, Tab 7, Schedule 3, 2.4.6.3 Specific Approvals Requested.

c) The Applicant followed Chapter 2 of the OEB's Filing Requirements in order to prepare this Application. As identified at the outset of Section 2.4, except the deviation from the Board's cost of capital methodology detailed in this Exhibit, Tab 2, Schedule 6, 2.4.2.F Cost of Capital and Exhibit 5, Tab 2, Schedule 1, 2.8.2 Cost of Capital (Return on Equity and Cost of Debt) there are no other deviations from the Filing Requirements in this Application.

d) The application was prepared and filed under Modified International Financial Reporting Standards (MIFRS). All historical years (2012 to 2014) and the forecast years (2015 Bridge Year and 2016 Test Year) are presented in MIFRS in this Application. For financial reporting purposes, Guelph Hydro began adhering to IFRS standards effective January 1, 2011.

e) Statement on high voltage assets (>50 kV) deemed as distribution asset:

By its Decision and Order issued on March 14, 2011 and corrected March 17, 2011, on Guelph Hydro's application for 2011 distribution rates file number EB-2010-0130, the OEB deemed the New MTS – Arlen (transmission asset above 50 kV) to be a distribution asset;

f) Statement of publication of applicant's notice

The persons affected by this Application are the ratepayers of Guelph Hydro's distribution business. Guelph Hydro is proposing that the notices related to the Application appear in the Guelph Tribune and Guelph Mercury publications. Guelph Tribune is an unpaid publication with a daily circulation of approximate 40,000 to 41,000. Guelph Mercury is a paid publication and it has an average circulation of 12,000 per day.

(source: http://www.newspaperscanada.ca/about-newspapers/circulation)

g) The Internet address for application viewing purposes is Guelph Hydro's website www.guelphhydro.com Newsroom section (http://www.guelphhydro.com/en/news/search.aspx)

h) With the exception of the half-year (D1-factor) proposed to be implemented by the Board, there are no changes to the methodologies used in previous Cost of Service application (EB-2011-0123); there could be changes during the proceedings of this Application related to the Board's Policy EB-2012-0410 "A New Distribution Rate Design for Residential Electricity Customers" issued on April 2, 2015, if the Board-approved Guelph Hydro to update this Application with the new rates design for Residential class (please see Guelph Hydro's request in this Exhibit, Tab 2, Schedule 7, 2.4.2.G Cost Allocation and Rate Design).

i) Responses to Letters of Comments

Guelph Hydro will file all responses to matters raised in letters of comment filed with the OEB during the course of the proceeding in this Exhibit 1, in accordance with Section 2.4.9 of the Filing Requirements.

j) Guelph Hydro's Conditions of Service document is publicly available on Guelph Hydro's website at:

http://www.guelphhydro.com/en/residential/conditionsofservice.asp

Guelph Hydro confirms that this is the current version, last updated February 2015. There are no changes to Guelph Hydro's Conditions of Service that result from approval of the application. There are no rates or charges included in Conditions of Service.

2. Proposed Distribution Rates and Other Charges

The Schedule of Rates and Charges proposed in this Application is identified in Exhibit 8, Tab 10, Schedule 1, Page 12, 2.11.10 Tariff of Rates and Charges; the material being filed in support of this Application sets out Guelph Hydro's approach to its distribution rates and charges.

3. Proposed Effective Date of Rate Order

The Applicant requests that the OEB make its Rate Order effective January 1, 2016.

4. The Proposed Distribution Rates and Other Charges are Just and Reasonable

The Applicant submits that the proposed distribution rates contained in this Application are just and reasonable on the following grounds:

i. the proposed rates for the distribution of electricity have been prepared in accordance with the Filing Requirements and reflect traditional rate making and cost of service principles;

ii. the proposed adjusted rates are necessary to meet the Applicant's Market Based Rate of Return ("MBRR") and Payments in Lieu of Taxes ("PILs") requirements; and

iii. there are no impacts (all bill impacts are below 10%) to any of the customer classes or consumption level subgroups that are so significant as to warrant the deferral of any adjustments being requested by the Applicant or the implementation of any other mitigation measures;

5. Bill Impacts

In accordance with the Filing Requirements, Guelph Hydro presents below the bill impacts to be used for the notice of application for a typical residential customer using 800 kWh per month and for a General Service <50 kW customer using 2,000 kWh per month:

Table 1-55: Residential and General Service less than 50 kW Bill Impacts

		Selected Delivery Charge and Bill Impacts								
		Subtotal A - Monthly Delivery Charge					Total Bill			
		Current	Proposed	Change			Current	Proposed	Change	
				$	%				$	%
Residential	800 kWh/month	$ 29.51	$ 33.56	$ 4.05	13.74%		$ 133.91	$ 136.59	$ 2.68	2.00%
GS < 50 kW	2000 kWh/month	$ 42.35	$ 45.84	$ 3.49	8.25%		$ 296.55	$ 297.32	$ 0.76	0.26%

6. Specific Approvals Requested

a) The Applicant applies for an Order or Orders approving the proposed distribution rates and other charges set out in Exhibit 8, Tab 10, Schedule 1, Page 12, 2.11.10 Tariff of Rates and Charges to this Application as just

and reasonable rates and charges pursuant to Section 78 of the OEB Act, to be effective January 1, 2016;

b) 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 issue an Interim Rate Order declaring the current Distribution Rates and Specific Service Charges as interim pending the implementation of the Board-approved 2016 distribution rates; and

c) In the event that the implementation date of the Board's 2016 Rate Order is later than the effective date for 2016 distribution rates and charges, Guelph Hydro requests to be permitted to recover the incremental revenue from the effective date to the implementation date by way of an appropriate rate rider.

7. Form of Hearing Requested

a) The Applicant requests that this Application be disposed of by way of a written hearing.

Certification of Evidence

As Chief Operating Officer and Chief Financial Officer of Guelph Hydro Electric Systems Inc., we certify that the evidence filed in Guelph Hydro's 2016 Cost of Service Application is accurate, consistent and complete to the best of our knowledge or belief. The filing is consistent with the Filing Requirements.

DATED at Guelph, Ontario, this 24th day of April, 2015.

All of which is respectfully submitted,

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Kazi Marouf	Pankaj Sardana
	
Chief Operating Officer	Chief Financial Officer

2.4.6.3 SPECIFIC APPROVALS REQUESTED

In this proceeding, Guelph Hydro is requesting the following approvals:

- Approval to charge rates effective January 1, 2016 to recover a revenue requirement of $34,319,428 as set out in Exhibit 1, Tab 2, Schedule 1, 2.4.2.A Revenue Requirement and Exhibit 6, Appendix 6-A. The schedule of proposed rates is set out in Exhibit 8, Tab 10, Schedule 1, Page 12, 2.11.10 Tariff of Rates and Charges;
- Approval of the proposed loss factor as set out in Exhibit 8, Tab 9, Schedule 1, 2.11.9 Loss Adjustment Factors;
- Approval to continue to charge Standard Supply Service, Wholesale Market, Rural Rate Protection, and Debt Retirement Charges approved in the OEB Decision and Order in the matter of Guelph Hydro's 2015 Distribution Rates (EB-2014-0077) subject to any modifications as a result of the OEB's future decisions;
- Approval to adjust the Retail Transmission Service Rates (Network and Connection) in accordance with the Board's Guideline G-2008-0001 Electricity Distribution Retail Transmission Service Rates as revised on June 22, 2011 and as presented in Exhibit 8, Tab 3, Schedule 1, 2.11.3 Retail Transmission Service Rates ("RTSRs").
- Approval to continue the Transformer Allowance of $0.72 per kW of billing demand, approved in the OEB Decision and Order in the matter of Guelph Hydro's 2015 Distribution Rates File number EB-2014-0077, for General Service 50 to 999 kW customers;
- Approval to continue Specific Service charges approved in the OEB Decision and Order in the matter of Guelph Hydro's 2015 Distribution Rates File number EB-2014-0077;

- Approval for two new Specific Service charges: Bond Connection - Underground, and Bond Connection – Overhead as presented in Exhibit 8, Tab 7, Schedule 1, 2.11.7 Specific Service Charges.
- Approval to eliminate the effect of the half year rule by adjusting for the incremental revenue requirement (depreciation expense plus return on capital and associated taxes/PILs) of the Test Year capital additions. This is proposed to be accomplished through an adjustment (referred as D_1-factor) to the price formula in the first IR application subsequent to this Application (i.e. 2017 IRM). The details of the D_1-factor calculation are presented in Exhibit 2, Tab 2, Schedule 6, 2.5.2.6 New Policy Options for the Funding of Capital.
- Approval for a credit service charge to be provided to customers who opt for paperless bill.
- Approval for Standby Rates for General Service above 50 kW classes (i.e.GS 50 to 999, GS 1000 to 4999, and Large Use). The details of the proposal are presented in Exhibit 8, Tab 1, Schedule 1, page 12, 2.11.1 Fixed/Variable Proportion.
- Approval to dispose of the following Deferral and Variance Account Balances, audited as at December 31, 2014 plus the interest calculated until December 31, 2015, over a one-year period using the method of recovery described in Exhibit 9, Tab 7, Schedule 1:

Table 1-56

Account Description	USoA #
Group 1 Accounts	
LV Variance Account	1550
Smart Metering Entity Charge Variance Account	1551
RSVA - Wholesale Market Service Charge	1580
RSVA - Retail Transmission Network Charge	1584
RSVA - Retail Transmission Connection Charge	1586
RSVA - Power (excluding Global Adjustment)	1588
RSVA - Global Adjustment	1589
Disposition and Recovery/Refund of Regulatory Balances (2008)	1595
Disposition and Recovery/Refund of Regulatory Balances (2010)	1595
Disposition and Recovery/Refund of Regulatory Balances (2014)	1595
Group 2 Accounts	
Other Regulatory Assets - Sub-Account - Deferred IFRS Transition Costs	1508
Retail Cost Variance Account - Retail	1518
Renewable Generation Connection OM&A Deferral Account	1532
Renewable Generation Connection Funding Adder Deferral Account	1533
Retail Cost Variance Account - STR	1548
LRAM Variance Account	1568
PILs and Tax Variance for 2006 and Subsequent Years (excludes sub-account and contra account below)	1592
Smart Meter OM&A Variance	1556
PILs and Tax Variance for 2006 and Subsequent Years	1592

- Approval to dispose 1568- LRAMVA balance ($467,344.98 principal and $17,009.65 interest). The 1568 LRAMVA balance includes 2011 to 2013 OPA Final Verified Results and a Guelph Hydro forecast of 2014 OPA CDM savings. Guelph Hydro expects to receive the 2014 OPA Final Verified Results report from the OPA in the fall of 2015 and it plans to reconcile the 1568 LRAMVA account balance when the 2014 final results are received. Guelph Hydro is seeking approval to update the 1568 LRAMVA account balance (during the proceedings of this application) with 2014 data when the OPA's results are final.

2.4.6.4 BOARD DIRECTIVES

There are no outstanding OEB directives applicable specifically to Guelph Hydro as at the date of filing this Application.

2.4.7 APPLICANT OVERVIEW

2.4.7.1 DISTRIBUTION SERVICE TERRITORY AND DISTRIBUTION SYSTEM

Guelph Hydro is located in Southern Ontario and belongs to the Kitchener-Waterloo-Cambridge-Guelph ("KWCG") Region, assigned for regional planning purposes. A map showing details with respect to Guelph Hydro's location within the province is attached in Appendix 1-O.

Guelph Hydro is a licensed distributor with approximately 53,000 customers servicing the City of Guelph and the Village of Rockwood.

Guelph Hydro owns, maintains and operates approximately 431 km of overhead primary distribution feeders and 672 km of underground primary distribution circuits in the City of Guelph and in the Village of Rockwood as well as 57-13.8 kV feeders and 5-8.32 kV feeders within its service territory.

Wholesale supply is provided by three Hydro One Networks Inc. ("HONI") owned Transformer Stations (Hanlon, Cedar, and Campbell) and one Guelph Hydro owned Transformer Station (Arlen MTS) in the City of Guelph. Cedar TS, Hanlon TS and Arlen MTS step down 115 kV Transmission supply to 13.8 kV while Campbell TS steps down 230 kV Transmission supply to 13.8 kV for primary distribution feeders. In the Village of Rockwood, supply is provided by two Guelph Hydro-owned Municipal Substations (Rockwood MS1, Rockwood MS2) and one Hydro One Networks Inc.-owned Distribution Station (Rockwood DS). All three stations are supplied from 44 kV feeders originating from Fergus TS and primary distribution is operated at 8.3 kV.

Guelph Hydro's customers are served by a total of 62 distribution feeders. The feeders are supplied upstream by Hydro One sub-transmission and transmission stations. The City of Guelph has 57 feeder circuits supplied by 4 transformer stations.

Guelph Hydro is a partially embedded distributor in relation to Hydro One for distribution services for the Village of Rockwood; therefore Guelph Hydro is charged by Hydro One for low voltage distribution services.

DESCRIPTION OF DISTRIBUTOR

COMMUNITY SERVED:	City of Guelph and Village of Rockwood
TOTAL SERVICE AREA	93 sq km
RURAL SERVICE AREA	0 sq km
DISTRIBUTION TYPE	Guelph – 13.8kV Rockwood – 8.3kV
SERVICE AREA POPULATION	131,600
MUNICIPAL POPULATION	131,600
BOUNDARIES	West: Guelph – Guelph – Eramosa Township Rockwood – Eramosa Township North: Guelph – Guelph-Eramosa Township Rockwood – Eramosa Township East: Guelph –Puslinch Township Rockwood – Eramosa Township South: Guelph – Puslinch Township Rockwood – Eramosa Township

A map of the Guelph Hydro's Distribution Service Territory is attached in Appendix 1-P.

A schematic diagram of Guelph Hydro's distribution system is attached in Appendix 1-Q.

LIST OF NEIGHBOURING UTILITIES

LIST OF ADJACENT DISTRIBUTORS

Hydro One Networks
483 Bay Street
Toronto, ON
M5G 2P5

Direct line: 613-274-6327
Direct Fax: 613-224-1726
email: mike.richie@HydroOne.com

DESCRIPTION OF SERVICE TERRITORY

COMMUNITY SERVED:	City of Guelph and Village of Rockwood
TOTAL SERVICE AREA	93 sq km
RURAL SERVICE AREA	0 sq km
DISTRIBUTION TYPE	Guelph – 13.8kV Rockwood – 8.3kV
SERVICE AREA POPULATION	130,800
MUNICIPAL POPULATION	130,800
BOUNDARIES	West: Guelph – Guelph Cityship and Puslinch Cityship Rockwood – Eramosa Cityship North: Guelph – Guelph Cityship Rockwood – Eramosa Cityship East: Guelph – Guelph Cityship and Puslinch Cityship Rockwood – Eramosa Cityship South: Guelph – Puslinch Cityship Rockwood – Eramosa Cityship

2.4.7.2 HOST AND EMBEDDED UTILITIES

In the City of Guelph, Guelph Hydro's distribution system is directly connected to the transmission system through three Hydro One-owned Transformer Stations and one Guelph Hydro owned Transformer Station. Within the City of Guelph, Guelph Hydro distributes electricity via fifty-seven 13.8 kV feeders and five 8.32 kV feeders circuits.

In the Village of Rockwood, Guelph Hydro's distribution system is embedded within the service territory of Hydro One Networks Inc. and takes supply for its Rockwood loads from Hydro One Networks Inc. at both 44 kV and 8.32 kV. Within the Village of Rockwood, Guelph Hydro owns two Municipal substations and distributes electricity via five 8.32 kV feeder circuits. One 8.32kV circuit is an embedded metering point at a Hydro One Distribution Station. The percentage of load that is supplied through the host distributor Hydro One is of approximate 1.4% of the total Guelph Hydro's withdrawn load.

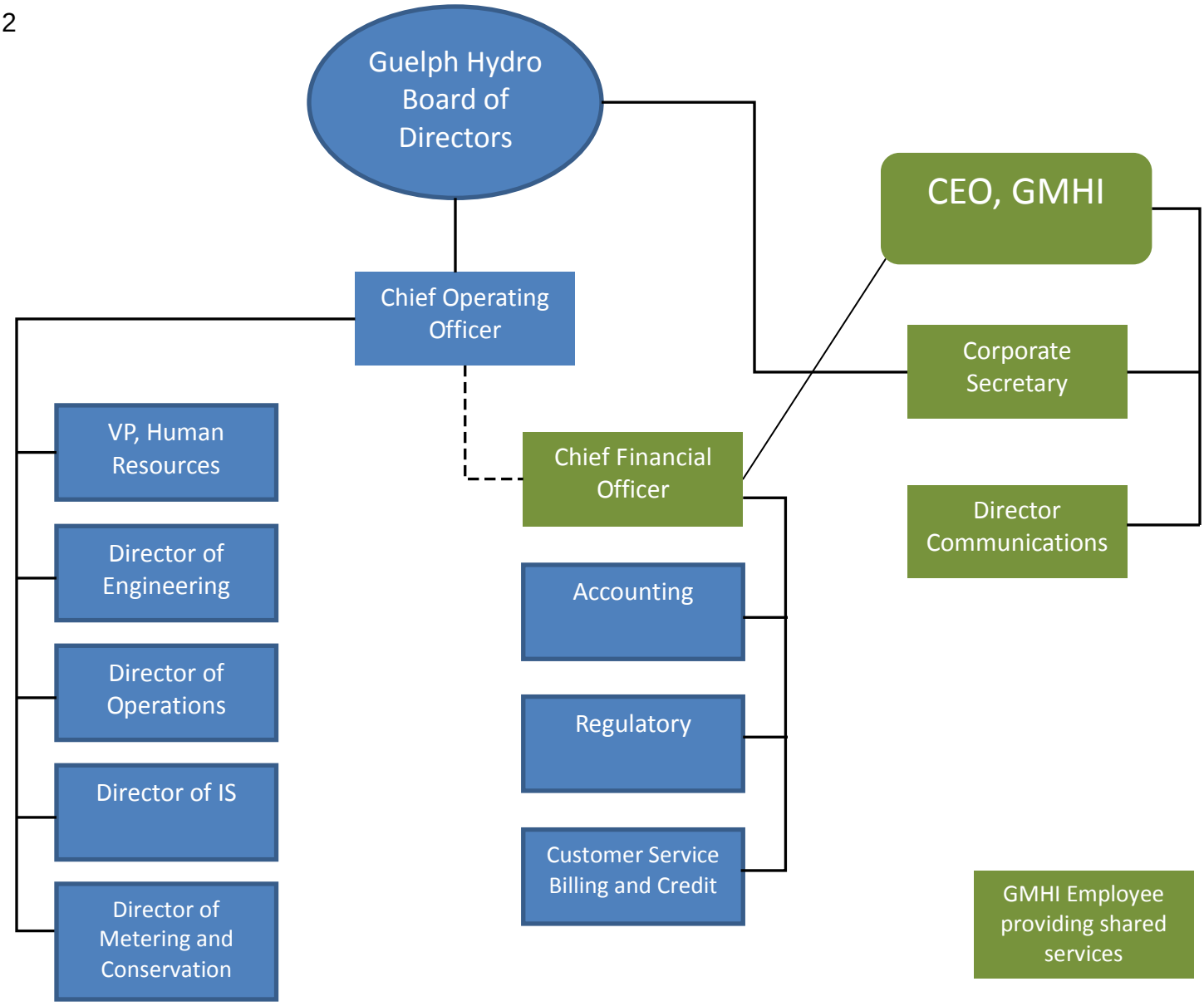
Guelph Hydro is not a host LDC to any embedded LDC.

2.4.8 CORPORATE GOVERNANCE

2.4.8.1 UTILITY ORGANIZATIONAL STRUCTURE

The executive team at Guelph Hydro comprises the Chief Executive Officer of Guelph Municipal Holdings Inc., the Chief Operating Officer of Guelph Hydro, the Chief Financial Officer of Guelph Municipal Holdings Inc., and the Corporate Secretary. The services of the CEO, CFO, Corporate Secretary and Director of Communications are allocated to Guelph Hydro and to the Corporation's other subsidiaries; the percentages of these shared services are reviewed annually to determine whether they remain appropriate and adjustments are made as necessary. Table 1-57 provides a schematic representation of how the utility is organized.

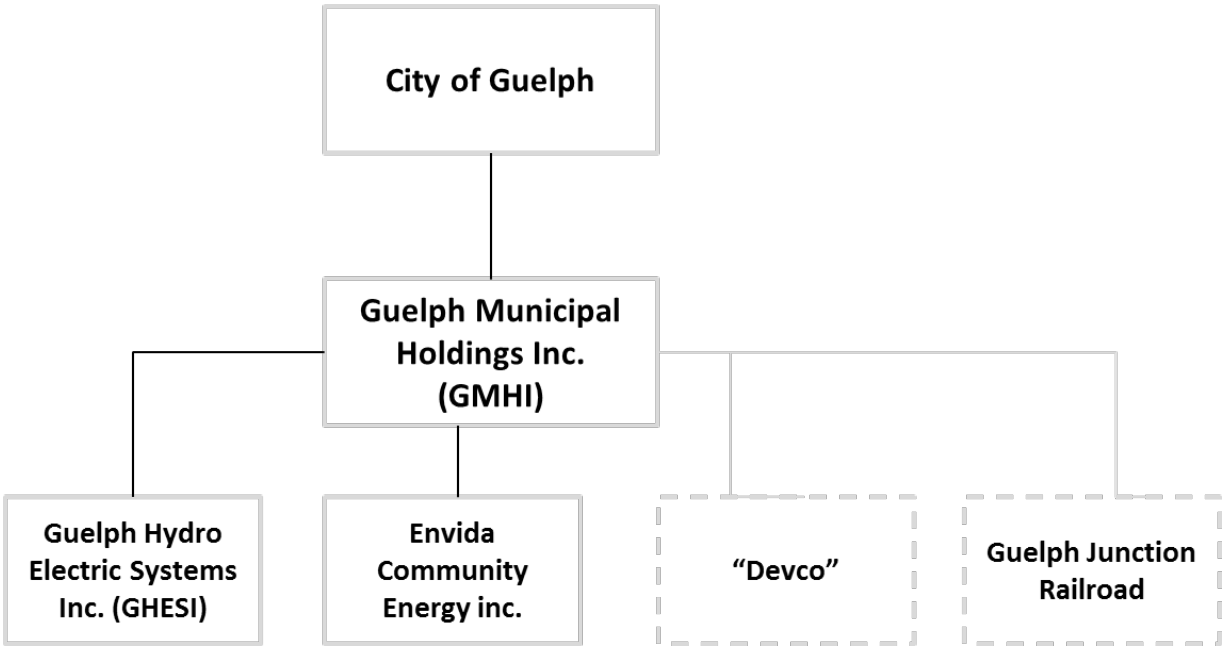
Table 1-57: Utility Organizational Structure



2.4.8.2 CORPORATE STRUCTURE

On September 6th, 2014, the City of Guelph amalgamated Guelph Hydro Inc. ("GHI"), the then parent company of Guelph Hydro, into Guelph Municipal Holdings Inc. ("GMHI"). As a result, Guelph Hydro is now 100 percent owned by GMHI and is the principal subsidiary of the amalgamated body Corporate, accounting for about 95 percent of GMHI's capital assets and about 99 percent of its revenues. GMHI was originally incorporated by the City of Guelph in August of 2011 to hold the City's investment in GHI and other City-owned incorporated bodies.

Table 1-58: Corporate Structure



Guelph Hydro Electric Systems Inc.

Guelph Hydro Electric Systems Inc. was incorporated on October 31, 2000, under the *Business Corporations Act* (Ontario). The principal activity of the company is to provide electrical power distribution throughout the City of Guelph and the Village of Rockwood. The parent company, Guelph Municipal Holdings Inc. is 100% owned by the City of Guelph.

In 2006 Wellington Electric Distribution Company was merged with Guelph Hydro Electric Systems Inc. and the merged company operates under the Guelph Hydro Electric Systems Inc. name.

Envida Community Energy Inc.

Envida Community Energy Inc., formerly known as Ecotricity Guelph Inc., is a wholly-owned subsidiary of GMHI, and was incorporated April 19, 2004 under the *Business Corporations Act* (Ontario). The company has two main lines of business: electricity generation and the provision of thermal energy from district energy systems installed in several buildings in the City of Guelph. Envida's electricity generation is provided from a turbine that uses methane gas emanating from the mothballed Eastview landfill site in the City of Guelph, and from solar panel arrays installed on the roof of Guelph Hydro's main office complex.

The Eastview plant has a nameplate electricity generating capacity of about 1.85 MW, which is over 0.6% of the City of Guelph's summer peak demand. The generator has an operating life expectancy of about 20 years and operates 24/7, except when maintenance is required. When the generation plant is not operating the methane gas is flared to reduce waste and odour.

The photovoltaic panels installed on the roof of Guelph Hydro's main office complex have a nameplate generating capacity of 100 kW.

"Devco"

The Development Company, or Devco, is a corporation that the City of Guelph intends to transfer to GMHI in due course. Devco is intended to hold land and related investments for the City of Guelph in furtherance of many of the City's strategic objectives.

Guelph Junction Railroad

Guelph Junction Railroad is a small, heritage railroad asset owned by the City of Guelph which the City intends to transfer into GMHI at some point in the future. At this time, discussions between GMHI and the City are at a preliminary stage, and so no further details can be provided on this asset, nor on GMHI's strategy for this asset when and if it is transferred.

Guelph Hydro's Board Representation

The Board of Directors for Guelph Hydro is made up of seven members, six of whom are independent and one member who also sits on the Board of the parent, GMHI.

Board and Management

The Board of Guelph Hydro has always been concerned with and cognizant of its obligations of independent judgment not merely within the specific terms of the Affiliate Relationships Code but within more general principles of corporate governance. To that end the Board of Guelph Hydro and Guelph Hydro Management organized an in-depth workshop under the facilitation of an independent consultant to consider the distinct roles of each of the Board on one hand and Management on the other. The crux of the issue lies in the asymmetry of corporate information. Management has custody and control of information and the Board must ensure that Management is open and trustworthy in regard to sharing of all material information. The product of the workshop session was an Accountability Framework which delineates the roles and responsibilities of each of the Board and Management and therefore ensures to the maximum extent the independence of the Board. The following is the resulting Guelph Hydro Accountability Framework:

- Each of the Board and Management has a fiduciary duty in relation to the Company.

- Neither the Board nor Management are, in and of themselves, capable of conducting the business of the Company; Board and Management are interdependent.
- Management formulates and develops the strategic plan; the Board provides advice and perspective.
- The Board and Management must collaborate respectfully and openly to achieve the objectives of the Company as set forth in the Strategic Plan.
- An atmosphere of trust is essential to the relationship between Board and Management. Trust is not merely conferred but must be earned and retained.
- Each of the Board and Management unequivocally acknowledges and respects the role of the other.

Board Governance

- Governance means oversight, monitoring, testing, influencing and evaluating the conduct and proposals of Management.
- Board meetings must be organized such that the Board is given ample opportunity to fully consider and discuss information necessary to the Board's oversight and monitoring role.
- Board members are entitled to full and open access to individual senior managers.
- The Board earns and retains trust by consistently demonstrating its commitment to these principles, delegating appropriate authority to, dealing fairly and openly with and not encroaching on the authority so delegated to Management.
- Board members have diverse and complementary skills that can be leveraged to the benefit of the Company.

Management's Execution of the Board's Governance Objectives

- Corporate information is inherently asymmetric; Management has custody and control of relevant corporate information and at all times must be alert to the Board's informational requirements.
- Management has a duty of candor and full and timely disclosure vis à vis the Board.
- Management must provide timely and clear information to the Board which is necessary and sufficient to allow the Board to govern effectively and fulfill its role of oversight.
- Management earns and retains trust by consistently demonstrating its commitment to these principles, conducting itself ethically, reporting exceptional issues promptly to the Board and meeting strategic objectives in compliance with law.

Reporting Relationships

The CEO, CFO, Corporate Secretary and Director of Corporate Communications are all employees of GMHI. Under the terms of a shared services agreement, these positions provide management services to Guelph Hydro Electric Systems Inc. and its affiliates.

The Chief Operating Officer (COO) reports to the Board of Directors of Guelph Hydro. Reporting to this position as it relates to the LDC are the following:

- Vice President of Human Resources
- Director of Engineering
- Director of Operations
- Director of Metering & Conservation
- Director of Information Systems

The CFO reports to the CEO of GMHI, but also has a "dotted" line responsibility to the COO. Reporting to this position as it relates to Guelph Hydro are the following:

- Controller, Accounting
- Director of Regulatory Affairs
- Manager of Customer Service and Billing

Services provided by Guelph Hydro to the affiliates

(for more details see Exhibit 4, Tab 3, Schedule 2, 2.7.3.2 Shared Services and Corporate Cost Allocation)

Services provided by Guelph Hydro to its affiliates include the following:

- Water billing services for both Guelph and Rockwood water/sewer charges
- Street Lighting maintenance

Shared Services

Shared services include the following:

- Financial Services (including accounting services)
- Human Resource Services (including payroll services)
- Management Services
- Information Technology Services
- General Administration Services
- Occupancy charge
- Control Room services provided to Milton Hydro
- Any other "shared corporate service" (as defined in the Affiliate Relationships Code for Electricity Distributors and Transmitters) which may be provided from time to time.

2.4.8.3 PLANNED CHANGES IN CORPORATE AND ORGANIZATIONAL STRUCTURE

No changes in corporate and operational structures are planned at the present time. However, Guelph Hydro is continually monitoring changes to the Affiliate Relationship Code to determine if any changes to the corporate and operational structures are required.

2.4.8.4 CORPORATE GOVERNANCE PRACTICES

Guelph Hydro's performance-based approach to regulation as outlined in the Board's RRFE Report is based on the achievement of outcomes. The emphasis on results is reflected on Guelph Hydro's COO's Performance Scorecard and places greater importance on robust and effective corporate governance structures and practices. Guelph Hydro's corporate governance practices are focused on the achievement of the Board's four outcomes – customer focus, operational effectiveness, public policy responsiveness and financial performance (please see the COO's scorecard below).

Guelph Hydro has used a scorecard for many years to annually track business performance and strategies and it forms part of an evaluative tool for year-end outcomes. It is also used for compensation awards for certain senior level employees for performance. The tool is an evaluation of corporate performance and individual contributions. Executive management has a larger percentage derived from corporate performance compared to individual achievements. For all other levels of VP's, department directors, managers and supervisors, the split was on a sliding scale where corporate goals are a lesser percentage with a corresponding greater emphasis on individual achievements.

A copy of Guelph Hydro's COO's Performance Scorecard is presented below in Table 1-59.

The holding company structure changed for Guelph Hydro in 2014 and as a result the COO's performance objectives were approved by the Board of Directors to become the corporate measures by which the rest of the organization will be assessed starting in 2015. Guelph Hydro's 2015 corporate scorecard (as attached) aligns its focus on achieving customer focus, operational effectiveness, public policy and financial performance and written to include all (OEB) scorecard measures or those that can be readily derived say for the financial performance by referring to the Company's financial statements. All performance categories under customer outcomes, operational effectiveness and public policy responsiveness have either been exactly accounted for or re-stated and in the opinion of Guelph Hydro incline to the same end result. For example, under the asset

management category, the Key Performance Indicator of Guelph Hydro is described as annual gross capital which contains an asset renewal budget consistent with the Company's asset management plan. The only section that is not part of Guelph Hydro's scorecard directly is the section dealing with financial ratios, which ratios can be readily derived from the Company's financial statements.

Table 1-59: Corporate Scorecard

2015 Performance Objectives for the Chief Operating Officer **November 2014**

Performance Measurement Category	Objective	Target	Stretch	Measurement	Weight		Deliverable
(1) Key Operational Results 65% of Weighting	• GHESI OM&A • GHESI gross capital	• $ 16.187M • $ 15,078M	• $ 15.378 (OM&A only) through efficiency improvements	• Audited Financials	25%		Quarterly tracking report to HRCC. December 2015
	• 2015 COS rate application	• Submission complete and on time with comprehensive Distribution System Plan and Customer Engagement	• COS filing accepted by first submission	• Successful outcome in final settlement as presented in 2016 budget.	20%		Quarterly tracking report to HRCC. December 2015
	• OEB Guidelines	• meet	• exceed as shown attached	• BOD discretion	10%		Quarterly tracking report to HRCC. December 2015
	• Meet IHSA and ESA Guidelines	• meet	• exceed as shown attached	• BOD discretion	10%		Quarterly tracking report to HRCC. December 2015
				Sub-Total	**65%**		
(2) Key Strategic Objectives / Milestones 35% of weighting	Ensure an optimal direction is set for the Company: • Create value by implementing change such as shared services, consortiums, and internal process changes. • Evaluate future direction and develop action plan for GHESI	• Successful implementation of shared service for control room with first LDC • Create action plan consistent with recommendations made by the Province's Sector Review Panel and Shareholder plans	• Expand scope of shared service towards implementation of 24/7 coverage and/or additional LDC added to shared service. • Board approval of development plan by mid-year. Initiate action plan in second half	• Implement recommendations derived through the Internal Audit Reviews and approved by the BOD. • Level of achievement relative to plan approval and engagement.	20% 15%		Quarterly tracking report to HRCC. December 2015
				Sub-Total	**35%**		
				Total	**100%**		

Note 1: Modified IFRS as per OEB calculations based on approved budget - There will be no bonus paid for this item if exceeds the budget above by 25%.
Note 2: Exceeding OEB and IHSA objectives is only related to certain defined items where stretch can be exceeded from target.
Note 3: The selection of objectives and related performance measurement will be guided by Guelph's approved Strategic Imperatives, specifically:

Strategic Imperative 1	Strategic Imperative 2	Strategic Imperative 3	Strategic Imperative 4	Strategic Imperative 5
Deliver balanced financial returns by in investing in quality energy production and distribution infrastructure.	Be a leader in the provision and implementation of an energy conservation and sustainable energy culture to our customers and employees that is consistent with the energy initiatives of our shareholder and province	Be a leader in the efficient, safe, reliable and economic distribution of Energy.	Be a great place to work and communicate it to attract and retain employees.	Ensure we enhance our position as an asset to our Shareholder and the communities by engaging all stakeholders in our key initiatives and objectives.

OEB Scorecard Objectives for 2015

ITEM		Base Target	Stretch Target	Weight	Results
Low Voltage Connections within 5 days		90%	90%	5%	
Telephone Response within 30 seconds	Note 2	65%	80%	5%	
Appointments kept on time	Note 2	80%	90%	5%	
First Contact Resolution	Note 2	80%	90%	5%	
Billing Accuracy		90%	90%	5%	
Customer Satisfaction Survey	Note 2	75%	80%	5%	
Annual Energy Savings toward the 6 year target	Note 2	104.7 GWh/6 = 17.45GWh	20GWh	10%	
Connection of renewal generation on time		90%	90%	5%	
Ave # of hours a customer is interrupted	Note 2	0.21 to 1.70	1.00	5%	
Ave # of times a customer is interrupted	Note 2	0.50 to 1.51	1.50	5%	

GHESI, IHSA and ESA Objectives for 2015

ITEM		Base Target	Stretch Target	Weight	Results
COR Certification annual audit		Meet	Meet	15%	
Annual ESA regulation 22-04 audit		meet CVP	Meet	10%	
Site Inspections and building inspections	**Note 2**	316 units	347 units	10%	
Public and Contractor Safety Programs		3	3	10%	
TOTAL				**100%**	

1

Corporate Governance

The Company's Board of Directors is sharply focused on achievement of the Board's four outcomes, customer focus, operational effectiveness public policy responsiveness and financial performance.

The Board oversees the implementation by a professional consultant of a customer survey every two or three years. Results are tabulated and deficiencies, if any, are recorded on an action list and corrected promptly.

The Company's Chief Operating Officer is required to report at each Board meeting as to operational issues with special attention being paid to public safety. A record is kept by the Corporate Secretary of matters that need attention and Board follow-up is uncompromising.

The Company's Board of Directors is keenly connected to matters of public policy. For example, the Board insists that senior company management is fully engaged with policy initiatives independently or through various industry associations. The Company regularly submits briefs in response to government requests for input, most recently in regard to the RRFE process as well as the task force on sector consolidation.

The Board of Directors carefully monitors Company financial performance in particular through its Finance and Audit Committee. In addition to the typical panoply of financial reports the Company has recently engaged the services of independent finance and accounting professionals to review in their entirety the company's financial controls. A number of system improvements have already been identified and undertaken with many more anticipated.

Although Guelph Hydro is not publicly traded, the Board and Management team strive to reasonably meet reporting requirements and comply with provisions of the Ontario Securities Act and the Ontario Energy Board's Affiliate Relationships Code.

Open and frank discussions are encouraged at all Board and Committee meetings. Management provides the Guelph Hydro Board with all the necessary information (e.g., written reports and submissions, oral presentations, and verbal or written responses to Board inquiries) in relation to all matters which require Board input and/or approval.

Board Responsibilities/Mandate

In accordance with Board Policy BD-1, Duties and Obligations, the Board of Guelph Hydro Electric Systems Inc. oversees management's day-to-day operation of the business and has the following responsibilities:

a) Determine, with management, the Corporation's business strategy, direction, objectives and policies including those relating to the Community Energy Initiative of the City of Guelph

b) Ensure competent executive and Senior Management Teams are in place and that their compensation is competitive

c) Ensure succession planning processes are in place in the organization and at the Board level

d) Evaluate and refine the Corporation's approach to corporate governance

e) Satisfy themselves that policies are in place to ensure the availability of adequate financial resources

f) Approve annual budgets

g) Account to stakeholders for the organization's performance

h) Participate in setting goals for, and monitoring and evaluating the performance of management against, objectives and Board expectations

i) Ensure the establishment of risk management policies and ensure compliance in particular as regards the Shareholder Declaration and the Affiliate Relationships Code

j) Prepare for, attend, and actively participate in all scheduled Board meetings

k) Have an understanding of all aspects of the business and the regulatory context

l) Ensure they have the appropriate information to make knowledgeable decisions on all matters coming before the Board

m) Support and participate on Board Committees

Board Composition and Skill Requirements

The Board promotes and champions diversity in its composition, recruiting directors with a broad mix of business and professional backgrounds, gender and ethnicity. Although local representation from the Guelph franchise area is an important consideration for membership, it is not a prerequisite in order to ensure that all requisite skill sets are included.

The Board maintains a matrix of skill sets and annually reviews the composition of the Board against the available inventory of skills in order to ascertain if further recruitment will be required. Among the skills considered essential to discharge the Board's oversight responsibilities are the following:

a) Business Development, Mergers and Acquisitions

b) Communication, Marketing and Public Relations

c) Community Awareness / Community Sector

d) Electrical Utility Knowledge / Engineering and Operations

e) Environmental

f) Finance / Accounting / Investment

g) Governance

h) Strategic Planning and Management

i) Human Resources / Diversity

j) Information Systems

k) Legal

l) Regulatory and/or Government Relations

m) Integrity and Ethics

n) Power Plants / Generation

o) Partnership / Join Ventures / Alliances

Board Committees and Terms of Reference

The Board has developed a number of policies by which members must conduct themselves. The following extract from its policy (please see Appendix 1-U: BD-01 Policy) setting forth Board duties and responsibilities in effect speaks to its independence from management:

> "Notwithstanding the delegation to senior executives of very broad powers over a Corporation's affairs, the Board of Directors must reserve to itself the ability to intervene in management's decisions and to exercise final judgment on any matter that is material to the corporation. Although no bright line separates the duties of the Board from the duties of Senior Management, the overriding principle governing delegation is that the Directors must retain ultimate control over the Corporation. The Directors must be sufficiently familiar with the business and affairs of the Corporation to know that the Corporation is being managed in an appropriate fashion. They must exercise sufficient leadership to ensure that the Corporation is following a course that they have approved. Whether business decisions actually originate with the Directors is less central to the Board's function than whether the Directors are monitoring how these decisions are formulated and implemented."

Pursuant to the Shareholder Declaration between Guelph Hydro and GMHI various committees of the GMHI and Guelph Hydro Boards may be established. The relevant provisions are as follows:

4.08 Board Committees

(a) The GMHI Board will or intends to establish committees of the Board which committees will serve the GMHI Board and all Subsidiary Boards. Each Committee may include members of the Subsidiary Board.

(b) The Guelph Hydro Board may establish committees, either *ad hoc* or standing, or task forces or any other entity for Board support, subject to the approval of GMHI.

(c) Pending the establishment of functioning GMHI Committees, and subject to any future direction of GMHI, the GHESI Board may establish a Finance & Audit Committee and a Human Resources Committee.

Pursuant to the foregoing provision the Guelph Hydro Board has established a Finance and Audit Committee and a Human Resources and Compensation Committee.

Guelph Hydro Finance and Audit Committee ("FAC")

The purpose of FAC is to receive and consider recommendations of Management in order to assist the Board in fulfilling its obligations to monitor the Corporation's financial reporting and disclosure, internal control, investment decisions and risk management and to evaluate investment opportunities as set out below.

Members of the Finance and Audit Committee are independent, financially literate and understand corporate fiduciary responsibilities. Among other things, the responsibilities of the Finance and Audit Committee include assisting the Board in oversight of the Corporation's financial well-being as outlined in the mandate below.

FAC Mandate:

a) Oversee the integrity of the Corporation's financial statements;

b) Supervise the Corporation's compliance with legal, regulatory and environmental requirements including its obligations under the Affiliate Relationships Code, obligations of disclosure to the Shareholder under the Shareholder Declaration and the Trustee under the Trust Indenture covering Guelph Hydro debentures;

c) Negotiate the terms of the retainer of and engage with the independent external auditor; conduct appropriate due diligence to satisfy itself with respect to the independent auditor's qualifications and independence;

d) Negotiate and engage Internal Audit support, develop the annual internal audit program, review reports of internal audit and consider significant findings along with the responses of management with respect to the matters set forth in point "e".

e) Review the Corporation's system of disclosure controls and system of internal controls regarding finance, accounting, risk management, legal compliance, and ethics;

f) Assist in the development of the Strategic Plan and monitor compliance with the Strategic Plan and annual business plans and budgets;

g) Evaluate investment opportunities and the raising of funds by the Corporation;

h) Review budgets and Business Plans that underpin rate applications filed with OEB;

i) Ensure compliance with the dividend policy;

j) Encourage continuous improvements to, and establish appropriate tone to promote adherence to the Corporation's policies, procedures and practices at all levels;

k) Maintain open avenues of communication among the independent auditors, financial and senior management, and the Board of Directors;

l) Obtain independent advice and assistance from outside legal, accounting, or other advisors, as required; and

m) Report regularly to the Board of Directors.

Guelph Hydro Human Resources and Compensation Committee

The purpose of the Committee is to assist the Board in discharging the Board's oversight responsibilities relating to attraction, compensation, evaluation and retention of employees, evaluation of management succession planning and organizational structure and approval of employee benefit plans and incentive compensation. The Committee shall have such powers and perform such duties as the Board may from time to time delegate to it, including those set forth in their mandate below.

HRCC Mandate:

a) Make recommendations to the Board regarding recruitment and selection as required from time to time of the COO and to advise the CEO, GMHI with respect to recruitment and selection from time to time of CFO, and Corporate Secretary;

b) Make recommendations to the Board and advise the COO regarding recruitment and selection of the VP HR

c) Set annual and long term performance goals for the COO and evaluate the performance of the COO against those goals and recommend to the Board approval of the compensation of the COO based on such evaluation;

d) Oversee development of comprehensive succession plans for the COO;

e) Advise the Board regarding policies and practices related to the terms and conditions of employment for all employees;

f) Develop strategy and policy in all matters relating to the recruitment, reward, retention, motivation and development of staff of Guelph Hydro;

g) Oversee all other senior management succession planning, performance and appointments, including in particular promotion of managers to director level;

h) Provide guidance to management with respect to human resource management strategies required to achieve the corporate objectives of Guelph Hydro;

i) Encourage continuous improvements to, and foster adherence to, the Corporation's human resource policies, procedures and practices at all levels;

j) Obtain independent advice and assistance from outside legal, accounting, or other advisors as required;

k) Report regularly to the Board of Directors; and

l) Evaluate the performance of the CFO and the Corporate Secretary and recommend to the Board the performance evaluations to be shared with the Board of GMHI and the CEO GMHI.

Committed to the Highest Standards of Corporate Governance and Business Ethics

The Board and the Management Team of Guelph Hydro are committed to the highest standards of corporate governance and business ethics.

On an annual basis, Board and staff members confirm their adherence to the company's policy on Ethics and Values which includes being respectful; conducting business in an ethical manner by acting with honesty, integrity and impartiality; complying with all legislation; and committing to safeguard company information and assets.

The Board has an approved Whistleblower Policy which directly supports the Ethics and Values Policy. The Whistleblower Policy provides a confidential process by which directors, officers and employees can report suspected violations of the Company Ethics and Values Policy and/or financial reporting, accounting, internal accounting controls, human resources, safety or environmental policies.

As well, the Board annually conducts an evaluation exercise led by independent experts. Once completed, the Board and committees prepare follow up and action plans and schedule time at meetings throughout the remainder of the year to address issues and

areas for improvement. In this way the Board achieves continuous improvement in its relationships, processes and operations.

Code of Conduct and Conflict of Interest

Corporate Governance policies and practices are in place, including protocols for Code of Conduct and Conflict of Interest. The policy in regard to conflict of interest states the following:

> *Directors and Officers are required to make reasonable efforts to avoid real, perceived or potential conflicts of interest, and are required to disclose any such conflicts or possible conflicts to the Board Chair. Such disclosure can be made on a general basis or on a case-by-case specific basis as soon as the Director or Officer becomes aware of the real, perceived or potential conflict.*

The practices following disclosure are defined in the Board's Duties and Obligations Policy, BD-1. That same policy includes a comprehensive description of how the Board will conduct itself.

In addition Guelph Hydro has in place processes and controls for Risk, Audit, Business Continuity, and Succession Planning. The Board and its committees each have specified terms of reference and annual work plans in their respective areas of responsibility. Processes are also in place for nomination and selection to the Board and its committees as well as job descriptions for each Chair.

Policy HRG-19 Code of Ethics

All Guelph Hydro employees and the Board of Directors must adhere to company policy HRG-19, Code of Ethics. Guelph Hydro is committed to conducting business in an open and ethical manner. This is fostered by creating a workplace built on the strength of trust, accountability, and integrity in all of the Corporation's business practices. It is the responsibility of every employee to build and maintain this code of ethics by supporting, and

actively participating in the process. The policy identifies the Company's expectations of officers and employees and establishes guidelines for the appropriate conduct of all its officers and employees of Guelph Hydro.

All employees are obliged to exercise honesty, integrity, and diligence in their duties for the Company. This includes a responsibility to avoid interests, activities, or influences which might conflict with these obligations, either by the employee directly or, in some instances, by members of his or her immediate family. Independent contractors, consultants and agents working for or on behalf of the Company will also be asked to acknowledge this policy, as it applies to their work.

The policy lays out expected behaviours and conduct as follows:

RESPECT: Guelph Hydro and its affiliates support the principle of respect of individual differences, and a workplace free from harassment and discrimination as outlined under Ontario's *Human Rights Code.* All employees are expected to comply with this principle and comply with Policy HRG-1, Respect in the Workplace.

HEALTH AND SAFETY: Guelph Hydro and its affiliates and all employees have a joint responsibility for workplace health and safety, and are expected to comply and act in accordance with Ontario's health and safety legislation and all related Health and Safety Policies and Procedures.

COMPLIANCE WITH ALL LEGISLATION: Employees are expected to be aware of, and fully comply with, all laws, rules and regulations relating to the carrying out of their day-to-day work.

ETHICAL BUSINESS CONDUCT: Employees are expected to act with honesty, integrity and impartiality. Employees shall have no direct or indirect personal or financial interest in a business or transaction that would conflict with the proper conduct of their duties. Employees shall always conduct themselves in accordance with the Company's best interests, which includes avoiding, in all work-related matters, any conflict of interest; real,

perceived or potential. In addition, the Company is committed to acting in accordance with, or exceeding, the legislative requirements with respect to human rights, health and safety, and the environment, and employees are expected to act in accordance with this commitment.

Please refer to Appendix 1-R of this Exhibit for a complete copy of the Code of Ethics Policy.

Policy HRG-8 Code of Conduct

The Code of Conduct applies to all employees, all management employees, and the union, in an effort to maintain healthy and respectful relationships between employees, between employees and management, between the union and management, between the union and employees and between all employees and customers, and to make Guelph Hydro a great place to work.

The policy lays out expected behaviours and conduct as follows:

- Respect
- Health and Safety
- Trust
- Customers
- Communications
- Problem Solving
- Vision, Goals and Expectations
- Leadership, Responsibility and Accountability
- Rewards, Recognition and Performance
- Developmental and Employment Opportunities

A complete copy of the HRG-8 Policy is in Appendix 1-S of this Exhibit.

Policy BD-12 Reporting Suspected Improper Conduct

As stated earlier, the "Whistleblower" policy, BD-12 Reporting Suspected Improper Conduct, sets out guidelines and procedures to be employed by all directors, officers and employees for the reporting, investigation and response to violations or suspected violations of the Company Ethics and Values Policy and/or financial reporting, accounting, internal accounting controls, human resources, safety or environmental policies. This Policy is intended to complement all of the aforesaid policies and is not intended to override any of such policies. The Company provides a system (the "Confidential Reporting System") that ensures anonymity for those reporting suspected wrongdoing. As well, the system provides broad–based communications options, voice, web and email access, to ensure an individual can provide information in the format that is most comfortable to them. A complete copy of the policy is provided in Appendix 1-T of this Exhibit.

Process for Nomination of Board Members

Whenever recruitment of Guelph Hydro outside Directors is required to fill a Board vacancy, the Guelph Hydro Board will activate its Nominating Committee to oversee and manage the recruitment process. The Committee will review the skill base and expertise of current Guelph Hydro Directors and identify gaps in the totality of skills available with regard to the strategic directives of the Corporation. The Nominating Committee will conduct a recruitment and evaluation process respecting vacancies to be filled at the next Annual General Meeting using open and targeted advertising in the discretion of the sub-Committee to identify candidates on the basis of merit and against objective criteria. For this purpose a skill set matrix has been developed which sets forth the full panoply of skills required by Guelph Hydro against the skill set of each individual director and clearly displays the gaps between required skills and available skills.

1 **Table 1-60**

2 **Guelph Municipal Holdings Inc. (GMHI) – Parent Company**

Board Member	Board Committee Membership	First Appointed to Board
Mayor Cam Guthrie	Finance and Audit Committee	2014
Councillor Karl Wettstein	Governance Committee, Nominating Committee	2011
Mary Ellen Richardson	Human Resource and Compensation Committee	2014
Curt Hammond	Governance Committee, Human Resource and Compensation Committee	2014
William Koornstra	Finance and Audit Committee, Human Resource and Compensation Committee, Nominating Committee	2014
Edward Sehl	Independent Director, Finance and Audit Committee, Nominating Committee	2012
Bud Smith	Governance Committee	2014
Corporate Officers	Barry Chuddy, Pankaj Sardana, Seymour Trachimovsky	

3

Table 1-61

Guelph Hydro Electric Systems Inc. (GHESI)

Board Member	Board Committee Membership	First Appointed to Board
Jane Armstrong	Human Resource and Compensation Committee	2006
Brian Cowan	Finance and Audit Committee	2001
Rob Fennell	Finance and Audit Committee	2006
Judy Fountain	Finance and Audit Committee Chair, Human Resource and Compensation Committee	2009
Edward Sehl	Finance and Audit Committee	2014
Jasmine Urisk	Board Chair, ex-officio member of all Committees	2000
Rick Thompson	Human Resource and Compensation Committee Chair	2001
Corporate Officers	Kazi Marouf, Pankaj Sardana, Nicole Mailloux, Seymour Trachimovsky	

Table 1-62

Envida Community Energy Inc. (Envida)

Board Member	Board Membership	First Appointed to Board
William Koornstra	Director	2012
Karl Wettstein	Director	2014
Pankaj Sardana	Chair	2014
Corporate Officers	Barry Chuddy, Pankaj Sardana, Seymour Trachimovsky	

Table 1-63

2015 Board and Committee Meeting Calendar

Board / Committee	2015 Meeting Dates
GHESI	April 16, June 18, August 26, November 11, December 2
Envida	As needed, approximately four times per year.
GMHI	February 12, May 14, June 15, August 13, September 10, December 3
Finance and Audit Committee	April 9, May 21, August 20, November 5, November 26
Human Resource and Compensation Committee	March 31, June 24, October 28, November 23
Board Education Session	April 16, September 29

Continuing Education and Professional Development

Guided by Board Policy BD-09, Professional Development, Guelph Hydro Electric Systems Inc. is committed to the ongoing professional development of its Board of Directors. The purpose is continuous improvement and broadening of knowledge, skills and personal qualities in order for the Board to perform its duties successfully and at the highest level of service to the corporation.

Opportunities are provided at both external and internal events. External participation in professional development is at the Director's discretion and requires approval of the Board Chair. Internally, Guelph Hydro holds a minimum of two Board Education sessions each year and takes into consideration the expressed interest of Board members. Past education topics have included The Green Energy Act, The Affiliate Relationships Code, Regulatory Accounting, District Energy, Risk Assessment and Global Adjustment.

2.4.9 LETTERS OF COMMENT

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

APPENDIX 1-A: Guelph Hydro 2015-2019 Business Plan and Budgets

Guelph Hydro Electric Systems Inc.
2015 and 2016 Budgets and 2017 to 2019 Business Plan

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1. EXECUTIVE SUMMARY

1.1 Introduction

This report summarizes Guelph Hydro Electric Systems Inc.'s (GHESI) Budgets for 2015 and 2016 and the Company's 2017 – 2019 Business Plan (hereafter collectively called the "Business Plan"), and which Business Plan encompasses the following activities in GHESI:

- Electricity distribution operations;
- Conservation and demand management programs (CDM); and
- Water billing services to the City of Guelph (note: this is an unregulated activity permitted by the Ontario Energy Board [OEB]).

1.2 Principles Underlying the Financial Plan

The Business Plan is based on the following assumptions and constraints:

1. A distribution revenue increase in 2015 of 3% over the 2014 Budget which is dependent on obtaining 1% from a distribution rate increase in the third year of GHESI's current three-year Incentive Regulation Mechanism (IRM) cycle, and 2% from load growth.
2. A revenue deficiency of about $4 million being approved by the OEB as part of GHESI's rebasing application. This increase is largely based on the following key assumptions: (i) the return on ratebase and return of ratebase (depreciation) associated with net distribution capital spending between the 2012 to 2016 period being added to ratebase and, (ii) an increase in operating, maintenance and administrative (OM&A) costs that primarily reflects the costs associated with hiring and training employees ahead of retirements.
3. Continued investment in safety and on distribution plant so that ratepayers in Guelph and Rockwood can continue to be provided with excellent service.
4. Organizational capability.
5. Long-term view of return on shareholder investments.
6. Improving productivity.
7. Managing economic and political uncertainty.

Given the preceding, it is important to note that the Business Plan presents a challenging financial outlook for GHESI, and management is proposing that the Board of Directors have a comprehensive discussion of the following items:

- GHESI's continued investment in distribution capital over amounts embedded in distribution rates.

- The need to carry out a long-term debt issue as soon as practical, and perhaps prior to OEB approval of the associated debt costs. The Business Plan assumes that GHESI will issue long-term debt in 2016, and that OEB approval for the debt costs will be approved as part of GHESI's 2016 Cost of Service Rates Application. However, given GHESI's current and expected cash position, and the current low interest rate environment, it may be practical for GHESI to issue long-term debt in 2015.

1.3 Summary of GHESI's 2015 & 2016 Budgets and 2017 – 2019 Business Plan

This Business Plan also incorporates GHESI's non-regulated business activities noted above.

Exhibits 1-1 through 1-3 in the Appendix provide the results of the Business Plan. GHESI's Business Plan provides for prudent and sustainable investment in core business operations, with consideration for new required business investments. Subject to certain material risks, the Business Plan results in the following metrics:

$ Millions	2014 Budget	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
Net Income	$3.8	$4.7	$5.9	$5.2	$5.3	$5.3
Dividends to GMHI	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0

- Dividend payments based on net income derived from Modified International Financial Reporting Standards ("MIFRS") earnings, which is the basis on which the Ontario Energy Board ("OEB") sets GHESI's rates; and
- Continued investment in capital renewal projects.

2 BUSINESS RISKS AND MITIGATION

2.1 Material Risks to the Business Plan and Potential Mitigation

For GHESI, the following business risks, should they materialize, could pressure earnings over the Business Plan horizon:

1. The impact of milder winter and cooler summers (compared to normal weather) on distribution revenue and maintenance costs.
2. Unforeseen weakness in the local economic environment and the associated increase in credit risk.
3. Conservation impacts on revenue, and the degree of success that GHESI has in meeting its CDM targets.

4. Unpredictable financial impacts such as settlement differences on results.
5. Adverse impacts from lower rates arising from the 4th generation IRM formula parameters which could result in distribution earnings and cash flow being lower than the rate increases assumed in the Business Plan.
6. Acquisition and retention of human resources to support existing operations and new business requirements.
7. Estimation risk, particularly in relation to the distribution system capital program with respect to: (i) the amount of capital contributions from customers which is driven by the level of customer demand and the economic evaluation of the related project; (ii) the timing/achievement of the capital program which could impact on the amount of directly attributable costs that are ultimately expensed to capital versus operating costs; and, (iii) unforeseen damage to distribution system plant stemming from severe weather, and which damage may not be recoverable in rates until GHESI's next rebasing.
8. Poor performance of the company's information technology systems, and the impact of this, particularly on billing.
9. The impact of the current municipal and provincial political environments on LDCs.
10. Other unforeseen events (e.g., storms) that could adversely impact the electricity distribution system.
11. The timing of the settlement of variance accounts required by the OEB.

Weather

GHESI cannot mitigate weather-related impacts on distribution revenue in the short term, although evidence may be presented in a Cost of Service Rates ("CoS") Application to mitigate the future impact of a weather-related declining revenue trend. Such evidence would generally include the presentation of weather-normalized data as a basis for determining customer specific volumetric distribution charges.

GHESI could mitigate *material* weather-related impacts on costs (e.g., ice storms, tornados, etc.) through a request for a z-factor adjustment application before the OEB. The current materiality threshold for z-factor adjustments is 0.5% of distribution revenue, or approximately $0.2 million per event.

Local Economy and Credit Risks

LDCs in general are challenged to mitigate short-term impacts on distribution revenue resulting from declining consumption, poor economic conditions, and from milder-than-normal weather. These aspects are considered to be normal business risks for LDCs, and

must be taken into consideration as part of the development of the load forecast underlying the CoS Application.

As part of its 2016 CoS Application, GHESI will provide a load forecast that is derived from a multi-factor, single-equation econometric model. The model includes such parameters as weather (Heating degree-days, Cooling degree-days), economic output (manufacturing GDP growth), calendar variables (days in month, number of peak hours), and a "dummy" variable (blackout parameter). GHESI (and all LDCs) are exposed to revenue reductions during the IRM rate periods from variances between actual loads and the load forecasts underlying distribution rates at the time of the CoS filing.

Credit Risk

GHESI faces credit risk primarily from non-payment of hydro bills by large customers. For example, GHESI's top five customers represent 4.5% of distribution revenue, which exposes GHESI to credit risk from this customer class. Additionally, a systemic downturn in the global, provincial or local economy could also expose GHESI to credit risk from other customer classes. To deal with this risk, GHESI has adopted credit policies that result in a reasonable level of credit risk mitigation.

Residential and Small Commercial Customers

Management continues to monitor and analyze the financial impact of customer service code amendments implemented by the OEB as follows:

- Clarification of notification processes, including the requirement for a 10 day notice period before disconnection;
- Security deposits that must be applied to amounts in arrears prior to issuing a disconnection notice for non-payment;
- Requirement to offer customers an arrears management program, which provides for amounts in arrears to be repaid over a period between five and ten months depending on the amount in arrears; and,
- Suspension of disconnection action for a period of up to 21 days where notice has been received from an agency that it is assessing the customer's eligibility for bill payment assistance.

Conservation and Demand Management

Revenue loss from customers' CDM efforts may be mitigated through a Lost Revenue Adjustment Mechanism ("LRAM") application with the OEB to accelerate recoveries of foregone revenue from CDM activities.

3 ANALYSIS OF GHESI's BUSINESS PLAN

GHESI's Business Plan provides for prudent and sustainable investment in core business operations with consideration for new required business investments. The achievement of this plan is subject to business risks and mitigation as addressed in Section 2.0.

Subject to certain material risks, GHESI's Business Plan provides for maintaining an "A" corporate credit rating which is underpinned by the following financial metrics**:**

MIFRS Basis; $ MM except where noted	2014 Budget	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
Net Income	$3.8	$4.7	$5.9	$5.2	$5.3	$5.3
Return on Equity	6.3%	7.5%	9.0%	7.6%	7.5%	7.3%
Capital Expenditures*	$12.3	$12.0	$10.1	$10.2	$10.9	$11.2

*Net of capital contributions

GHESI is confronted with determining how to meet the OEB's deemed ROE target of 9.36% (per the 2013 OEB re-set of ROE) in the face of a moderate economic recovery and the OEB's 4th Generation IRM cycle which limits rate increases to below the rate of inflation.

In addition to these on-going challenges, the OEB's Decision on GHESI's 2012 CoS Application set a constraint on GHESI's operating and capital expenditures in relation to prevailing economic conditions. Despite these constraints, GHESI has continued with a steady program of making investments in distribution infrastructure and distribution plant maintenance. These investments were necessary to support the existing customer base, irrespective of customer growth and broader economic conditions. Because GHESI is required to make the necessary capital investments in distribution infrastructure that are in excess of the amounts embedded in its current rates, and because GHESI's operating costs are forecast to increase by more than the levels embedded in current distribution rates, the associated net income results in an ROE that is below the OEB's allowed ROE in 2015. While capital investments could potentially be deferred or reduced, there are practical considerations including quality of service delivery and safety that speak strongly against deferring such items. GHESI's financial position is shown in the net income and ROE metrics in the table above. The financial position in 2015 is forecast to improve in 2016 once GHESI is rebased. GHESI's lower-than-allowed ROE's after 2016 are due to the impacts of the 4th Generation IRM cycle following the rebasing period, whereby annual rate increases are expected to be below the OEB's inflation parameters, while costs are expected to be largely in line with inflation.

Despite the moderate rate increases expected in the IRM years, management believes that it can deliver GHESI's capital plan and manage costs in an effective manner without negatively impacting GHESI's credit rating, and in a manner that continues to deliver quality distribution service safely and reliably for ratepayers. GHESI's Business Plan reflects managed increases in expenditures with due regard for the following:

- Expectations set by the OEB regarding the nature and magnitude of expenditures.
- Prioritization of investments in the context of requirements for distribution system renewal and the needs of GHESI's ratepayers.
- Advancement of business processes through replacement or new investments in information technology systems and technology-based processes.
- Customer affordability.
- A reasonable rate of return for the shareholder.

3.1 Analysis of the 2015 and 2016 Budgets:

The previous GHESI Business Plan (2014 Budget and Four Year Plan) was developed in 2013. As was noted by Management at that time, the financial impact of certain differences (described below) in accounting treatments between IFRS and MIFRS used by the OEB as the basis for rate setting were not fully known; these differences manifested in the 2013 budget and carried over into the 2014 budget. These differences will continue to adversely impact the 2015 budget but are expected to be mitigated in 2016 when GHESI is rebased.

1. Recognition of Regulatory Assets and Liabilities

IFRS does not permit the recognition of regulatory assets and liabilities (RA/L). Under IFRS, revenue is recognized based on amounts billed to customers through rates, including current period regulatory charges and billings ("Settlement Differences") not yet approved for recovery/disposition by the OEB as well as rate riders providing for the recovery/disposition of settlement differences. Under IFRS, GHESI is no longer permitted to record RA/L on its balance sheet and, as a result, these Settlement Differences are recorded as net earnings or net costs depending on whether the Settlement Difference is positive or negative in the period. These Settlement Differences are not predictable nor can they be readily forecasted / budgeted. The volatility arising from these settlement differences will continue to impact earnings.

2. Property, Plant & Equipment (PP&E) Variance Accounts

Following GHESI's 2012 Cost of Service rates application, the OEB created a deferral account tracking the rate impact of PP&E valued under Canadian Generally Accepted Accounting Principles (CGAAP), compared to PP&E valued under IFRS. The period impacted by this review was from the effective date of the adoption of IFRS to the period in which IFRS-valued PP&E could be brought into the ratebase. For GHESI, this period was from 2010 to 2011. For the two years in question, it was determined that the change to IFRS accounting had the impact of increasing the Net Book Value of PP&E by $1.53 million. Since these costs had already been recovered from ratepayers, a mechanism was established by the OEB to amortize this $1.53 million bump and its associated returns, out of the rates over the entire rate period (2012-2015). This resulted in a $381,500 per year reduction in both revenue and depreciation expense for regulatory purposes, and a $104,000 per year reduction in the return on ratebase. Under IFRS, GHESI continues to recognize the full amount of depreciation expense in its financial statements, but the full amount of depreciation and its associated return on ratebase is not being recovered in current distribution revenue due to the rate adjustments noted above.

3. Other Costs

In addition to the above impacts, there were a number of other costs that were either disallowed by the OEB in its 2012 Rate Decision, or were not included in GHESI's distribution rates largely because of uncertainties from the conversion to IFRS. GHESI will have an opportunity to recover these costs as part of its 2016 CoS rebasing application. These cost categories are explained below and are expected to continue to adversely impact GHESI's distribution revenue in 2015:

i. Zigbee Chips

The OEB required that the incremental cost of the Zigbee Chips be removed from GHESI's rate base and recorded in a variance account for future cost recovery consideration. The resulting impact was a disallowance of approximately $40,500 in revenue (through the rates) and depreciation. Under IFRS, GHESI is required to depreciate the Zigbee Chips and, as a result, the 2015 Budget reflects a higher depreciation expense than is reflected in distribution rates.

ii. Componentization of the Southgate facility

Under IFRS, fixed assets are required to be componentized. At the time of the 2012 CoS application, Management had not completed the componentization of

the Southgate facility and depreciation that was calculated for purposes of the rate application was based on an estimated useful life of 50 years.

Under IFRS, depreciation on Southgate was approximately $126,000 higher per year than anticipated in the rate application. The additional depreciation has been included in the 2015 Budget.

iii. Additional investment in the Arlen MTS

Approximately $4.0 million dollars in additional capital expenditures were incurred for the Arlen MTS after the 2012 CoS application was submitted due to higher overall projects costs and higher costs from Hydro One. These incremental costs became known much after GHESI's 2012 rates application had been filed with the OEB. As a result, GHESI actual depreciation expense was about $131,000 over that which is currently reflected in rates. This additional depreciation expense is reflected in the 2015 Budget and will continue to be carried forward in subsequent budgets, but GHESI expects to recover the higher depreciation expense as part of its 2016 rebasing application.

iv. Depreciation recorded net of Contributed Capital

Under IFRS, Contributed Capital is required to be included in Other Operating Income; whereas, under MIFRS, it is included as a reduction to depreciation expense. While there is no impact to the financial results, for purposes of the 2015 Budget, Contributed Capital has been included in Other Operating Income.

4 GHESI Financial Results

Exhibits 1-1 through 1-3 provide the results of the GHESI Proposed Business Plan assuming the following:

2015 - 2016

In the 2015 Budget, distribution revenue has been forecast using a 1.0% IRM rate adjustment (based on expected 2014 IRM factors which will be released by the OEB in late-2014) and a 2.0% growth factor. The load forecast has been derived using the same econometric model that underpinned the 2012 CoS Decision, but updated for:

i. actual loads experienced from the last forecast date through July 2014; and,
ii. forecast achievements of regulated CDM targets.

Starting with GHESI's 2016 CoS Application, GHESI expects to be on a five-year rate cycle — 4 years of IRM followed by a CoS rebasing year in 2021. Currently, GHESI is on track to

file its CoS Application in April 2015 for rates effective January 1, 2016. GHESI has assumed a 10.0% distribution revenue increase in 2016 over 2015. The main drivers of the increase are:

- The approval by the OEB to incorporate capital expenditures undertaken in the 2012 to 2016 period into GHESI's ratebase, and the attendant impacts of this on increased return on and return of (depreciation) ratebase in 2016 rates;
- Higher depreciation expense in 2016 compared to 2012 due to the under-recovery of depreciation expense in 2012, and due to incremental depreciation expense associated with GHESI's capital expenditures over the 2012 – 2016 period;
- Incremental debt costs associated with a new $30 million long-term debt issue, which is expected to be undertaken as soon as practical, and with the proceeds being used to pay for distribution capital expenditures in the 2012 to 2016 period. Assuming that the OEB approves the associated debt costs, these costs will be fully reflected in distribution rates in 2016 and beyond.

Other Business Plan Assumptions:

- Base salaries are assumed to increase by 2.75% in 2015 and by 2.5% in 2016.
- Productivity savings wherever possible have been incorporated into the Business Plan.

The table below provides a summary of the financial results for GHESI for the 2014 Budget and 2015 to 2019 Business Plan. Regulated net income is consistent with Management's expectations after considering the challenges of rate increases in an IRM regime. Specifically, net income is relatively flat in 2015 compared to 2014 as it is unlikely that the OEB's IRM parameters will lead to rate increases significantly higher than 1.0% on a year-over-year basis. This implies that the underlying accounting Return on Equity (ROE) will remain below the OEB's deemed ROE in 2015 because of uncompensated inflationary costs, net of productivity gains. For GHESI, the deemed ROE approved in the 2012 OEB Rate Decision was 9.42%.

For the year ended December 31,	2014 Actual	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
Revenue						
Gross electricity distribution revenue	212,562	**216,367**	221,922	224,141	227,503	230,916
Cost of sales	184,552	**(187,392)**	(190,024)	(192,594)	(195,290)	(198,219)
Net electricity distribution revenue	28,010	**28,975**	31,897	31,547	32,213	32,696
Other operating revenue	4,737	**2,883**	3,102	3,782	3,839	3,897
	32,747	**31,858**	34,999	35,330	36,052	36,593
Expenses						
Operations	6,528	**7,152**	7,857	7,967	8,078	8,192
Billing and Collection	2,678	**2,793**	2,896	2,940	2,984	3,029
General administrative and IS	6,432	**6,267**	6,100	6,192	6,284	6,379
Operating expenses	15,638	**16,212**	16,853	17,098	17,347	17,599
Depreciation and amortization	5,596	**6,074**	6,270	6,534	6,864	7,161
Operating expenses and depreciation	21,234	**22,285**	23,123	23,633	24,211	24,760
Income from operating activities	11,513	**9,572**	11,876	11,697	11,841	11,833
Interest income						
Interest expense	(3,415)	**(3,491)**	(4,242)	(4,994)	(4,937)	(4,937)
Income before taxes	8,098	**6,082**	7,634	6,703	6,905	6,896
Income and future taxes	(2,154)	**(1,408)**	(1,768)	(1,552)	(1,599)	(1,597)
Net income	5,944	**4,673**	5,866	5,151	5,305	5,299

Conservation and Demand Management

GHESI executed a contract with the OPA for Tier 1 CDM programs which provides for four-years of program funding (Program Administration Budget (PAB) in the amount of $3.1M. The implementation of the OPA Tier 1 programs is estimated to deliver 100% of GHESI's mandated 2011-2014 electricity consumption and demand reduction targets.

CDM programs are solely funded from the Global Adjustment Mechanism (GAM) and, therefore, do not affect operating expenses reflected in the 2015 Business Plan. In March 2014 the Minister of Energy announced a new conservation framework for LDCs commencing January 1, 2015 and covering a six-year timeframe to December 31, 2020. The new framework would provide a greater role for LDCs to deliver cost effective, customer centric conservation programs. Since the announcement, the OPA, LDCs, and other stakeholders such as the Electricity Distributor's Association (EDA), various CDM Working and Advisory Groups and the gas companies have been actively working on the design of the new Conservation First Framework (CFF). At the time of writing of this document, a significant amount of work is still required to complete the development of the CFF, and much of what has been developed is still in draft form. Broad CFF parameters include the following:

- An energy reduction target of 7 TWh will be allocated to LDCs based on the OPA's Achievable Potential Study;
- LDC delivery of conservation to all customer segments will remain a condition of licence, but without hard targets;
- Program design and delivery budgets will now include Customer Incentive payments previously managed by the OPA;

- Funding model options of Full Cost Recovery (FCR) as well as Pay for Performance (P4P) will be developed, with significantly different levels of risk;
- Penalties for non-performance of minimum delivery thresholds will be included;
- Regional and gas collaboration for CFF implementation will be required;
- A new Energy Conservation Agreement (ECA) will replace the current Master Agreement (MA), and new "Program Rules" will be developed to replace "Initiative Schedules";
- The ECA is a binding agreement to be submitted by LDCs to the OPA by December 31, 2014;
- LDCs must develop and submit a six-year CDM plan to the OPA by May 1, 2015, with the OPA having 60 days to review and approve or not approve the plan.

Preliminary analysis of the CFF target allocation indicates that the 2015-2020 energy targets are very aggressive, in fact more than double the current framework incremental annual energy target. In anticipation of the new CFF direction, GHESI has budgeted for additional resource(s) in the Energy Services group to support the new CDM delivery requirements. As with the current CDM programs, GHESI's expectation is that future CDM delivery will be funded through GAM or another similar measure.

Water Billing Services

GHESI provides billing and payment processing services to the City of Guelph. Water and sewer billing for the City of Guelph is performed under contract which provides for annual increases. The current agreement is being renegotiated with the City. It is expected that the agreement will be renewed for a five-year term upon completion.

4.1 OM&A Expenses

OM&A expenses reflect costs required to operate, maintain and sustain the electricity distribution operations, including new expenditures in continued support of addressing on-going investments in human resources, productivity improvements and risk management.

Operating, Maintenance and Administrative (OM&A) costs per customer increase from $282 in 2012 to an estimated $310 in 2019. The compound average annual increase over this period is 1.4% which factors in productivity improvements, cost containment and general inflation.

OM&A costs in total, excluding depreciation, are budgeted to be $16.2 MM in 2015 rising to $17.6 MM by 2019 or at a compound annual average pace of 1.8% over the 2014 to 2019 period. The 2014 OM&A budget was $16.1MM, and is budgeted to increase by a modest 0.6% or by $100k in 2015. The increase is attributable to:

- Cost of living and salary progression increases arising from the recent collective bargaining agreement with the union and a commensurate percentage increase for management staff;
- The return to work for employees that had been on LTD and the need for new FTEs related to succession planning and retirements.
- The above-noted increases were offset by significant cuts to other areas in GHESI's operations.

4.2 Human Resource Requirements

The 2015 budget assumes a 2.75% average base salary increase for both management and IBEW employees effective January 1, 2015. The 2015 Budget also reflects salaries and related benefits for seven additional full-time equivalent (FTE) employees to meet planned growth in GHESI's business operations. The seven FTEs include: one Regulatory Accountant, one Linesperson, one Meterperson, one SCADA Technologist, one Energy Services Representatives, one Energy Manager/Energy Representative, and one Engineering Technician. With the addition of these FTEs, the total 2015 FTE count will be 126 in GHESI. The incremental cost of the average salary increase noted above and the seven additional FTEs is $441k.

The 2015 budget also reflects a short term incentive pool for management consistent with the approved compensation plan at the "target level" of $320k to be accrued in 2014 for payout in 2015.

The 2016 budget assumes a 2.50% average base salary increase for both management and IBEW employees effective January 1, 2016. The 2016 Budget also reflects salaries and related benefits for three additional full-time equivalent (FTE) employees to meet planned growth in GHESI's business operations. The three FTEs include: one Linesperson, one System Control Operator, and one System Control Supervisor. With the addition of these FTEs, the total 2016 FTE count will be 129 in GHESI. The incremental cost of the average salary increase noted above and the three additional FTEs is $320k over 2015.

BUDGET- TOTAL COMPENSATION SUMMARY (in $ Millions)

	2014 Budget	2015 Budget	2016 Budget
Compensation – (All employees including students, etc.; net of interco transactions)	$10.7	$11.2	$12.1
Benefits	$2.5	$2.5	$2.7
Short Term Incentive	$0.3	$0.4	$0.4
TOTALS	$13.5	$14.1	$15.2

4.3 Capital and Operating Programs

Electricity Distribution Operations 2014-2018 Capital Expenditure Summary

($'000s)	2014 Budget	2014 Projection	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
Land	-	-	**-**	**-**	-	-	-
Substations	1,265	459	**2,232**	**199**	205	212	218
Feeders/Infrastructure	4,190	4,369	**3,416**	**3,518**	3,624	3,732	3,844
Rehabilitation	3,721	3,084	**3,960**	**4,479**	4,613	4,752	4,894
Subdivisions	2,122	2,134	**2,185**	**2,251**	2,319	2,388	2,460
Commercial/Industrial	610	810	**628**	**647**	666	686	707
Metering	611	448	**685**	**415**	365	685	685
SCADA	712	285	**218**	**225**	232	239	246
Subtotal	$ 13,230	$ 11,589	**$ 13,324**	**$ 11,734**	$ 12,024	$ 12,694	$ 13,054
Other Capital							
IT Capital	938	938	**780**	**590**	545	561	578
Building/Fixtures	490	550	**255**	**159**	164	169	174
Office Equipment/Graphics	57	57	**58**	**60**	62	64	66
Rolling Stock	500	540	**556**	**573**	590	608	626
Major Tools	62	62	**64**	**66**	68	70	72
Solar Panels - Arlen TS							
AFUDC		68	**41**	**39**	39	39	39
Subtotal	$ 2,045	$ 2,215	**$ 1,754**	**$ 1,487**	$ 1,468	$ 1,511	$ 1,555
Capital Expenditures (incl. intangibles)	15,275	13,804	**15,078**	**13,221**	13,492	14,205	14,609
Contributed Capital	(2,980)	(3,422)	**(3,057)**	**(3,148)**	(3,243)	(3,340)	(3,440)
Net Capital Expenditures	12,295	10,382	**12,021**	**10,073**	10,249	10,865	11,169

Capital investments are required to maintain adequate capacity and security of supply to meet customer needs, as well as to replace end-of-life assets. Load forecasts on stations and feeders identify areas where demand may exceed the capacity of the network. Reliability studies are performed to identify improvement opportunities. Areas within the network requiring significant improvement, capacity upgrade, or asset renewal are identified and considered for capital investment.

GMHI pays GHESI under a service level agreement for certain administrative costs, including HR services, payroll and benefits services, purchasing, information services, accounting services, space rental, etc. For 2015, the non-wage operating expenses as well as the wage operating expenses for information services and accounting services will be charged to GMHI by GHESI based on drivers specific to the activity being allocated. For example, information services costs are allocated based on the number of network users being serviced. These allocated costs are assumed to rise by 2% in each of 2015 through 2019.

5 CONCLUSIONS

GHESI's 2015 and 2016 Budgets and 2017 – 2019 Business Plan present a challenging financial picture for the company. All costs and projected revenues have been closely examined and reasonable assumptions respecting growth and expected OEB rate increases have been used.

The OEB's 4th Generation IRM framework will continue to challenge GHESI's management to find operational savings and efficiencies throughout the organization in order to achieve reasonable financial results. Despite being able to find cost savings and efficiencies, the regulatory disallowances in GHESI's 2012 Cost of Service decision, as well as costs associated with the Arlen TS that were not submitted in time for the 2012 rate filing will continue to adversely impact GHESI's financial results in 2015. Therefore, finding efficiencies that are of a magnitude sufficient to offset past disallowances and below-inflation IRM rate increases will be difficult in the months leading up to GHESI's 2016 rebasing rates application. Nevertheless, management remains confident that the financial challenges in the 2015 budget will not hinder the delivery of excellent distribution service nor GHESI's continued focus on safety.

Appendix A

Pro Forma Financial Statements

Modified IFRS Basis

Guelph Hydro Electric Systems Inc. **Exhibit 1-1**
Results of Operations ($'000)

For the year ended December 31,	2014 Actual	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
Revenue						
Gross electricity distribution revenue	212,562	**216,367**	221,922	224,141	227,503	230,916
Cost of sales	184,552	**(187,392)**	(190,024)	(192,594)	(195,290)	(198,219)
Net electricity distribution revenue	28,010	**28,975**	31,897	31,547	32,213	32,696
Other operating revenue	4,737	**2,883**	3,102	3,782	3,839	3,897
	32,747	**31,858**	34,999	35,330	36,052	36,593
Expenses						
Operations	6,528	**7,152**	7,857	7,967	8,078	8,192
Billing and Collection	2,678	**2,793**	2,896	2,940	2,984	3,029
General administrative and IS	6,432	**6,267**	6,100	6,192	6,284	6,379
Operating expenses	15,638	**16,212**	16,853	17,098	17,347	17,599
Depreciation and amortization	5,596	**6,074**	6,270	6,534	6,864	7,161
Operating expenses and depreciation	21,234	**22,285**	23,123	23,633	24,211	24,760
Income from operating activities	11,513	**9,572**	11,876	11,697	11,841	11,833
Interest income						
Interest expense	(3,415)	**(3,491)**	(4,242)	(4,994)	(4,937)	(4,937)
Income before taxes	8,098	**6,082**	7,634	6,703	6,905	6,896
Income and future taxes	(2,154)	**(1,408)**	(1,768)	(1,552)	(1,599)	(1,597)
Net income	5,944	**4,673**	5,866	5,151	5,305	5,299
Opening Retained Earnings	18,042	**18,303**	19,976	22,842	24,992	27,298
Add: Net Income	5,944	**4,673**	5,866	5,151	5,305	5,299
Less: Dividends	(3,000)	**(3,000)**	(3,000)	(3,000)	(3,000)	(3,000)
Closing Retained Earnings	20,986	**19,976**	22,842	24,992	27,298	29,597

Guelph Hydro Electric Systems Inc. **Exhibit 1-2**
Balance Sheets ($'000)

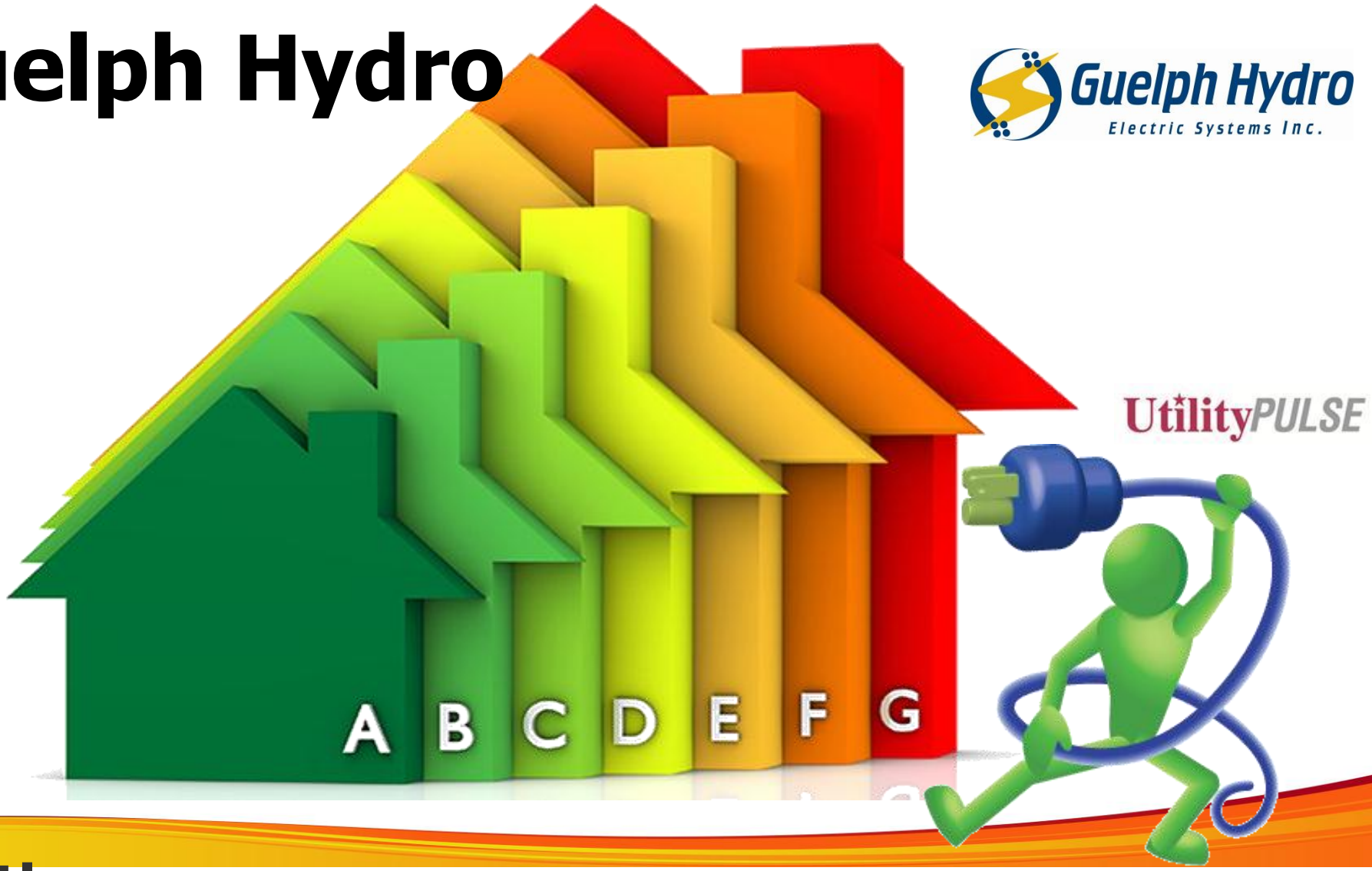
As at December 31,	2014 Actual	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
ASSETS						
Cash	(1,090)	(4,735)	24,969	23,432	21,822	20,559
Accounts receivable	16,840	18,316	18,786	18,974	19,258	19,547
Accounts receivable regulatory	1,047	1,185	1,216	1,228	1,246	1,265
Income taxes receivable	(84)	-	-	-	-	
Unbilled revenue	12,595	10,774	11,050	11,161	11,328	11,498
Inventory	1,832	2,040	2,081	2,122	2,165	2,208
Other	552	816	501	501	501	-
Total Current Assets	$ 31,692	$ 28,395	$ 58,602	$ 57,417	$ 56,321	$ 55,077
Fixed Assets	136,725	150,032	156,530	163,047	169,880	176,781
Construction in progress	4,552	1,200	1,200	1,200	1,200	1,200
Intangible Assets	388	461	372	281	214	182
Future income taxes	2,758	3,971	3,772	3,584	3,405	3,234
Deferred charges						
Total Assets	$ 176,115	$ 184,061	$ 220,477	$ 225,529	$ 231,019	$ 236,475
LIABILITIES						
CURRENT						
Accounts payable and accrued liabilities	$ 22,543	$ 18,823	$ 19,200	$ 19,584	$ 19,976	$ 20,375
Accounts payable regulatory	(10,258)					
Income taxes payable	-	1,408	1,768	1,552	1,599	1,597
Deferred credits -- accounts receivable	1,142	2,005	2,005	2,005	2,005	2,005
Customer deposits -- current portion	5,577	2,898	2,898	2,898	2,898	2,898
Due to related parties	711	-	-	-	-	-
Total Short-Term Liabilities	19,715	25,135	25,871	26,039	26,478	26,875
LONG TERM DEBT						
Long term portion debentures	64,600	64,625	94,650	94,675	94,700	94,725
	64,600	64,625	94,650	94,675	94,700	94,725
OTHER LONG TERM LIABILITIES						
Employee future benefits	10,039	9,078	9,305	9,435	9,567	9,701
Customer deposits -- long term portion	2,874	3,091	3,152	3,215	3,280	3,345
Deferred revenue	15,460	18,941	21,442	23,956	26,481	29,016
Total Liabilities	112,688	120,870	154,420	157,321	160,505	163,663
SHAREHOLDER'S EQUITY						
Common shares	**43,374**	43,374	**43,374**	43,374	**43,374**	43,374
Opening Retained Earnings	**18,042**	18,303	**19,976**	22,842	**24,992**	27,298
Effect of change in accounting policy						
Dividends Paid	**(3,000)**	(3,000)	**(3,000)**	(3,000)	**(3,000)**	(3,000)
Accumulated Other Comprehensive Income	**(933)**	$ (159)	**(159)**	$ (159)	**(159)**	$ (159)
Equity from contributed capital						
Net Income	**5,944**	4,673	**5,866**	5,151	**5,305**	5,299
Closing Retained Earnings	**20,986**	19,976	**22,842**	24,992	**27,298**	29,597
Total Shareholder's Equity	**63,427**	63,191	**66,057**	68,207	**70,513**	72,812
TOTAL LIABILITIES & SHAREHOLDER'S EQUITY	$ 176,115	$ 184,061	$ 220,477	$ 225,529	$ 231,019	$ 236,475

Guelph Hydro Electric Systems Inc. **Exhibit 1-3**
GHESI Statements of Cash Flow ($'000s)

For the year ended December 31,	2014 Actual	2015 Budget	2016 Budget	2017 Plan	2018 Plan	2019 Plan
OPERATING ACTIVITIES						
Net income (loss) for the year	$ 5,944	$ 4,673	$ 5,866	$ 5,151	$ 5,305	$ 5,299
Net change in employee future benefits	1,490	178	227	130	132	134
Allocated Depreciation	6,041	6,581	6,811	7,067	7,439	7,738
AFUDC capitalized interest	(123)					
Amortization of deferred revenue	(426)	(565)	(646)	(730)	(816)	(904)
Future income taxes		29	199	189	179	170
Amortization of debenture fees	25	25	25	25	25	25
Comprehensive Income (Loss)	(774)					
	12,199	10,921	12,481	11,832	12,264	12,463
Net change in non-cash WC balances	6,011	(4,341)	234	(183)	(74)	377
Net change in other long-term liabilities		91	62	63	64	66
CASH FROM (USED BY) OPERATIONS	11,919	6,671	12,777	11,712	12,255	12,905
INVESTING ACTIVITIES						
Additions to fixed assets	(12,924)	(14,978)	(13,128)	(13,427)	(14,138)	(14,537)
Additions to intangible assets	(167)	(100)	(93)	(65)	(67)	(72)
Net proceeds on disposal of fixed assets	90					
Cash used in investing activities	(13,001)	(15,078)	(13,221)	(13,492)	(14,205)	(14,609)
FINANCING ACTIVITIES						
Net change in long term borrowings		-	30,000	-		
Dividends paid	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)
Contributed capital received	2,373	3,057	3,148	3,243	3,340	3,440
Cash provided by (used in) financing activities	(628)	57	30,148	243	340	440
Net increase (decrease) in cash during the year	(1,710)	(8,350)	29,704	(1,537)	(1,609)	(1,263)
Cash, beginning of period	620	3,615	(4,735)	24,969	23,432	21,822
Cash, end of period	$ (1,090)	$ (4,735)	$ 24,969	$ 23,432	$ 21,822	$ 20,559

APPENDIX 1-B: Customer Satisfaction Survey

Guelph Hydro



15th Annual Electric Utility Customer Satisfaction Survey

The purpose of this report is to profile the connection between Guelph 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.

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



All comments and questions should be addressed to:

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Email: sidridgley@utilitypulse.com or sridgley@simulcorp.com

Executive summary

"Putting the Consumer First" was part of the title of the *Report of the Ontario Distribution Sector Review Panel.* Its findings and recommendations add an additional level of challenges and opportunities. While the Report challenges the structural nature and efficiency of LDCs in Ontario, the "customer" remains focused on their own needs and expectations. The customer is primarily concerned about their overall costs for their electricity rather than the costs of the individual components of producing, transmitting, distributing and regulating electricity.

For the past 15 years, the only constant Ontario LDCs and their customers have faced is constant change. With topics such as SMART Meters, SMART Grid, green energy, infrastructure renewal, coupled with the recommendations from the Ontario Distribution Sector Review Panel, it is easy to predict that change will continue – for many years to come. One of the challenges for utilities today is to determine how to educate, empower and engage their residential and small business customers. The goal for utilities is to cut through the fog of fear, misinformation and confusion that exists amongst its customers, regarding a myriad of subjects, while retaining a very high level of trust, respect and credibility.

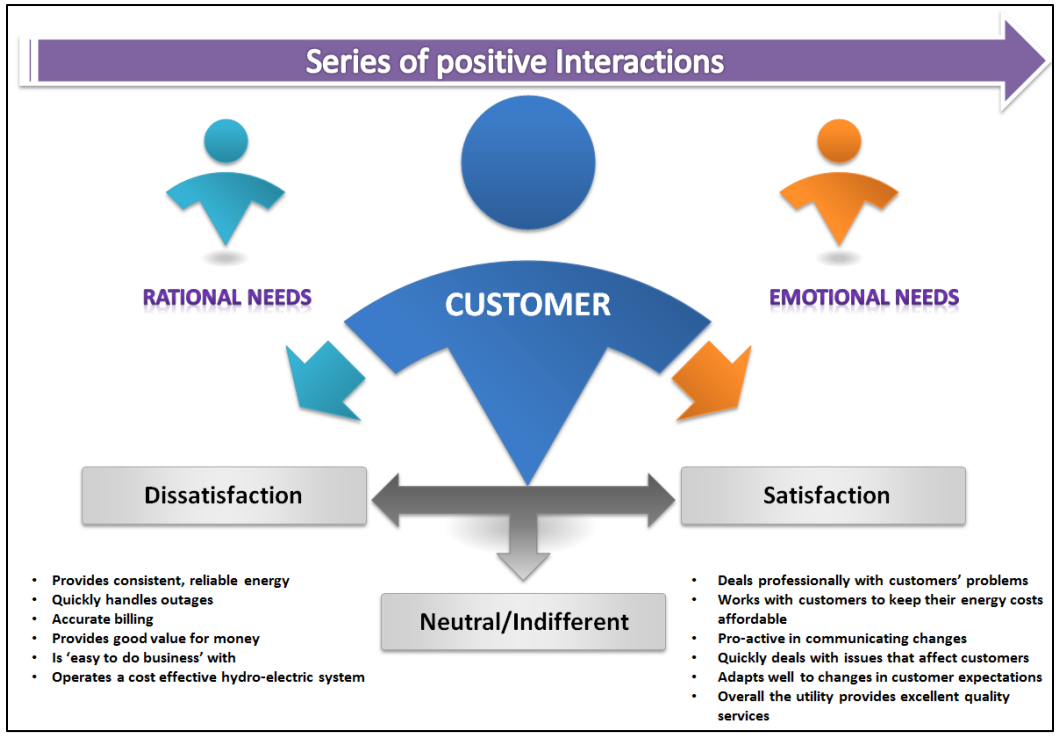




Trust and credibility are the foundational building blocks for ensuring that customers have both their rational and emotional requirements

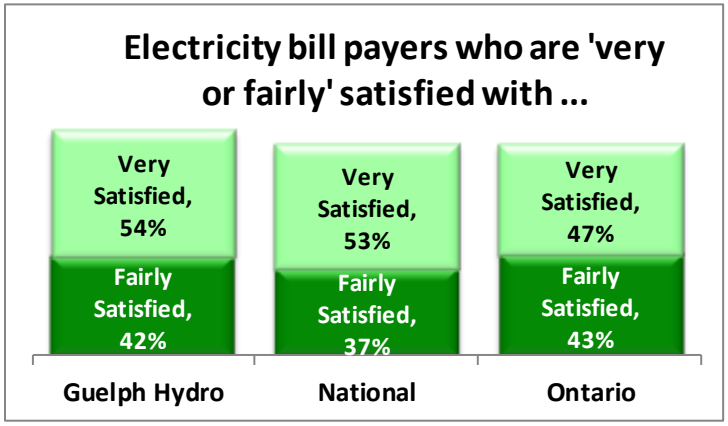
fulfilled. The attributes which help an LDC to be seen as trusted and highly credible are: knowledge, integrity, involvement and trust. On demonstrating Credibility and Trust, Guelph Hydro has done well. Overall, Guelph Hydro 87% [Ontario 82%; National 82%].

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 old adage, “You cannot command respect, you have to earn respect” is a lesson that aptly describes the loyalty effect with customers. Many people mistakenly think doing a good job will lead to loyalty; that a satisfied customer equals a loyal customer. Customers have expectations of their electric utility that go far beyond “keeping the lights on”, “billing me properly”, and “restoring power quickly”.



- **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.

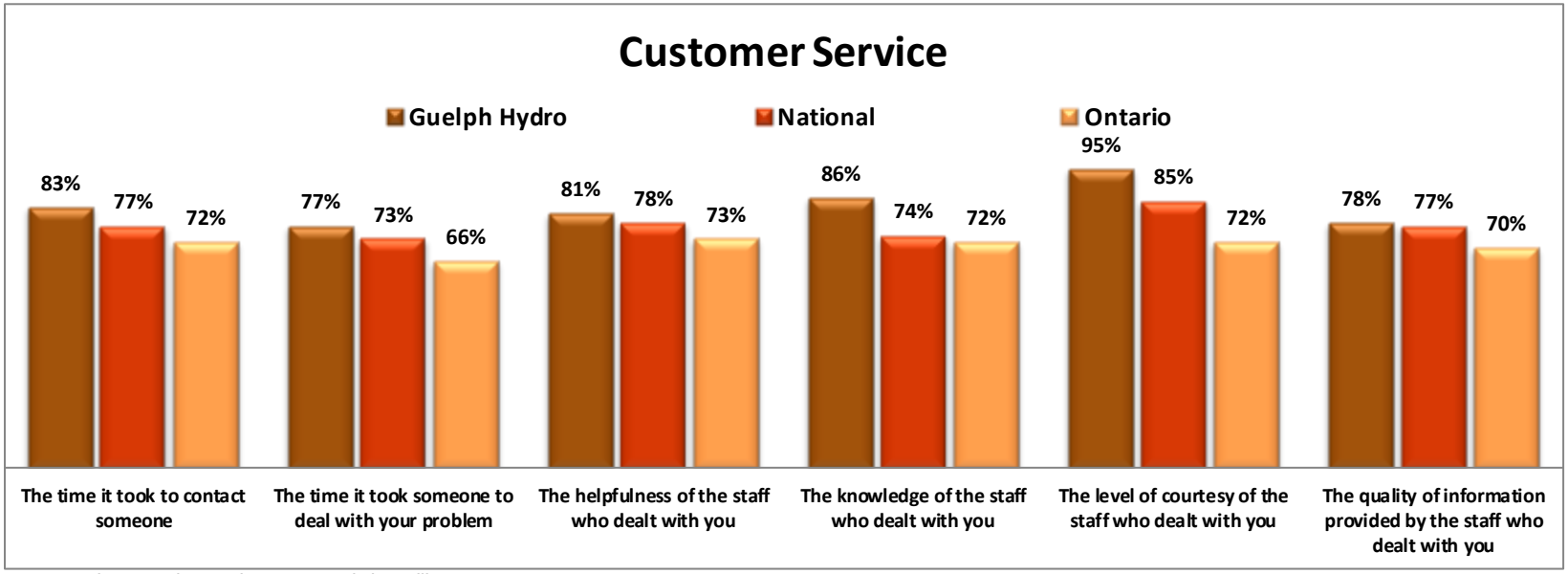
Satisfaction alone does not make a customer loyal; a willingness to commit and advocate for a company along with satisfaction identifies the three basic customer attitudes which underpin loyalty profiles. While satisfaction is an important component of loyalty, the loyalty definition needs to incorporate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



Guelph Hydro SATISFACTION SCORES – Electricity customers’ satisfaction				
Top 2 Boxes: ‘very + fairly satisfied’	**2013**	**2012**	**2011**	**2010**
PRE: Initial Satisfaction Scores	96%	-	92%	-
POST: End of Interview	96%	-	93%	-

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

Customers have needs and expectations AND they will have problems. How those problems are dealt with are “proof points” which will validate or invalidate their perceptions. Customer problems are far more diverse than they have ever been, thereby, causing customer service to change in response to those problems and needs. 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.



Base: total respondents who contacted the utility



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 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 that cause the most concern with customers.

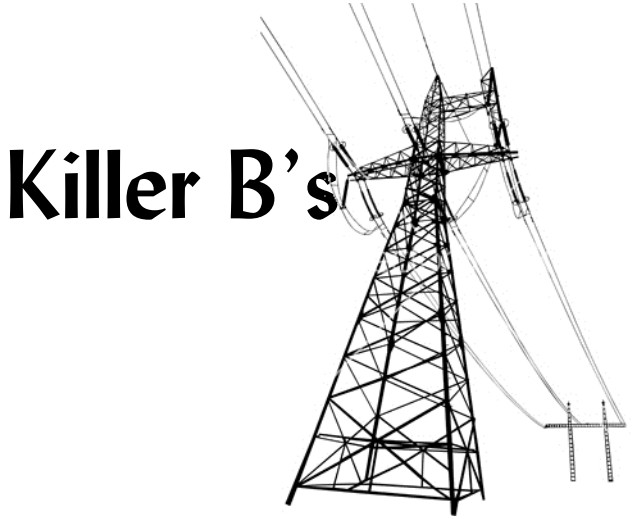
Percentage of Respondents indicating that they had a Blackout or Outage problem in the last 12 months			
	Guelph Hydro	National	Ontario
2013	29%	41%	35%
2012	-	44%	46%
2011	26%	43%	43%
2010	-	45%	41%

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			
	Guelph Hydro	National	Ontario
2013	9%	8%	10%
2012	-	12%	13%
2011	11%	10%	16%
2010	-	10%	12%

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



What do customers think about electricity costs?

There is a correlation between ability to pay and satisfaction with higher earners reporting the highest levels of initial satisfaction with their utility. It is also true that emotional connectivity, i.e. loyalty, also plays a role about what customers think about costs. Out of all the Ontario survey respondents this year, only 17% of Secure customers vs 43% of At Risk customers report that they sometimes or often worry about paying their electricity bill.

Is paying for electricity a worry or major problem …			
	Guelph Hydro	**National**	**Ontario**
Not really a worry	65%	70%	66%
Sometimes I worry	25%	18%	21%
Often it is a major problem	5%	8%	11%
Depends	3%	2%	1%

Base: total respondents



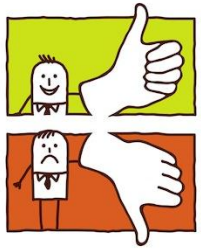
Customer Experience Performance rating (CEPr)

New for 2013 is the 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.



Customer Experience Performance rating (CEPr)			
	Guelph Hydro	National	Ontario
CEPr: all respondents	87%	83%	83%
CEPr: respondents *who have* contacted their utility	84%	79%	77%
CEPr: respondents *who have not* contacted their utility	88%	84%	85%

Base: total respondents



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.

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.



Customer Engagement Index (CEI)

UtilityPULSE has been researching this topic for the past 2 years and we have found that there are 4 basic types of definitions associated with the term called “customer engagement”. Here are the basic types:

1- Participation in programs or service offerings

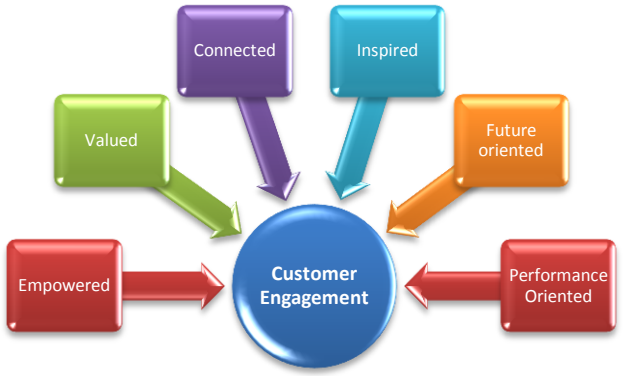
2- Pro-active “reach-out” to customers

3- Customer loyalty

4- How customers think, feel and act towards the organization that serves them.

Drawing from our 25+ years of experience working with enterprises in both the private and public domains, we believe that basic types 1 & 2 are too simplistic and tend to be an efficiency measurement. Whereas types 3 & 4 are more valuable to the organization especially when a key corporate goal is to create an operationally effective place to do business with – essentially an effectiveness and outcomes oriented measurement.

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. The six dimensions of an outcome based definition of customer engagement are: empowered, valued, connected, inspired, future oriented and performance oriented.





Utility Customer Engagement Index (CEI)			
	Guelph Hydro	**National**	**Ontario**
CEI	86%	81%	81%

Base: total respondents

UtilityPULSE Report Card®

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

Guelph Hydro's UtilityPULSE Report Card®

Performance

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



Base: total respondents

Corporate Image

Organizations today, are always under scrutiny and have to consider the reality AND perception of their image. Increasingly, organizations have realized that the management of a strong positive image with various stakeholders can be beneficial.

Attributes strongly linked to a hydro utility's image			
	Guelph Hydro	National	Ontario
Is a respected company in the community	89%	83%	84%
Maintains high standards of business ethics	88%	81%	81%
A leader in promoting energy conservation	83%	80%	80%
Keeps its promises to customers and the community	87%	81%	82%
Beyond providing jobs and paying taxes, is socially responsible	87%	79%	79%
Is a trusted and trustworthy company	88%	83%	83%
Adapts well to changes in customer expectations	79%	74%	73%
Is 'easy to do business with'	87%	82%	81%
Overall the utility provides excellent quality services	88%	85%	83%
Operates a cost effective hydro-electric system	79%	72%	68%

Base: total respondents with an opinion



Supplemental Insights

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

SMART Meters & SMART Grid



Do economic incentives have an impact on resource consumption patterns? *77% agree strongly or somewhat that Time-of-Use billing has changed the way in which they consume electricity on a day-to-day basis. [Base: Ontario LDC respondents]*

SMART metering is also a key element of SMART grid technology. This year's survey probed around the concept of SMART grid, its importance and support towards working with neighbouring utilities. It is clear that the need for education is immense. 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 LDCs	**Guelph Hydro**
I have a fairly good understanding of what it is and how it might benefit homes and businesses	7%	4%
I have a basic understanding of what it is and how it might work	17%	13%
I've heard of the term, but don't know much about it	33%	35%
I have not heard of the term	42%	48%
Don't know	1%	2%

Base: An aggregate of respondents from 2013 participating LDCs / total respondents from the local utility

Importance of pursuing implementation of the SMART Grid	
	Ontario LDCs
Very important	23%
Somewhat important	30%
Neither important or unimportant	9%
Somewhat unimportant	5%
Unimportant	10%
Don't know	23%

Base: An aggregate of respondents from 2013 participating LDCs

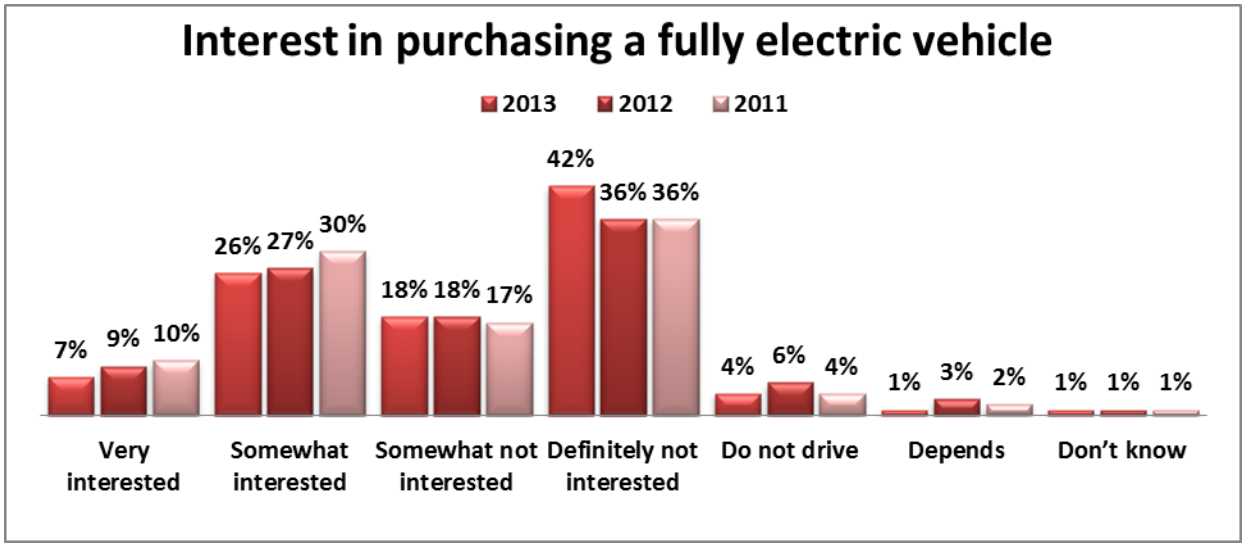
Support towards working with neighbouring utilities on SMART Grid initiatives	
	Ontario LDCs
Very supportive	38%
Somewhat supportive	37%
Neither supportive or unsupportive	4%
Somewhat unsupportive	2%
Unsupportive	6%
Don't know	12%

Base: An aggregate of respondents from 2013 participating LDCs



Purchasing an Electric Vehicle

Looking at age demographics, 22% of older respondents (55+) versus 47% of respondents aged 35-54 and 43% aged 18-34 are in favor of EVs replacing conventional cars.





Base: total respondents in the Ontario Benchmark survey



Energy Conservation & Efficiency

Improving energy efficiency does not mean that customers have to give up or forgo activities to save energy. Rather, new technologies and more effective behaviour will actually allow customers to do more, improving their living conditions rather than reducing their comfort. 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. During the survey interview process, we asked *"what are the 1 or 2 barriers for creating higher levels of energy efficiency?"* 21% identified "costs involved in making equipment/appliance changes", and 12% identified "lack of knowledge or lack of information". Respondents were asked: *"What will you be doing to conserve energy?"*

Efforts to conserve energy				
Ontario LDCs	**Yes**	**No**	**Already Done**	**Don't Know**
Install energy-efficient light bulbs or lighting equipment	20%	10%	69%	1%
Install timers on lights or equipment	15%	49%	35%	2%
Shift use of electricity to lower cost periods	21%	19%	57%	3%
Install window blinds or awnings	15%	26%	58%	1%
Install a programmable thermostat	15%	20%	63%	2%
Have an energy expert conduct an energy audit	9%	70%	18%	3%
Removing old refrigerator or freezer for free	14%	45%	37%	4%
Join the peaksaverPLUS™ program	18%	48%	21%	13%
Replacing furnace with a high efficiency model	13%	36%	48%	3%
Replacing air-conditioner with a high efficiency model	16%	39%	41%	4%
Use a coupon to purchase qualified energy saving products	33%	42%	21%	4%

Base: An aggregate of respondents from 2013 participating LDCs





E-care and E-billing

For any service provider including electric utilities, using the Internet for online customer care and electronic billing involves a number of interrelated requirements, including a customer's ability to: sign up for and change their services using the internet, find answers to their questions online about their accounts, learn about products, services and topics, i.e., green energy, electricity pricing, etc. It is about giving control to the customer.

88% of Guelph Hydro respondents have access to the internet and 29% have accessed their utility's website in the last six months.

When asked the media used to access the internet, Guelph Hydro respondents confirmed: 98% use computer or laptops, 29% use tablets, and 42% use their Smartphones.

Consumers will eventually adopt electronic billing and online customer care as many industries/companies begin providing consumer bills online, and critical mass is reached.



Using the internet for billing

	Ontario LDCs
I am already receiving my hydro bill electronically	10%
I use on-line banking and will definitely be requesting that my bill be sent electronically	11%
I use on-line banking but prefer to have paper statements	30%
I prefer to have the paper copy of my bills	23%
I don't use on-line banking	17%

Base: An aggregate of respondents from 2013 participating LDCs

Guelph Hydro: Business Matters

Guelph Hydro took the opportunity to probe respondents about certain issues that could potentially affect how business is conducted in the future, i.e. mergers, extended hours of operation.

- *Assuming they would see no changes in service or response to outages and perhaps a reduction in costs on their bill, 56% were in favour of Guelph Hydro merging with other utilities, 34% were not in favour and 11% either did not know or were undecided.*
- *47% responded that they were likely to contact Guelph Hydro in the evening or weekends if their hours were extended; 52% responded they were not likely and 1% did not know.*

Guelph Hydro: Projects and services

Additional questions were posed to respondents to acquire their feedback on the importance of Guelph Hydro's involvement in certain projects and services.



- *70% believe it is important to be involved in projects/services associated with electric vehicles*
- *62% believe it is important to be involved in projects/services associated with home automation*
- *78% believe it is important to be involved in projects/services associated with SMART home technologies*
- *90% believe it is important to be involved in projects/services associated with energy efficient home appliances*
- *70% believe it is important to be involved in projects/services associated with monitoring the utility's carbon footprint*

- *81% believe it is important to be involved in projects/services associated with Guelph community energy initiative.*

Social Media



Respondents of this year's survey were asked *"how likely they would use social media such as twitter®, facebook® (and others) as a resource for energy efficiency tips or to help manage your electricity use"…*

Likelihood of using Social Media				
	Guelph Hydro	**Ontario LDCs**	**Ontario LDCs Age Group:18-34**	**Ontario LDCs Age Group: 55+**
Very likely	3%	6%	10%	3%
Somewhat likely	9%	11%	17%	6%
Not likely	24%	20%	24%	17%
Not likely at all	63%	61%	48%	68%
Don't have social media account	1%	2%	0%	4%
Don't know	1%	1%	0%	1%

Base: An aggregate of respondents from 2013 participating LDCs / 90% of total respondents from the local utility

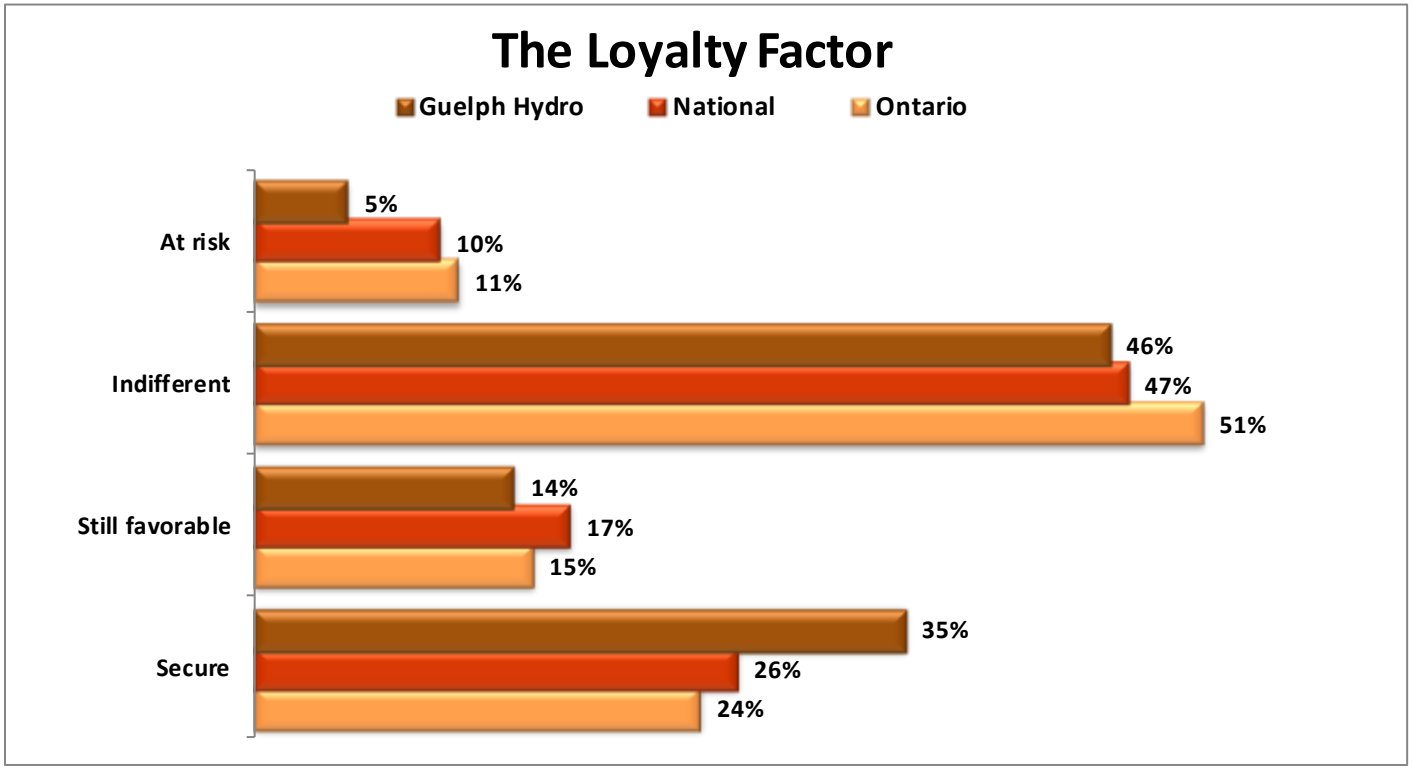


Customer Affinity

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 a customer’s future behaviour but more about their “attitudinal” loyalty (are they advocates?).



Base: total respondents



Customer Loyalty Groups				
	Secure	Favorable	Indifferent	At Risk
Guelph Hydro				
2013	35%	14%	46%	5%
2012	-	-	-	-
2011	28%	14%	52%	7%
2010	-	-	-	-

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



Electricity customers' loyalty – Is a company that you would like to continue to do business with				
Guelph Hydro	**2013**	**2012**	**2011**	**2010**
Top 2 boxes: 'Definitely + Probably' would continue	89%	-	85%	-

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



Electricity customers' loyalty – is a company that you would recommend to a friend or colleague				
Guelph Hydro	**2013**	**2012**	**2011**	**2010**
Top 2 boxes: 'Definitely + Probably' would recommend	81%	-	79%	-

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

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 energy 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.



Marketing – Communications			
	Guelph Hydro	National	Ontario
Topics that require more pro-active communication			
Cost of electricity is reasonable when compared to other utilities	65%	66%	61%
Works with customers to keep their energy costs affordable	72%	66%	65%
Adapts well to changes in customer expectations	79%	74%	73%
Operates a cost effective hydro-electric system	79%	72%	68%
Provides good value for money	75%	71%	68%
Topics that your utility scores very well on			
Is a trusted and trustworthy company	88%	83%	83%
Respected company in the community	89%	83%	84%
Accurate billing	89%	85%	86%
Overall the utility provides excellent quality services	88%	85%	83%
Provides consistent, reliable energy	92%	90%	90%

Base: total respondents with an opinion

UtilityPULSE is the only enterprise with multiple year customer trend data that appears on the List of Presenters and Submitters in the *Report of the Ontario Distribution Sector Review Panel.* With 14 years of data (15 now that the 2013 survey has been completed), we know that LDCs in Ontario have made excellent progress in the way(s) in which customers are cared for and served – despite the massive amounts of change that have taken place during that same timeframe.

We've often been asked: "What does it take to be seen as having great customer service?" Our answer continues to be "have genuine empathy for customers". If you and your fellow employees don't have it, then your organization will not achieve the highest levels of customer engagement and affinity as may be possible. This requires Guelph Hydro to ensure that it is truly embracing the strategic intent of being "customer centric" AND it requires the establishment of a corporate culture that supports both customer and employee engagement.



We recommend having meaningful two-way dialogue with employees (and others) to leverage the results from your 2013 customer satisfaction survey derived from speaking with 400 Guelph Hydro customers [April 6 - April 16, 2013]. After-all, people can't care about the things that they don't know about.

Sid Ridgley
Simul/UtilityPULSE
Email: sidridgley@utilitypulse.com or sridgley@simulcorp.com
June, 2013

Simul

UtilityPULSE

Good things happen when work places work. You'll receive both strategic and pragmatic guidance about how to improve Customer satisfaction & Employee engagement with leaders that lead and a front-line that is inspired. We provide: training, consulting, surveys, diagnostic tools and keynotes. The electric utility industry is a market segment that we specialize in. We've done work for the Ontario Electrical League, the Ontario Energy Network, and both large and small utilities. For fifteen years we have been talking to 1000's of utility customers in Ontario and across Canada and we have expertise that is beneficial to every utility.

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
Teambuilding	Customer Satisfaction and Loyalty Benchmarking Surveys	Customer Care
Organizational Culture Transformation	Organization Culture Surveys	Dealing with Difficult Customers

Benefit from our expertise in Customer Satisfaction, Leadership development, Strategy development or review, and Front-line & Top-line driven-change. We're experts in helping you assess and then transform your organization's culture to one where achieving goals while creating higher levels of customer satisfaction is important. Call us when creating an organization where more employees satisfy more customers more often, is important.

Your personal contact is:

Sid Ridgley, CSP, MBA

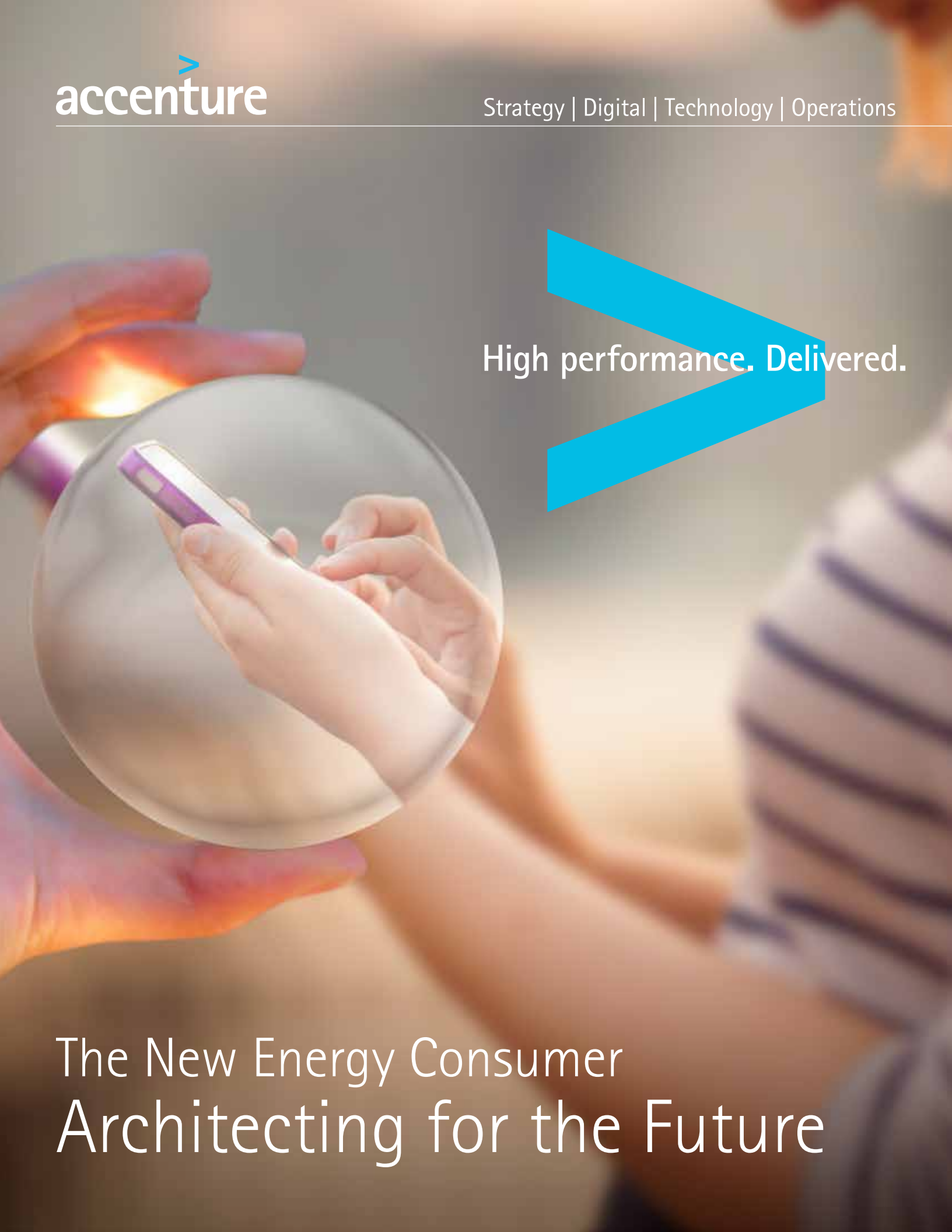
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APPENDIX 1-C: Accenture Report – "The New Energy Consumer: Architecting for the Future"

accenture

Strategy | Digital | Technology | Operations

High performance. Delivered.



The New Energy Consumer
Architecting for the Future

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Foreword

Around the world, the energy industry is facing unprecedented, fundamental change. Rapid advancements and widespread adoption of distributed generation, smart technologies and connected home products and services are just a few of the game changers affecting energy providers and consumers.

In some markets, distributed generation adoption has already tipped due to falling technology costs and increasing commodity prices. In others, the pace of adoption is increasing at exponential rates as consumers look to alternative energy solutions. At the same time, digital consumer technologies are rapidly breaking down barriers and creating new opportunities for utilities and nontraditional players.

As the fast-moving world becomes increasingly social and connected, more consumers are seeking added value, personal relevance and societal meaning—all of which extend beyond simply selling energy. In short, energy is increasingly becoming a foundation on which innovative value propositions and new products and services can be sold. "Business as usual" is giving way to "business unusual."

It is difficult to predict the path of the colliding, nascent markets for electric vehicle charging, the connected home and energy management. What is certain: the market is experiencing a tectonic shift with more changes to come. Utilities are at a crossroads, and the time to architect for the future is now. They can either remain service and commodity providers, or move beyond the commodity and become energy providers.

While technology may attract new players and value propositions, our New Energy Consumer research program has shown that, ultimately, it will be consumer preferences that change the energy landscape and not technology alone. Disruptive technology should be seen as an enabler—a piece of the puzzle—as energy providers look to address distinctive consumer needs.

To thrive in the next-generation energy ecosystem, energy providers need to move forward with increasing cadence to build new capabilities that enable them to scale quickly, seize new opportunities, tap into unconventional markets and architect a future-proof foundation of simplicity and flexibility. These new capabilities include:

- Addressing a spectrum of energy perspectives—driving simplified, agile customer solutions as consumer preferences run the gamut from "energy agnostic" to "energy literate."
- Enabling interconnection and short-cycle innovation—demonstrating innovation in energy diversity through multiproduct value, partnerships and brand extension.
- Delivering seamless experiences—leveraging digital technologies to enable a social-centric yet individualized customer experience for the "always-on" customer.
- Reinventing customer operations—rethinking and creatively addressing the preferences and behaviors of the current and future new energy consumer.

In addition to presenting a forward-looking view of the energy consumer, this report highlights some of the opportunities awaiting providers that proactively construct next-generation strategies. It looks at business models and approaches to effectively engage consumers, reduce costs, increase revenue and deliver on demand-management objectives.

At Accenture, we are continually developing an ecosystem of accelerators, strategies and capabilities to help energy providers increase agility and speed to market. No matter how the market unfolds, we remain committed to understanding how the energy consumer will shape the journey ahead and helping providers architect for the future.





Greg Guthridge
Executive sponsor
New Energy Consumer research program

2 Envisioning the Energy Marketplace

In a complex world of dynamic energy markets, disruptive technologies, industry convergence and the digital revolution, what will be the enduring and prevailing characteristics of the future energy consumer?





Around the world, utilities are facing fundamental changes that require new approaches to strategic and operational capabilities. The provision of energy has become only a small piece of a large, complex puzzle, and the traditional value chain is giving way to one with bidirectional flows of energy, information and revenue. Energy is now viewed as more than a commodity—it has become a product, a lifestyle and a service enabler.

Accenture's New Energy Consumer research program highlights providers' complex, and sometimes contradictory, priorities. The *New Energy Consumer Handbook* explores how energy providers can navigate the effects of critical trends in product innovation, consumer interaction paradigms and new partnerships, as well as the changing role of data in consumers' daily lives. Providers have growing opportunities to achieve targeted outcomes by personalizing energy for consumers. However, as nontraditional players enter the energy marketplace, providers will need to find new avenues to create value for themselves and for consumers.

Amid continued market change is the quickening pace of the digital consumer technology revolution—a profound force creating challenges and opportunities. The changes are accelerating the pace of market convergence, reducing barriers for new market entrants and driving down the cost of product innovation. Smart technologies, mobile applications and consumer data-driven products and services are evolving quickly. And while the pace of change and scale of disruption seem to continuously increase, the energy industry is not unique. As other industries experience the effects of the digital revolution and industry convergence, they too are looking to new industries, such as energy, to create new value propositions. These market confluences are not only disrupting the energy marketplace, but also increasing the need to change.

As energy marketplace boundaries continue to blur, traditional value chains and levers are at risk. More than ever, utilities are challenged not just to redefine their market and business models but also to execute with increasing tempo. Every energy provider is at a pivotal point in determining the pace at which it will transform its business and stake its claim in the digital-driven new energy ecosystem. To succeed, energy providers should start thinking of themselves as a new type of engineer: master architects to address the new energy consumer.

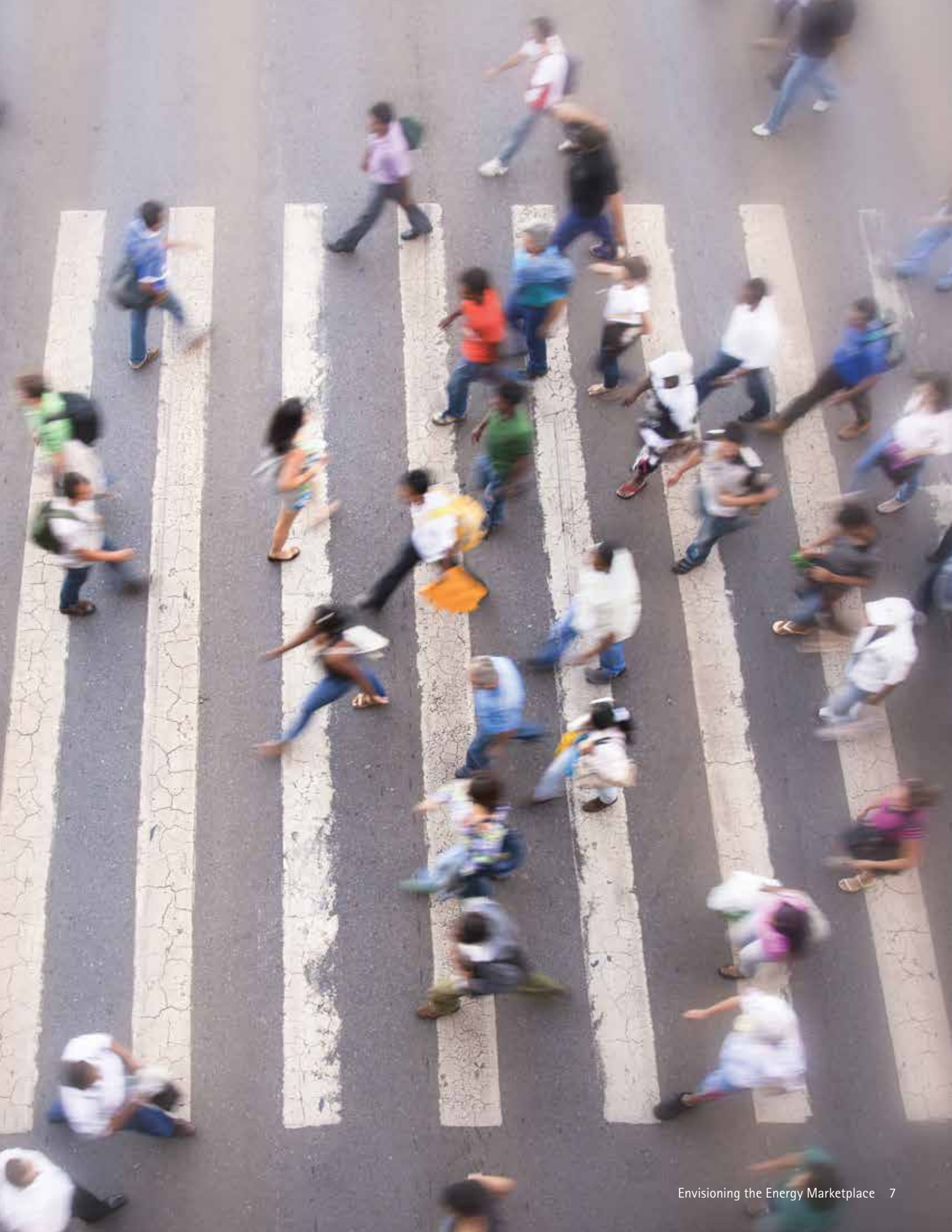
To develop a blueprint for the future, energy providers must embed the characteristics of the new energy consumer into their strategies. Based on key findings from five years of end-consumer research, Accenture has identified nine consumer characteristics that will shape how providers address and serve the consumer of the future.

The characteristics of the new energy consumer

1. **Energy Perspective—**addressing a spectrum of consumer mindsets, from energy literate to agnostic
2. **Omnipresent—**supporting seamless virtual interaction anytime, anywhere
3. **Individualized—**personalizing the energy experience to address unique needs and preferences
4. **Social Centric—**creating a gathering place for ideas, conversations and collaboration
5. **Prosumer—**buying and selling energy via a variety of business partners
6. **Tech Savvy—**providing set-and-forget technologies that deliver financial savings, convenience and individual control
7. **Interconnected—**developing bundled solutions that combine energy with other products and services for the home, business and automobile
8. **Pay It Forward—**offering a range of prepaid energy solutions to meet a variety of lifestyle needs
9. **Energy Diverse—**adopting a range of nontraditional energy options, including distributed generation, net metering and microgrids

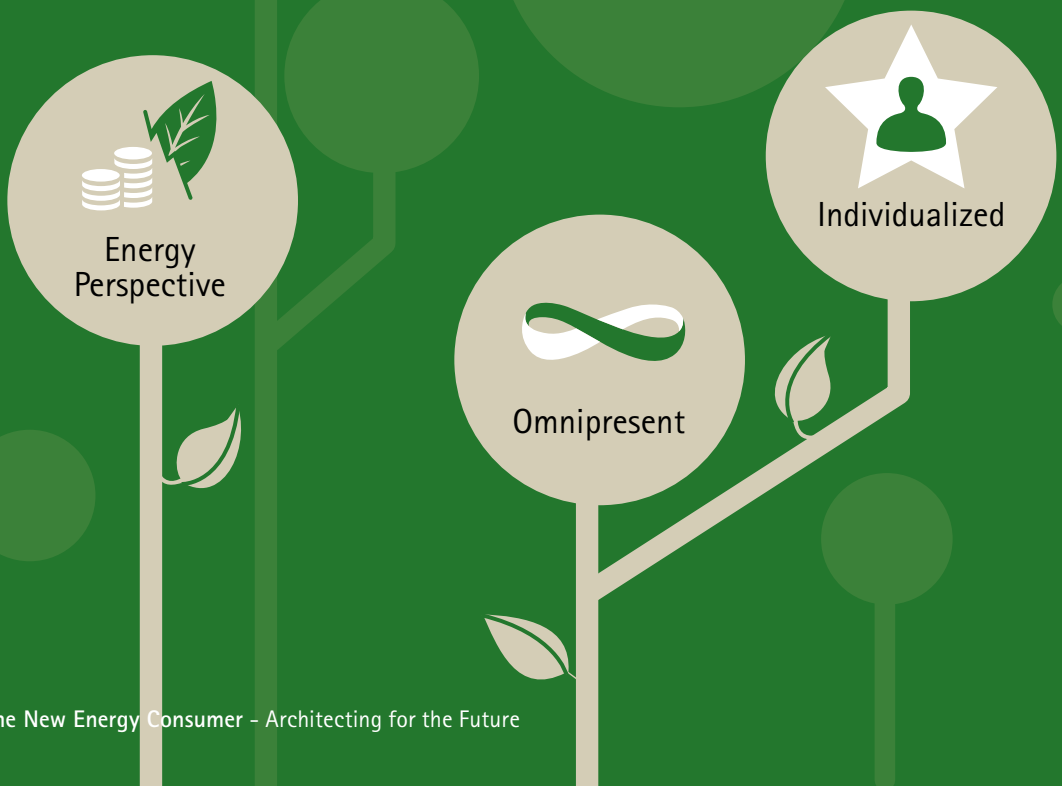
Providers can approach these characteristics not as individual traits but as a mosaic of the energy consumer of the future. While consumers will continue to evolve, these characteristics will remain at the core of the preferences and behaviors of next-generation consumers.

Successful energy providers will be those that understand how and why the new energy consumer requires much more than the traditional utility service model. They will also recognize that strategies for interaction, new products and services, or in-home technologies should be integrated. Incorporating all nine of the consumer characteristics into next-generation strategies will influence how a provider identifies and approaches new market opportunities, sources of value and, ultimately, determines its business model.



3 Defining the Prevailing Consumer Characteristics

The new energy consumers of the future will continue to evolve and exhibit a set of core attitudes, preferences and behaviors that coalesce to form a vision of the next generation.




Energy Diverse
Pay It Forward
Interconnected
Prosumer
Social Centric
Tech Savvy

3.1 Energy Perspective

New energy consumers exhibit a range of knowledge and needs—from those who are informed and active to those who view energy as a basic commodity.

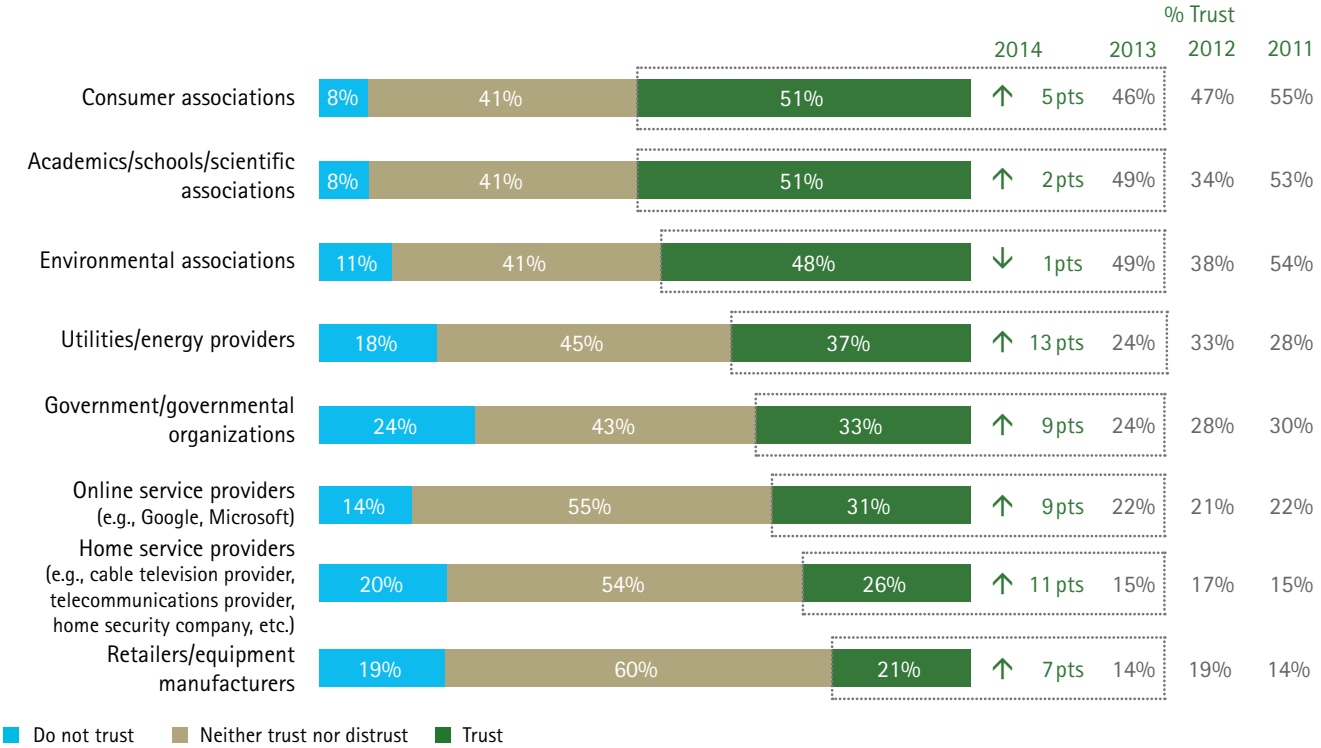
Today's energy consumers seem to want it all: competitive pricing, value for money, new products and services, and consistent service—there is no longer a one-size-fits-all approach to consumers. With the growing complexity of the energy marketplace, consumer values have also become more sophisticated and nuanced. To understand and address consumers' prioritization of energy preferences, energy providers should consider both ends of the spectrum. On one end is the growing minority; these consumers are knowledgeable and opinionated about the source, mix and environmental impact of energy options.

We define these consumers as energy literate. At the other end is a large but shrinking group that views energy as a commodity, something that is simply "there." We define consumers at this end of the spectrum as energy agnostic. All consumers fall somewhere on the spectrum between these two end points.

The energy literate

Vocal, energy-literate consumers represent a growing portion of consumers—one gravitating to more active engagement with their providers. These consumers have a perspective on energy that extends beyond price and they are increasingly aware of where their energy comes from. They are generally influenced by energy management programs, energy mix, new technology and distributed generation. In fact, according to our *New Energy Consumer Handbook*, many consumers (76 percent) say they are more likely to buy from a business certified "green" by an energy provider; some would even pay a premium for their products and services. As energy awareness and literacy increase, so do expectations of the energy provider. Over the next decade, more consumers will

Figure 1. Consumers' trust in utilities has increased, while trust of third parties is also gaining momentum.



Base: All respondents.
Source: Accenture New Energy Consumer research, 2011 - 2014, www.accenture.com.

become energy literate and will play a more dominant and pivotal role in the new energy ecosystem.

Accenture has tracked and observed the dynamics of consumer trust. Our research shows that energy providers maintain a marginal trust advantage over nontraditional market players—and that overall trust has reached a high (see Figure 1). While results vary from country to country, overall, in 2014, more than one-third of consumers reported trusting energy providers to inform them of actions they can take to optimize their usage—a 13-point increase and a significant rebound from a 9-point loss in 2013. Even with alternative providers (such as home service and online providers) also experiencing a marked increase in trust, energy providers have a window of opportunity to engage the energy literate.

Our research illustrates the diverse values of energy-literate consumers. We have often seen the themes of energy independence and environmental impact as key drivers for the next-generation consumer. In 2011, we found that many consumers perceive value in attributes unrelated to price, including a decrease in personal environmental impact. Further, our survey showed that nearly 70 percent of consumers are driven by personal environmental impact when it comes to adoption of an electricity management program.

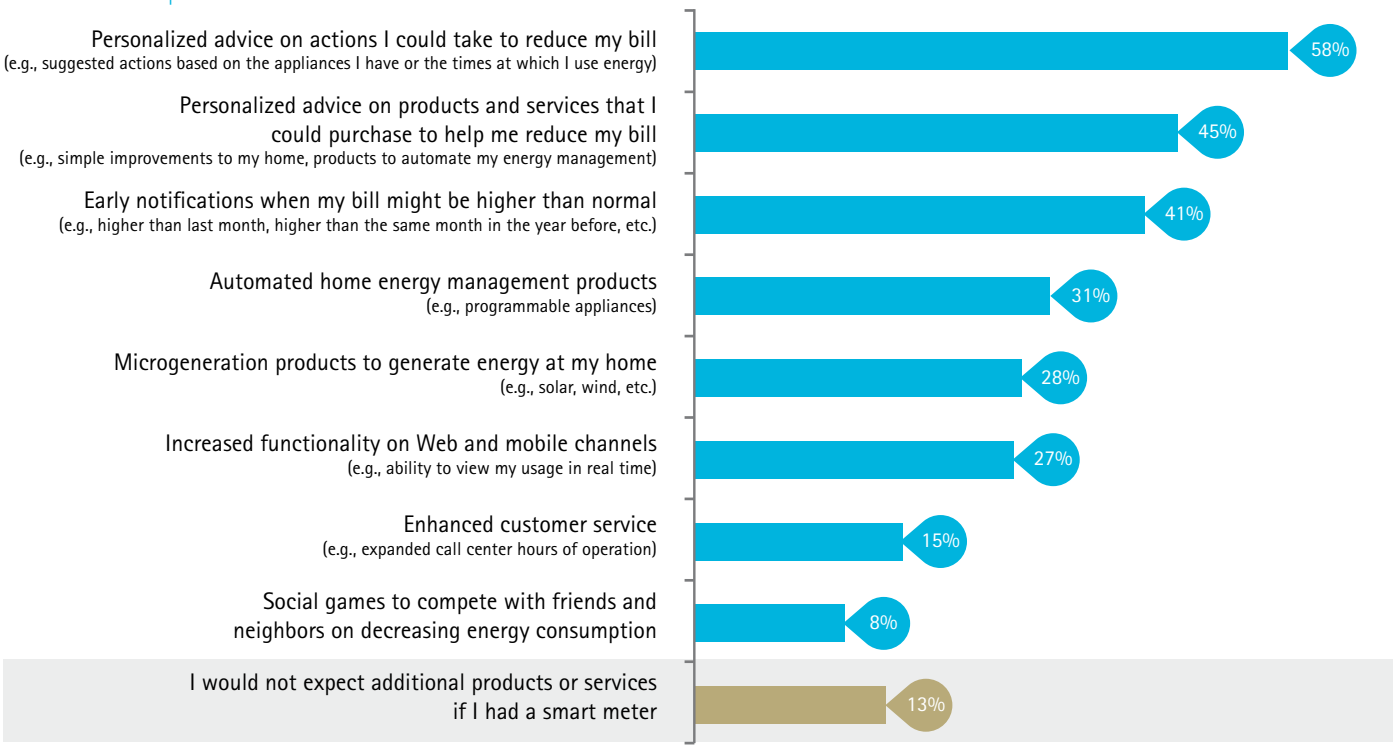
When looking into beyond-the-meter value, in one instance we found that only 38 percent of the decision to enroll in an electricity management program is based on impact to the electricity bill. The remaining 62 percent is based on other factors: how much control the energy provider has over the consumer's home usage, how much impact the consumer has on the environment and how much effort the consumer must make. While the relative importance of energy bill impact can fluctuate, these results underscore the importance of consumer education and beyond-the-bill engagement.

More recently, we found that energy independence, financial incentives and environmental impact are key motivators for consumers to purchase solar energy products. Given these preferences—and increasing energy literacy—consumers are drawn to technologies such as on-premise solar as their understanding of the value proposition increases.

As consumers become more energy literate, utilities need to continue tapping into new value levers and targeting specific consumers with appropriate value-added products and services. They will also need to address key questions around how to engage consumers as energy providers scale their smart meter programs. Insights gleaned through our research point to potentially effective approaches. For example, 93 percent of consumers reported that they would like to learn more about smart meter functionalities. In addition, they are keen to learn how a smart meter will affect their bill, how it will work and whether or not it will require additional installation and maintenance costs.

Once consumers have a smart meter, they expect more—including personalized advice to help reduce energy bills and early notifications when bills might be higher than normal (see Figure 2). Both point to the growing demand for energy information and education.

Figure 2. Consumers expect additional products and services along with a smart meter.



Base: All respondents.
Source: Delivering the New Energy Consumer Experience, Accenture, 2013.

To move from education to engagement, providers will need to build and nurture meaningful relationships in a manner that is proactive, individualized and personalized. That requires a foundation of consumer trust and the ability to support and cater to a diverse set of preferences and behaviors.

The energy agnostic

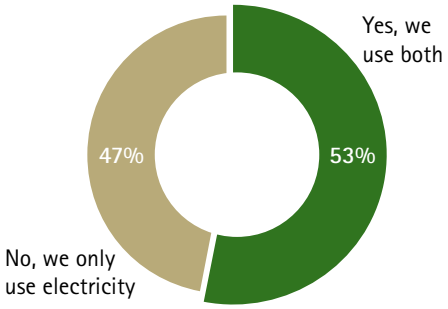
At the opposite end of the spectrum are the energy agnostics. With these consumers, price has maintained a dominant role. These consumers seek simple, basic options that will allow them to reduce their costs. As many as 53 percent of consumers would take simple actions to decrease their energy usage. They want predictable pricing that is easy to understand. Moreover, while this group is largely loyal to their utilities, they do not typically view them as "trusted advisors." Consequently, they tend to be skeptical of energy provider programs and offerings. In particular, Accenture believes they tend to be more sensitive to data privacy and less comfortable with technology than their more energy-literate counterparts.

As price signals remain a pivotal factor in driving adoption of energy-related programs and services, utilities will need to continue addressing the preferences of the energy agnostic. Price has continued to play an essential role in consumer decisions around commodities and new products and services, as well as energy efficiency. While a portion of consumers will always be motivated by price alone, it is important to note that many consumers can be motivated, in some manner, by a larger collection of value propositions beyond price.

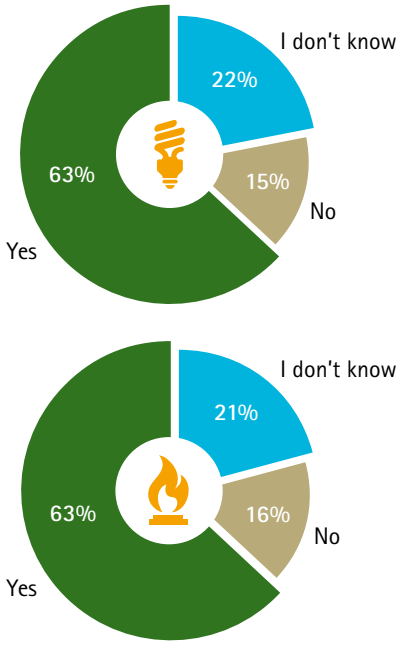
Around the world we see price sensitivity across many consumer types. In 2014, 71 percent of consumers expect their energy provider to do more to help reduce their energy bill. In addition, this year's research revealed significant room for improvement in terms of informing consumers about price changes. While the majority of consumers say they experienced a price increase over the past year (63 percent), more than half (54 percent) were not comfortable with the reasons given by their energy provider for the price increase. Surprisingly, one-quarter stated that they were not informed about the reasons for the increase (see Figure 3).

Figure 3. There is significant room for improvement to better inform consumers about price changes.

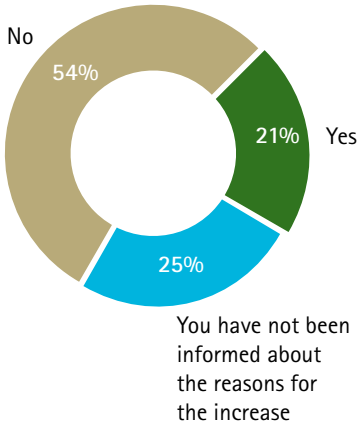
Does your household use both electricity and natural gas?



Has your energy provider increased its electricity/gas prices over the past year?



Were you comfortable with the reasons provided by your energy provider for such increase?



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Actionable Insights for the New Energy Consumer showed that when it comes to energy, consumers are also interested in discounted prices with fewer traditional service options. More than three-quarters of consumers have some level of interest in agreeing to limited customer service in exchange for a discount (see Figure 4).

For low-involvement purchases such as standard commodity-based products, it can be a challenge to differentiate in the eyes of consumers. More than ever, if given the option, consumers will switch providers if they do not find what they want. Accenture's research shows that price continues to be the driving motivator when considering switching providers. Following deregulation, incumbent retailers have lost consumers to competitors—and once consumers realize they have choice, they tend to become increasingly demanding of their providers. Consumers' rising price sensitivity, along with their ability to switch online with limited cost and effort, continues to fuel volatile retail energy markets.

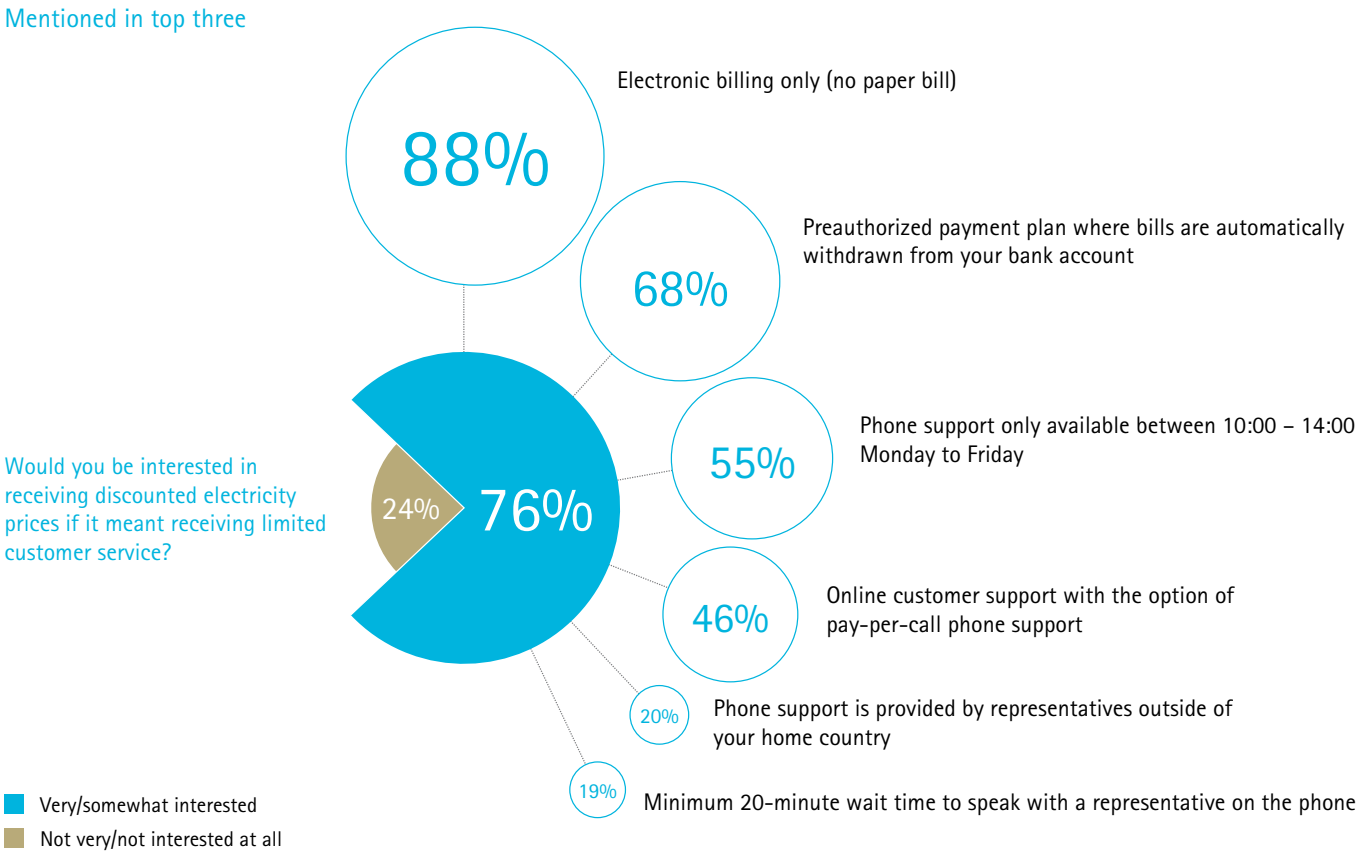
Simplifying for market agility

Whether an energy provider is competing on price in retail markets, managing operational costs in a regulated market or looking to provide a greater number of products and services, simplifying for market agility will remain a critical component in addressing a spectrum of consumer mindsets. And that means across markets, managing costs will continue to be a strategic imperative in the future.

To address energy agnostics with a standard energy experience, providers need to reduce operating costs and complexity so they can support customer service needs via simpler, more streamlined interactions. For the energy literates, simplifying for market agility will allow providers to quickly deploy dynamic interactions and cost-effectively build a platform for engaging and empowering consumers through greater transparency and control over energy usage. Developing this agile approach is an important shift—one that can be the foundation of a consumer-focused mindset throughout the organization. That, in turn, inevitably reduces barriers of entry for more innovative product and service offerings.

However, utilities are frequently encumbered by layers of complicated regulations and processes. Successful energy providers will be those that relentlessly focus on what Accenture calls the "economics of dissatisfaction"—a mindset of continuous improvement, automation and process excellence. Getting the basics right is essential and the foundation for enhanced consumer interaction and profitable growth.

Figure 4. The majority of consumers are interested in discount electricity with limited customer service options.



Base: All respondents.
Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

3.2 Omnipresent



For the next generation of consumers, digital is more than a channel—it has become a way of life with consumers. They expect anytime, anywhere interaction—and a seamless, easy and convenient experience.

The era of the traditional call center and paper bill experience is coming to an end. Innovative channels, devices and interaction types are forging a new landscape for energy providers. For their part, consumers welcome these changes, as evidenced by widespread adoption of virtual and self-service interactions. Consumers have become "omnipresent," the notion that they are always available and online and move between the Web, telephony, social media, and messaging. These trends are largely driven by the increasing capability of mobile devices, the maturity of the social Web and the ever-increasing "Internet of Things."

In wrestling with changing consumer technologies, experiences and expectations, many energy providers have already begun to place the consumer at the center of their organizations. At the same time, they have a case to create an entirely different interaction model, one that reflects the proliferation of devices and communication types. By becoming oriented around virtual interaction, energy providers can not only deliver on changing consumer preferences but also increase customer satisfaction and address a range of operational and efficiency goals—what Accenture calls "unlocking digital dividends."

With consumer centricity as a critical component of success, providing a seamless customer experience will be pivotal to extending the value proposition in the new energy marketplace. Today's energy consumers already expect a seamless experience across products, services and touch points.

The aggregation of digital and traditional channels to establish a seamless approach is what Accenture calls "omnipresence." In an era in which consumers increasingly use multiple channels and devices—even at the same time—energy providers will need to bring omnipresence to the forefront of aspirational and operational strategies.

In other words, it is not enough to maintain a strong presence in each channel. In the age of new products and services, true consumer centricity requires a fully connected, cohesive experience—one with seamless transitions across channels and touch points. Failure to provide such an experience will endanger strategies around energy efficiency, new products and services, and smart meter capabilities.

The cornerstone of omnipresence is enabling an interaction platform at scale. Thus, building and maintaining the technologies, processes and talent that provide cohesive integration across digital channels and other points of interaction are critical to success.

Disruptive technologies, soaring consumer expectations and proliferating channels have made the ever-evolving landscape of consumer interaction increasingly difficult to navigate. Many utilities are being challenged to constantly redefine channel strategies and capabilities. Rapid development and diversification of interaction options are presenting very real challenges around which channels to use, when to use them and how to seamlessly integrate interactions for a consistent, tailored customer experience.

To understand customer perceptions and values when it comes to traditional and digital interaction, Accenture has studied the opportunities and challenges around remaining relevant to consumers. Above all, our findings have shown that utilities cannot simply master the mechanics of interaction—they have to also address the changing expectations and preferences of consumers who are increasingly social, mobile and connected.

Next-generation virtual interaction

The changing nature of consumer interaction is creating a case for an entirely new interaction model. To begin the journey, the basis for reinventing consumer interaction should be a "dual-consumer relationship." This approach to customer interaction focuses on delivering excellence across a few channels—balancing effective self-service for basic transactions with higher-touch, more personal channels for high-value interactions.

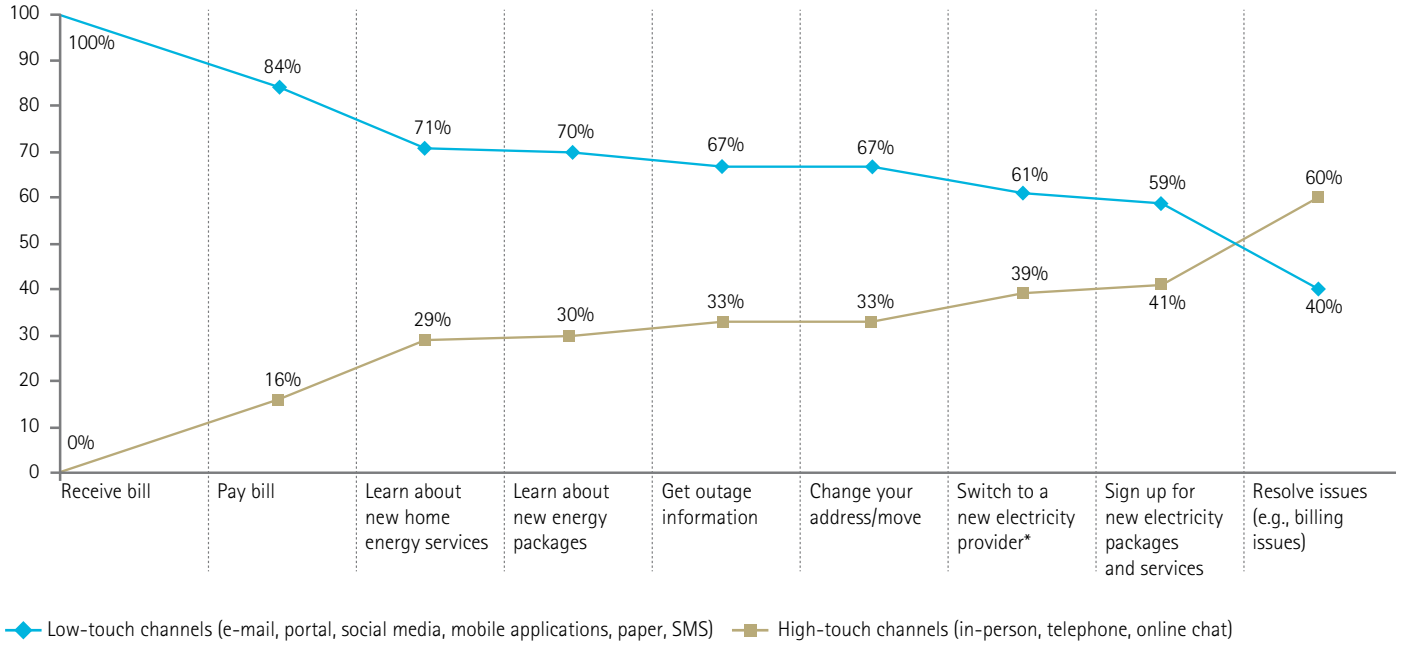
Our research shows that consumers' preferences and behaviors are fundamentally changing the way they want to interact with their energy providers. Over the past five years, our research has illustrated the following:

Low-touch interaction. Half of consumers prefer low-touch channels across seven of nine primary interaction types (see Figure 5).

Self-service. For 70 percent of interactions, consumers prefer a do-it-yourself approach.

Social engagement. 30 percent of consumers want to use social media for two-way interactions with their energy provider.

Figure 5. Consumers prefer low-touch channels for the majority of interactions.



*Only in competitive markets.
Base: All respondents.
Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

Our latest research leaves no doubt that consumers' preference for Web-enabled channels has increased since 2012 (see Figure 6).

Historically, many utilities have appraised self-service initiatives based primarily on cost-reduction goals. However, with the rise in consumers' desire to proactively manage their own transactions, self-service becomes much more than a tool for trimming cost to serve. Self-service now represents a key determinant of satisfaction and loyalty—and a primary enabler when developing and maintaining relationships.

Unlocking digital dividends

With digital channel users indicating greater satisfaction with their energy providers, our latest research affirms new interaction imperatives. We found that 67 percent of consumers who are digital channel users (via online portal/website and/or mobile application) are satisfied with their energy provider.

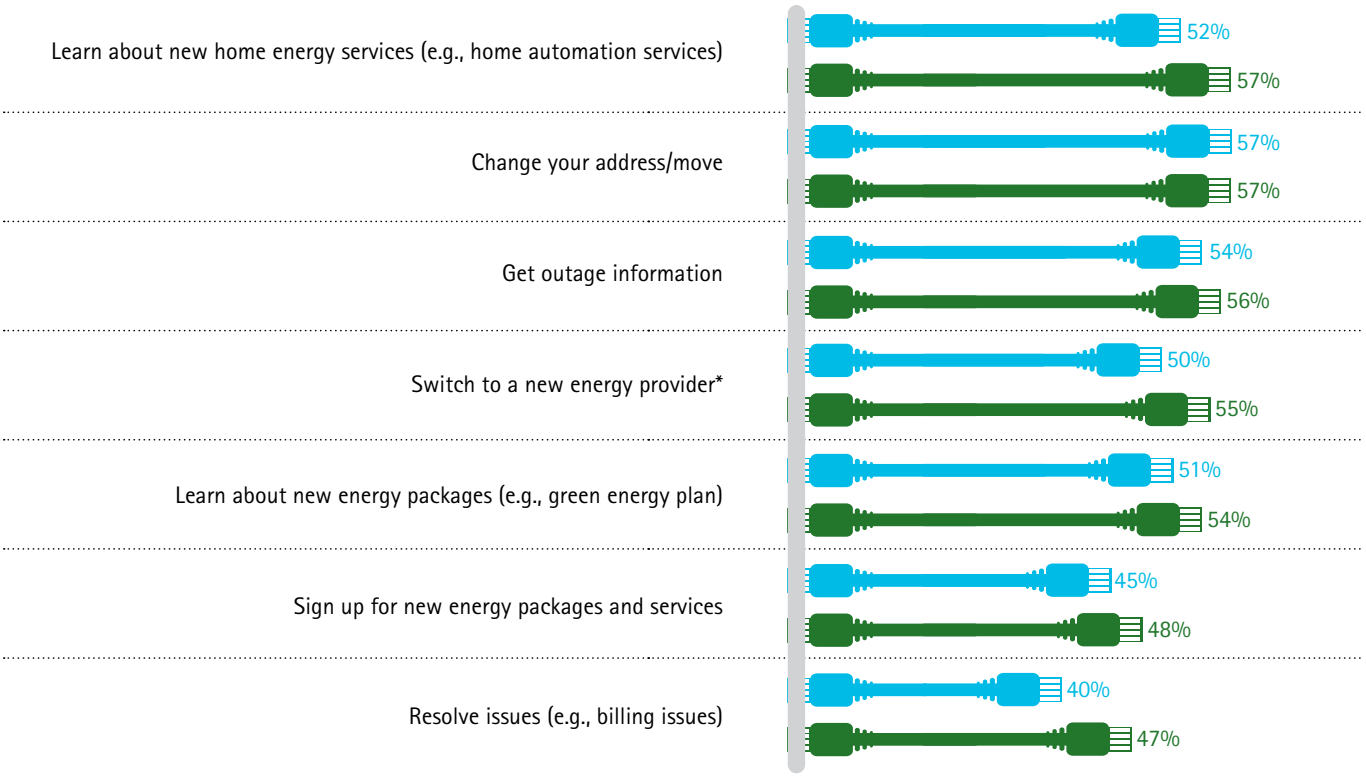
By contrast, 58 percent of consumers who use nondigital channels are satisfied with their energy provider.

Despite growing consumer interest and adoption, more than half of consumers have never tried to complete a majority of interactions with their energy provider via a virtual channel. In 2014, we identified significant opportunity to increase consumer adoption of these channels (see Figure 7).

Consumers demand the convenience of 24/7 service that matches their lifestyle and, therefore, expect consistent service delivered through virtual channels. Rapid adoption of social media and mobility, together with continued expansion of deeper usage insights and energy management solutions, is creating an expectation that energy providers will always be available. The desire for increased speed and convenience is driving consumer adoption of virtual channels and also represents a key value of today's younger generation.

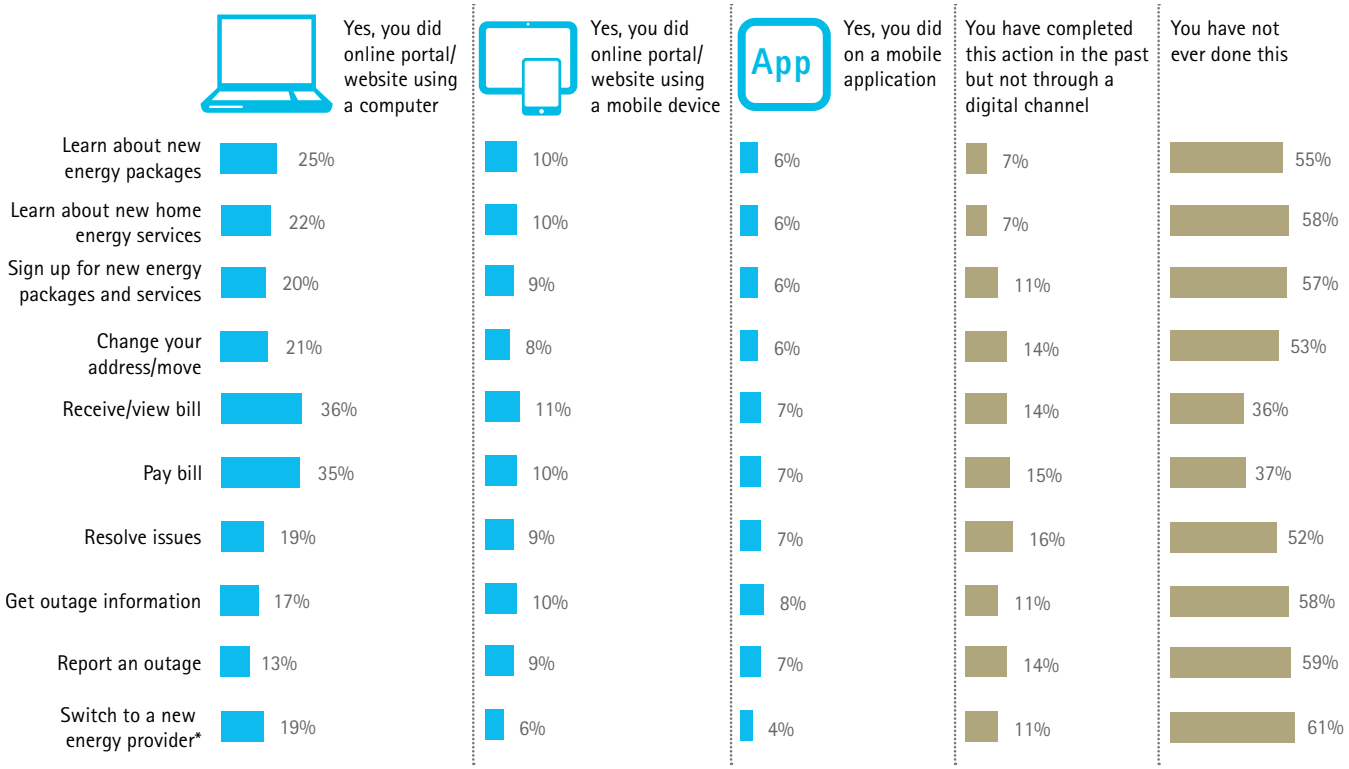
In terms of satisfaction, however, younger consumers are generally less satisfied with the digital experience offered by their energy provider. In this case, energy providers may not be effectively targeting even the basic needs of this audience. As energy consumers become increasingly connected through social and mobile channels, they will expect energy providers to be at least on par with the experience delivered by other service providers. In fact, nearly one-third of consumers, especially the younger generation, expect more from their energy provider's experience when compared to other service providers (see Figure 8).

Figure 6. Consumer interest for Web-enabled channels has increased.



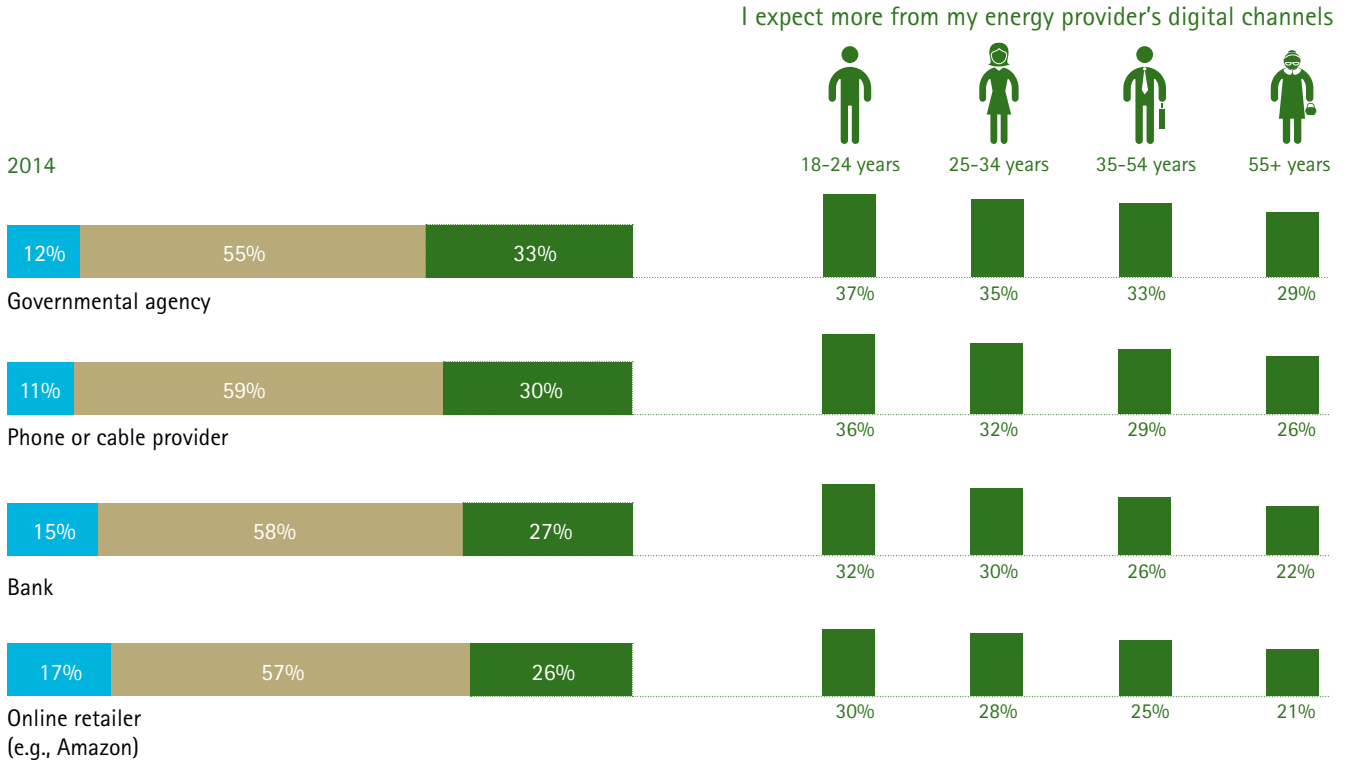
*Only in competitive markets.
Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Figure 7. There is a significant opportunity to increase consumer adoption of digital channels.



*Only in competitive markets.
Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Figure 8. Consumers' digital service expectations of energy providers are high when compared to other providers.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

With expectations high but overall adoption low, it is no surprise that our latest research found that only 45 percent of consumers have been able to successfully complete their request online every time. When diving deeper into the root cause of the issue, we recommend that energy providers address a wide range of dissatisfiers—from navigation and convenience to interface and functionality (see Figure 9).

To remain relevant in the "always-on" world, energy providers must transform their service models and embrace consumers' adoption behaviors and preferences.

The shift to digital

The future will be increasingly dependent on digital capabilities—and as the pace of change accelerates, there is a growing urgency to take action. Widespread consumer adoption of virtual channels presents utilities with the opportunity to dramatically shift customer interaction from traditional high-cost channels to optimized self-service capabilities.

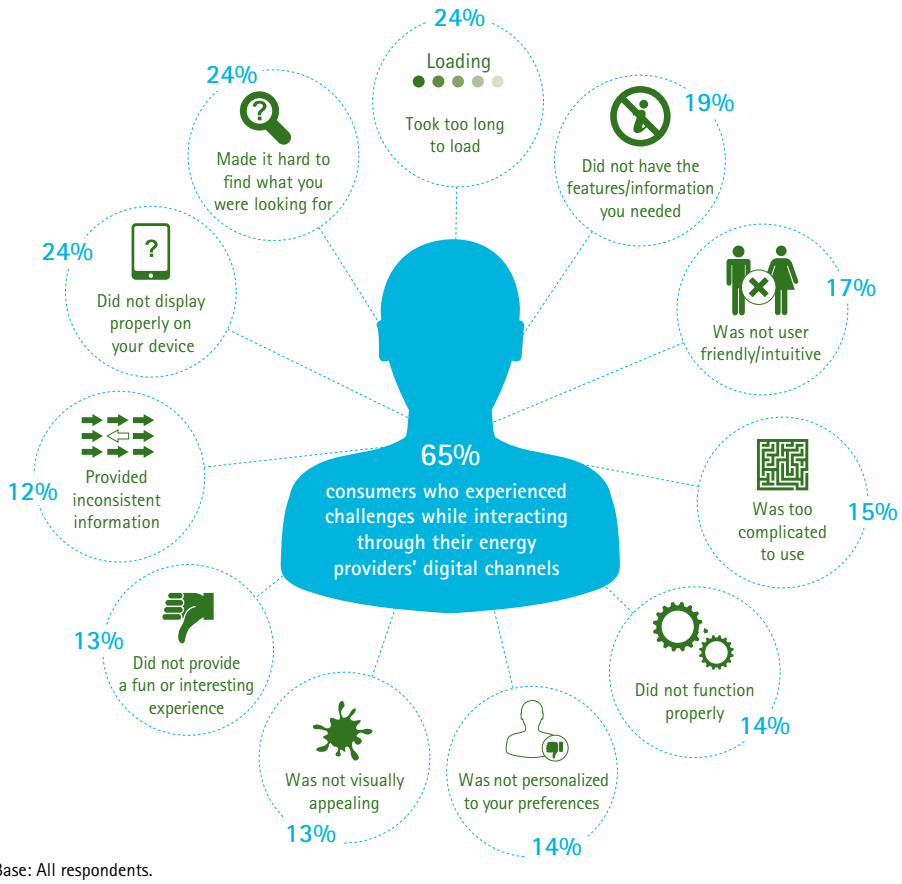
Furthermore, the digital shift provides multiple layers of opportunity as it will enable energy providers to unlock value within their current customer base. It also enables new products and services to increase revenue and meet energy-efficiency goals.

Despite challenges in adoption and usage of digital channels, the opportunity to fundamentally shift the interaction paradigm is now. It may not be easy, given that utilities are often held back by a fractured channel landscape and siloed analytics. With an expanding mix of channels spanning the organization, many energy providers are facing the challenge of breaking down these silos and creating new and integrated cross-organization governance and processes.

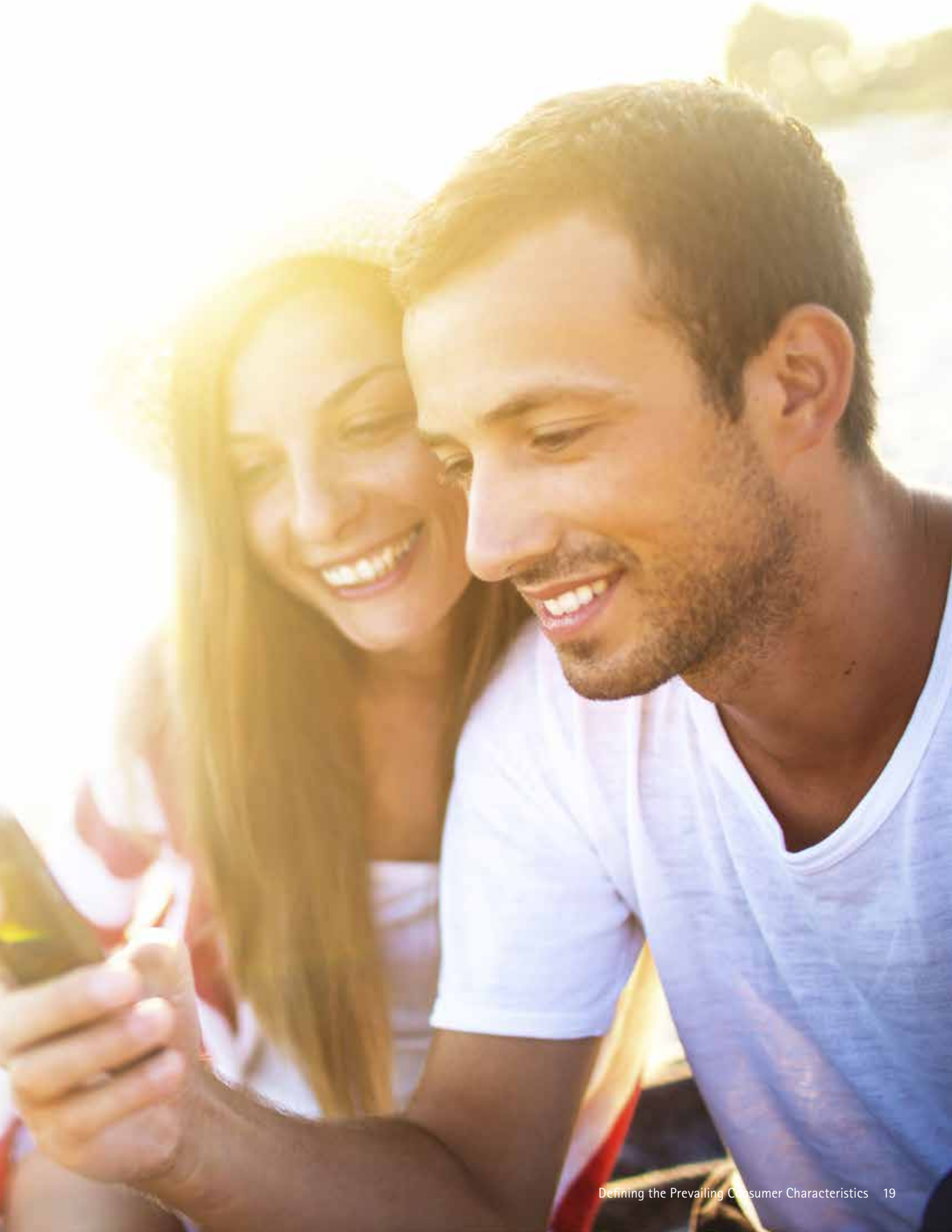
With the shift toward delivering on omnipresence, getting the basics right is the vital first step. A key consideration is reducing channel complexity which, in turn, will reduce organizational challenges in creating a seamless customer experience.

Successful, visionary energy providers will be those that understand that the digital revolution is an opportunity to completely reinvent their interaction model—from self-service through to high-value interactions.

Figure 9. There is a wide range of digital dissatisfiers that needs to be addressed.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.



3.3 Individualized

As energy providers embrace the diversity of energy consumers, they must still find ways to personalize the energy experience—defining "segments of one" and meeting consumers on their terms.

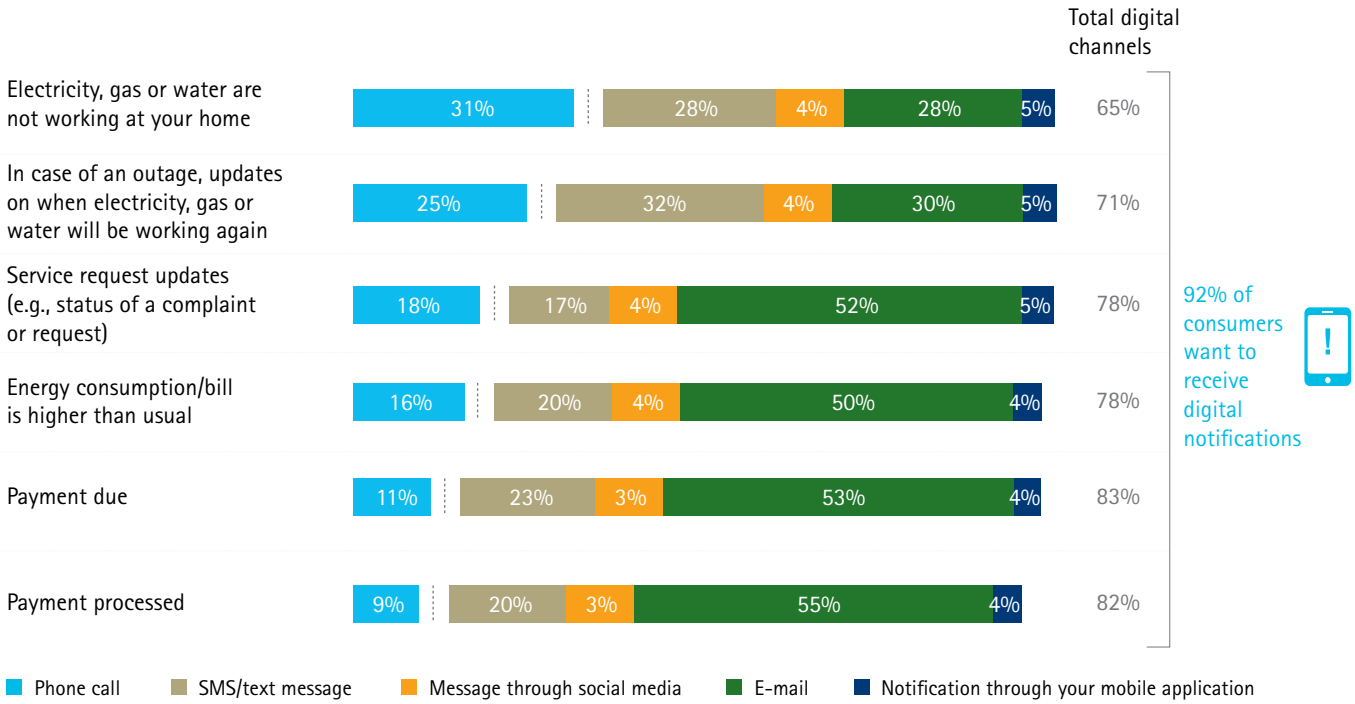
In the new energy ecosystem, options abound—from new customer interactions and new products and services to advanced home energy management and connected energy experiences. The composition of customer segments is not the only thing that has changed—there also has been a shift away from traditional segmentation toward a more dynamic, personalized approach. Energy providers are not alone; across industries, service providers are working quickly to offer an experience so specific as to be a "segment of one."

As energy becomes more top of mind for consumers, utilities have begun investing more into the consumer insight and technology necessary for more personalized experiences. The results? Providers are gaining more data and insights into consumer energy usage, needs and preferences. They are also tackling more advanced billing, analytics and customer relationship management (CRM) applications, which enable better targeting across marketing, sales and customer service.

And yet, a challenge remains in terms of maximizing the power of new analytics tools and technologies to provide an individualized energy experience across touch points, programs, products and services. To be successful, energy providers should address two critical, intertwined facets of individualization: choice and personalization.

As other industries strive for greater personalization, consumers are becoming accustomed to more choice in terms of solutions, services and methods of interaction. Generally, consumers like

Figure 10. Digitally enabled notifications have emerged as a significant means of communication.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

options, when they create a sense of ownership, control and satisfaction. And as utilities begin deploying more advanced interaction capabilities, offering variety and consumer control will likely play a significant role in successful adoption.

Recent storms and resulting mass outages have shown that virtual interaction is not only an option for routine communications; it is also a critical channel during and after disasters. When searching for the latest news, consumers increasingly turn to their mobile devices and social networks. In fact, our research found that digitally enabled notifications have emerged as a significant means of communication. Outages are one of the most sensitive times for energy consumers, and our results have shown that most (71 percent) would opt for digital notifications about service restoration (see Figure 10).

Choice has emerged as a key driver of consumer satisfaction and a powerful lever to create a personalized experience. With energy viewed as a commodity—and a traditional, call center–focused service model—providers have typically struggled to provide choice and execute more personalized approaches. As rates, channels, technologies, and products and services evolve; however, energy providers can enable new opportunities to provide consumers with a selection of options. That's true even in regulated energy markets.

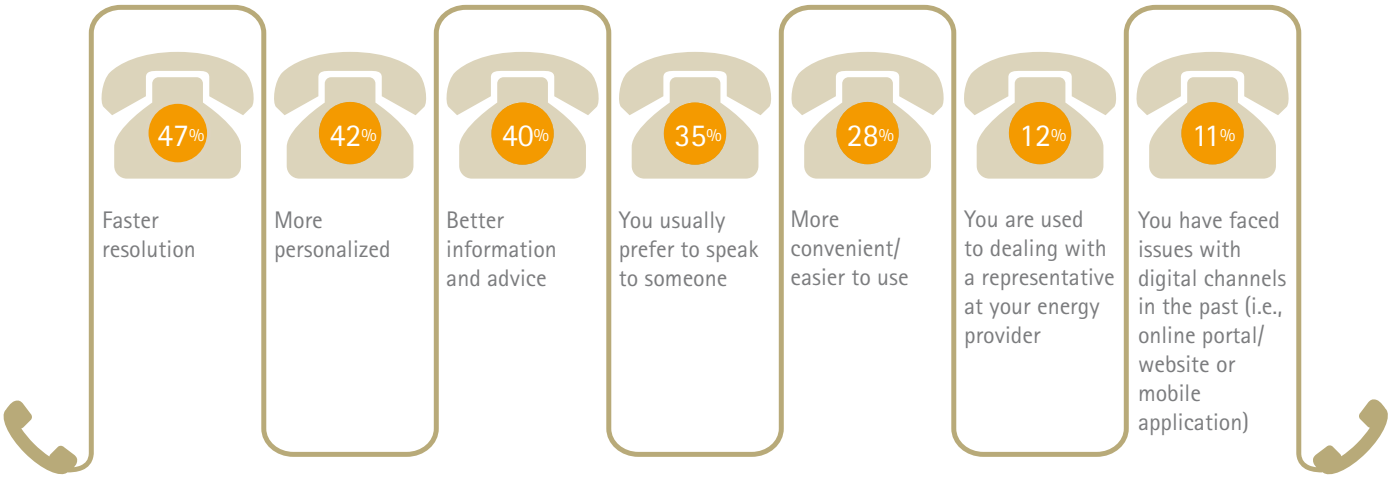
Our research into interaction preferences found that of the 20 percent of consumers who interacted with their energy provider multiple times a month in the past year, the contact was across all available customer touch points (over the phone, online, in person and social media). This result highlights the importance of understanding not only channel preference, but also a seamless experience as consumers move between channels. However, consumers with higher rates of interaction were nearly twice as likely to interact via traditional channels versus virtual channels, ultimately driving increased costs. Seeking to further understand traditional channel preferences, we found that faster resolution, better personalization and information/advice are key reasons for preferring to speak with a representative rather than using self-service channels (see Figure 11).

Building insight to individualize

Traditional customer segmentation groupings can be useful in driving overall policy and strategic decisioning. But in the future, differentiated sales and service capabilities will require a much more granular and dynamic view of the individual. Consequently, traditional views of segmentation are giving way to one that is far more diverse—and more focused on the individual consumer experience.

When it comes to driving adoption of virtual interaction and engaging consumers beyond the meter, it will be critical for energy providers to understand and act upon the nuances of customer choice and personalization. It will be almost impossible to achieve that level of understanding via vague segments and high-level personas. Successful energy providers will take segmentation to a new level—using analytics to dive deeper into specific consumers' values, preferences and behaviors.

Figure 11. Faster resolution, better personalization and information/advice are key reasons for preferring to speak with a representative than using digital channels.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

3.4 Social Centric

Social media is no longer just a forum for sharing ideas and information; it is now an extended ecosystem for marketing, selling and serving a variety of "socially" designed products and services.

Over the past five years, we have cataloged the changing nature of social media interaction. These interactions started with a highly vocal subset of consumers taking part in the online conversation. Over time, social media has become a tool for energy providers to offer up-to-the-minute information during critical periods—building trust while reducing call-center volume. Now social media has become a core marketing, sales and service tool—one ideally suited to influencing consumer behavior, increasing customer satisfaction and driving revenue in competitive markets.

Of course, energy providers cannot expect to control the information consumers receive regarding energy products and services. Through social media, consumers can collect and verify information from formal and social sources. In many regards, social media propagates the notion of the "irrational consumer"—with consumers increasingly receiving and acting on anonymous tips before verifying the source or validity.

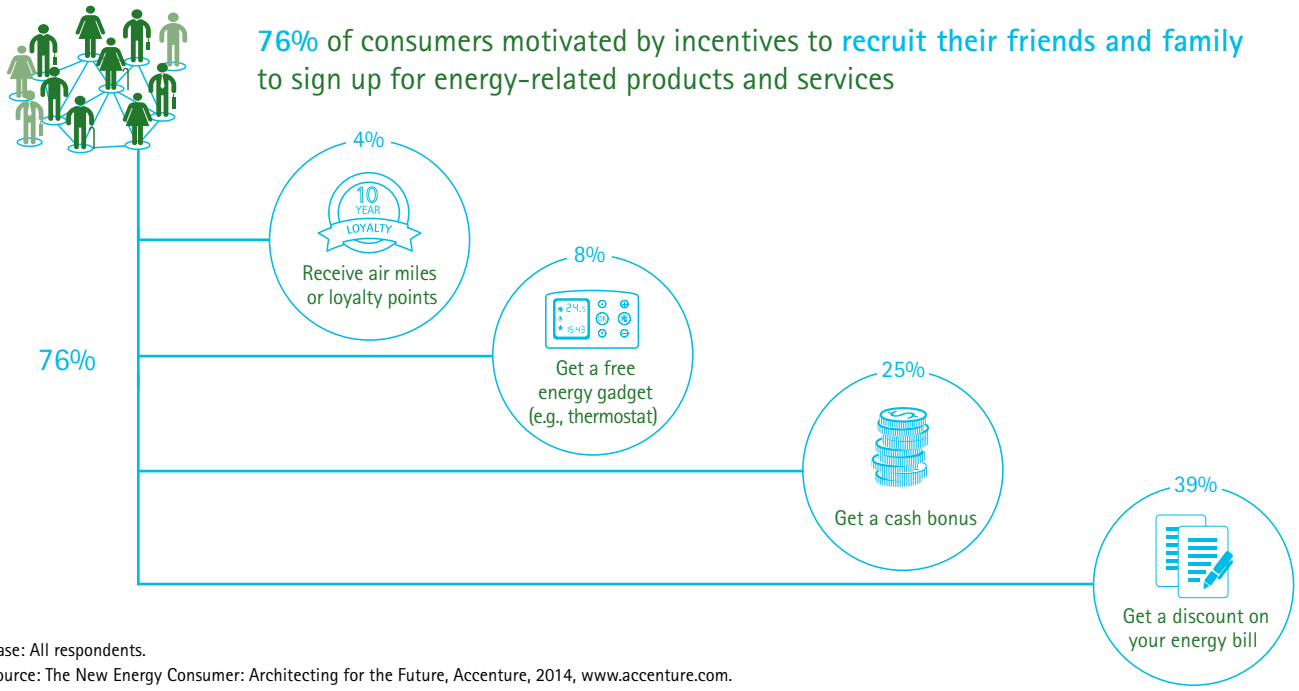
Even so, forward-looking energy providers will actively engage in the social energy dialogue. Successful providers will move beyond simply participating in social media to drive a social-centric approach across a variety of facets of the organization.

Most importantly, successful providers will address the next generation of social-centric consumers.

Utilities face a fundamental shift from company-to-consumer to consumer-to-consumer dialogue. Our research showed that monitoring social media is no longer enough. Nearly one-third of consumers are interested in following and interacting directly with their providers. When asked what would encourage them to engage providers via social media, half cited quick, convenient service as the most important factor.

Our latest research shows not only that most consumers are social, but also that a significant proportion would share personal

Figure 12. Three-quarters of consumers can be motivated to recruit their friends and family to sign up for energy-related products and services.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

information in exchange for lower bills. Further, half are comfortable sharing information about themselves and their families in order to get more personalized services—findings that point to a consumer preference toward a close, trusted relationship with their energy provider.

Accenture's research also found significant consumer interest in socially oriented, multilevel marketing initiatives. Three-quarters said they would be motivated by incentives to recruit family and friends to sign up for energy-related products and services (see Figure 12).

The anytime, anywhere generation

With seamless interaction across channels becoming the norm, Accenture's research has identified a number of characteristics that define the next generation of energy consumers. We found that younger consumers are more interested in convenience via a seamless digital experience, with nearly 50 percent of 18- to 34-year-olds open to using social media credentials to log in to their energy provider's portal. Also, we found that younger consumers are more willing to share their personal information and show a greater propensity for using social media for interaction and service; nearly half of 18- to 34-year-olds expressed interest in engaging with their energy providers through this channel. Younger consumers are also more likely to be encouraged to engage through social media—particularly if providers offer access to exclusive offers or fast, convenient service.

Similarly, *Actionable Insights for the New Energy Consumer* shows that social levers—including recommendations from friends and family or online reviews—play a larger role in increasing younger consumers' interest in energy-related products and services (see Figure 13).

Our multiyear findings suggest that younger consumers have increased demands around social centricity. Even as they expect more, they are also willing to provide more in exchange for convenience and value. The challenge for energy providers is developing cost-effective strategies for creating targeted experiences and engaging this next generation.

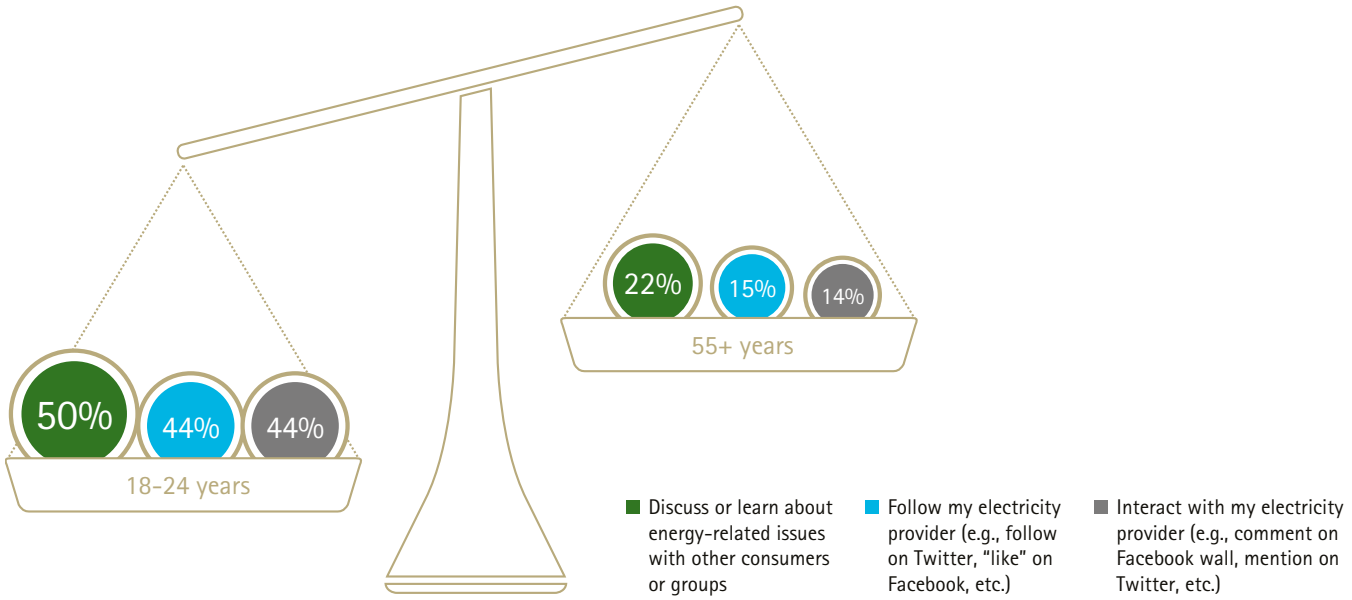
#engagingconsumers

Many utilities have made excellent progress in using social media as an effective tool for monitoring sentiment and broadcasting emergency information. However, long-term success will require open information, as trust is critical to creating social-centric value. When energy consumers share information, they expect something in return—whether tailored engagement, targeted offerings or simply an enriching experience.

Given the characteristics of the next generation, providers should make social media core to customer operations. They need to integrate social media with traditional channels as part of a holistic, omnipresence strategy and build disciplined processes and tools for managing it. Furthermore, utilities will need ways of continuously monitoring social media, responding to queries and scaling up during emergencies.

Successful energy providers will engage consumers with original and curated content. They will become more sophisticated in using different social channels for different uses and customer segments. In competitive markets, providers will embrace the marketing and brand-building opportunities of paid social advertising and other innovative brand-building approaches.

Figure 13. Younger consumers are more interested in learning about energy or engaging with their providers through social media.



Base: All respondents.
Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

3.5 Tech Savvy



Across demographics, more consumers are technology savvy—increasing the appeal of set-and-forget solutions that deliver financial savings, convenience and control.

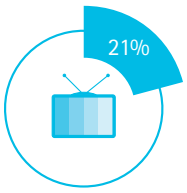
As smart meter rollouts and new capabilities gain momentum around the world, adoption of connected devices is also growing exponentially. More consumers are filling their homes with these devices and, in some cases, may not even realize it. Kitchen appliances, televisions, thermostats, lights, locks, phones and computers are all becoming "smarter"—with energy remaining the great connector. Virtually all consumers utilize some type of smart device in their daily lives.

Indeed, energy has become the underlying foundation for a range of new value propositions in an increasingly connected world. Amid these new value propositions, energy will continue to deliver against long-held consumer values and preferences, such as sustainability, convenience, control and cost savings. But while providers used to view tech-savvy consumers as a distinct segment with distinct values and behaviors, interconnected mobile and home solutions have made technology savviness an almost universal attribute.

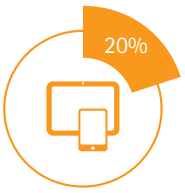
The ever-present nature of technology is enabling new value propositions around home and energy management solutions. Some consumers will leverage technology for convenience (making them ideal candidates for set-and-forget home automation services) while others will want to be more hands on (making them targets for an active energy management program with remote home energy management via Web portal or smartphone).

Figure 14. Despite low overall knowledge about connected home products and services, there is a significant opportunity for energy providers to offer such products and services to consumers.

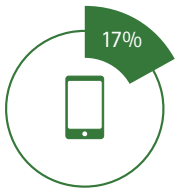
How knowledgeable do you feel you are about the following connected home-related products and services?



Connected media and entertainment such as audio, video, gaming and personal media



Connected communications and productivity such as voice, messaging and video telephony



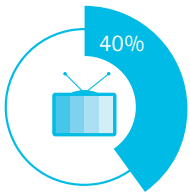
Monitoring and control such as energy management, proactive health care and home security



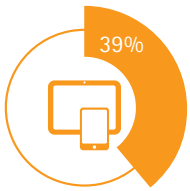
Connected home services such as installation, management, monitoring, financing, insurance and warranty

*Knowledgeable (You know a lot about it).

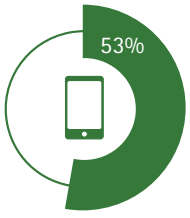
If your energy provider were to offer connected home products and services, how likely would you be to purchase or sign up for any of the following types of products and services with your energy provider?



Connected media and entertainment such as audio, video, gaming and personal media



Connected communications and productivity such as voice, messaging and video telephony



Monitoring and control such as energy management, proactive health care and home security



Connected home services such as installation, management, monitoring, financing, insurance and warranty

*Consumers who would be likely

Base: All respondents.

Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Energy providers can capitalize on consumer values of convenience and simplicity by offering products and programs that help automate home energy management.

The race for the connected home

Over the past five years, we have observed a race into the home—and the pace is quickening. Similar trends are being observed in other markets, such as telecommunications companies offering smart home devices and security companies offering energy management solutions. While no single provider currently owns the entire connected home value chain, industries are colliding as technologies converge.

Service providers are seeking to stake out territory by extending current product offerings and introducing additional interconnected devices and services. Recognizing potential synergies between their products and home automation, telecommunications and cable providers have entered the market with a mix of extended home services and offerings.

As technology continues to change consumer behavior and interaction, energy providers can seize new opportunities in the connected home.

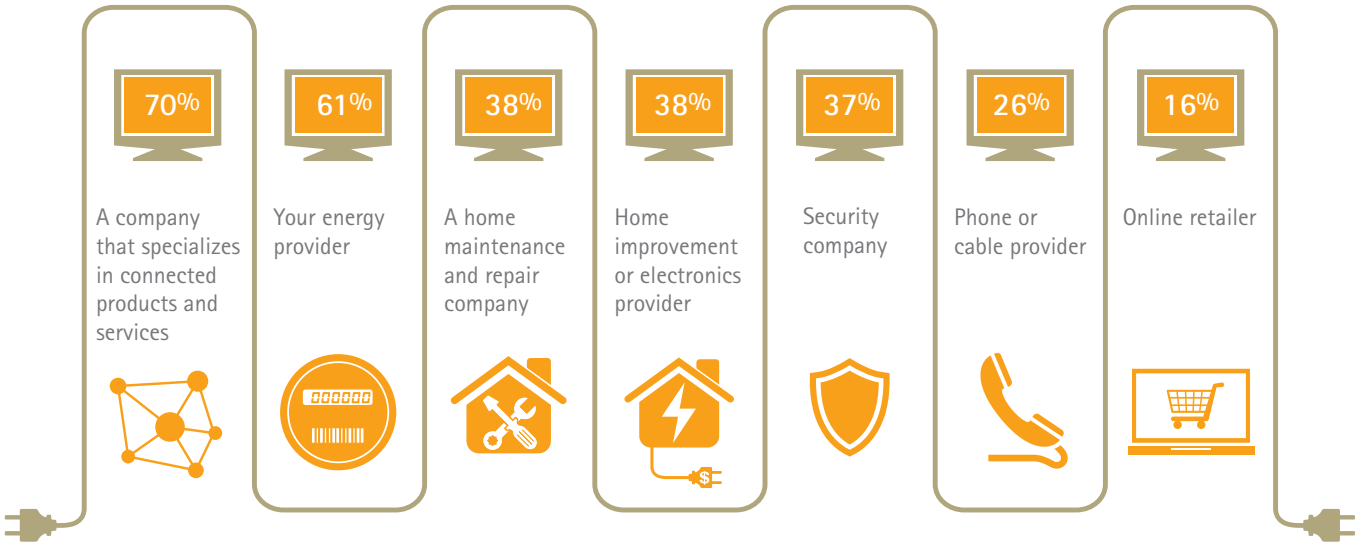
Accenture has observed a number of trends in consumer interest in energy management programs and smart in-home products and services. In our latest survey, we studied consumer interest in connected home technology beyond energy management. More specifically, we sought to gauge consumers' increasing interest in purchasing connected home products and services.

We define the connected home as a residence that allows consumers to link a number of devices through one centrally controlled system—enabling convenient, remote home management. Despite market entry by a variety of major manufacturers, retailers and home service providers, overall consumer knowledge about connected home products and services remains low. Across the categories of media and entertainment, communications and productivity, monitoring and control, and services, the majority of consumers expressed limited knowledge of connected home products and services (see Figure 14).

However, as the technology further matures, demand appears to be building. Though current adoption is less than 10 percent of households, more than half of consumers (57 percent) stated that they would be interested in purchasing or signing up for a connected home product or service within five years.

The opportunity for energy providers: they are among consumers' most preferred providers for monitoring and control products and services. These include energy management services and home security and even extend to proactive health monitoring. In fact, after specialized companies, energy providers are the most preferred, with 61 percent of consumers interested in receiving monitoring and control products and services from energy providers (see Figure 15).

Figure 15. Energy providers are, after specialized companies, the most preferred providers to get monitoring and control products and services from.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

As the connected home market matures and expands, consumers also indicate a strong preference for energy providers as a preferred option across a range of products and services. For example, a large proportion of consumers (40 percent) would be interested in connected media and entertainment from their energy provider.

In addition to placing energy providers among the most preferred for connected home products and services, consumers also highlight two major touch points during which they would be most interested in signing up for or purchasing new monitoring and control products and services. Of the top four most preferred moments of contact, energy providers have direct oversight and influence into two: 44 percent of consumers would be interested when moving to a new home and 41 percent would be interested when their bill is higher than usual.

With new connections, customer move in/move out and high-bill inquiries driving most customer contacts, energy providers already have a stake in the connected home market.

The connected, convenient home

Accenture has observed that technology adoption depends on much more than merely providing devices. Overwhelmingly, our research has shown that consumers do not want just an advisor; they want a provider that can help manage and simplify their lives. *Revealing the Values* demonstrated that nearly half of all consumers would be willing to exchange savings on their energy bill in order to have the convenience of using energy when it best suits their lifestyle.

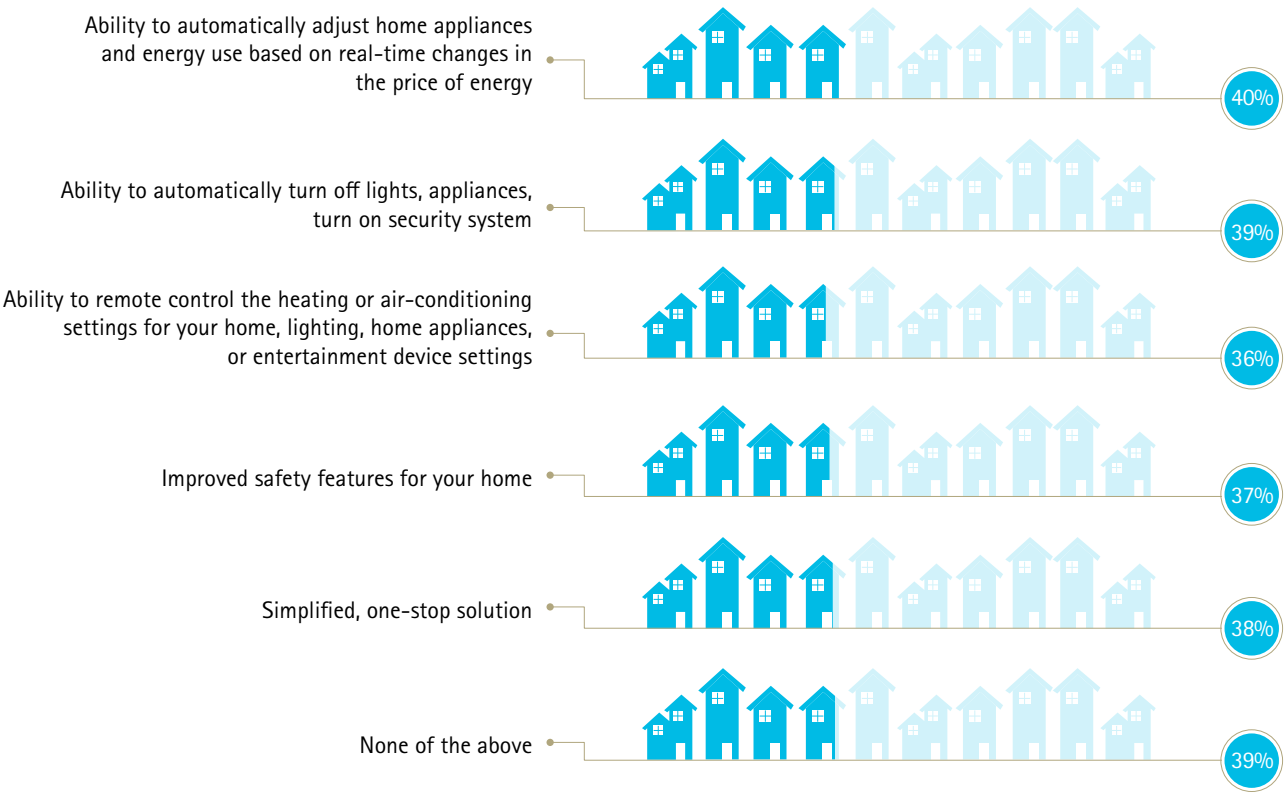
With many consumers perceiving active energy management participation as time consuming, they gravitate toward a mindset of set-and-forget convenience. Our 2012 study revealed that 60 percent of consumers would be interested in technology that can completely automate the management of their electricity.

In our latest round of research, we see this trend continuing as in-home technology matures to include the broader scope of the connected home. When considering connected monitoring and control solutions for their home, set-and-forget functionalities seem to appeal to consumers. A majority selected automated functionality as one of their top-two criteria for inclusion in a monitoring and control package (see Figure 16).

Early adopters may be willing to pay for the latest technology and invest in more expensive smart thermostats and energy-efficient upgrades. For adoption to reach a tipping point, providers must address the financial aspects. In our latest research, consumers reaffirmed that savings, convenience and set-and-forget features are key motivators for purchasing monitoring and control products and services (see Figure 17).

While consumers seek more convenience and automation in connected home products and services, their purchasing experience appears to provide just the opposite. These new in-home technologies are complicated, and consumer understanding is currently low. *Revealing the Values* showed that

Figure 16. When considering a connected home solution, set-and-forget functionalities seem to appeal to consumers.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

63 percent of consumers would prefer to purchase a set-and-forget program from a salesperson either in a store or at home.

As consumers gain greater access to and control over their energy usage, related products and services will make electricity and gas much more personal products. The findings of the program point to greater opportunity for energy providers to engage consumers around the convenience of set-and-forget services.

Making life easier

While energy providers are one of the most preferred providers, other service providers are aggressively moving into the market and gaining consumer mind and share. Energy providers have a window of opportunity to establish themselves as enablers by leveraging smart technology, existing consumer relationships and next-generation customer insight.

With capabilities centered on customer interaction, segmentation and smart meter usage data, energy providers can be uniquely positioned to support the connected home via a growing array of products and services.

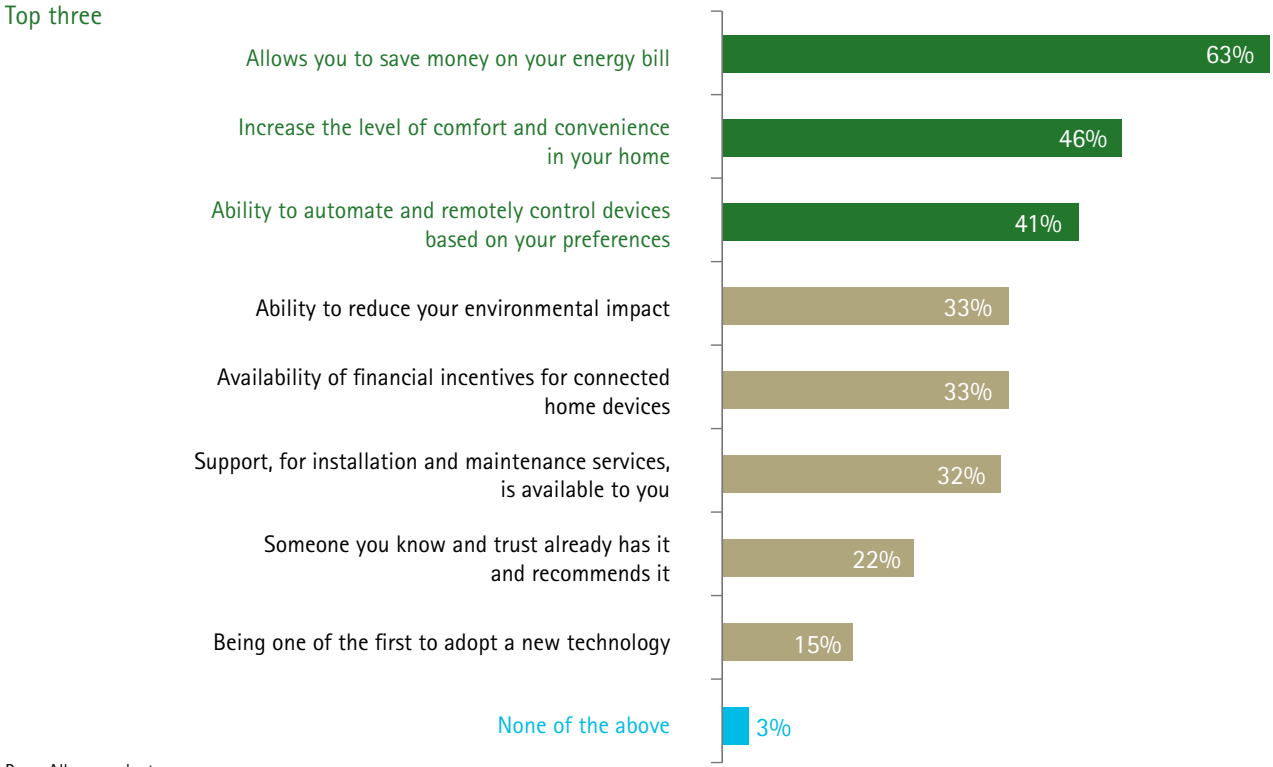
As connected devices become commonplace, energy providers should keep a keen eye on the marketplace to ensure they are not "outsmarted" by the technology. In fact, Accenture sees two strategies evolving: the first is acting as an advisor and offering an open platform to connect devices with the aim of helping consumers conserve energy and increasing customer satisfaction. The second is creating differentiated value propositions through connected devices (alone or with partners).

Providers offering set-and-forget value propositions are likely to see more success. Though some of these options are already emerging, the most successful value propositions will be those combining online and mobile visualization with set-and-forget energy and home management services.

To create a truly effortless energy experience, providers should consider technology solutions that leverage the convergence of social, mobile, analytics and cloud-based interaction methods. Just as important is promoting short-cycle innovation. Despite strong, creative progress in energy visualization and related areas, utilities still lag in offering simple, intuitive energy visualization and connected services across a broad spectrum of interaction types. Given the rapid pace of change in the connected home market, innovation and investment cycles need to be measured in months, not years.

Finally, providers should consider embedding tools into internal processes in order to provide consumers with immediate solutions and services. Identifying and resolving issues in real time helps in managing automated services, preempting negative customer experiences and preserving operating margins.

Figure 17. Savings, convenience and set-and-forget features are key motivators for consumers to purchase monitoring and control products and services.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

3.6 Prosumer

Active buying and selling of energy through various business partners is making relationships more complex—and deeper insight more important.

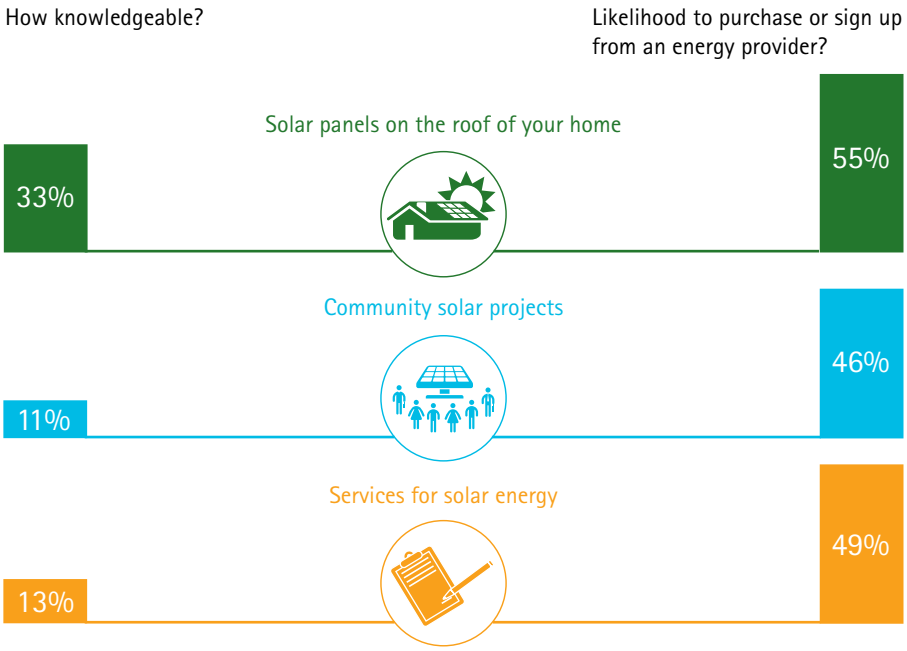
Historically, utilities have had one-way relationships with bill payers. Today, environmental awareness, rising energy costs and declining costs of micro-generation technology such as solar panels, small-scale wind turbines and energy storage are driving governments and citizens to increase interest in a variety of distributed energy sources.

With growing adoption of residential solar and other forms of distributed generation, providers are facing a new dynamic. Consumers are becoming "prosumers" who are creating their own energy and, in some cases, selling it back into the grid. Meanwhile, electric vehicles are enabling a new breed of roaming consumers who are using energy services in various places—further creating even more complex consumer relationships that emphasize greater personalization and connectedness.

As consumers move away from traditional one-way relationships, these forces are driving more complex, interactive relationships both with individuals and with certain communities of consumers. What will ultimately emerge are more active, multi-way relationships—necessitating an entirely different, and more complex, set of customer insights.

Accenture expects buyer-supplier convergence, especially in developing markets with recurring electricity shortages and in developed markets with high energy costs or financial incentives. In some markets, solar is emerging as one of the first technologies to become a cost-effective micro-generation solution for residential and commercial consumers. With the cost of producing solar panels falling exponentially in recent years, certain geographies have already reached grid parity.

Figure 18. Despite low overall knowledge about solar energy products and services, there is a significant opportunity for energy providers to offer such products and services to consumers.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

In our latest survey, we sought to understand consumer trends and behaviors around the prosumer—specifically, the increasing market for solar-related generation options. Overall knowledge of solar energy products and services is low, with only about one-third of customers knowledgeable about rooftop solar products and even fewer claiming knowledge of community solar projects or solar services (see Figure 18).

Although only a handful of respondents (9 percent) have solar products, 55 percent say they are considering purchasing or signing up in the next five years. Given rising interest and adoption, we continue to observe a variety of innovative companies entering the market. We also see a growing array of solar home solutions and community solar projects, as well as a host of supporting services—from automated support to financing instruments.

With an eye toward protecting margins, strengthening customer engagement or both, many energy providers have already entered the solar market. While new energy consumers' top choice may be specialized providers (74 percent), energy providers are a very close second at 71 percent. And despite aggressive entrance into the home energy market, home improvement and phone or cable companies rank much lower (see Figure 19).

Further reinforcing these trends are consumers' "moments of truth" when making decisions to sign up for solar products and services. With 46 percent saying they would engage in a discussion when their energy bill is higher than expected, energy providers already have a significant opportunity to leverage real-time analytics in order to connect with consumers in a more meaningful manner.

Nurturing multifaceted relationships

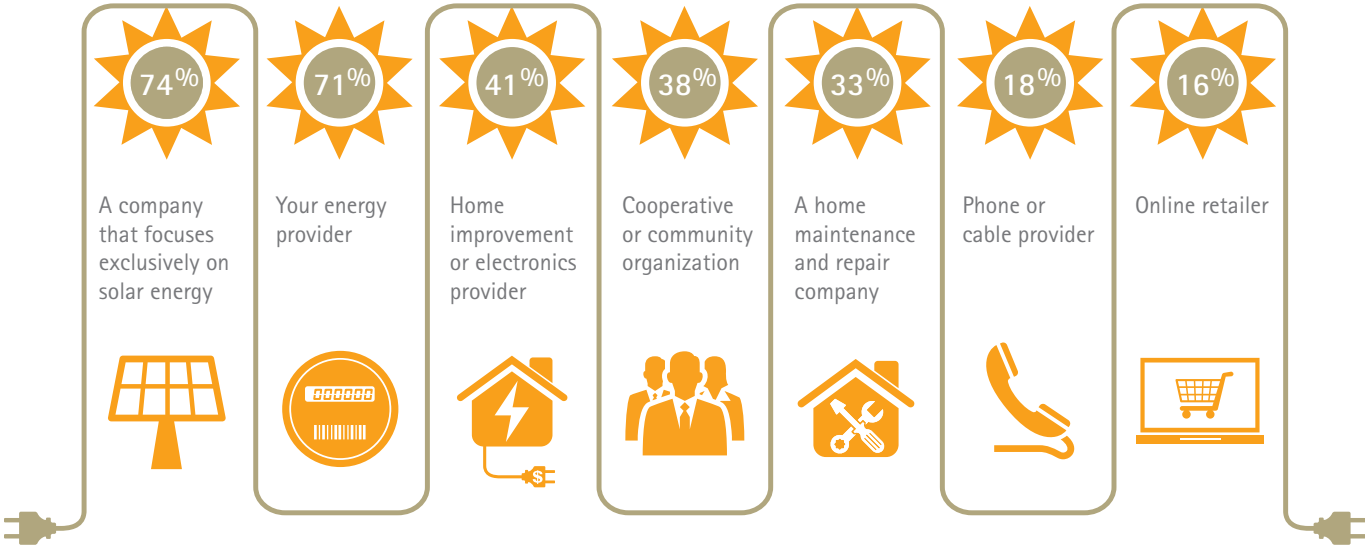
Distributed generation and technologies like rooftop solar are here to stay. Further fueling this trend are maturing disruptive technologies, such as fuel cells and onsite battery storage. Together with the continued deployment of smart grid infrastructure, energy generation is poised for further democratization.

Consequently, a growing number of utilities' consumers should be viewed as business partners—which introduces a host of complexities around billing, customer support and field maintenance. Prosumers represent a large component of the market upheaval many energy providers are already facing. Successful energy providers will be those currently building a prosumer-centric approach: a new platform for growth.

Insight-driven decisioning based on advanced analytics and data management will be at the core. Despite some progress, and even with smart meter usage data, energy providers currently lack the system and data integration needed for a true wealth of data. The crux of a platform approach is the ability to take an enterprise view of data, build in new data sources, enable retail-oriented data collection capabilities, and support outcome-based decision and experience modeling.

Above all, redefining consumer relationships further reinforces the absolute necessity of utilizing a variety of interaction and behavioral analytics.

Figure 19. Energy providers are the second most preferred provider of solar energy products and services, after specialized companies.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

3.7 Interconnected

With consumers seeking a convenient solution for home products and services, energy providers are finding ways to build interconnected offerings that address more aspects of consumers' daily lives.

Product and service bundles have become more popular among energy providers and consumers. Consumers welcome the convenience of receiving multiple services from a single provider. Consumers are interested in bundles that fit their lifestyle, whether it is around saving the planet, saving time or saving money—bundles have become part of the fabric of consumers' services.

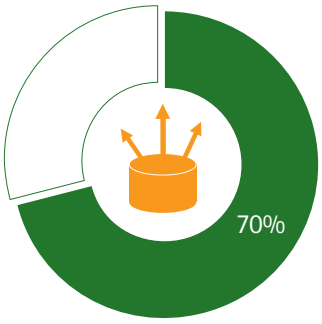
Extending beyond traditional commodity-based value propositions, energy bundles now include connected home services, technologies and plans, financing, insurance and other services—from security to cable and phone. Other possibilities include distributed generation products and support, as well as emerging options for in-home and remote-based electric vehicle charging.

At the same time, telecommunications and other providers have begun bundling energy with their core offerings. But with many consumers rating energy providers as a top choice for energy-related bundles, there are significant opportunities.

In 2012, half of consumers expressed interest in receiving additional energy- and nonenergy-related products and services from electricity providers. The following year, nearly half were planning to spend money on energy-related products and services over the next 12-month period. Consumers not planning to spend are held back primarily by cost or the belief that they will not see significant savings. Through financing plans and consumer education, providers can overcome these barriers—creating opportunities to influence consumer behavior and capture new revenue.

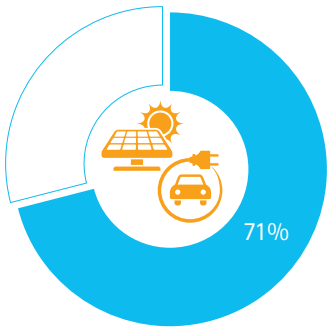
Figure 20. A large segment of consumers prefers a single provider for bundled solutions, and an energy provider for select services and solutions.

When considering monitoring and control products and services (energy management, proactive health care, and home security), would you prefer a single provider or multiple providers?



70% of consumers would prefer a bundled solution from a **single** provider

When considering making a purchase for solar products, monitoring and control solutions as well as electric vehicles, which provider would you select?



71% of respondents have selected **energy provider** among their top three preferred providers for solar products, monitoring and control solutions as well as electric vehicles

Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

More recently, overwhelmingly, consumers indicate interest in bundles from a single provider—especially when it comes to the connected home. A majority (70 percent) would prefer a single provider for a bundled solution of monitoring and control products and services, while just 30 percent would be interested in working with a mix of specialized providers (see Figure 20).

What is driving adoption of bundled energy packages? In our research, consumers cite potential savings, ease of use and convenience as the main factors (see Figure 21).

Consumers are open to receiving a variety of nonenergy-related services from electricity and gas providers. The key: offering the right mix of products and services.

Loyalty programs provide one example. In competitive markets, energy providers are identifying partners with such programs to attract and retain consumers. By bundling in loyalty programs, providers can create opportunities to reward certain behaviors—from self-service and electronic billing to energy conservation. We found that a majority of consumers (69 percent) indicated that they would be motivated to stay with their current provider if it offered a loyalty points program.

With clear customer demand for bundling from a single provider offering a diverse set of products and services, the central question becomes: Who will consumers turn to for support? The good news for energy providers is that consumers are likely to come to them. Our 2014 research showed us that nearly three-quarters of consumers would turn to their energy provider for solar products and monitoring and control solutions, as well electric vehicle services.

Energy providers are at an important inflection point in their relationship with consumers. With bundling as a key element of success, by proactively advancing operations today, providers can address the needs of the next-generation consumer.

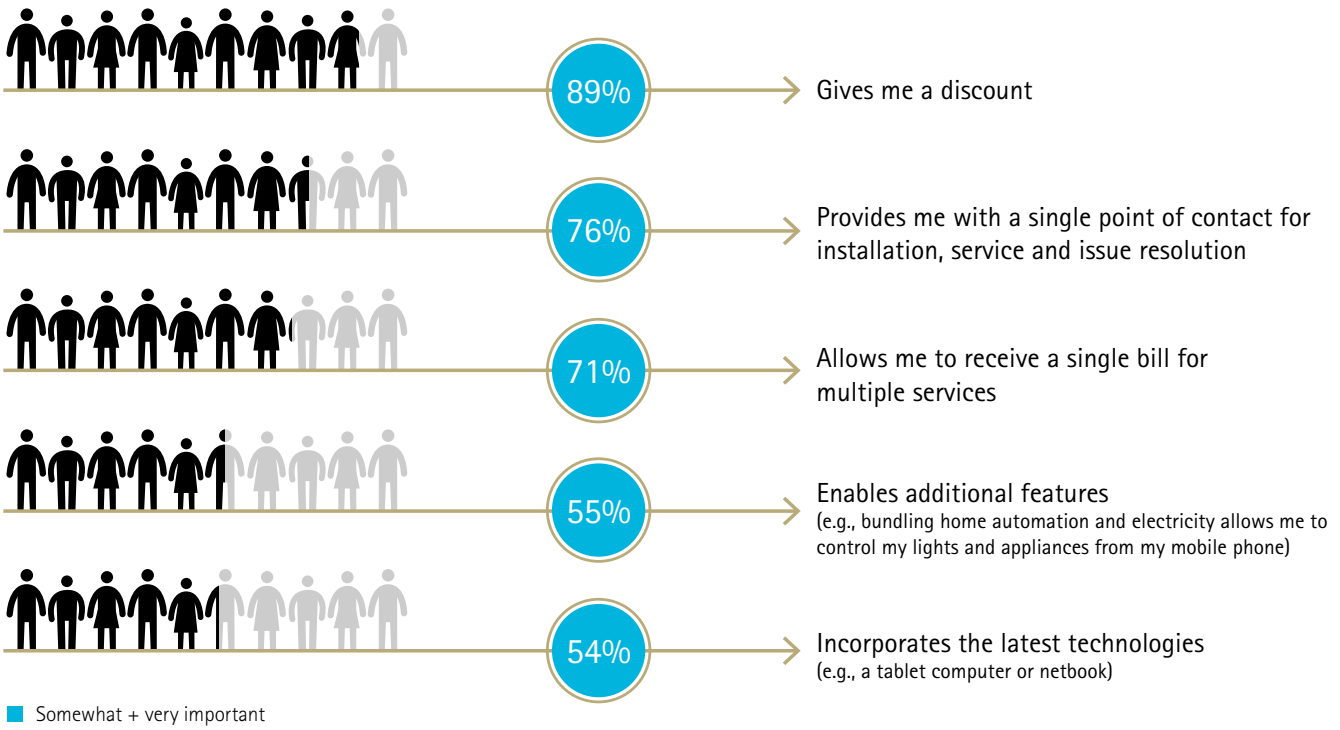
Becoming more interconnected

Deeper data analytics and other disruptive technologies are providing a gateway to the connected, mobile energy consumer—giving energy providers a unique vantage point for capturing additional consumer value. While smart meters can act as an accelerator in this environment, waiting for deployments may cause providers to miss out on the potential of extending the value proposition.

Becoming a multi-product and service organization is a significant shift for many utilities—one requiring new approaches to successfully manage a growing range of products and services. Bundling is not without challenges or risks. Experience in other industries suggests that when not managed properly, bundling can lead to lower margins that ultimately drain value.

Still, the potential benefits of bundling are compelling. Whether energy providers decide to move into additional products and services or establish strategic partnerships, the most successful will be those that provide open, accessible platforms. These platforms must have the capability for driving customer insights and managing events across diverse offerings.

Figure 21. Potential savings, ease of use and convenience are the main drivers for bundling.



Base: All respondents
Source: Actionable Insights for the New Energy Consumer, Accenture, 2012, www.accenture.com.

3.8 Pay It Forward

Creative, convenient payment channels are helping energy providers deliver energy solutions that meet a variety of lifestyle needs.

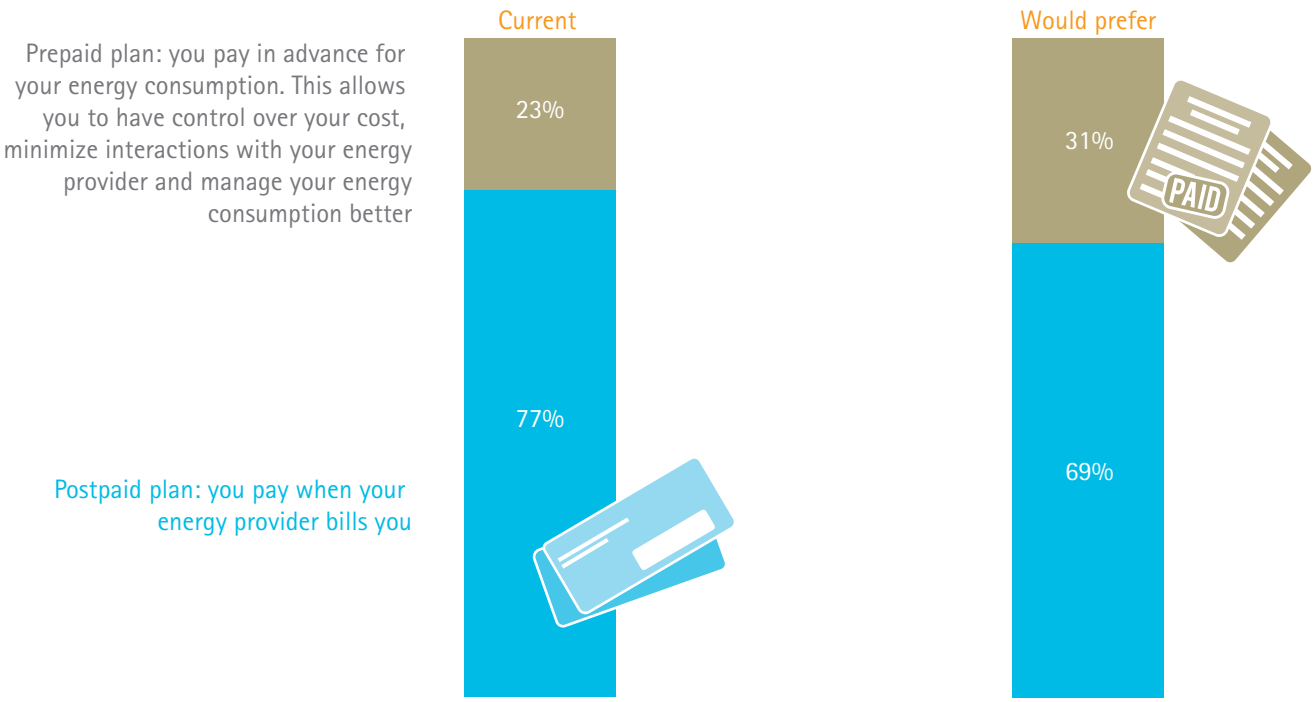
Smart metering, connected homes, electric vehicles and other technologies are giving consumers more control over their energy usage and increasing the prevalence of point-of-use billing. At the same time, convenience and cause-and-effect options are becoming more popular. In short, energy providers are at the cusp of a payment transformation where more consumers will select prepayment channels.

The payment changes bring benefits to consumers and providers. Technology change and rising energy rates have driven energy consumers to seek new means of reducing their energy bill. For energy providers, innovative payment options can help meet two goals: reducing bad debt and differentiating products and services. Not surprisingly, many energy providers have already begun implementing a variety of prepaid solutions, as well as other types of electronic payment options.

As a concept, prepayment or pay-ahead is widely understood and accepted by many consumers around the world. Traditionally, utilities have offered prepaid electric services in developing markets, to lower-income households and transient premises, enabling customers to enjoy greater flexibility and control over energy spending.

For the next-generation energy consumer, prepayment may become the rule rather than the exception. Changes from other service providers, such as telecommunications companies, have laid the groundwork for a pay-as-you-go mindset. For example, markets with mature smart meter deployments have already seen several smart-meter-related innovations, including new kinds of rates, prepaid bundle options, prepayment meters and a greater number of energy management technologies and services.

Figure 22. While postpaid plans are currently preferred, a segment of consumers would prefer prepaid plans.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

Even if an energy provider opts not to participate in this space, other players in the consumer market will more than likely facilitate point-of-use energy sales. In fact, nonenergy service providers are already partnering to create solutions that enable electric vehicle owners to securely and conveniently pay for charging fees through a mobile application.

Successful energy providers will be those that offer a variety of dynamic billing and payment options—thereby providing the most value to energy consumers.

In some geographies, there remains a stigma around prepaid meters as being focused on credit protection rather than a value-add service. However, there are also segments of consumers who recognize the benefits and would opt in to pay-as-you-go functionality for traditional energy services.

Nearly one-quarter of consumers (23 percent) indicated that they are currently enrolled in a prepaid plan (see Figure 22). Not surprisingly, lower-income consumers are overrepresented in this group. Interestingly, when asked if they would prefer prepaid over postpaid plans, over one-third of consumers (31 percent) preferred prepaid. Compared to older generations and lower-income respondents, younger energy consumers were the ones overrepresented in expressing interest in prepaid. We expect this trend to accelerate, as younger consumers look for solutions more tailored to their digital, interconnected lifestyles and more aligned with their desire to reduce environmental impact.

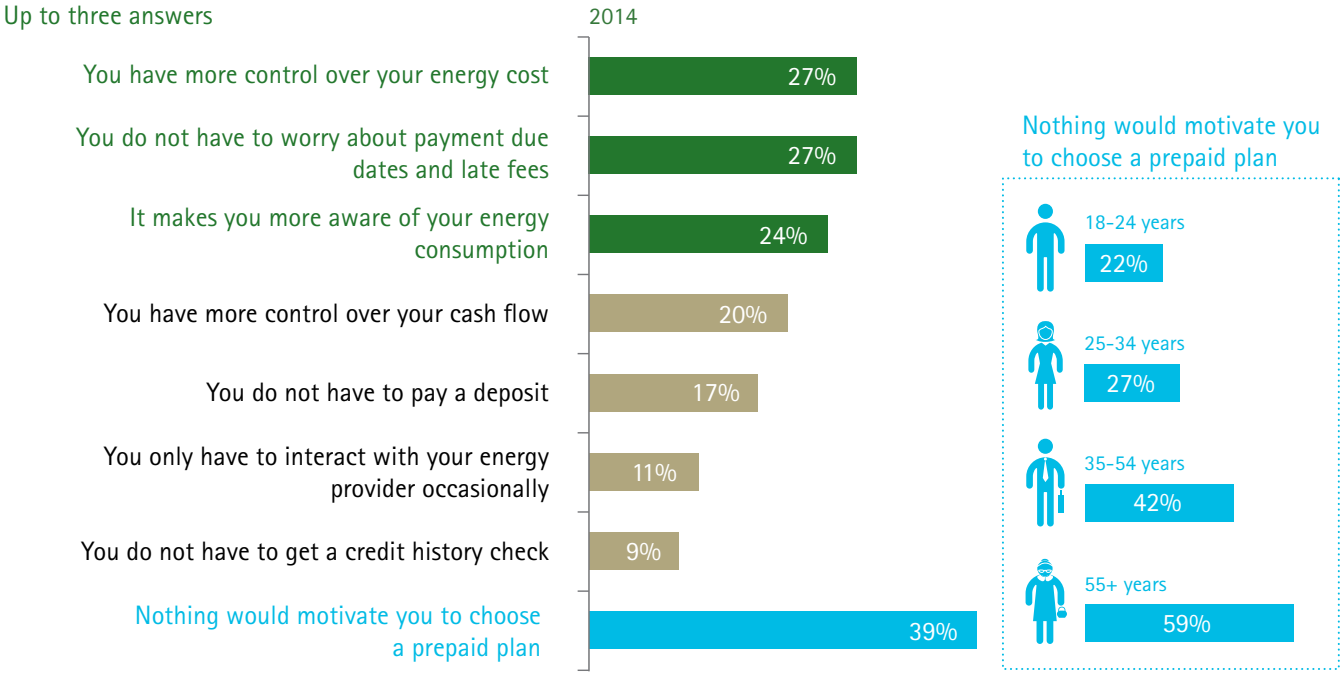
This is further reinforced by consumers' responses to what would motivate them to adopt a prepaid energy plan. Topping the list: energy cost management, payment convenience and consumption awareness (see Figure 23). Fewer younger consumers were among those stating that nothing would motivate them to choose a prepaid plan. As younger consumers mature, prepaid energy plans will become more common, potentially overtaking postpaid plans in the near future.

Paving the way for prepaid

Although infrastructure changes required for enabling prepayment to the mass market are significant, incremental costs to implement this capability are reduced following smart meter deployment. In offering prepaid, many energy providers have already realized benefits around bad-debt reductions and lower operating and generation costs.

To win in a prepaid world, providers will need to engage consumers around the potential benefits of prepayment—targeting this option to those most interested in having greater control over their energy costs.

Figure 23. Energy cost management, payment convenience and consumption awareness are the main motivators to choose a prepaid plan.



Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

3.9 Energy Diverse

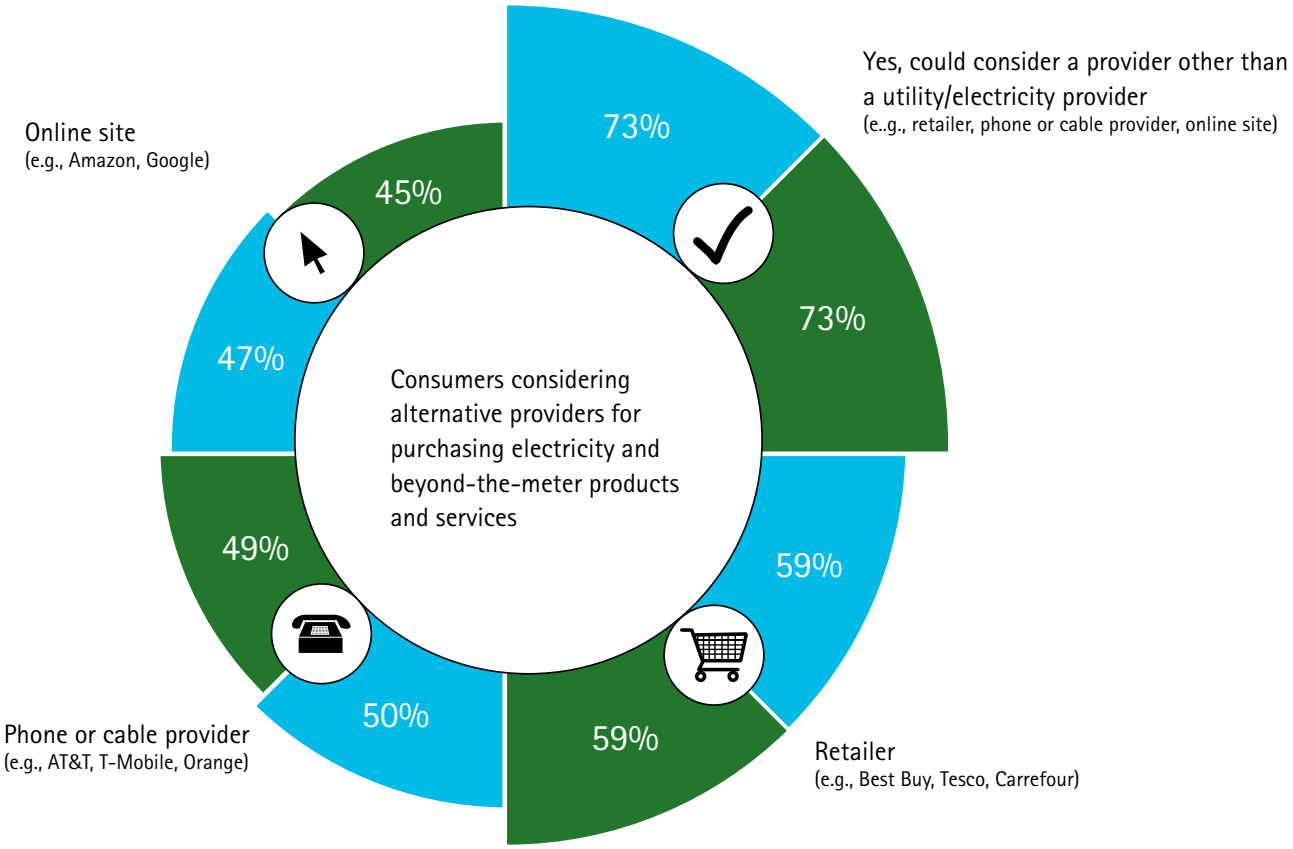


As consumer-provider relationships become more multifaceted, so too are the availability and range of products and services that energy providers can offer.

As energy becomes the foundation for a range of value-added products and services, the traditional energy provider faces both opportunities and challenges. However, this is not unique to energy providers. Our research has demonstrated that consumers remain open to receiving and acquiring various electricity-related products and services from new market players. 73 percent of consumers indicated they would consider purchasing electricity or energy-efficient products and services from alternative providers (see Figure 24).

Further, many beyond-the-meter competitors currently operate with a high degree of consumer centricity. Telecommunications companies and product retailers, for example, have long placed the consumer at the center of their businesses. Even if an energy provider opts out of the beyond-the-meter market, it will still face changing consumer preferences and behaviors driven by energy diversity—and the continued upheaval of the traditional market model.

Figure 24. Consumers continue to show significant interest in alternative providers.



Note that local examples of retailers, phone or cable providers were provided in each country
Base: All respondents
*2013 scope = 2011 + Norway, Poland, and Turkey
Source: Delivering the New Energy Consumer Experience, Accenture, 2013.

We found that interest in in-home and other disruptive energy technologies and services is on the rise—perhaps attracting other product and service providers to the new energy marketplace. Compared to observations in 2012, our 2014 research revealed an increase in consumer interest in signing up for a wide range of products and services. Of particular interest are energy-efficient home improvements, home energy audits, home energy devices and bundled energy sources (see Figure 25).

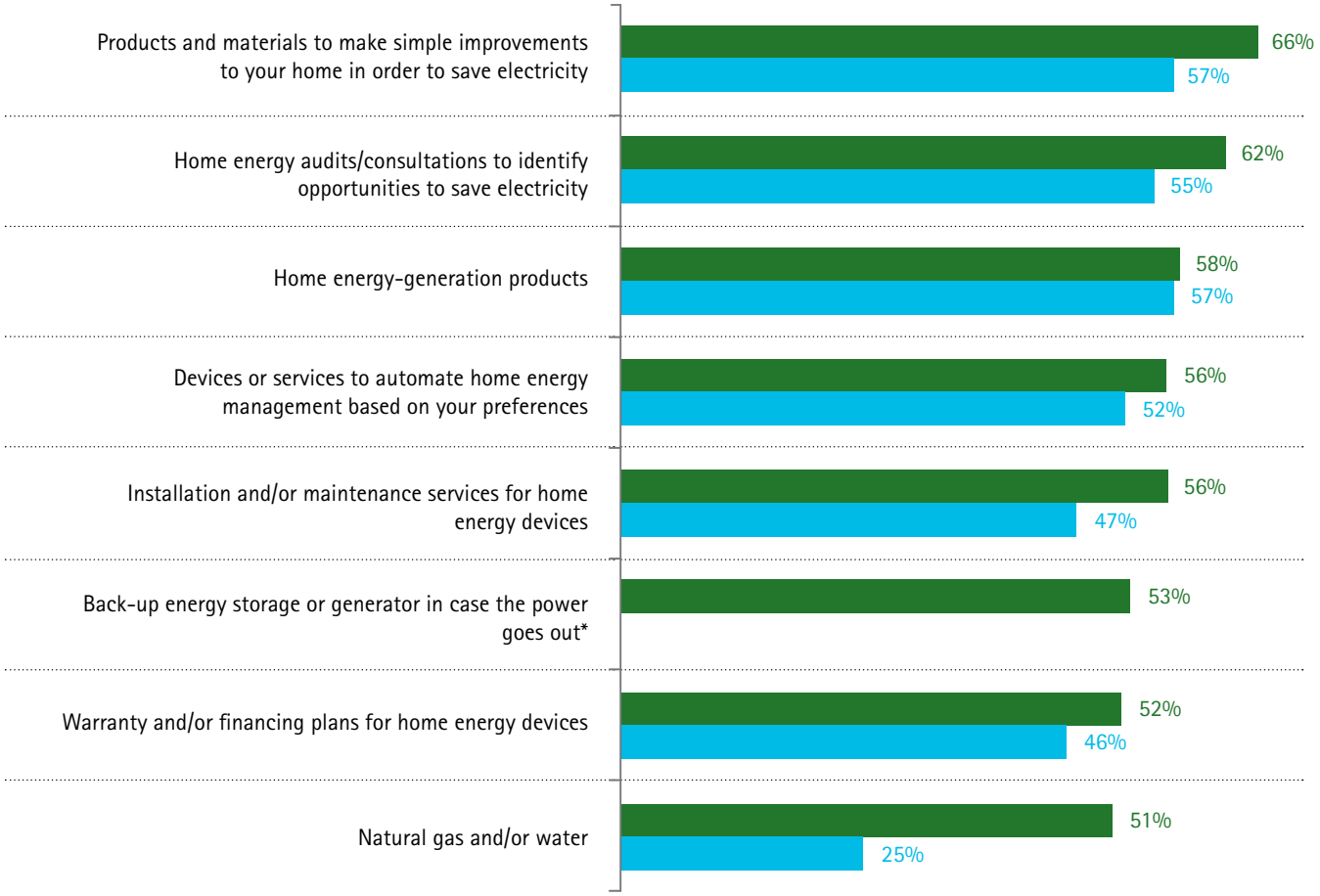
Recently we explored rising interest in electric vehicles and consumer preferences around related products and services. While electric vehicle adoption is growing steadily, forecasts call for demand to increase sharply over the next five to 10 years. Though specific growth forecasts vary, electric vehicles clearly represent promising opportunities for energy providers to increase revenues and to engage consumers. In fact, our research shows that more than half of consumers are considering an electric vehicle for their next car purchase, with greatest interest coming from 18- to 34-year-olds (see Figure 26).

When considering the rising interest in connected home technology and micro-generation, the electric vehicle may be considered the unifying technology—providing a true solution for daily energy engagement. The opportunity to deliver such a solution is not limited to energy providers; third parties and other stakeholders across the energy value chain also have an opportunity to scale their solutions in this space.

Energy providers currently have an edge. Our research confirmed that energy providers remain among the preferred providers for charging services. While the majority of consumers (81 percent) prefer to purchase charging services from their energy providers, they are also interested in purchasing from traditional gas/petrol retail stations and other retailers.

Interestingly, we observed a decline in preferences toward traditional service stations and an increase in interest around nontraditional providers, such as Internet service companies. These shifts may highlight the importance of the connected home as it relates to the electric vehicle platform.

Figure 25. There is steady interest in signing up for a wide range of additional products and services.



*No results for 2012.
Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.

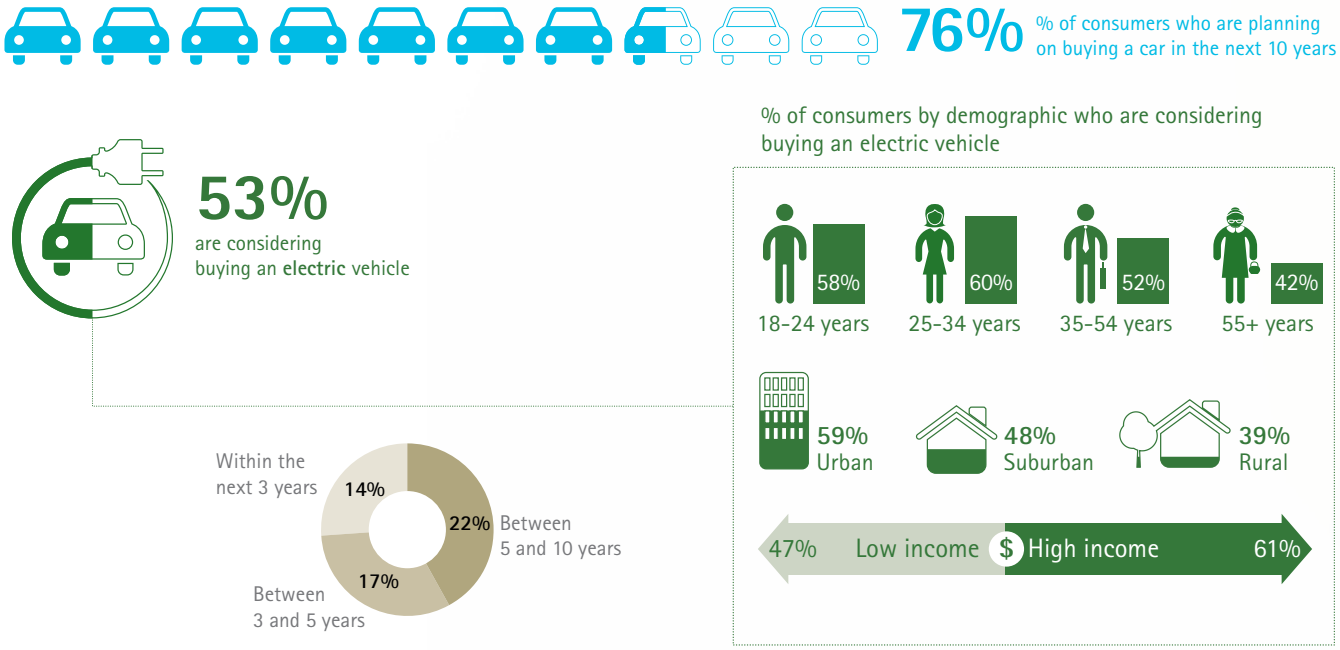
Building an energy-diverse portfolio

As the traditional utility market gives way to an energy ecosystem, consumers are taking a more holistic view of energy and energy-related products and services. Meanwhile, consumers' preferences, characteristics and perceptions of an energy provider will shape how much of the beyond-the-meter market it can capture.

As energy providers consider their role in the beyond-the-meter space, they must examine the business model or models to address the new energy consumer. Our findings point to a number of viable business models for providing new products and services—with consumer sentiment spread evenly across the models. Only 21 percent of consumers are interested in a traditional utility experience (that is, no additional products and services), with most interested in further products and services. About one-third (31 percent) are looking for a provider that offers electricity, gas and/or water along with a full range of products and services. Interestingly, the younger generation expressed more interest in specialized and full-service providers; by contrast, a higher share of consumers aged 55 and older prefer a standard provider.

Thus, it has never been more important for energy providers to develop deep consumer understanding. Every energy provider needs to find a way to segment and analyze its base and determine the consumer appetite and value proposition for additional products and services. Successful energy providers will engage partners to deliver a fluid energy system with a variety of value propositions.

Figure 26. More than half of consumers are considering an electric vehicle for their next car purchase.

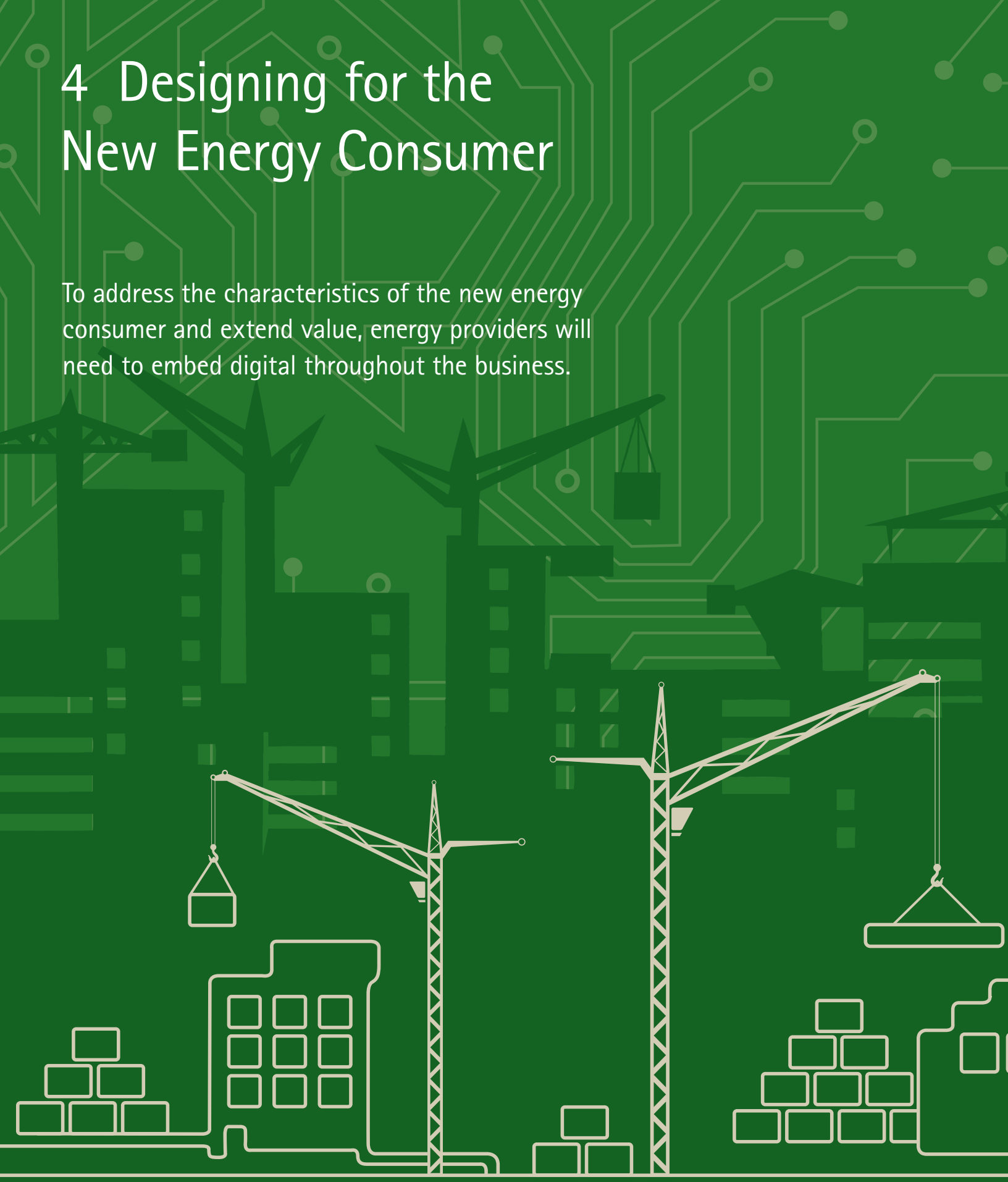


Base: All respondents.
Source: The New Energy Consumer: Architecting for the Future, Accenture, 2014, www.accenture.com.



4 Designing for the New Energy Consumer

To address the characteristics of the new energy consumer and extend value, energy providers will need to embed digital throughout the business.





While virtual interaction is not a new concept for energy providers, Accenture's New Energy Consumer research program has highlighted its broadening impact. With digital now central to all facets of the business, energy providers can no longer consider it as simply one aspect of customer interaction. Digital has become an enterprise imperative—one that requires energy providers to consider different mindsets for bringing new capabilities and competencies to market.

In 2013's *New Energy Consumer Handbook*, we profiled four core competencies that we have identified as central for success in the future (see Figure 27). While many utilities have implemented elements of these competencies, they can drive even better results by applying a digital view across the four competencies.

1. Delivering operational excellence

An energy provider may already be deploying new channels, providing additional consumer products and services or exploring new in-home service offerings. While these investments begin to address the new energy consumer views and preferences, they often add unnecessary complexity—increasing operational expenses and total cost of ownership.

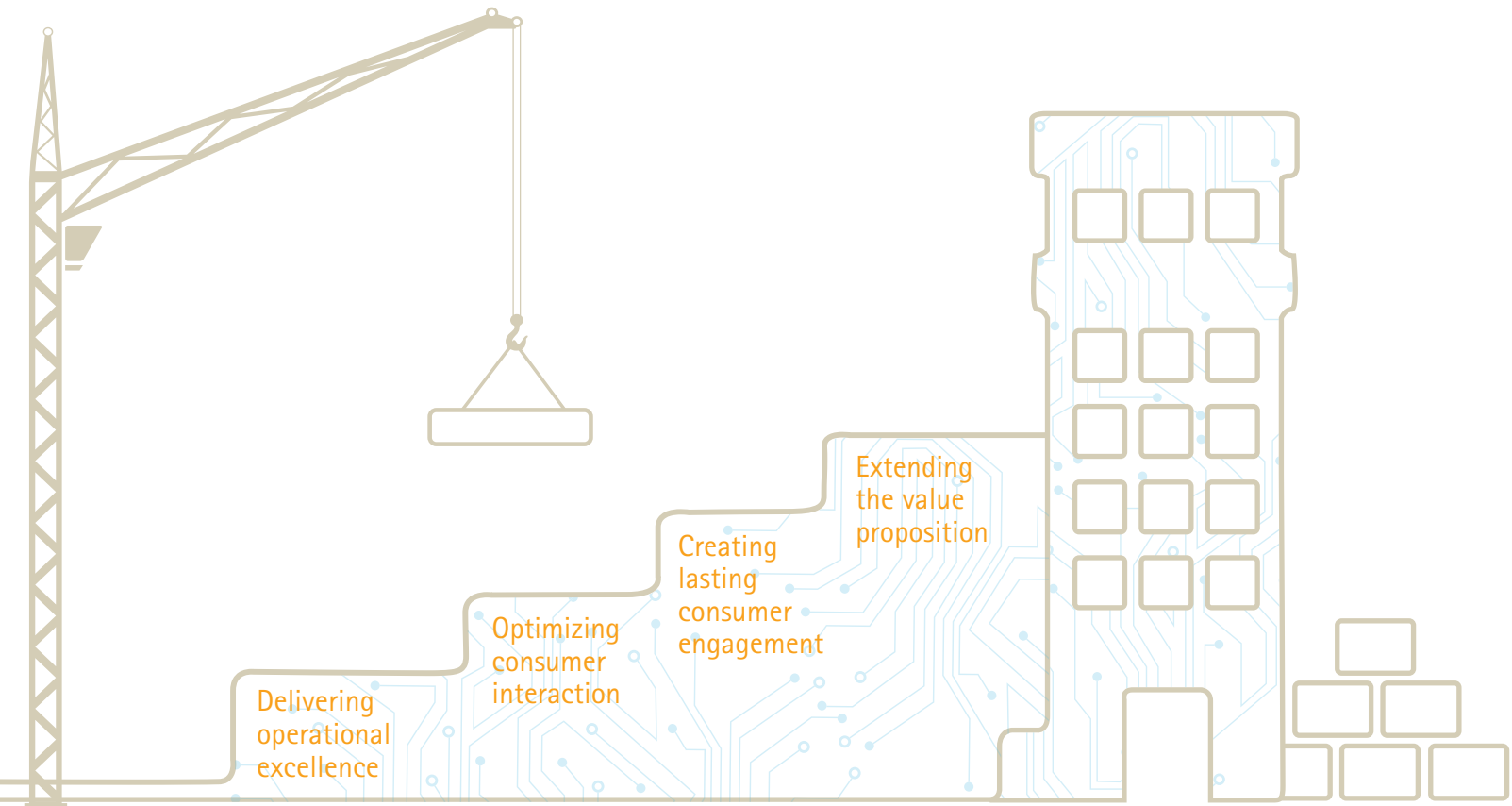
Even as interaction and product complexity increases, providers should not forget the basics: consistently delivering optimal quality and performance at the lowest possible cost. To that end, energy providers need to examine both base processes and technologies to streamline governance and increase discipline with continuous improvement. Over time, these investments can simplify operations and further enhance business agility amid market fluctuations.

By modernizing customer support capabilities, streamlining processes and simplifying policies and procedures, providers can reduce controllable customer support costs by up to 30 percent. In addition to reducing costs, shifting the operational mindset can also enable operations to be more nimble, more flexible and better suited to the new energy marketplace.

When reinventing customer operations, a resilient technology platform is a key factor moving forward. Information strategies, master data management practices and governance for real-time smart infrastructures, emerging energy solutions and customer-powered innovation will continue to be important.

By adopting a new mindset, energy providers' information technology teams can verify that systems go beyond traditional requirements and that design specifications are targeted toward dynamic, accessible

Figure 27. The four core competencies of the next-generation energy provider.



and continuous systems. Ultimately, an information technology mantra of "architecting for resilience" will carry through to the business. Resilient system design should support a modular, hub-and-spoke approach that caters to interconnectedness and embeds next-generation analytics. These capabilities allow for greater scalability, as well as more automated, localized decision making based on qualified operational measurements.

In strengthening digital capabilities, providers must support "always-on" processes and services. After all, unreliable or poorly designed solutions could actually compound dissatisfiers of customer service. The most successful providers will look beyond the value potential of deflecting transactions to low-cost channels and shifting to automated processes. Leading energy providers will also focus and orient their workforce around complex interactions while adapting to the new demands emerging from technology and operational processes.

2. Optimizing consumer interaction

An ever-expanding set of connected personal and home devices have changed the traditional interaction paradigm. In retail markets, nimble energy providers have already introduced innovative digital and interaction capabilities. Many of these providers are leveraging new technologies in ways that are driving consumers to expect more. As such, larger retail incumbents and regulated energy providers are now pushing toward enhanced digital capabilities.

To their credit, many energy providers have achieved profound shifts in the range of choice and self-service capabilities they offer consumers. Even so, they should take it a step further: revisiting primary interactions to design self-service capabilities via consistent, easy-to-use channels while providing a cost-effective mix for consumer interactions. Interestingly, our research has revealed paradoxical preferences around interactions. Consumers want not only convenient self-service but also high-touch, value-added interactions. Given those demands, energy providers must be able to pinpoint the right interactions across the right channels at the right time.

Today, many utilities are often challenged by a fractured channel landscape—analytics that deliver a siloed view of the customer and pockets of insight that are neither automated nor immediately actionable. Providers need an integrated interaction management foundation to create a single view of the customer and drive self-service.

3. Creating lasting consumer engagement

In the past, customer engagement resulted largely from outages, high bills or other negative triggers. To capture value in the new energy marketplace, providers should shift to high-value interactions and relationships. With the introduction of roaming consumers, beyond-the-premise engagement has become essential to delivering services without boundaries while educating and building trust with consumers. At the same time, more complex products and services are renewing the need for tailored, in-person education and sales interactions.

In many ways, the traditional, linear customer experience journey has given way to a "nonstop" customer experience. Changing behaviors have shifted how consumers relate to their service providers—making customer journeys more:

Dynamic. Enabled by technology, consumers now control their own journeys. Ways of getting information and service are no longer linear; in fact, consumers often cross channels when obtaining information or support.

Accessible. As technology amplifies and empowers the "voice or noise of others"; it is increasingly easy for consumers to compare promise versus reality.

Continuous. "Always-on" consumers expect the same of their utilities—and are willing to engage for added value.

Whether targeting conservation goals, new revenue opportunities or improved customer satisfaction, energy providers are challenged to deliver more tailored experiences that contribute to sustained engagement and loyalty.

Even effective self-service and virtual channel capabilities often lead to an increasingly fractured customer experience that may actually drive up costs and negate the desired effects. When different operating units own various channels and touch points, it can be difficult to deliver a consistent yet tailored experience to the consumer.

Providers must give new energy consumers an omni-experience—a seamless, consistent, end-to-end customer experience achieved through a holistic customer view that aligns business units, talent and priorities. Omnipresence also accelerates education and ideation by empowering consumers as marketers and co-creators.

To build the omni-experience, providers need to look beyond typical customer information. Consumer data is everywhere—from data about consumers' homes and businesses, channel preferences and past interactions to their social connections. Smart meters promise even more vast amounts of information about consumers' energy usage. The value of these data assets cannot be overstated. Yet, many energy providers have been challenged to architect their data in a manner that supports actionable data use. This digital information has become, and will remain, a vital currency and critical enabler of consumer engagement.

Vague segments and high-level personas are no longer sufficient for driving actionable consumer insights. The journey to a true omni-experience will always start with analytics that improve customer-centric decision making and business effectiveness in real time. As these trends progress, the key to success will be creating digital and enterprise platforms for managing market and interaction convergence at scale.

Further, these insights into consumers can enable new products and services or allow for new modes of engagement. With digital platforms offering end-to-end views of the energy provider's value chain, data can be a true source of competitive advantage. In the hunt for value and shifting market models, the skill with which an energy provider creates, manages and analyzes data—about its operations and its consumers—will be one of the factors that determine success or failure.

4. Extending the value proposition

The convergence of disruptive technologies and industries is redefining energy as a consumer product alongside a range of other value-added products and services. Energy has become the foundation for realizing new, more diverse types of value. In many regards, energy can now be viewed as a core component of any truly connected, "smart" home solution. As our research has illustrated, energy providers have a profound opportunity to enter new markets—paving the way for enhanced revenue and engagement opportunities supported through compelling consumer value propositions.

Extending the value proposition will require energy providers to develop a new mindset of innovation and agility. The first step involves a shift from traditional one-way consumer relationships to a view of consumers as business partners. As balancing supply and demand becomes less predictable and more dynamic, energy providers should develop deeper analytics to better understand the levers of consumer adoption and ultimately derive consumer value. By increasing understanding of consumer patterns and incenting behavior change, utilities can build optimal propositions that create value for both consumer and provider.

Next, in advancing toward extended value propositions, energy providers must build or strengthen an innovation competency. With new products, services and technologies breaking through traditional boundaries, providers can seize opportunities to strengthen consumer engagement and, in some cases, capture new revenue streams. But that is possible only if they are able to quickly launch new products—and just as quickly decommission old ones. With the nonstop consumer becoming even more interconnected through smart home technologies, providers have little time to play catch-up. Extending value requires a culture of short-cycle innovation focused on product development and consumer value propositions that are both tailored and easy to understand.

Finally, despite growing consumer expectations around new energy value propositions, tailored products and personalized services, many utilities must build the capabilities required to meet consumer demands. At the same time, the energy ecosystem is expanding to encompass a broader range of organizations—some with new products and services and others looking to influence energy usage behavior in the name of conservation. Although utilities remain at the heart of the energy marketplace, they need to innovate and transform to maintain this coveted position.

The increasing complexity of modern-day products and customer service has led many organizations to refocus on core strengths and leverage partnerships to fill capability gaps or offer entirely new value propositions. While collaboration is an established trend, "coopetition" is another approach that is gaining momentum. In uncertain, highly integrated, complex competitive environments, we are observing collaborative partnerships in which direct competitors team up to create new markets or redefine cost structures on noncore capabilities. As energy providers consider new digital capabilities and market models—alongside cost-to-serve and other ever-present imperatives—the importance of tapping into the power of partnerships is no longer an option. It is now an operational reality.

Even as digital reshapes the landscape, operational excellence, consumer interaction, consumer engagement and extended value propositions remain the building blocks of enduring success. Developing these competencies will not be fast or easy. For many providers, they will require organizational transformation and significant upheaval to the status quo. But they are critical to surviving amid constant change, seizing new opportunities and thriving in the new energy marketplace.

5 Shaping the Future-forward Strategy

Digital technologies and interconnectedness continue to accelerate the pace of change in the new energy marketplace. Energy providers should now prepare to make decisions and investments that will define their core competencies to address the new energy consumer.

Our New Energy Consumer research has illustrated that consumers fall across a spectrum from energy literate to energy agnostic. As they engage consumers, the most successful providers will be those who identify and address clear targets for the two ends of that spectrum. For the "always-online" consumer, providers need to deliver a seamless, individualized experience. In the face of growing social centricity, providers must also consider the mechanics of how to gather information and ideas, as well as how to engage larger groups of consumers with socially designed programs. As other consumers become more tech savvy, they will encounter energy alternatives, challenging energy providers to offer bundles of products and services that go beyond the meter and address a variety of lifestyles and preferences. At the same time, industry and digital convergence will continue accelerating change—and intensifying competition.

Despite continued uncertainty and disruption, providers should act now to architect a roadmap for the future. To deliver on the promise of a new era of customer operations, providers must answer these questions:

Reinvention. What steps should we take to reinvent core customer operations? How can we modernize customer support capabilities, streamline processes and simplify policies and procedures?

Future proof. How resilient is our technology architecture? How will the architecture be able to support real-time smart infrastructures, emerging energy solutions and customer-powered innovation?

Digitally driven. How are we deploying digital customer technologies? How are we proactively addressing consumers' needs through optimized self-service interactions?

Analytics. How do we maximize the value of data to support decision making? How are we using real-time actionable insights to build business effectiveness?

Customer centricity. How are we developing a view of the omni-experience? How are we aligning business units, talent and priorities in order to deliver a seamless, consistent, end-to-end customer experience?

Product based. Is innovation a core competency? Are we launching products and services at speed—embracing social and mobile channels that empower consumers as marketers and co-creators?

Market maker. How are we positioned in the market? How are we accelerating value creation by partnering with other providers and forming unconventional alliances?

Success will require that providers prepare for both success and failure when they bring to market new capabilities, products and services—and to accept the risk inherent in entering new markets. The key will be sustaining the innovation engine as a provider architects its business and orchestrates its new energy consumer propositions.

For more information on the new energy consumer and Accenture's complete point of view of the currents of change and core competencies of the future, please refer to the *New Energy Consumer Handbook* on www.accenture.com.

6 The New Energy Consumer Research Program

Accenture undertook the multiyear New Energy Consumer research program to help gas, electricity and water utilities understand emerging consumer needs and preferences, to identify new challenges and opportunities and to bring focus to the critical competencies required to succeed in the evolving energy marketplace.

Collecting consumer insights from interviews with more than 50,000 end consumers around the world, the initiative has explored a range of topics.

2010

Understanding Consumer Preferences in Energy Efficiency offers a consumer view to support the increasing industry focus on smart metering and demand management. This first study produced valuable insights into consumer preferences in energy efficiency, awareness, readiness and willingness to take action.

2011

Revealing the Values of the New Energy Consumer explores the emergence of a new energy marketplace through a worldwide end-consumer survey looking at preferences, opinions and priorities in beyond-the-meter products and services offered by utilities or other providers.

2012

Actionable Insights for the New Energy Consumer focuses on developing actionable insights and tactical implications for the emerging energy marketplace. This study explores consumer choice, connection and loyalty, and provides a fresh view of how consumers want to interact with their energy providers, the products they value and what drives their purchasing and loyalty behavior.

2013

Delivering the New Energy Consumer Experience looks to the path ahead for energy providers addressing key consumer "dissatisfiers" and offers views to help deliver on the diverse expectations and needs of residential consumers and small and medium businesses (SMBs).

2014

The New Energy Consumer – Architecting for the Future explores new opportunities in virtual customer interaction, the connected consumer, distributed energy, and new products and services. It also offers Accenture's view of the energy consumer of the future.

All data points and figures in *Architecting for the Future* have been sourced from these five years of research, and are available on www.accenture.com.

The New Energy Consumer research methodology and sample

Accenture's five years of global research surveys are based on questionnaire-led interviews with end consumers. Surveys were conducted online in native languages for Accenture by Harris Interactive. The selected countries represent a range of regulated and competitive markets.

For residential consumers, the survey sample was statistically representative of the general population in each country, with the exceptions of Argentina, Brazil, Chile, China, Indonesia, Philippines, South Africa, and Thailand, where the sample was representative of the urban populations. For countries with large and/or diverse populations, participants were selected from a broad spectrum of locations. The surveys included attitudinal, behavioral and demographic questions.

In 2010, 2011 and 2012, the survey also presented choice-based questions about various combinations of elements of energy management programs and value-added products and services. The information was evaluated using a conjoint analysis to understand how consumers weigh different components when considering energy packages or energy management and to segment them according to their preferences.

In 2013, more than 2,000 small and medium businesses were surveyed in nine countries. Respondents were responsible for or contributed to electricity- and/or gas-related decisions at their place of business.

In 2014, more than 13,000 residential consumers were surveyed across 26 countries.

# Interviews	
Argentina*	500
Australia	500
Belgium	500
Brazil*	500
Canada	500
Chile*	500
China*	500
Denmark	500
France	500
Germany	500
Indonesia*	500
Italy	500
Japan	516

# Interviews	
Netherlands	500
Norway	500
Philippines*	500
Poland	500
Singapore	500
South Africa*	500
South Korea	500
Spain	500
Sweden	500
Thailand*	500
Turkey	500
United Kingdom	652
United States	1,052

Gender	
Men	49%
Women	51%

Age	
18-24 years	18%
25-34 years	25%
35-54 years	34%
>55 years	23%

Income	
Low (bottom 25% in every country)	26%
Medium	49%
High (top 25 % in every country)	25%

*Sample representative of the urban population.

Countries included in the multiyear research program, with number of consumer participants.

Country	2014 residential consumer research	2013 residential consumer research	2012 residential consumer research	2011 residential consumer research	2010 residential consumer research
Argentina	500	-	-	-	-
Australia	500	500	500	500	500
Belgium	500	500	500	512	-
Brazil	500	500	500	510	518
Canada	500	500	500	500	500
Chile	500	-	-	-	-
China	500	500	500	502	500
Denmark	500	500	514	505	500
France	500	500	500	514	500
Germany	500	500	500	500	513
Indonesia	500	-	-	-	-
Italy	500	500	500	548	527
Japan	516	500	500	530	530
Netherlands	500	500	500	544	500
Norway	500	500	500	-	-
Philippines	500	-	-	-	-
Poland	500	500	-	-	-
Singapore	500	500	505	510	501
South Africa	500	500	512	500	500
South Korea	500	500	500	537	500
Spain	500	500	500	550	500
Sweden	500	500	500	511	514
Thailand	500	-	-	-	-
Turkey	500	500	-	-	-
United Kingdom	652	634	627	724	500
United States	1,052	1,020	1,000	1,202	1,005
Total survey sample	13,720	11,154	10,158	10,199	9,108



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About Accenture Energy Consumer Services

Accenture Energy Consumer Services delivers energy provider customer solutions for both competitive and regulated markets globally. We help our clients achieve three key business imperatives: cost effectiveness, revenue assurance and extension, and customer satisfaction. Guided by New Energy Consumer insights, our electricity, gas and water clients realize higher value through industry-specific strategy, digital, technology and operations capabilities and world-class expertise, assets, tools and accelerators.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 289,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

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APPENDIX 1-D: 2014 Online Customer Survey and Results

Summary Report
Guelph Hydro 2015 Online Customer Survey

In December, 2014, Guelph Hydro launched its first ever online Customer Survey in an effort to obtain feedback from customers on Guelph Hydro's services and investment plans.

==========

Overall Customer Satisfaction

Results indicate that **91 per cent** of respondents **rated Guelph Hydro's performance** in serving them as **"Good" or "Excellent."**

This high rate of customer satisfaction is in line with results of previous customer satisfaction surveys conducted by telephone which have repeatedly reported satisfaction levels above 90 per cent.

Overall Value

Overall, Guelph Hydro customers are satisfied with the service and value Guelph Hydro provides to Guelph and Rockwood. **77 per cent** of respondents rated the value of the services they receive from Guelph Hydro as **"Good" or "Excellent,"** and only **4 per cent** rated the value of Guelph Hydro's service as **"Poor."**

Suggestions for Adding Value

When asked what they **would like to see** Guelph Hydro do to **add value** for the money they pay, **suggestions were varied and widespread**, from the elimination of smart meters and/or changes made to time-of-use billing, to better cost management, to more and less investment in renewable or "green" infrastructure.

==========

The results of this online survey were considered by Guelph Hydro in developing its Cost of Service application and Distribution System Plan and will be used as the company continues to seek out new and different ways of adding value and furthering its customer engagement efforts.

Methodology

Two online surveys were launched; one survey was designed for residential customers, and a second survey was designed for commercial customers.

Both surveys were available on Guelph Hydro's website and in hard copy for nine weeks starting December 1, 2014 and ending January 30, 2015. An incentive of the chance to win one of five Apple iPads was offered to participants.

Extensive advertising efforts included:

- Ads in local media outlets including newspapers, community and business papers, and Guelph Chamber of Commerce newsletters
- Bill inserts
- Website banners
- Social media
- Promotion by Customer Service Representatives

Response Rate

A total of **356** online surveys were received, representing 0.7 per cent of the customer base. Of this, **354** were from Residential customers with only two responses received from Commercial customers.

Survey responses do not reflect an accurate sample size since they only representing less than one per cent of Guelph Hydro's residential and commercial customers. However, when considered in relation to past customer surveys conducted by telephone, the results provide insight into customer needs and preferences from customers who are comfortable engaging with Guelph Hydro online.

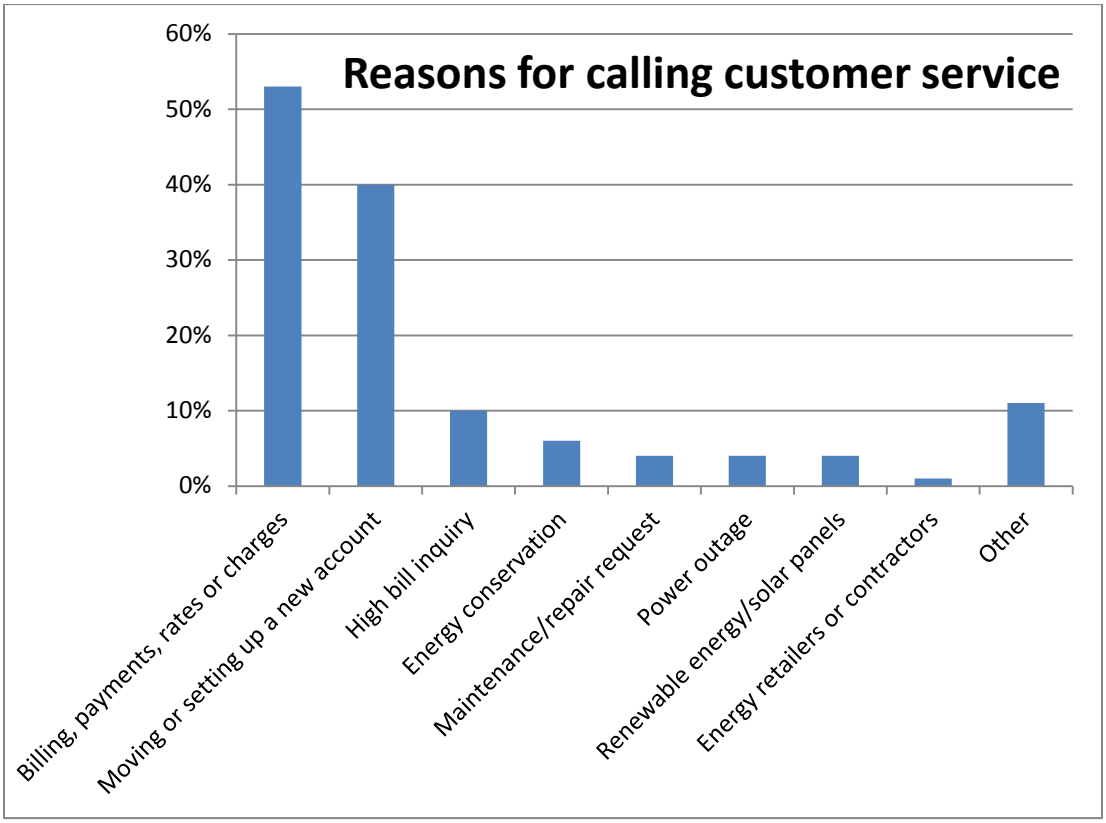
Demographics

- The majority of survey respondents were male between the ages of 35 and 54
- The majority own a fully-detached home.
- The average number of people residing in the home is three (2.87).

Customer Service

Overall, Guelph Hydro customers are satisfied with the customer service Guelph Hydro provides.

- Only **one third of respondents contacted customer service in the preceding year**, the **majority** calling about **billing, payments, rates or charges**, followed by moving or setting up a new account.
- The **fewest calls** were about **maintenance or repairs, power outages, or renewable energy or solar panels**.

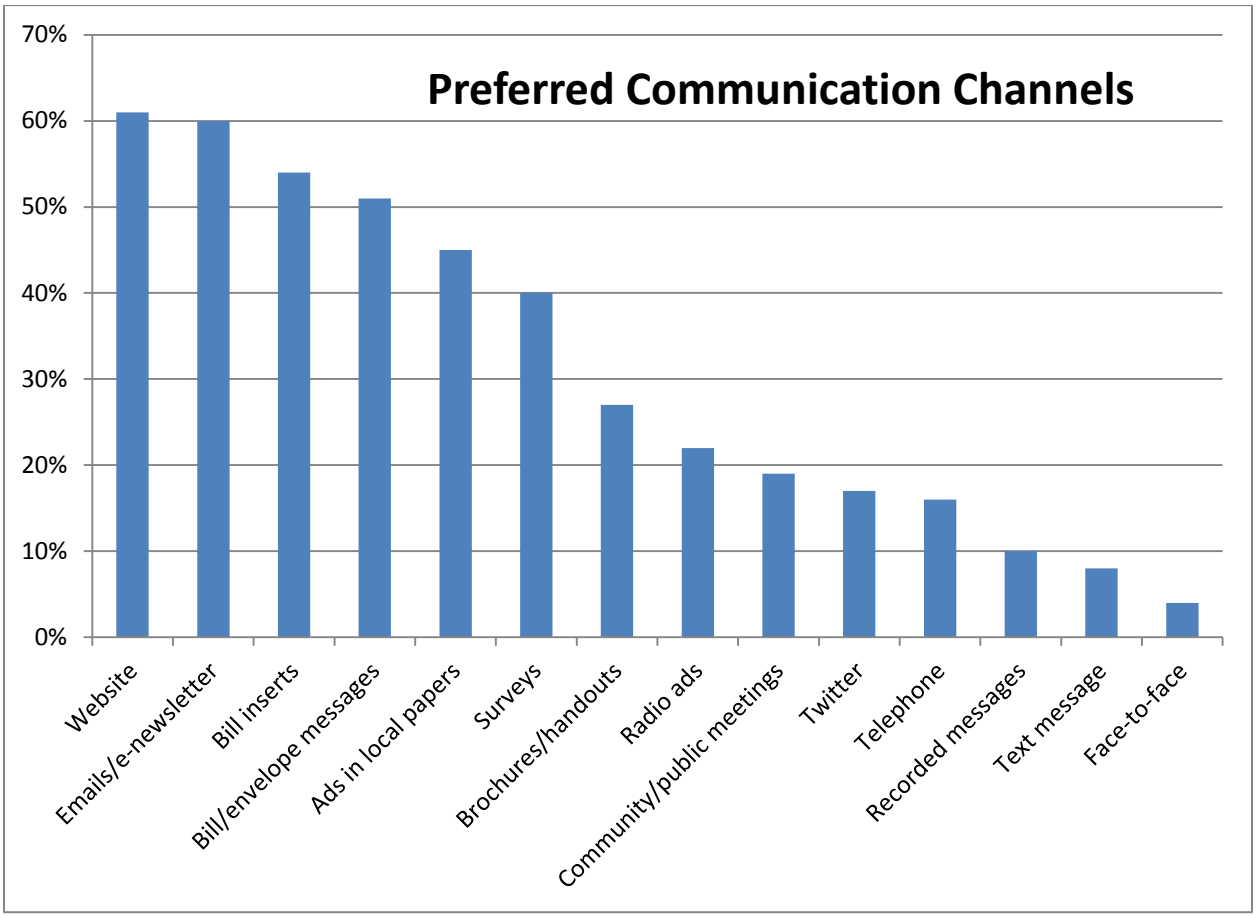


- **85 per cent were very satisfied or satisfied** with the time within which their issue was resolved, the helpfulness of the customer service representative
- **83 per cent were very satisfied or satisfied** with the training and knowledge of the customer service representative.
- **84 per cent per were very satisfied or satisfied** with the courtesy and professionalism of the customer service representative
- **80 per cent were very satisfied or satisfied** with the ability of the customer service representative to resolve their concerns with one email or call.

Communication

With respect to how Guelph Hydro communicates with customers, the **majority** of respondents **like Guelph Hydro's website and would like emails or email newsletters**. Guelph Hydro is actively exploring the feasibility of providing this option.

- Approximately **half** of respondents like **bill inserts, bill and/or envelope messages or ads in local newspapers.**
- The **least preferred methods** of communication are **face-to-face meetings and text or recorded messages**.
- **Less than one third** like **brochures and handouts at community events, radio ads, community or public meetings, or Twitter**
- While **one respondent suggested public information displays in shopping malls**, **78 per cent** of respondents **did not feel** a customer service kiosk in malls or retail stores **was important**



Social Media

When it comes to social media, Guelph Hydro is using Twitter to communicate and educate customers about safety, electricity conservation and other information related to electricity but does not currently have a Facebook page.

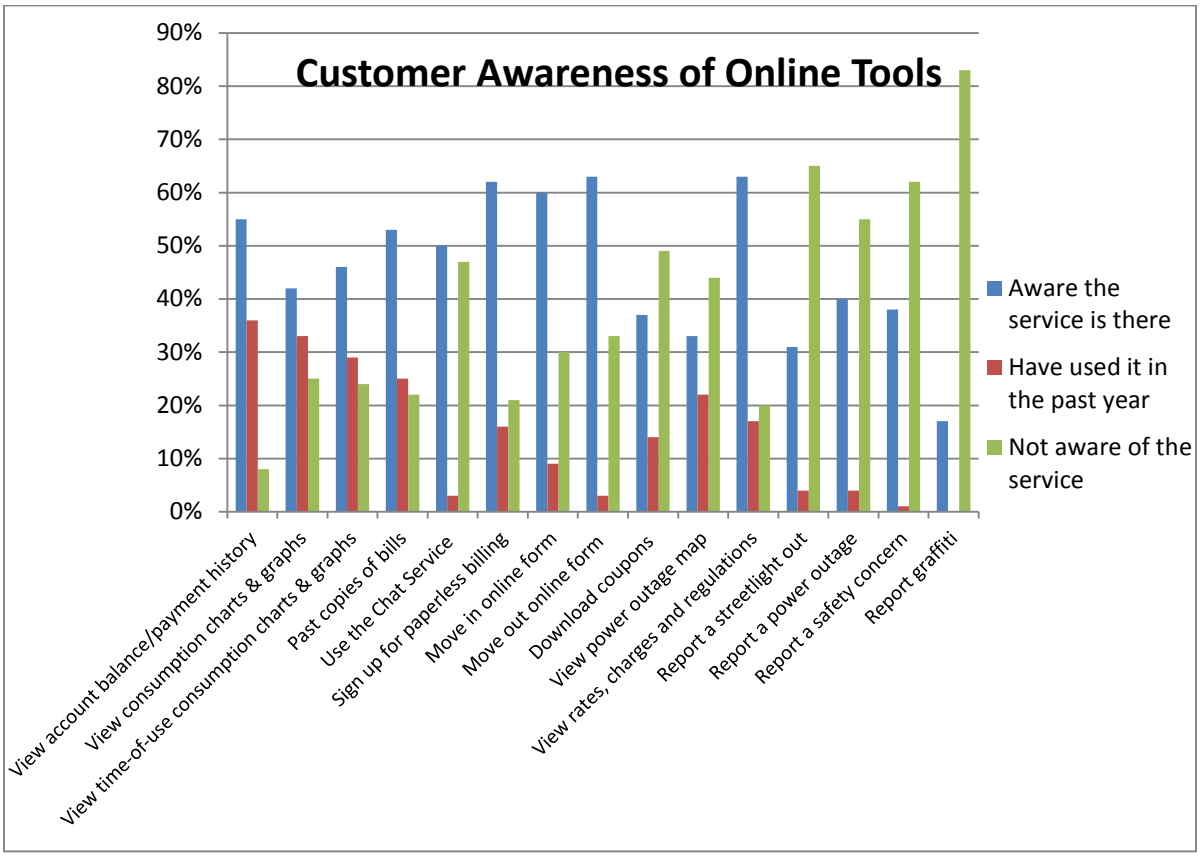
- It appears that at this time **customers are not using social media to address customer service issues**.
- Of the **62 per cent of respondents who use social media, 58 per cent** are **unlikely** to seek information on **customer service issues using Twitter**, and **54 per cent** are **unlikely** to seek information on **customer service issues on Facebook**.

Both these and other social media platforms will continue to be monitored and as customer interests change, social media strategies will be adapted.

Online Services

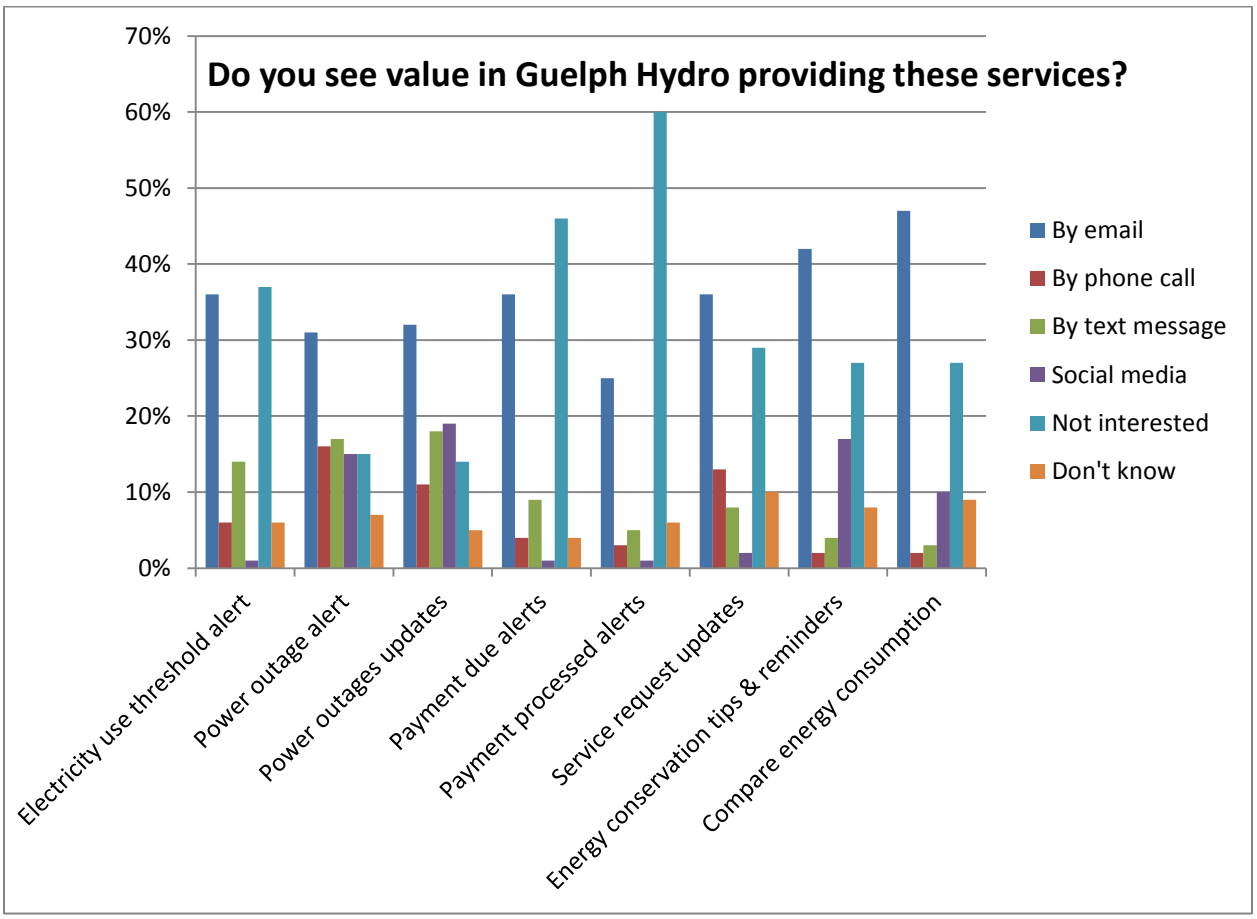
Based on customer feedback, online services present a cost-effective and convenient solution for Guelph Hydro to improve its service to customers.

- **When asked if they learned anything** about Guelph Hydro when completing the survey, **online services was ranked second, with 20 per cent** of respondents **surprised to learn of the number of online services available**.
- Close to **70 per cent** of respondents would **prefer more self-serve options through Guelph Hydro's online and mobile channels** over extended hours to speak with a customer service representative.
- Approximately **half** of the respondents are **aware** that Guelph Hydro offers **online options to manage their account and billing,** but **at most, one third have used one or more** of the available options in the past year.
- Just **over half** of survey respondents reported that they had **visited Guelph Hydro's website or mobile site** in the last two years, and the **majority** of those respondents had **visited the site between one and six times** and said it was **very easy or easy to navigate** the site.



Although customers are aware of some online services, there is a clear opportunity for Guelph Hydro to improve the communication about the availability of its online services and to continue to investigate opportunities to provide self-serve online options on an ongoing basis.

Guelph Hydro also asked questions in an effort to gauge customer interest in additional services Guelph Hydro could provide. This information will be used in planning future online services.



Customers made suggestions on other services Guelph Hydro could provide, including an analysis of high bills (17 per cent), a longer remittance period (11 per cent), notifying customers if their bill is from a meter reading or an estimate, discounts for customers who are already energy-conscious, and a partnership with Nest for Rush Hour Rewards.

The suggestion that Guelph Hydro notify customers if their bill is from a meter reading or estimate reveals that not all customers know how to read their bill. Guelph Hydro will consider “How to read your bill” as part of its energy literacy communications objectives.

Rates and Billing

The **cost of electrical service** is either a **strain or a great strain** on the household budget of **71 per cent of survey respondents**. **21 per cent say it is not much of a strain,** and anecdotal feedback throughout the survey revealed that customers are frustrated by electricity costs. This indicates that Guelph Hydro must do what it can to manage its costs, continue to educate customers about the cause of rising electricity costs and how they can better manage their electricity consumption, and promote a conservation culture in Ontario.

- **All survey respondents** were **surprised** to learn **that only 22 per cent** of a Guelph Hydro bill actually **goes to Guelph Hydro**.
- **84 per cent** of respondents said they find their bill **easy to understand** and only 15 per cent find it hard to read.
- **82 per cent** are **satisfied** with Guelph Hydro's **billing accuracy**
- **Less than half** were **interested** in community **information sessions on how to read and understand their bill** or household energy consumption.
- **Of the two commercial respondents**, **neither understands global adjustment or power factor.**
- When asked if they would **prefer** to receive **a monthly bill** for an additional cost of approximately $8 per month, **the overwhelming majority** of customers (91 per cent), **said "No."**

Paperless Billing

Only **19 per cent** of respondents **have made the switch to paperless billing**. **The majority** of respondents **who hadn't made the switch** said it was because they **preferred the paper bill**. Others said they were unaware of the option, some were afraid they would forget to pay the bills, some said they found it difficult to sign up, and others were rely on paper for tracking or tax purposes.

In 2015, Guelph Hydro is actively working to make its online portal more user-friendly and will be undertaking a marketing and communications strategy to encourage more customers to take advantage of paperless billing.

Rate Application Process

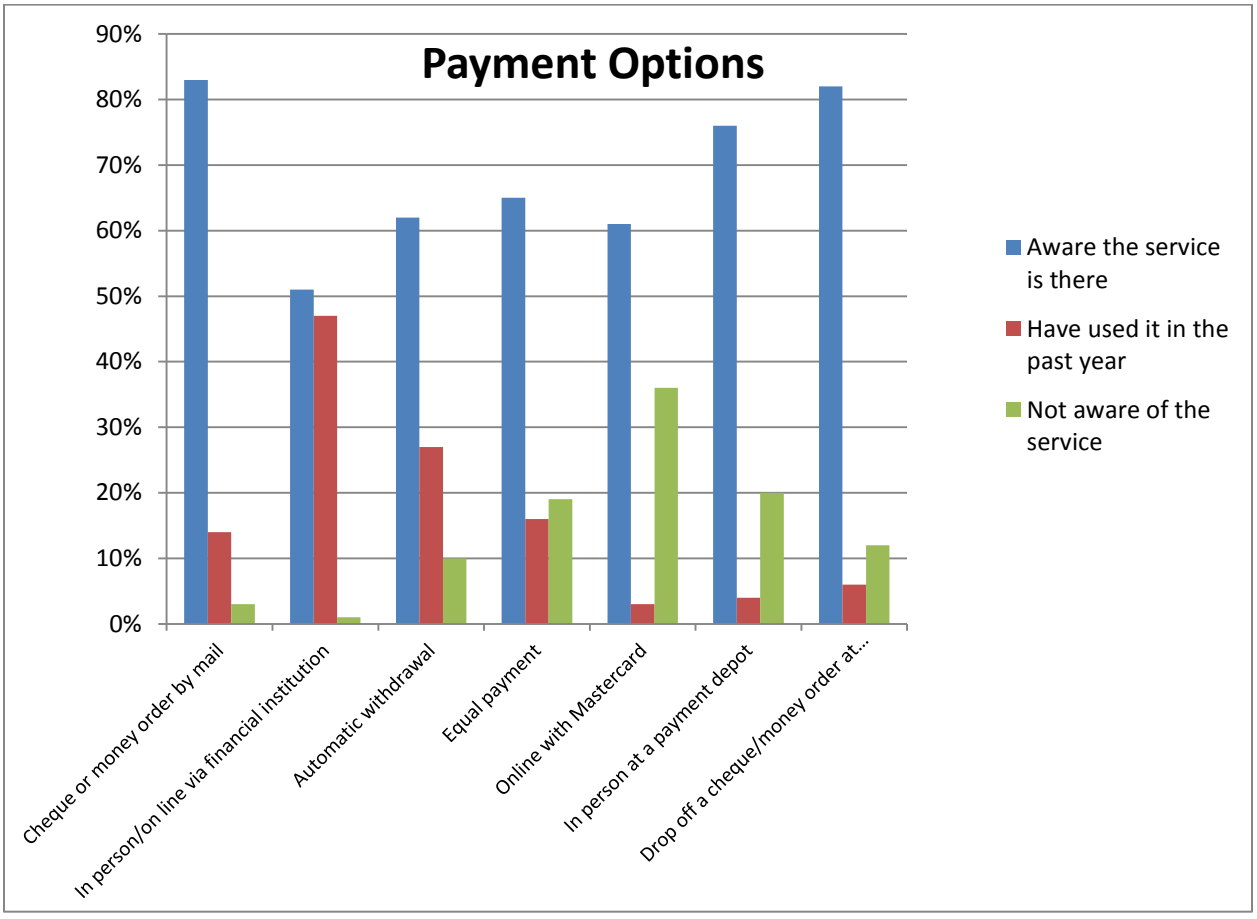
Only **35 per cent of respondents were aware** of their **ability to provide input and comment and actively participate** in Ontario Energy Board hearings with respect to Guelph Hydro's rate applications.

To improve awareness, Guelph Hydro will be actively promoting the content and status of its rate application and encouraging customer feedback as the application proceeds.

Payment Options

When it comes to bill payment options, survey results indicate that there is a good awareness of the payment options available among survey respondents.

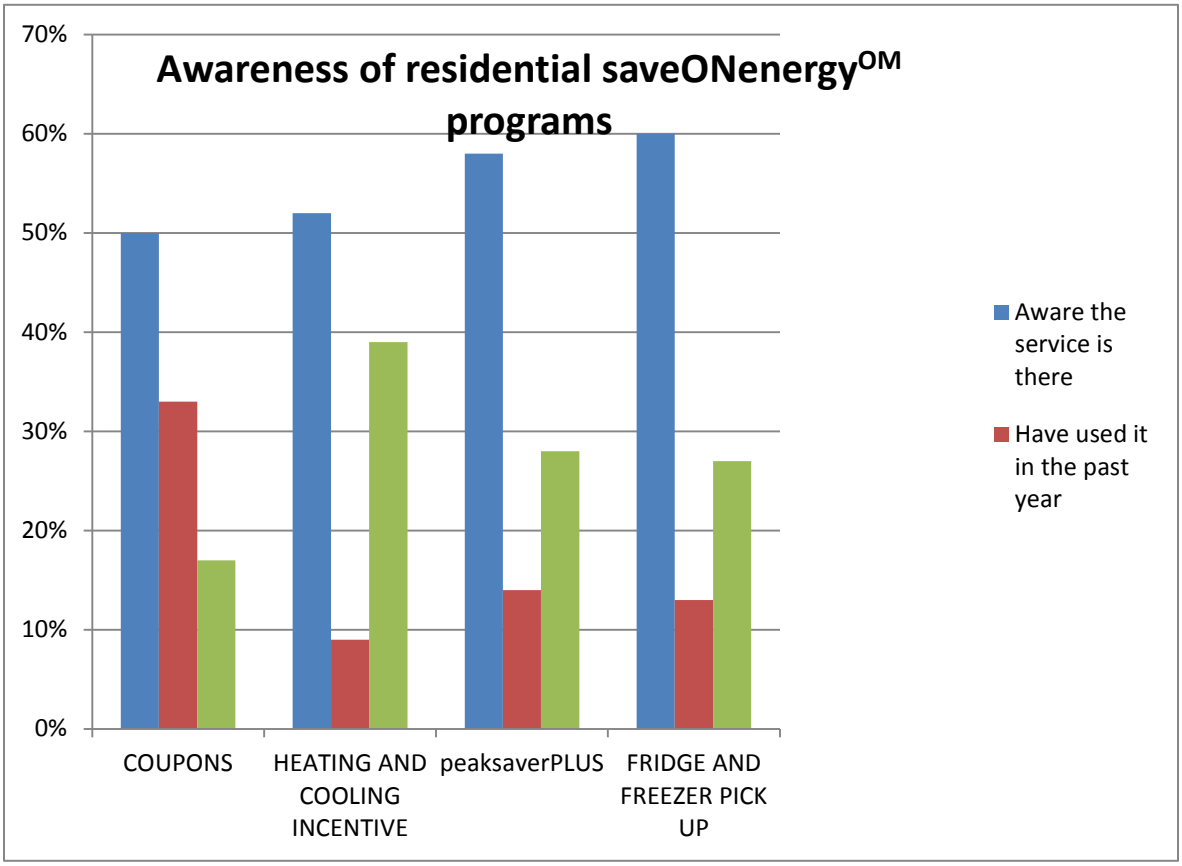
- **Paying in person or online via a financial institution** was the **most popular** option used **at 47 per cent**
- Paying **online with Mastercard, in person** at one of our payment depots, and **dropping off a cheque or money order at the Guelph Hydro office** were the **least popular at three per cent, four per cent and six per cent** respectively.
- **72 per cent** of respondents **do not feel** Guelph Hydro should be looking into systems that will enable them **to pay their bill using a mobile device**.
- **37 per cent** of respondents want to see Guelph Hydro **accept more brands of credit card**. Note: In the time since the survey was conducted, Guelph Hydro has re-introduced VISA as a payment option through Paymentus, and is actively investigating the option of accepting American Express credit cards.



Energy Conservation

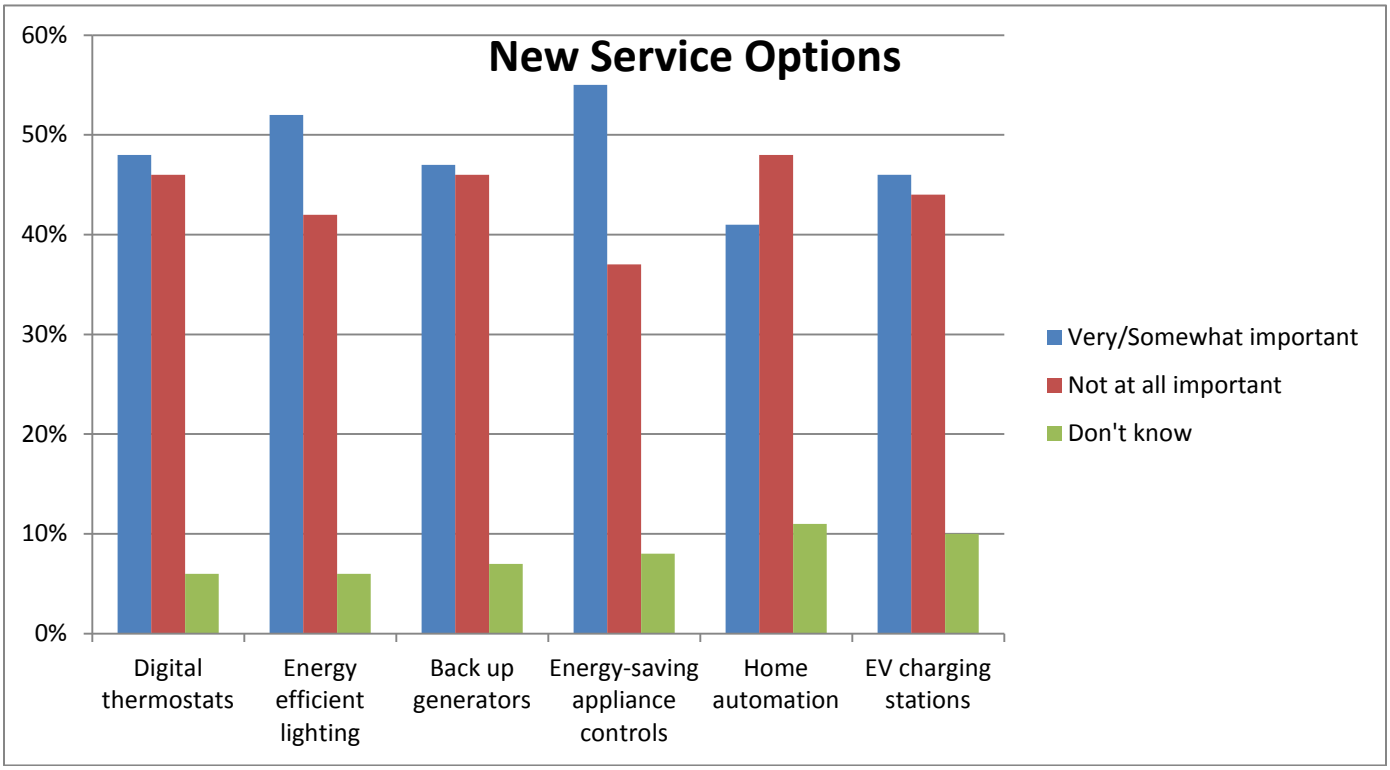
Through the saveONenergy^{OM} programs available through the IESO, Guelph Hydro customers have a great opportunity to take advantage of energy conservation incentives. Survey findings indicate that Guelph Hydro can be doing more the improve awareness of and participation in the programs.

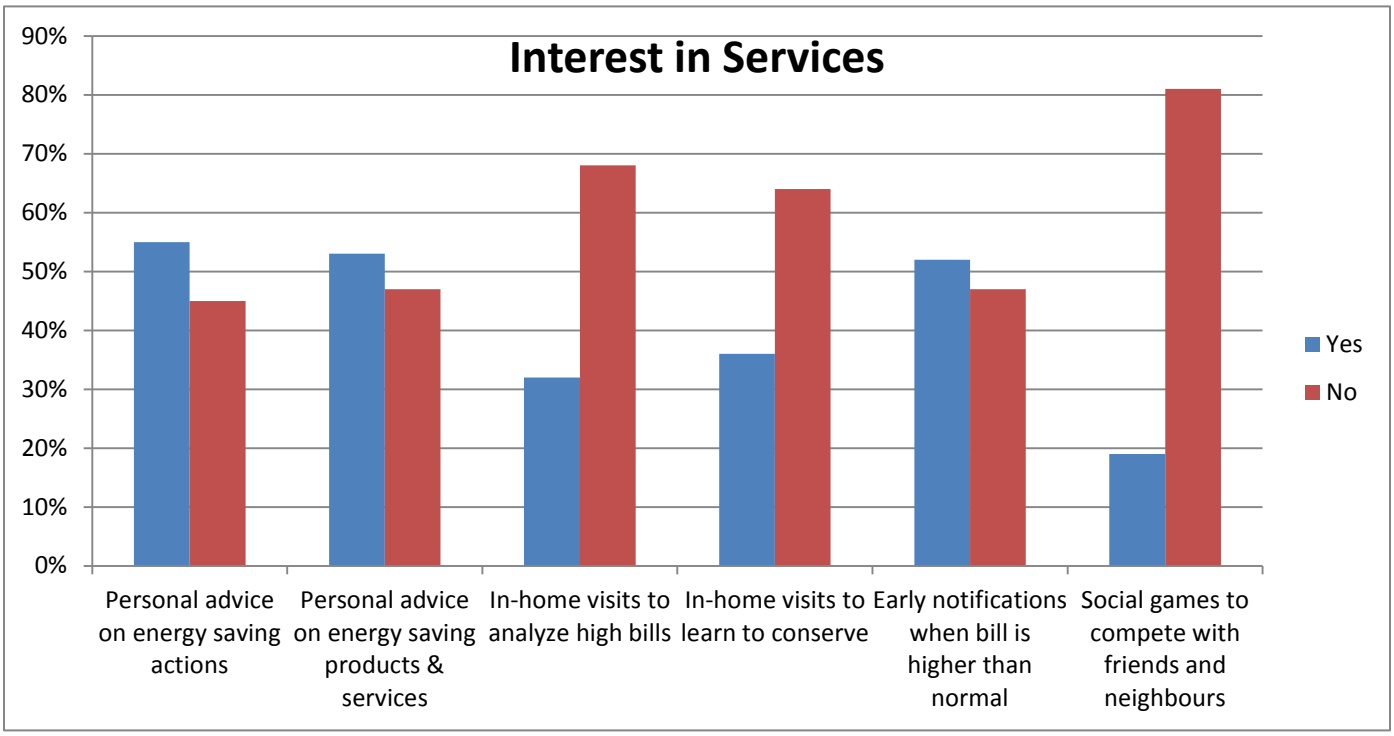
- **82 per cent** of survey respondents said they would like to see Guelph Hydro **invest in more energy conservation programs**
- **70 per cent** said they would like to see **more customer communication and education about energy conservation**.
- **63 per cent** said they felt it was **very or somewhat important** that Guelph Hydro **hire representatives to help business and industries in the community improve their energy efficiency.**
- **56 per cent** felt it was **very or somewhat important** to **offer on-bill financing for energy conservation and efficiency initiatives**
- Approximately **half of respondents** are **aware** of the **saveONenergy^{OM} coupons and the HEATING AND COOLING INCENTIVE**, but only **33 per cent have taken advantage of the coupons**
- **Less than 10 per cent have taken advantage of the HEATING AND COOLING INCENTIVE**.
- **58 per cent** are **aware of peaksaverPLUS**
- **60 per cent were aware of the FRIDGE AND FREEZER PICK UP**



Value Add or New Service Options

In the survey, Guelph Hydro asked questions to gauge customer interest in value-add services or new service options. These results reveal there may value-add options Guelph Hydro can offer to customers. Guelph Hydro will continue to investigate these options.




Interest in Services
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Personal advice on energy saving actions
Personal advice on energy saving products & services
In-home visits to analyze high bills
In-home visits to learn to conserve
Early notifications when bill is higher than normal
Social games to compete with friends and neighbours
Yes
No

Renewable Energy and New Technology

According to survey respondents, interest in renewable energy and new technologies is low.

- **18 per cent** of respondents reporting they are either **planning or considering installing rooftop solar panels** on their home in the next five years
- **10 per cent** of respondents **planning or considering installing an energy storage system,**
- **23 per cent** of respondents **planning on or considering purchasing an electric vehicle** in the next three to five years.

Despite this, **76 per cent** said that it was **very or somewhat important** for Guelph Hydro to **invest in research into future technologies such as smart grids, electric vehicles or electricity storage (see chart on page 11).**

Guelph Hydro will continue to monitor industry developments and growth in these technologies so it is ready to react should interest change.

Service Reliability and Power Outages

With respect to service reliability and power outages, Guelph Hydro customers are satisfied.

- **83 per cent** of respondents rated Guelph Hydro's **performance in minimizing power outages as "Good" or "Excellent,"**
- **82 per cent** of respondents said the **time within which Guelph Hydro restores power** when a power outage occurs is **"Good" or "Excellent."**
- **91 per cent** of respondents said the **overall reliability** of the electricity service is **"Good" or "Excellent,"**
- **83 per cent** of respondents rated the performance of Guelph Hydro's **outside crews as "Good" or "Excellent."**
- Only **five per cent** of respondents reported that their **home or business was negatively affected by a power outage in the past year**, excluding the ice storm in December 2013.

Guelph Hydro's outage reporting communications is generally acceptable but there is room for improvement in this area. Guelph Hydro will be exploring ways to enhance its customer communication efforts during outages.

- **28 per cent** of respondents rated Guelph Hydro "**Good" or "Fair" in being reachable by telephone** during an outage, but **58 per cent** responded **"Don't know."**
- **40 per cent** of respondents rated Guelph Hydro as **"Good" or "Fair" when communicating the cause and estimated time of restoration** during a power outage through Guelph Hydro's website, mobile website, Twitter, customer service department and radio, but **43 per cent responded "Don't know."**

When asked what they attributed power outages to, **79 per cent** of respondents attributed power outages to **weather, animal contacts or "natural occurrences"** and **12 per cent** thought they were the result of **equipment trouble, maintenance, or human interference**.

This indicates that Guelph Hydro is seeing success in communicating the causes of outages as responses are in line with actual causes of power outages.

When asked to think about the Ice Storm in December 2013 and the damaging wind storms that have occurred over the past two years in Guelph, **27 per cent** of respondents said Guelph Hydro could have done a **better job of communication**.

- **17 per cent** said to **improve or continue to keep trimming trees**
- **13 per cent** said to **move service underground**
- **11 per cent** wanted an **estimated time of restoration**
- **8 per cent** wanted **updates by email**.

Guelph Hydro has already taken some of the learnings gained through the ice storm and made some changes to processes including publishing a Crisis Communications Plan and improving its Twitter activities during severe weather and in response to outages.

Investment in Infrastructure

Overall, survey respondents are satisfied with Guelph Hydro's investment in infrastructure.

- **65 per cent** of respondents would like to see Guelph Hydro **replace equipment according to a pre-determined replacement schedule**, even if it means spending more money replacing equipment that is still working
- **83 per cent did not feel** Guelph Hydro **should be investing additional funds and raising rates to reduce the number of power outages in the community**.
- **81 per cent did not want to see** Guelph Hydro budget for a long-term project to **move overhead services underground**.
- **54 per cent were unwilling** to pay extra in order for Guelph Hydro to **staff a System Control Centre 24/7**, and only **35 per cent felt it was very or somewhat important.**

These results were taken into consideration in preparing the Distribution System Plan.

Safety

Overall, respondents are **very satisfied or satisfied** with Guelph Hydro's commitment to employee and public safety, with **87 per cent** reporting they **do not feel Guelph should be doing more** to improve electrical safety. Of those who felt Guelph Hydro could do more, suggestions included:

- Continuous improvement
- More education about electrical safety for children and the public
- Free do-it-yourself (DIY) workshops for electrical wiring of a home

Supporting this suggestion, **76 per cent of respondents** reported they **feel it is important** for Guelph Hydro to **invest in materials for schools to use to teach children about energy conservation and electrical safety,**

While Guelph Hydro currently has a school education program in place and actively promotes electricity safety in the community, it will continue to look for opportunities to further this education, including the potential for DIY workshops.

APPENDIX 1-E: Customer/Stakeholder Engagement Plan

Customer / Stakeholder Engagement Plan 2014 - 2015



Communications Plan: Customer / Stakeholder Engagement

Issues:

Regulator

- In developing a Distribution System Plan and Cost of Service Application, LDCs are required to ensure they are responding identified customer needs and preferences.
- Cost of Service applications must provide an overview of customer engagement activities used to identify needs and preferences and show how these are reflected in the application
- LDCs must inform customers of their proposed Cost of Service Application and the value of the proposals to customers in terms of costs, benefits and the impact on rates. Feedback must be included in the application along with an explanation of how the feedback was incorporated into the application

Shareholder

- Changing municipal leaders need to be educated about the business of Guelph Hydro Electric Systems Inc.

Customers

- Need to increase customer energy literacy and understanding of value provided by LDCs
- Rising electricity costs could lead to reputational damage

Desired Outcome/Behaviour:

- Obtain input from customers regarding their needs and preferences that can be used in developing the Distribution System Plan and Cost of Service rate application
- Municipal leaders demonstrate knowledge about Guelph Hydro rates, budgeting, services, processes, etc.
- Customer Satisfaction Survey scores are maintained at a high level in a survey conducted in late 2014 and in the bi-annual survey scheduled for late 2015

Measurement of Effectiveness:

- Number of surveys
- Number of participants
- Value / usefulness of information gathered
- Behaviour / comments of municipal leaders
- Lack of negative reaction regarding Cost of Service application

Objectives:

- To engage customers by using a variety of engagement techniques and channels in order to gather usable information that will assist Guelph Hydro in being more effective and efficient and in meeting or exceeding current customer satisfaction levels
- In 2014, to gather information about customer needs and preferences for electricity distribution and other LDC services for use in developing the company's Distribution System Plan and rate application to meet Regulatory requirements
- In 2015, to solicit input from customers on a draft copy of the Distribution System Plan and rate application

Communication Channels:

- Face-to-face (meetings, workshops, information sessions, individual discussions, community events)
- Telephone (telephone calls, surveys)
- Online (website, surveys, online forms, email, social media)

Tactical Communications Plan: Stakeholder Engagement

Audiences	Issues and Needs Identification Discussions / Meetings	Information Session / Workshop	Customer Satisfaction Telephone Survey	Online Survey	Post Transaction IVR Survey	Community Outreach	Website Improvements	Social Media
MP, MPP, Mayor, Councillors Rockwood & Guelph	X							
City Staff (CAO, Planning , Water, Energy,)	X							
Large Customers	X	X March 2014						
Commercial Customers	X	X Business After Five – Fall 2013	X 2013	X 2014	X	X	X	X
Residential Customers	X Calls to Customer Service		X 2013	X 2014	X	X	X	X
Low Income Customers, Seniors		X Scheduled for 2015						
Students						X	X	X
New Canadians		X Scheduled for 2015						
Developers / Homebuilders	X							
Unmetered load customers	X Winter 2015							

Issues and Needs Identification Discussions

Activity	Details	Location	Timing	Internal Resources Required	Status
MP, MPP, MAYOR, COUNCILLORS	• One-on-one discussions	• In offices	• Ongoing	• CEO – regular meetings • COO • Customer Service • Communications • Engineering • CDM	Complete
CITY STAFF (CAO, PLANNING DEPARTMENT, WATER DEPARTMENT)	• One-on-one discussions or group discussion focused on procedures, issues identification and needs.	• In offices	• Ongoing	• COO • Customer Service • Communications • Operations • Engineering • CDM	Complete
LARGE CUSTOMERS	• One-on-one discussions or group discussion focused on procedures, issues identification and needs.	• Various	• Ongoing	• COO • Customer Service • Communications • Operations / Metering • Engineering • CDM	Complete
COMMERCIAL CUSTOMERS	• Group discussion focused on procedures, issues identification and needs. • CDM information	• Various	• First quarter 2014	• COO • Customer Service • Communications • Engineering • CDM • Metering	Complete
RESIDENTIAL CUSTOMERS	• Calls to Customer Service • High bill analysis process	• Call centre	• Ongoing	• COO • Customer Service • Communications • Engineering • CDM • Metering	Complete
DEVELOPERS/ HOMEBUILDERS	• Individual discussions / meetings	• Various	• Ongoing	• Engineering • Metering	• Complete
UNMETERED LOAD CUSTOMERS	• Discussions • Letter followed by individual discussions	• Telephone	• Winter 2015	• Engineering • Customer Service • Communications	• Complete

Information Sessions / Workshops

Activity	Details	Location	Timing	Internal Resources Required	Status
LARGE CUSTOMERS	• Intro presentation • Discussion focused on issues identification and needs	• Offsite location	• First quarter - 2014	• COO • Customer Service • Communications • Engineering • CDM • Metering	Complete
COMMERCIAL CUSTOMERS	• Business After Five via Chamber of Commerce	• Guelph Hydro	• First quarter - 2014	• COO • Operations • Communications • Engineering • CDM	Complete
LOW INCOME CUSTOMERS	• Work through social service agencies	• Offsite	• Dependent on agency schedules	• Customer Service • Communications • CDM	Scheduled in 2015
NEW CANADIANS	• Work through Immigration Council	• Offsite	• Dependent on Council schedule	• Customer Service • Communications • CDM	Scheduled in 2015

Surveys

Activity	Details	Location	Timing	Internal Resources Required	Status
Customer Satisfaction Survey (telephone) **RESIDENTIAL & COMMERCIAL CUSTOMERS**	• Not planned for 2014 • Revisit comments from 2013 survey for actions that can be implemented in 2014	• N/A	• Ongoing	• Customer Service • Communications	Complete
Online Survey Bill Insert Survey **RESIDENTIAL & COMMERCIAL CUSTOMERS**	• On-line survey • Hard copy survey upon request • Incentives	• N/A	• End of 2014	• Communications with input from all departments	Complete
Post Transaction IVR Survey **RESIDENTIAL & COMMERCIAL CUSTOMERS**	• At the end of a call with a customer, Customer Service provides the customer with the opportunity to respond to a survey	• N/A	• Commencing 2nd quarter	• Customer Service	Complete

Community Outreach / Home Visits

Activity	Details	Location	Timing	Internal Resources Required	Status
Community Outreach Team Events **RESIDENTIAL & COMMERCIAL CUSTOMERS**	• CDM team and Customer Service staff at community events	• Various	• Ongoing	• CDM Outreach Team • Customer Service • Communications	Complete
Community Group (EMERGE) Home Visit Energy Audit / Survey **RESIDENTIAL**	• Promotion of CDM and services	• Homes	• Ongoing	• EMERGE Outreach Team • CDM • Communications	Complete

On-Line Communications – Website Improvements

Issues:

- Utilities are experiencing a shift from telephone customer contact to online customer contact
- Customer Satisfaction Survey (2013) indicates customers are interested in expanded online services
- Large utilities are offering a wider range of online services for their customers
    - Online services include online forms, payment mechanisms, videos, chat services, alerts for overdue bills, consumption thresholds, outage notifications, electronic billing, etc.
- We have limited resources to develop some of the more sophisticated tools
- The Ontario government wishes to roll out Green Button Download My Data functionality

Desired Outcome/Behaviour:

- Ease of access for customers to desired information using computers or mobile devices
- Strong uptake in chat functionality once launched
- Gradual shifting of customers from phones to email, chat room, website
- Increase in electronic billing

Objectives:

In 2014, initiate improved online services including chat functionality, additional online forms and Green Button Download My Data functionality and investigate the possibility of providing email and text message alert services in order to:

- Positively impact revenue
- Increase customer satisfaction
- Increase efficiency and drive down costs
    - Agent call = $3.02 per call approx.
    - IVR = $0.67 per interaction approx.
    - Text = $0.01 per message approx.
    - Online = <$0.01 per call approx.
        - (Source: OnCor – Fixed costs not included)
- Enhance Guelph Hydro's brand awareness and reputation

Measurement of Effectiveness:

- Number of initiatives
- Continuing increase in website traffic
- Increase in email contacts
- Increase in online chat contacts
- Continued high customer satisfaction rates
- Positive survey results when asking about online services

Website Improvements

Activity	Details	Location	Timing	Internal Resources Required	Status
RESIDENTIAL & COMMERCIAL CUSTOMERS	• Chat function • Co-browsing • On-line forms • Green Button Download My Data • Mobile site refresh • On-line survey • Up to date website information	• Website	• Ongoing	• Communications • Customer Service • IT	Complete
STUDENTS & LANDLORDS	• Create new section for Students and Landlords	• Website	• First Quarter	• Communications • Customer Service	Complete

Social Media

Issues:
- Utilities are using Twitter, Facebook and other social media platforms to engage customers
- Lack of resources to launch a Facebook presence
- Lack of resources for video clip creation
- Lack of staff trained on Twitter and Facebook

Desired Outcome/Behaviour:
- Engage younger demographic through use of social media
- Improve service for student population
- Improve outage response through increased use of Twitter
- Improve CDM program update through use of social media

Objectives:
Enhance social media presence in order to:
- Positively impact revenue
- Positively impact CDM targets
- Increase customer engagement and satisfaction
- Drive down costs through increasing use of electronic communication
- Enhance Guelph Hydro's brand awareness and reputation

Measurement of Effectiveness:
- Increased Twitter followers
- Increased website traffic driven from Twitter
- Increase in uptake of CDM programs due to Twitter promotion

Social Media

Activity	Details	Location	Timing	Internal Resources Required	Status
TWITTER	• Train additional staff on Twitter • Increase number of tweets – generally 1 per day • Create a larger team of employees who can post to Twitter in an emergency (with appropriate controls and permissions) • Work with other LDC communicators to develop a mutual aid agreement to provide social media backup in an emergency	• N/A	• Ongoing	• Communications • Executive Assistants • Operations	Complete

APPENDIX 1-F: Guelph Hydro Sample Tweets

Home Notifications Messages Discover from:@GuelphHydro since:2014-1

Everything
People
Photos
Videos
News
Timelines
Advanced Search

All people
People you follow

Everywhere
Near you

Trends · Change

#TheDress
#whiteandgold
#dressgate
#llamadrama
Jihadi John
#CPAC2015
Mohammed Emwazi
Laura Ingraham
Clarkson
Rick Perry

Who to follow · Refresh · View all

TOFinancialDistrict @MyT…
Followed by Serge Imbrogno…
Follow Promoted

Jim Van Fleet @JamesVan…
Follow

10 News Traffic @10Ne…
Follow

Popular accounts · Find friends

© 2015 Twitter About Help Terms Privacy Cookies Ads info Brand Blog Status Apps Jobs Advertise Businesses Media Developers Cricket

Results for **from:@GuelphHydro since…** Save

Top / **All**

Guelph Hydro @GuelphHydro · Dec 30
Our office is closed from Dec 31 to Jan 2, but our emergency services never stop! Happy New Year, #Guelph ow.ly/i/83jXh
2 1 View photo

Guelph Hydro @GuelphHydro · Dec 30
#Guelph Hydro customers beware of fraudsters seeking payment for overdue Guelph Hydro accounts! We never ask for payment over the phone.
6

Guelph Hydro @GuelphHydro · Dec 30
Beware! #Guelph businessperson zapped by hydro bill scam via @WR_Record ow.ly/G3Zlz
2

Guelph Hydro @GuelphHydro · Dec 29
Looking to maximize savings at Boxing Day sales, #Guelph? Download coupons for energy saving devices! ow.ly/GxPQx
2 1

Guelph Hydro @GuelphHydro · Dec 28
Help us plan for the future, #Guelph! Tell us what you think for the chance to win an iPad! #survey ow.ly/FaF5e
1 1

Guelph Hydro @GuelphHydro · Dec 27
Did you get electronics over the holidays, #Guelph? Stay safe - keep them away from liquids such as beverages!

Guelph Hydro @GuelphHydro · Dec 27
Beware! #Guelph businessperson zapped by hydro bill scam via @WR_Record ow.ly/G3Zlz
3

Guelph Hydro @GuelphHydro · Dec 27
Sign up for peaksaverPLUS & get a FREE in-home display that will let you see your electricity use & photos, #Guelph! bit.ly/1z6gfub
1

Guelph Hydro @GuelphHydro · Dec 26
All customers in #Guelph should now have power restored. If you continue to experience outages please call 519.822.3014 to let us know.
3

Guelph Hydro @GuelphHydro · Dec 26
Most of the power has been restored to #Guelph. Crews continue to work to restore those customers still experiencing outages.
1

Guelph Hydro @GuelphHydro · Dec 26
If your power remains out in #Guelph please check our outage map for updates. ow.ly/GsaHh



Guelph Hydro @GuelphHydro · Dec 26
@w_zimmermann Yes, there is a loss of supply from Hydro One but crews are on site and working to resolve.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
Power has been restored in some parts of #Guelph. Downtown continues to be out; crews are working to restore power as quickly as possible.
2

Guelph Hydro @GuelphHydro · Dec 26
Outages in #Guelph are the result of an upstream loss of supply. Crews are responding and working to restore power as quickly as possible.
3

Guelph Hydro @GuelphHydro · Dec 26
We have crews on call to deal with power outages. We are responding and will restore power ASAP. See outage map. ow.ly/GsaHh
1

Guelph Hydro @GuelphHydro · Dec 26
@davebeaton4 Unfortunately no. Crews are on route to investigate. Hopefully not too long.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
@mellyd Crews are on route to investigate but unfortunately we have no estimated time of restoration.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
. @sensfan4eva Refrigerated and frozen food will be fine for 24 hours. Our crews are responding and will restore ASAP.
View conversation

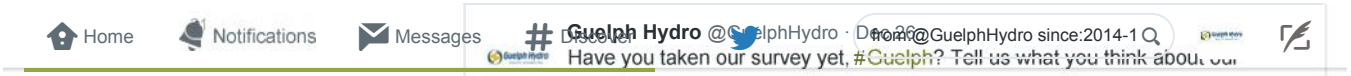
Guelph Hydro @GuelphHydro · Dec 26
@Misbah_Hussain Thanks - we are aware and crews are on route to investigate.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
@aheig82 Crews are on route, hopefully it won't be too long but we don't have an estimated restoration time as of yet.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
@FaytheHelder Hi there, crews are on route to investigate. No estimated time of restoration as of yet unfortunately.
View conversation

Guelph Hydro @GuelphHydro · Dec 26
@heatjarvis Hi there, crews are investigating. No estimated time of restoration as of yet I'm afraid.
1
View conversation

Guelph Hydro @GuelphHydro · Dec 26
Power outages in #guelph. We are investigating. Check our outage map. ow.ly/Gs6Ta
9
1



Guelph Hydro @GuelphHydro · Dec 26
Have you taken our survey yet, #Guelph? Tell us what you think about our service & you could win an iPad! ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 25
If you're making a holiday supper, #Guelph, save energy - use the correct size burner for your pot!

Guelph Hydro @GuelphHydro · Dec 25
Merry Christmas to those celebrating, #Guelph! Today and tomorrow are stat holidays so off peak rates apply.

Guelph Hydro @GuelphHydro · Dec 24
Beware! #Guelph businessperson zapped by hydro bill scam via @WR_Record ow.ly/G3Zlz

Guelph Hydro @GuelphHydro · Dec 24
Friends & family joining you for festive celebrations tonight, #Guelph? Turn down the thermostat - extra bodies mean extra warmth!

Guelph Hydro @GuelphHydro · Dec 24
.@ShannonWare2 We are currently experiencing a power outage in the southwest area of Guelph between College and Stone. We are investigating
View conversation

Guelph Hydro @GuelphHydro · Dec 24
@ShannonWare2 Hi there, yes, crews are investigating. Thanks for your patience.
View conversation

Guelph Hydro @GuelphHydro · Dec 23
Our office is closed Dec 24-26 & Dec 31-Jan 1 inclusive. Regular business hours resume Jan 2. Happy Holidays #Guelph! ow.ly/i/83jiK
View photo

Guelph Hydro @GuelphHydro · Dec 23
Hey #Guelph businesses, we have a survey for you! Tell us what you think about our service & you could win an iPad! ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 22
Have you taken our survey yet, #Guelph? Tell us what you think about our service & you could win an iPad! ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 22
RT @OntMinEnergy: Learn more about electricity on emPOWERme ontario.ca/empowerme

Home Notifications Messages Discover from:@GuelphHydro since:2014-1



View photo

Guelph Hydro @GuelphHydro · Dec 21
Sign up for peaksaverPLUS & get a FREE in-home display that will let you see your electricity use & photos, #Guelph! bit.ly/1z6gfub

Guelph Hydro @GuelphHydro · Dec 21
@speedriverbike Sorry for the delay. Restoration has begun. Shouldn't be much longer. About a half hour.

View conversation

Guelph Hydro @GuelphHydro · Dec 21
@speedriverbike Please call 519-822-3014 and report you are still out.

View conversation

Guelph Hydro @GuelphHydro · Dec 21
Inspect your Xmas lights for safety! Powerful @ontfiremarshal video shows how fast fire can spread. @GuelphFire ow.ly/FFq4p

Guelph Hydro @GuelphHydro · Dec 20
Beware! #Guelph businessperson zapped by hydro bill scam via @wr_record ow.ly/G3ZSr

Guelph Hydro @GuelphHydro · Dec 20
Beware! #Guelph businessperson zapped by hydro bill scam via @wr_record ow.ly/G3ZYC

Guelph Hydro @GuelphHydro · Dec 20
Save energy & money this holiday season by putting your holiday lights on a timer, #Guelph - and we have COUPONS! ow.ly/FYwPQ

Guelph Hydro @GuelphHydro · Dec 20
Help us plan for the future, #Guelph! Tell us what you think for the chance to win an iPad! #survey ow.ly/FaF5e

Guelph Hydro @GuelphHydro · Dec 19
Beware! #Guelph businessperson zapped by hydro bill scam via @wr_record ow.ly/G3ZKE

Guelph Hydro @GuelphHydro · Dec 19
Have you signed up for #ProjectNeutral, #Guelph? Complete a survey by Jan 1 & you could win a gift basket! ow.ly/FYvkS

Guelph Hydro @GuelphHydro · Dec 18

#DYK Ontarians use more than 140 million megawatt hours of electricity a year, #Guelph. Here is where it comes from: ow.ly/FYrQ

Guelph Hydro @GuelphHydro · Dec 18
We want to hear from YOU, #Guelph! Tell us what you think about our service & you could win an iPad! #survey ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 17
Beware! #Guelph businessperson zapped by hydro bill scam via @wr_record ow.ly/G3Zlz

Guelph Hydro @GuelphHydro · Dec 17
Guelph businessperson zapped by hydro bill scam therecord.com/news-story/520… via @wr_record

Guelph Hydro @GuelphHydro · Dec 17
RT @homeandsafety Do you have outdoor holiday lighting? Plug in safely by using a GFCI outlet!

Guelph Hydro @GuelphHydro · Dec 16
@GuelphChamber Thanks for getting the message out!
View conversation

Guelph Hydro @GuelphHydro · Dec 16
Hey #Guelph - let's talk about electricity! Tell us what you think about our service for the chance to win an iPad! ow.ly/FaC21

Guelph Hydro @GuelphHydro · Dec 16
If you receive a call demanding payment over the phone or wire transfer for overdue #Guelph Hydro account, it's a scam & you should ignore.

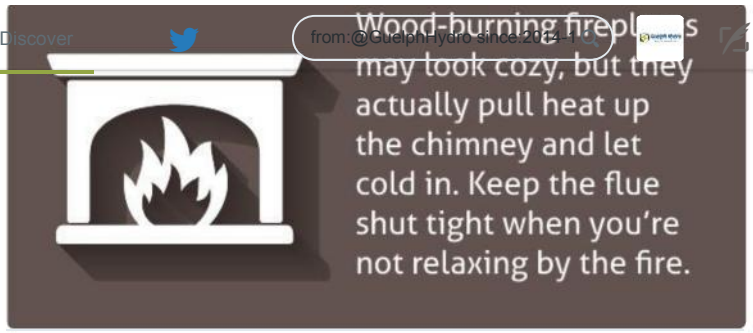
Guelph Hydro @GuelphHydro · Dec 16
RT @OntMinEnergy: Let the sun shine in! Keep curtains & shades open during the day so the sun can warm up your home



View photo

Guelph Hydro @GuelphHydro · Dec 15
MT @OntMinEnergy: Wood-burning fireplaces pull heat up the chimney, let cold in. Keep the flue shut when not in use

Home Notifications Messages Discover from:@GuelphHydro since:2014-12-10



View photo

Guelph Hydro @GuelphHydro · Dec 15
#Guelph Hydro customers beware of fraudsters seeking payment for overdue Guelph Hydro accounts! We never ask for payment over the phone.

Guelph Hydro @GuelphHydro · Dec 15
"Trees should have branches, not your electrical outlets." Great video of holiday safety tips from @homeandsafety ow.ly/Ed1iX

Guelph Hydro @GuelphHydro · Dec 14
Ever wonder how #electricity is made, #Guelph? Check out this video from @OntMinEnergy ow.ly/EkpCr

Guelph Hydro @GuelphHydro · Dec 14
We want to hear from YOU, #Guelph! Tell us what you think about our service & you could win an iPad! #survey ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 13
Hey #Guelph, if you're entertaining tonight, turn down the thermostat. Extra bodies in the house means extra warmth!

Guelph Hydro @GuelphHydro · Dec 13
The holiday rush is on, #Guelph! Save time & energy when it comes to meals - use your slow cooker!

Guelph Hydro @GuelphHydro · Dec 12
Wondering if those holiday appetizers are done yet? Check with the oven light, #Guelph. Opening the door causes 20% of the heat to escape.

Guelph Hydro @GuelphHydro · Dec 11
Cosying up in front of the fireplace, #Guelph? Make sure you close the flue when it's not in use to prevent heat escaping from the house!

Guelph Hydro @GuelphHydro · Dec 11
We want to hear from YOU, #Guelph! Tell us what you think about our service & you could win an iPad! #survey ow.ly/FaEKT

Guelph Hydro @GuelphHydro · Dec 10

Home Notifications Messages Discover from:@GuelphHydro since:2014-1

Sign up for peaksaverPLUS & get a FREE in-home display that will let you see your electricity use. photos, #Guelph bit.ly/1z6gfub

2 1

Guelph Hydro @GuelphHydro · Dec 10
Inspect your Xmas lights for safety! Powerful @ontfiremarshal video shows how fast fire can spread. @guelphfire ow.ly/FFq4p

YouTube



12 Days of Holiday Fire Safety - 3 Minutes of Holiday Havoc
A dramatic new video showing the right and the wrong way to equip your home for the holidays. Go to www.safeathome.ca for 12 Tips to keep your family safe ov...

View on web

1

Guelph Hydro @GuelphHydro · Dec 10
RT @OntMinEnergy: Conservation and renewable energy incentive programs to help you be more energy aware in your home energy.gov.on.ca/en/incentives-…

Guelph Hydro @GuelphHydro · Dec 10
Energy conservation is the gift that keeps on giving, #Guelph, & we have lots of ways to help you save. Check it out! ow.ly/FBa2B

1

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APPENDIX 1-G: CDM Outreach Schedule (2011-2014)

2011 Event Summary

EVENT & PROMOTIONS	LOCATION	saveONenergy (RES, C&I, IND, HAP)	PROMOTION TIMEFRAME	EVENT DATE or TIMEFRAME	OUTREACH POTENTIAL	CDM PROGRAM(S) PROMOTED / NOTES
Guelph Chamber of Commerce	GHESI	C&I	1 day	9-Feb-11	200	All SOE Business Programs
GCC Manage Energy Costs	GCC	C&I, SBL	1 day	25-Mar-11	300	All SOE Business Programs and SBL
Polycon Earth Week	Polycon	RES	1 day	21-Apr-11	700	HVAC, FFP, Pledge, Awareness, PK+
Greening Sacred Places Workshop	The Redeemer	SBL, ERII, RTU	1 day	1-Jun-11	75	SBL, RTU, ERII
Mulitcultural Fest	Riverside Park	RES	3 day	June	20,000	HVAC, FFP, Pledge, Awareness
Ribfest	Riverside Park	RES	3 day	August	25,000	HVAC, FFP, Pledge, Awareness
Fall Energy Fair	St. James the Apostle	SBL, RES	1 day	22-Oct-11	500	Greening sacred places and RES programs
Guelph Firefighters Benefit Game	Sleeman Centre	RES	1 day	9-Jan-12	5,000	FFP

2012 Event Summary

EVENT & PROMOTIONS	LOCATION	saveONenergy (RES, C&I, IND, HAP)	PROMOTION TIMEFRAME	EVENT DATE or TIMEFRAME	OUTREACH - POTENTIAL	CDM PROGRAM(S) PROMOTED / NOTES
GCC Industrial Breakfast	Chamber of Commerce	C&I	1 day	1-Feb-12	40	All SOE Business Programs
Energy Management Tech Symposium	700 Woodlawn	C&I	1 day	29-Feb-12	100	All SOE Business Programs
Linamar Cheque Presentation	700 Woodlawn	C&I	1 day	29-Feb-12		All SOE Business Programs
SOE Retailer Event	Zellers	RES	2 day	April	500	Coupons, HVAC, FFP, Pledge
Mulitcultural Festival	Riverside Park	RES	3 day	June	20,000	HVAC, FFP, Pledge, Awareness
Ribfest	Riverside Park	RES	3 day	Aug 24-26	25,000	HVAC, FFP, Pledge, Awareness
International Plowing Match	Roseville	RES	5 day	Sep 18-22	10,000	Joint utility effort, all residential programs
SOE Retailer Event	TSC Store, Silvercreek Pkwy	RES	2 day	Sep 28-29	400	Coupons, HVAC, FFP, Pledge
Guelph Fall Home Show	University of Guelph	RES	3 day	Oct 12-14	900	Coupons, HVAC, FFP, Pledge
Waste Reduction Week	1 Stone Road	RES	1 day	18-Oct-12	250	Coupons, HVAC, FFP, Pledge
SOE Retailer Event	Home Depot, Woodlawn Rd	RES	1 day	19-Oct-12	500	Coupons, HVAC, FFP, Pledge
SOE Retailer Event	Home Hardware, Speedvale Ave	RES	1 day	20-Oct-12	200	Coupons, HVAC, FFP, Pledge
SOE Retailer Event	Home Hardware, Rockwood	RES	2 day	Oct 19-20	250	Coupons, HVAC, FFP, Pledge
CSR RES Program Training	GHESI	RES	1 day	7-Nov-12	25	PK+, all SOE residential programs
Durose Cheque Presentation	Durose Manufacturing	C&I	1 day	9-Nov-12		This was accompanied by a published case study
Lunch & Learn	Denso	C&I	1 day	12-Nov-12		ERII, Audit funding
Wellness Fair	Kortright Hills	RES	1 day	14-Nov-12	600	Coupons, HVAC, FFP, Pledge
COG Cheque Presentation	City Hall	C&I	1 day	22-Nov-12		ERII, Audit funding
Owens Corning Cheque Presentation	Owens Corning	C&I	1 day	26-Nov-12		ERII Accompanied by a published case study
Urban Sustainable Energy Discussion	GHESI with University of Waterloo	RES, C&I	1 day	26-Nov-12		All SOE programs
Realizing Your Facility's Potential	Innovation Centre	C&I, IND	1 day	11-Dec-12		All SOE programs for Business
Guelph Firefighters Benefit Game	Sleeman Centre	RES	1 day	5-Jan-13	5,000	Coupons - Tweet your seat

2013 Event Summary

EVENT & PROMOTIONS	LOCATION	saveONenergy (RES, C&I, IND, HAP)	PROMOTION TIMEFRAME	EVENT DATE or TIMEFRAME	OUTREACH - POTENTIAL	CDM PROGRAM(S) PROMOTED / NOTES
Industrial Committee Meeting	Guelph Hydro	IND	1 Day	1-Jan-13		Guelph Chamber of Commerce monthly meeting
Capitalizing on Energy Incentives for Business	Springfield Golf Club	C&I, IND	1 Day	22-Jan-13	300	OPA SOE overview - shared with 2 LDCs
Tabletop Tradeshow	Cutten Fields, 190 College Ave E	C&I, IND	1 Day	3-Apr-13		All Programs
Guelph Lions Club Spring 2013 Home & Leisure Show	West End Rec Centre	RES	3 Days	Apr 5-7		Peaksaver+, Coupons
The Brick Tent Event	392 Silvercreek Pkwy	RES	1 Day	15-Apr-13		RES
Realizing Your Facilities Energy Savings (City 101)	Innovation Centre	C&I	1 Day	8-May-13	30	ERII - Dollars to $ense NRCAN presentation
UGDSB Cheque Presentation	500 Victoria Road N	C&I	1 Day	14-May-13		ERII
Mitigating Energy Costs for Business Tradeshow Symposium	Holiday Inn, Guelph	C&I, IND	1 Day	23-May-13	250	HPNC, ERII - shared with 4 LDCs
Guelph General Hospital Cheque Presentation	Delhi Street	C&I	1 Day	4-Jun-13		ERII
Guelph District Multicultural Festival	Riverside Park	RES	3 Days	Jun 7-9		Peaksaver+
Southwest Ontario saveONenergy Symposium	London	C&I, IND	1 Day	26-Jun-13		Case study presentation with 11 LDCs involved
University of Guelph Cheque Presentation	at London Hydro Symposium	C&I	1 Day	26-Jun-13		ERII - part of symposium activities
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	20-Jun-13	13,000	Booth in kidszone, handouts
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	7-Jul-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	13-Jul-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	13-Jul-13	GHESI Host	Guest - Polycon
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	27-Jul-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	27-Jul-13	GHESI Host	Guest - Polycon & UGDSB
Ribfest	Riverside Park	RES	Weekend	Aug 23-25	25,000	Peaksaver+, Fridge Pick-Up
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	24-Aug-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	24-Aug-13	GHESI Host	Guest - McNeil
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	7-Sep-13	13,000	Click thru web ads, Coupons
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	7-Sep-13	GHESI Host	Guest - Sonepar
Chamber After 5	Guelph Hydro	RES, C&I, SBL	1 Day	9-Sep-13		RES, Business
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	28-Sep-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	28-Sep-13	GHESI Host	Guest - Polynova
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	14-Oct-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	14-Oct-13	GHESI Host	Guests - KW, WNH, CND counterparts
Hamilton TiCats Partnership	Alumni Stadium	RES, C&I, IND	Summer-Fall	26-Oct-13	13,000	9 home games x 13,000 seating capacity
Hamilton TiCats Games - Host	Alumni Stadium	C&I, IND	1 Day	26-Oct-13	GHESI Host	Guest - Owens Corning
Video advertising	Cineplex Odeon - all Guelph	RES	Fall-Winter	Fall-Winter		HVAC, FFP, PK+ - booth set up in theatre lobby
SOE Retailer Event	Home Depot	RES	2 days	Oct 5-6	Guelph & Rockwood	PK+, FFP Coupons, HVAC
SOE Retailer Event	TSC	RES	2 days	Oct 19-20	Guelph & Rockwood	PK+, FFP Coupons, HVAC
Mitigating Energy Costs for Business Tradeshow Symposium	Flamboro Downs	C&I, IND	1 Day	22-Oct-13	100	ERII, HPNC, Audit - shared with 6 LDCs
SOE Retailer Event	Canadian Tire	RES	2 days	Oct 26-27	Guelph & Rockwood	PK+, FFP Coupons, HVAC
Guelph Storm CJOY Radio Partnership	Radio	RES	Fall-Winter	30-Oct-13-15-Mar-14	Guelph & Rockwood	HVAC, FFP, PK+, Coupons
saveONenergy Peer to Peer Training	shared	C&I	Fall-Winter	Nov-Dec	Area energy specialists	Retrofit
Small Business Lighting	Stone Road Mall	C&I	Winter	December	Mall Store Managers	SBL

2014 Event Summary

EVENT & PROMOTIONS	LOCATION	saveONenergy (RES, C&I, IND, HAP)	PROMOTION TIMEFRAME	EVENT DATE or TIMEFRAME	OUTREACH - POTENTIAL	CDM PROGRAM(S) PROMOTED / NOTES
Water & Power Outreach	W.C.C. #9 - 295 Water Street	RES	1 Day	24-Jan-14	Guelph	PK+, FFP, HVAC, General - Joint with City WaterWorks
Guelph Storm Game Promos	Radio sponsorship ads	RES	Nov-March	Jan 12-17	Guelph & Rockwood	HVAC, FFP, PK+,Coupons - CJOY/CIMJ
Energy Into Action	Toronto	C&I, IND	1 Day	11-Feb-14	Guelph	All SOE for Business - co-sponsored with 5 other LDCs
Large Customer Breakfast	Holiday Inn	C&I, IND	1 Day	19-Mar-14	Guelph & Rockwood	ERII, Audit, PES, DES
Coupon Retailer Event	Home Depot	RES	2 Days	April 5-6	Guelph & Rockwood	All RES SOE
Coupon Retailer Event	Canadian Tire - Stone Road	RES	1 Day	12-Apr-14	Guelph & Rockwood	All RES SOE
Denso Cheque Presentation	Onsite	ERII	1 Day	20-Apr-14	Guelph	Denso
Guelph Lions Club Home Show	West End Rec Centre	RES	3 Days	Apr 25-27	Guelph & Rockwood	All RES SOE
Coupon Retailer Event	Canadian Tire - Woodlawn	RES	1 Day	26-Apr-14	Guelph & Rockwood	All RES SOE
Linamar Conservation Trade Show	700 Woodlawn Rd W	C&I, IND	1 Day	2-Jun-14	Guelph	All SOE for business
Guelph Multi Cultural Festival	Guelph	RES	3 Days	Jun 6-8	Guelph & Rockwood	Coupons, HVAC, General - outreach via Twitter
Denso Cheque Presentation	Denso	ERII	1 Day	6-Aug-14		Denso, Business, Case Study
Ribfest	Riverside Park	RES	3 Days	Aug 22-24	Guelph & Rockwood	Coupons, PK+, HVAC, General
CPK Cheque Presentation	CPK	ERII	1 Day	4-Sep-14		CPK, Business, Case Study
PK+ CSR Training	Onsite	RES	1 Day	18-Sep-14	Guelph & Rockwood	PK+
Retailer Coupon Event - TSC	TSC	RES	2 Days	Sep 27-28	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Retailer Coupon Event - Home Depot	Home Depot	RES	2 Days	Oct 3-4	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Cineplex Theatres - Woodlawn and Clair	In theatre lobby - Friday evenings	RES	10 days	Oct 3-Nov 30	Guelph & Rockwood	PK+
Home & Better Living Show	Stone Road Mall	RES	4 days	Oct 16-19	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Retailer Coupon Event - Home Depot	Home Depot	RES	2 Days	Oct 17-18	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Conservation & Recycling Event	One Stone Road	RES	1 Day	22-Oct-14	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Retailer Coupon Event - Canadian Tire	Canadian Tire	RES	2 Days	Oct 24-25	Guelph & Rockwood	Coupons, PK+, HVAC, FFP
Farmers Market	Downtown Guelph	RES	8 Days	Thurs/Fri to end Nov	Guelph & Rockwood	PK+

APPENDIX 1-H: Large Use Breakfast – Presentations and Feedback

LARGE CUSTOMER INFORMATION SESSION
March 19, 2014



Guelph Hydro Inc.

AGENDA

Company Overview	*Kazi Marouf, Chief Operating Officer*
Rate Application Process	*Pankaj Sardana, Chief Financial Officer*
Distribution System Plan	*Mike Wittemund, Director of Engineering*
Energy Efficiency	*Matt Weninger, Director of Metering & Conservation* *Mark Britton, Energy Services Representative*
BREAK	
Breakout Groups	**Reliability and Power Quality** **Know Your Bill**

Guelph Hydro
A Valuable Asset to the Community
Kazi Marouf, Chief Operating Officer

OUR VISION

An energy company powering sustainable communities

OUR MISSION

Provide superior customer service while investing in energy-related initiatives that benefit the communities in which we operate and align with the energy-related objectives of the Province of Ontario, the City of Guelph, and our shareholder, Guelph Municipal Holdings Inc.; thus enabling the Guelph Hydro group of companies to grow and enhance our position as an industry leader.

Guelph Hydro Inc.

CITY OF GUELPH

GUELPH MUNICIPAL HOLDINGS INC.

GUELPH HYDRO INC.
Non-Regulated
Holding Company

Total employees = 123

GUELPH HYDRO ELECTRIC SYSTEMS INC.
Regulated
Company

ENVIDA COMMUNITY ENERGY INC.
Non-Regulated
Company

Serving a Critical Role in the Community

- Public trust invested in us to:
  - **Keep the Lights On**
    - **Deliver power** from the transmission supply point (Hydro One) to the customer - safely, reliably and cost-effectively
    - **Maintain, upgrade and expand network** to support growth and economic development needs of the community
  - Provide an appropriate **return on investment** for our shareholder – Guelph Municipal Holdings Inc.
  - Support the **Guelph Community Energy Initiative**

Guelph Hydro Electric Systems Inc.

- "Wires" company
- Serves more than 52,000 customers in Guelph and Rockwood
- Service territory = 93 square kilometres



Where We Fit in the Big Picture



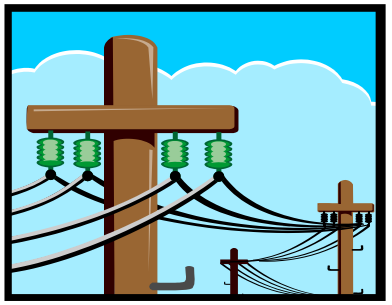
Generators - OPG / Bruce Power and others



Transmitters - Hydro One / Great Lakes Power

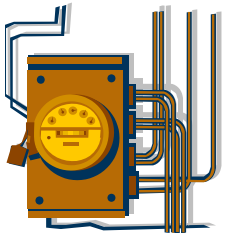
Transformer Stations in Guelph (Three Hydro One owned and one Guelph Hydro owned)



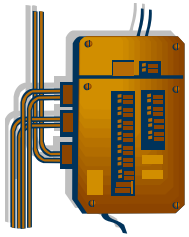




Distribution System



Customer Demarcation Point – Guelph Hydro Meter and our Customer's Meter Base





Customer's Service Entrance Panel

Asset Management

- Assets
  - 3 transformer stations
  - 1,000 kilometres of overhead wires and underground cable
  - 10,000 hydro poles
  - 7,800 pole-mounted and pad-mounted transformers
  - 51,500 smart meters
- Aided by a sophisticated GIS (Geographic Information System) mapping system, the Engineering Department plans a capital replacement program of approximately $11 million annually to replace aged distribution system assets
- On-going maintenance on poles, switches, transformers, underground equipment, tree-trimming, and infra-red scans to provide early detection of degrading equipment prevents power outages caused by equipment failures and prolongs service life

Highlights of Capital Infrastructure Program

- Growth
  - Arlen Transformer Station
  - Road widenings
- Reliability / Response Times
  - Smart grid
- Day-to-Day Operations
  - Fleet
  - IT systems

Impact of Green Energy and Economy Act

- Electricity Conservation
- Renewable energy
  - Feed-in-Tariff programs (FIT, microFIT) designed to encourage investment in renewable generation
  - Utilities required to connect renewable energy and perform any necessary infrastructure upgrades
- Smart grid development



Conservation and Demand Management

- Electricity conservation and peak load reduction targets are now a condition of licence
  - Consumption
    - Current consumption = **1,626 GWh**
    - Four-year reduction target = **79.53 GWh**
  - Demand (Peak Load)
    - Current system peak load = **281 MW** (summer) / **250 MW** (winter)
    - Four-year reduction target = **16.71 MW**

Guelph Hydro's Smart Grid
(handout)

Guelph Hydro's Smart Grid consists of:

- 51,500 smart meters
- Approximately 100 remotely operable switches
- Approximately 30 intelligent monitoring devices



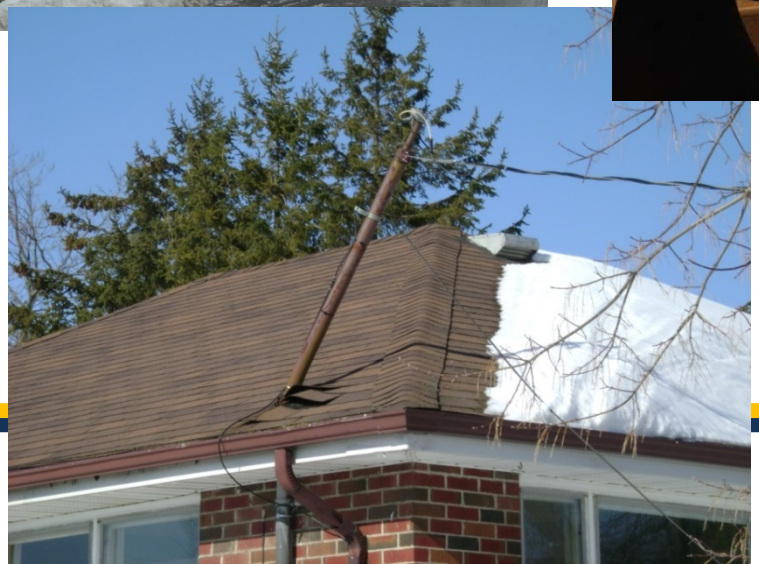
Guelph Hydro's Existing Smart Grid

- Equipment Summary:
  - 4 transformer station Remote Terminal Units
  - 87 SCADAMate switches (remotely operable)
  - 39 wireless line sensors / Faulted Circuit Indicators (FCI)
  - 23 capacitor banks (remotely operable)
  - Real-time metering of 18 transformer station busses
- Remote monitoring of larger renewable generators: 3
- Automatic load transfer scheme:
  - IntelliTeam

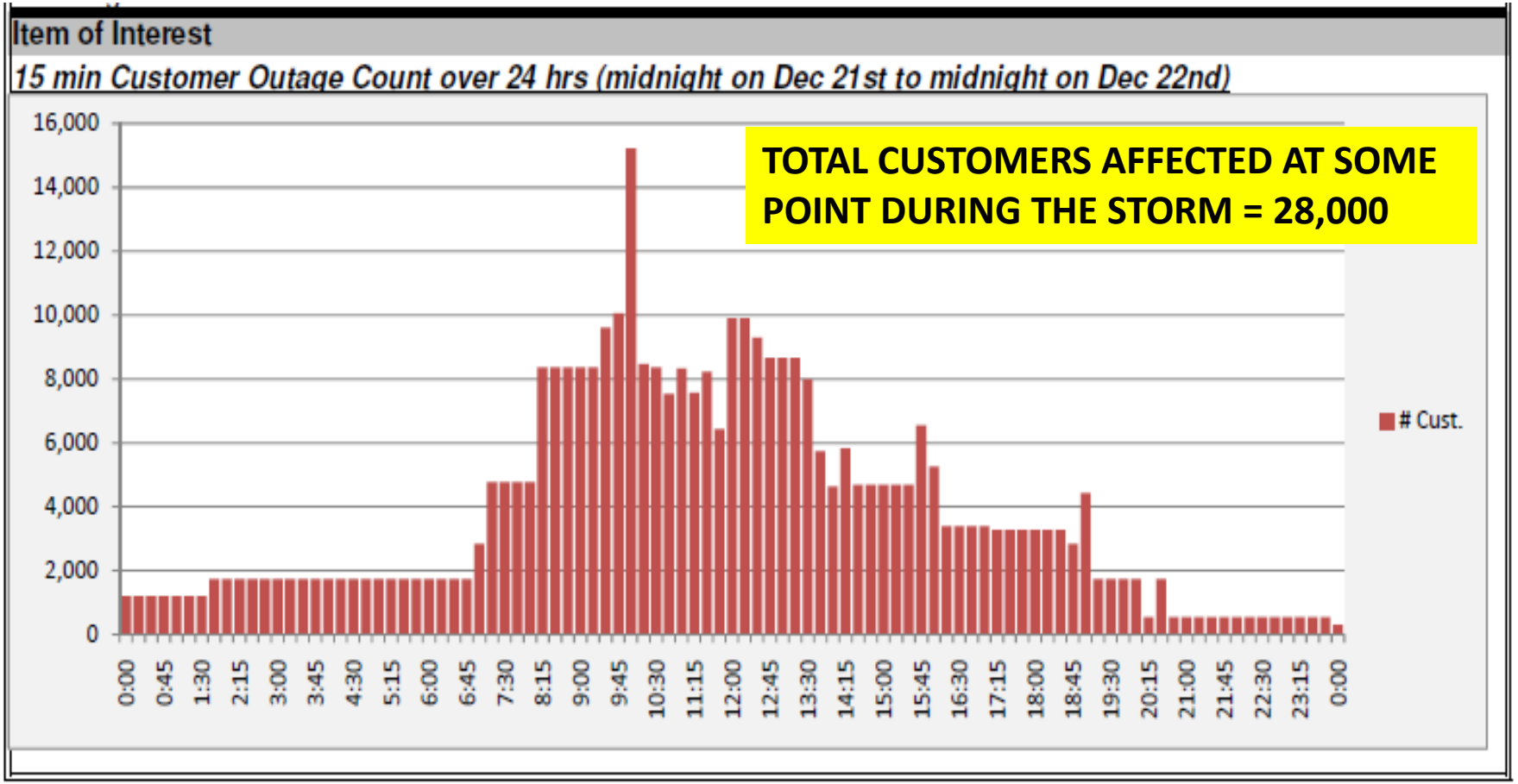
Storm Response







Ice Storm – December 22, 2013



Guelph Hydro Inc.

Ice Storm Response - Operations

- Total customers affected for more than 24 hours = < 500 customers
- Total customers affected for more than 48 hours = < 50 customers
- Approximate percentage restored within 48 hours = 99.9%

- 36 Operations staff assisted with storm restoration
- We sent one crew to assist Milton Hydro and two crews to help out Halton Hills Hydro

Ice Storm Response - Communications

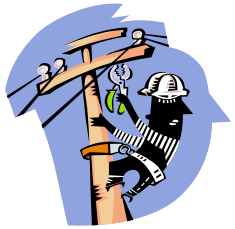
- Six Customer Service Representatives came in on Sunday to answer phones
- Management team kept Board members and elected officials informed
- Communications staff handled social media and updated website
  - Website normal traffic = 300 visits per day
  - Sunday, Dec. 22 = 8,067 visited website and 4,645 visited our mobile site
  - More than 100 tweets were sent out
  - Guelph Hydro was mentioned in 400 tweets sent out by others
  - Tweets were so frequent, @GuelphHydro was “trending”

RATE APPLICATION PROCESS
Pankaj Sardana, Chief Financial Officer

How Electricity Rates are Determined

Ontario Energy Board

- Regulates Guelph Hydro Electric Systems Inc. ("GHESI")
- Sets GHESI's Ratebase and Revenue Requirement
- Ratebase = Net Fixed Assets + Working Capital Allowance

Ratebase =  + 

- Revenue Requirement = Operating, Maintenance and Administration Costs + Depreciation Expense + Return on Ratebase + Taxes

Revenue Requirement ÷ Consumption = Rates

Guelph Hydro Inc.

What's The Process?
Cost of Service + Incentive Regulation

- Cost of Service
  - Ontario Energy Board examines ratebase and costs of serving customers
  - Decision rendered → rate order → utility charges customers new rates

- Incentive Regulation
  - Cost of Service "rate year" is followed by four years of incentive regulation
  - Utilities incentivized for cost efficiencies in operations
  - Rates are reset using a formula:

Inflation less productivity and "stretch" measures

Guelph Hydro Inc.

Rate Application Process

- Rate Application typically filed with Ontario Energy Board about nine months prior to Rate Approval
- Required to file on a “Forward Test Year” basis; that is, on a forecast basis
- Application typically covers historical years, a “Bridge Year”, and a “Test Year”. For example, for the 2016 rate filing, we are going to file 2012-2014 (historical), 2015 (bridge) and 2016 (test)
- Application process typically leads to either a written or oral hearing

Rate Application Process



- Oral hearing process is set in a “quasi-judicial” rate setting, where witnesses are under oath, and are “cross-examined” by intervenors
- Guelph Hydro staff present our story
- Public intervenors with electricity expertise submit their own evidence challenging our plans and assumptions

- The Ontario Energy Board weighs the evidence and decides on the rates Guelph Hydro can charge for distribution services
- Filed evidence needs to be thorough and we must demonstrate we are meeting customer needs and expectations



FRAMEWORK OF DISTRIBUTION SYSTEM PLAN
Mike Wittemund, Director of Engineering

What is a Distribution System Plan (DSP)?

- Consolidated document of a distributor's asset management (AM) process and capital expenditure plan
- The Distribution System Plan is required to be included as part of the Rate Application submitted by Licensed Local Distribution Companies (LDC) in Ontario

Purpose of Filing a Distribution System Plan

- Good distributor planning is an essential pre-requisite to the performance-based rate-setting approaches established under the Renewed Regulatory Framework for Electricity.
- Filing a Distribution System Plan with an application to the Ontario Energy Board will provide information to the Ontario Energy Board and interested stakeholders including but not necessarily limited to a distributor's:
  - Asset related performance objectives and approach to evaluating its performance relative to those objectives;
  - Approach to lifecycle asset management planning and the management of asset-related operational and financial risk; and
  - Plan for capital-related expenditures over the five-year forecast period.

Other Key Elements

- **Integrated planning**
  - Investments are planned and optimized to help distributors pace and prioritize projects
- **Longer term planning horizon**
  - A planning horizon of five years is required to support integrated planning and better align distributor planning cycles with rate-setting
- **Regional considerations**
  - Planning the distribution system infrastructure in a regional context
  - Cost effective development of electricity infrastructure in Ontario
- **Smart grid development and implementation**
  - Expected to be integral to distribution system plans
  - Implemented on a coordinated regional basis to achieve economies of scope and scale

Performance Drivers

- **Customer Focus**
  - Responds to identified customer preferences
  - Customer engagement used to identify preferences; the value proposition economic efficiency and cost-effectiveness
  - Factors relating to customer preferences or input from customers and participants in Regional Planning
- **Operational Effectiveness**
  - Asset management and capital expenditure planning processes take advantage of opportunities for continuous improvements in productivity and cost performance keeping. System reliability and quality objectives
- **Public Policy Responsiveness**
  - Integrated and rationalized so as to permit timely and appropriate expenditures in relation to a distributor's government-mandated obligations
- **Financial Performance**
  - Financial viability and operational effectiveness will endure over the long term by sustaining efficiencies gained through prudent capital-related expenditure planning and Distribution System Plan execution.

CONSERVATION & DEMAND MANAGEMENT

Matt Weninger, Director of Metering & Conservation

Mark Britton, Energy Services Representative

Why Conservation?

- Ontario's 2030 Long-Term Energy Plan (LTEP) Targets:
  - 7,100 MW in demand reduction
  - 28 TWh in energy savings
- Guelph Hydro 2011-2014 Targets
  - 16.71 MW in demand reduction
  - 79.53 GWh in energy savings
- Conservation is more cost effective than new generation and transmission

In 2012, conservation was delivered at a program cost to consumers of under 4 cents per kWh. For every dollar invested in energy efficiency programs, Ontarian's have saved two dollars in avoided energy costs.
- Andrew Pride, OPA

Guelph Hydro Inc.

Results Achieved

- 2012 verified results have Guelph in top five of all LDCs
- 2013 projections

2013 - DEMAND [MW] RESULTS PROJECTION

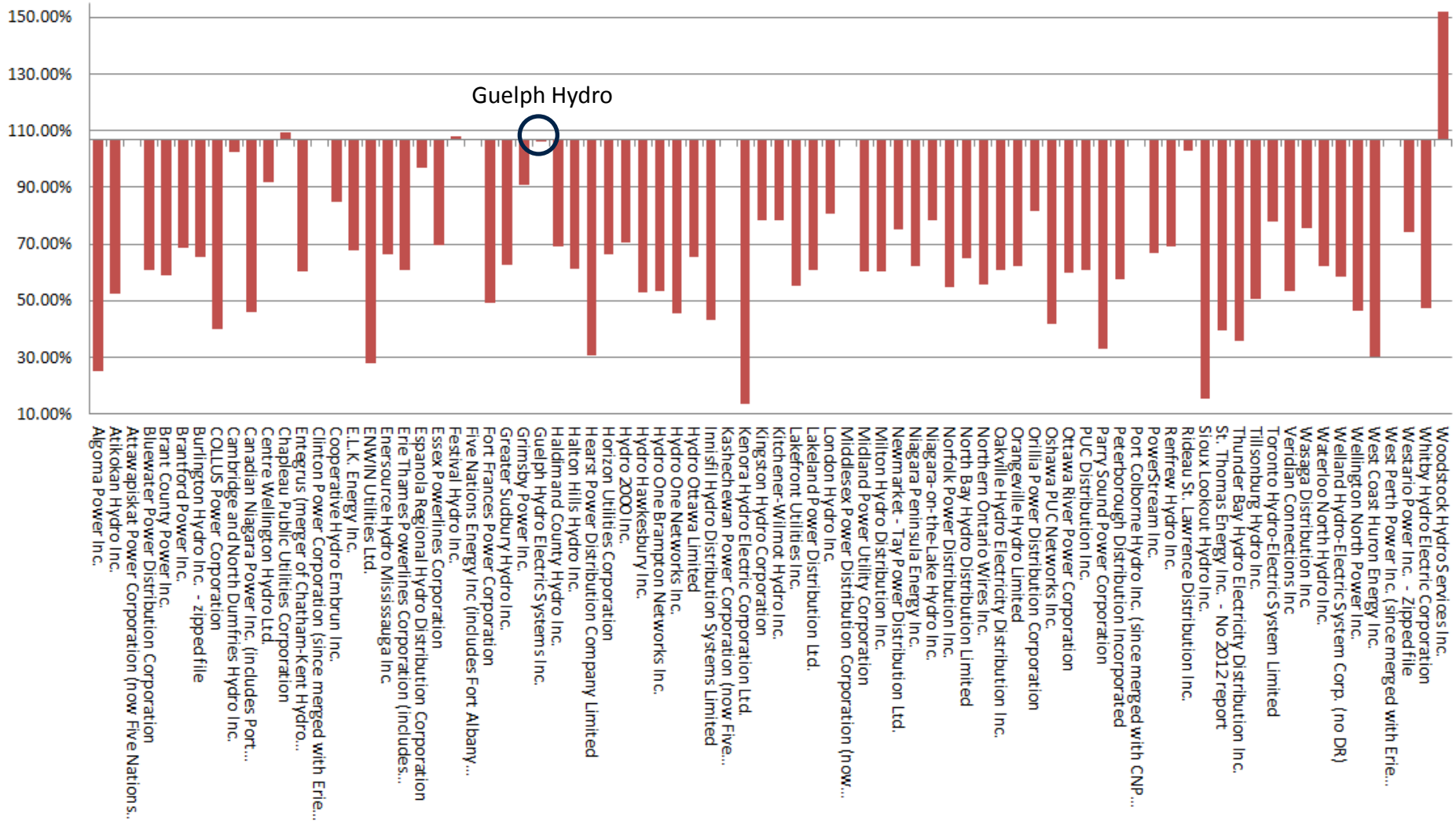
GHESI Results - NET	2011	2012	2013	2014	Total
2011	3.42	2.99	2.98	2.93	**2.93**
2012	-	2.87	3.99	3.96	**3.96**
Projection 2013	-	-	5.20	5.11	**5.11**
2014	-	-	-	-	**0.00**
Unverified Net 2014 Peak Demand Savings Target Achieved [MW]:					**12.00**
Unverified Net 2014 Peak Demand Savings Target Achieved [%]:					**71.8%**

2013 - ENERGY [GWh] RESULTS PROJECTION

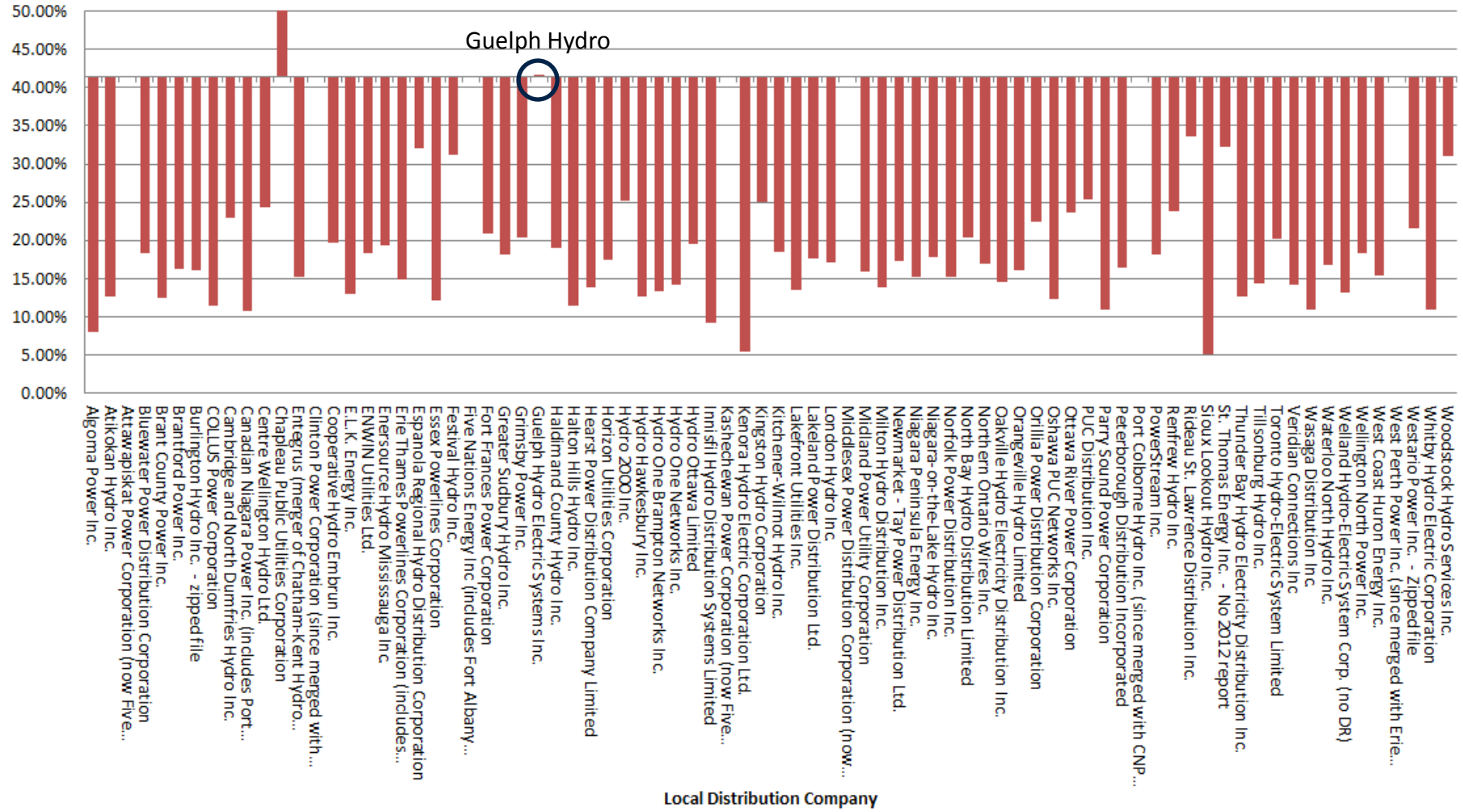
GHESI Results - NET	2011	2012	2013	2014	Total
2011	14.41	14.39	14.38	14.23	**57.41**
2012	-	9.83	8.91	8.80	**27.54**
Projection 2013	-	-	3.71	3.67	**7.38**
2014	-	-	-	-	**0.00**
Unverified Net Cumulative Energy Savings 2011-2014 Achieved [GWh]:					**92.33**
Unverified Net Cumulative Energy Savings 2011-2014 Achieved [%]:					**116.1%**

Guelph Hydro Inc.

Cumulative 2011-2012 Contribution to 2014 MWh % Target Achieved (excluding DR)



Cumulative 2011- 2012 Contribution to 2014 MW % Target Achieved (excluding DR)



Beyond 2014

- Anticipate electricity conservation programs will exist
- Currently working on:
  - Energy only LDC targets?
  - Links to regional supply planning
  - Timeframe could be six-year tranche
  - Programs, incentives, delivery to be determined
- More to follow . . .

Energy Efficiency Programs

Conservation Program Highlights:

- Over **1 million** energy efficient products through the **COUPON** program in collaboration with over 900 retail partners and stores
- Over **34,000** inefficient appliances were collected through the **FRIDGE & FREEZER** program
- Over **3,800** appliances were collected at retail locations across the province through the **EXCHANGE EVENT**
- Over **85,000** upgrades were completed through the **HEATING & COOLING INCENTIVE** – over half of all Ontarians who replaced their furnace or central air conditioning used the incentive
- Over **190,000** load control devices are now available in homes and small businesses across the province through the ***peaksaver* PLUS®** program
- Over **18,000** upgrades were completed through the **SMALL BUSINESS LIGHTING PROGRAM**
- Over **5,500** energy-efficient projects were completed though the **RETROFIT PROGRAM**











Beyond Lighting: What is Next?

- Business and Industrial programs
  - ERII - Electricity Retrofit Incentive Initiative
    - Compressed Air, Variable Frequency Drives, Equipment Replacement, Process Improvement
  - Energy Audits
    - Discover possibilities through third party audit
  - PSUI – Process and Systems Initiative
    - Incentives for studies on large projects such as Combined Heat and Power
  - HPNC – High Performance New Construction
    - Incentives to build efficient buildings above Ontario Building Code

BREAKOUT SESSION 1
Reliability and Quality of Power

Facilitators: Erik Veneman, Director of Operations

Mike Wittemund, Director of Engineering

Group Questions - Reliability

Power Quality

- Do you have sensitive operations that are affected by power quality issues?

Outages / Reliability

- How many outages did your company experience in the past year?
- What was the impact of the outages?
- Is there a certain length of time at which the costs and consequences of an outage become more serious for you?
- How do momentary outages impact your business?
- How acceptable is the current number of outages you are experiencing? What would be acceptable?
- What is the reasonable duration for a service interruption?
- Was your organization (or family) impacted by the ice storm in December?
  How would you rate our response?
- Do you understand the cost differential between overhead and underground wires?
- Have you used our online outage map?
- In the event of an after-hours outage, did you call Guelph Hydro? What happened? Did this response meet your needs? Were you satisfied? If not, how can we improve? What do you need from us?

Suggestions for Improvement

- Is there anything specific Guelph Hydro could be doing to improve our response in outage situations? In carrying out our day-to-day responsibilities?

BREAKOUT SESSION 2
"Know Your Bill"

Facilitators: MJ van Boxmeer, Billing Analyst

Giorgio Boccalon, Key Accounts Manager

- Review of a typical invoice
- Line by line explanation
- Discussion of HOEP and Global Adjustment
- My Accounts Online

Guelph Hydro Inc.

GROUP QUESTIONS – Know Your Bill

- What other services could we be offering to assist you in managing your bill?

- Is there anything that we can do to assist you in engaging your employees in your energy conservation efforts?

CLOSING AND SURVEY

Please fill in the survey

Thank you for coming!

Large Customer Information Session Feedback Summary

Executive Summary

This report summarizes the results of the feedback forms received following the Large Customer Information Session hosted by Guelph Hydro on March 19, 2014. Ten representatives from eight organizations representing a cross section of businesses sectors in Guelph attended the session, which featured presentations on the following topics:

- Overview of Guelph Hydro
- Rate Application Process
- Distribution Plan
- Energy Efficiency Programs
- Reliability and Power Quality
- Know Your Bill

Of the 10 people in attendance at the event, seven submitted feedback forms for a response rate of 70 per cent.

Highlights of the feedback:

- 71% of attendees found the session a valuable use of time
- 86% of attendees rated the overview of Guelph Hydro good to excellent
- 71% of attendees rated the Rate Application presentation good to excellent
- 71% of attendees rated the Distribution Plan presentation good
- 71% of attendees rated the Energy Efficiency presentation good to excellent
- 86% of attendees rated the Reliability and Power Quality presentation good to excellent
- 100% of attendees rated the Know Your Bill presentation good to excellent

Energy conservation and incentive programs and billing appear to be the most valued and informative presentations at the session, with energy conservation and incentive programs receiving 10 mentions in anecdotal feedback and billing receiving eight mentions in anecdotal feedback.

Three respondents would like to see more sessions like the Large Customer Information session held in the future. Topics suggested for future information sessions include solar energy and energy conservation programs.

The following pages provide the detailed information for each question. For information presented in table format, the results are presented as a percentage with the number of responses for each category presented with the number in a bracket, as follows: (number).

Anecdotal feedback has been captured verbatim. Because the information itself is considered more important than who provided it, we have not made an effort to keep track of responses by individual respondent and therefore similar comments may appear in the same category more than once.

Detailed Information

1. **Your time is valuable. Do you feel this information session was a valuable use of your time?**

Very Valuable	No Answer
5	2
71%	**29%**

2. **Please rate each of the presentations on a scale of 1-5 where 1 is poor and 5 is excellent**

	Overview	Rate Application Process	Distribution System Plan	Energy Efficiency	Reliability & Power Quality	Know Your Bill
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	**14%** (1)	**29%** (2)	**71%** (5)	**14%** (1)	**14%** (1)	0
4	**43%** (3)	**57%** (4)	**14%** (1)	**29%** (2)	**43%** (3)	**14%** (1)
5	**43%** (3)	**14%** (1)	0	**57%** (4)	**43%** (3)	**86%** (6)
N/A			**14%** (1)			

3. **What was the best part, most interesting, or most valuable part(s) of today's Information Session?**
   - How the OEB works
   - Know your bill (4)
   - Incentive plans
   - Breakout sessions
   - Energy efficiency

4. **What part of the session was the least interesting or valuable?**
   - Distribution system plan (2)
   - Entire package was worthwhile
   - A few of the presentations
   - Know Your Bill

5. **What was the most significant piece of information that you learned today?**
   - Opportunities for improvement
   - Better understanding of the invoice (3)
   - Incentive programs
   - Feed in Tariff

6. **What were some of the things you learned from the presentations/discussions that you didn't know before?**
    - No 24 hour coverage in the control room
    - LED lighting
    - Graph availability
    - Understanding the non-competitive portion of the bill
    - Consumption charts
    - Energy incentives

7. **What topics do you need more information on?**
    - Conservation projects
    - Possibly Lunch & Learn on Know Your Bill
    - Outages
    - Feed in Tariff

8. **What should we be doing differently? Please provide three suggestions for ways in which we can improve or enhance services or provide new services that would increase your satisfaction with Guelph Hydro.**
    - More interfacing (personally or digitally)
    - More like these sessions
    - Email notification of outages
    - More frequent information sessions
    - Would welcome more assistance with energy audit and information to save

9. **We will be engaging with various groups of customers more frequently in the future. What sort of format would work best for you? Please check all that apply.**

Morning session (like this one)	Afternoon session	Evening session	Webinar	Conference call	On-line survey	Newsletter/Email Blast	Personal visits
86% (6)	0	**14%** (1)	0	0	0	0	0

10. **Questions/Comments - please provide any additional comments that might help us improve our services.**
    - It's good to be able to network with industrial and other large users.

APPENDIX 1-I: Innovative Research Group Inc. Customer Engagement

Innovative Research Group, Inc.
Toronto • Vancouver

Customer Consultation Report

2016 Distribution System Investment Plan Review

April 2015

Prepared for:

Guelph Hydro Electric Systems Inc.
395 Southgate Drive
Guelph, Ontario
N1G 4Y1

Customer Consultation Report

2016 Distribution System Investment Plan Review

April 2015

This report has been prepared by Innovative Research Group Inc. ("INNOVATIVE") for Guelph Hydro Electric Systems Inc. ("Guelph Hydro").

The conclusions drawn and opinions expressed are those of the authors.

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Fax: 416.640.5988
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Introduction

About this Consultation

Innovative Research Group Inc. (INNOVATIVE) was commissioned by Guelph Hydro Electric Systems Inc. (Guelph Hydro) to help the utility design, collect feedback and document its customer engagement and consultation process as part of the development of Guelph Hydro's 2016 Distribution System Investment Plan Review, which incorporated both capital infrastructure and operational plans.

Guelph Hydro's 2016 Distribution System Investment Plan Review is a key element of its next distribution rate application. The outcome of this application will determine Guelph Hydro's electricity distribution rates for next year and will help set the pace for spending over the next 5 years.

The Ontario Energy Board's new "consumer-centric" approach to rate applications contained in the *Renewed Regulatory Framework for Electricity (RRFE)* requires Local Distribution Companies (LDC) 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 Guelph Hydro's 2016 Distribution System Investment Plan Review.

This process of identifying and reacting to customer needs and preferences towards Guelph Hydro's system plan development and execution, as it relates to rate applications, is new to all of Ontario's LDCs. There are no established practices and there are a number of options available to engage with customers. The following section explains how we approached this engagement.

Approach to Meaningful Customer Engagement

It is our experience at INNOVATIVE that engaging customers in meaningful consultation can be a challenge. 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 don't know enough to contribute to a public consultation. 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.

Running a consultation on the Guelph Hydro's 2016 Distribution System Investment Plan Review has an additional challenge – customers' lack of familiarity with the distribution system; including how it is funded, regulated and the nature of its challenges. This is well documented in Ontario Energy Board research and in INNOVATIVE's own experience.

[1] OEB Renewed Regulatory Framework for Electricity Sections 2.4.2, 5.0, and 5.0.4.

Considering both the challenge of engaging a representative group of customers and the challenge of lack of knowledge, we developed a process built on three key principles:

1. Use random-sampling research elements to ensure a representative sample of customers are engaged.
2. 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.
3. Create an opportunity for the public to learn the basics of the distribution system so they can provide a more informed point of view.

Customer Consultation Overview

Based on the principles outline above, INNOVATIVE worked with Guelph Hydro 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 priorities as they relate Guelph Hydro's 2016 Distribution System Investment Plan Review.

The consultation encompassed two core elements of customer engagement.

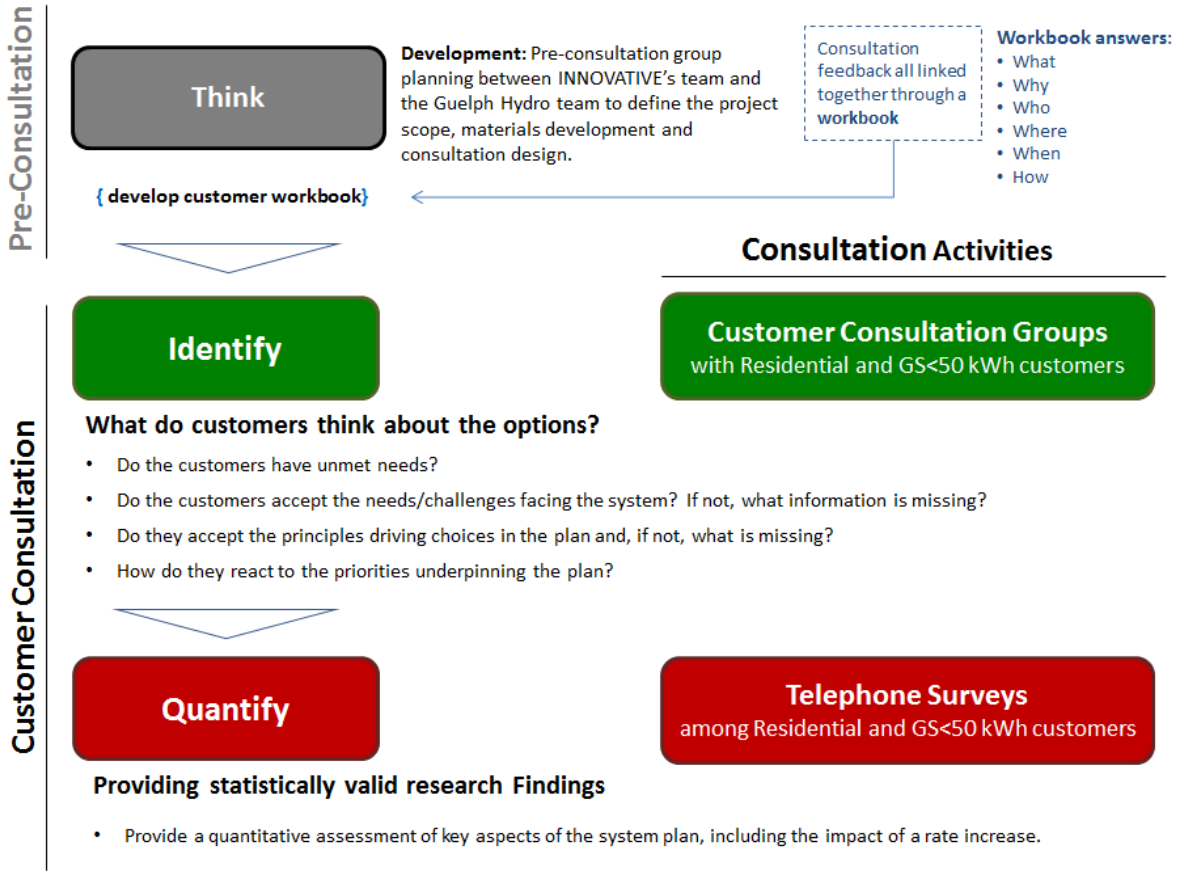
1. **General Service and Residential Consultation Groups:** This qualitative phase of the consultation was designed to educate customers, assess their preferences and priorities, gauge reaction to proposed rate changes, and ultimately inform the quantitative phases of the consultation. The groups were randomly recruited and held in Guelph. A workbook was used to provide the participants with core information about both the provincial and local electricity system, Guelph Hydro'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.
2. **Random Telephone Surveys**: INNOVATIVE conducted telephone surveys with residential and general service (GS < 50kW) customers to provide a quantitative assessment of key aspects of the system plan. Customer lists for both respondent groups were provided by Guelph Hydro and the sample was randomly selected by INNOVATIVE.

There were three stages in developing and implementing this consultation:

- **Think**: The first stage was to develop the core background material and key questions for the workbook. INNOVATIVE and Guelph Hydro worked together to review the utility's system plan, capital investments and OM&A spending. Potential questions were identified that would enable customers to share their needs and preferences. Then a workbook was developed that would provide the information needed to enable customers with varying levels of knowledge to find answers to those questions.
- **Identify**: The second step was to determine the range of views held by the public regarding the system plan through the more qualitative elements of the process. This included

holding two customer discussion groups using randomly recruited samples of residential and general service customers.

- **Quantify**: The third step was quantitative – a randomly recruited telephone survey of residential and general service customers. Randomly recruited surveys allow for generalizable conclusions that can be applied to the broader population of Guelph Hydro customers. The surveys were developed based on the feedback from the qualitative research.



Workbook Development

As we noted earlier, a key challenge in obtaining customer feedback on Guelph Hydro's rate application is the lack of knowledge customers have regarding Ontario's electricity system and Guelph Hydro's role as the local distributor within the system. Guelph Hydro's proposed distribution system plan, capital investment plan and OM&A budget are all very detailed and extensive documents that use technical language. Our challenge was to briefly cover these key issues and frame meaningful questions about customer needs and preferences.

The consultation workbook was developed by INNOVATIVE and Guelph Hydro in the spring of 2015. INNOVATIVE provided a framework for the workbook, which contained background information on the rate application process and the provincial electricity system. All content specific to Guelph Hydro was provided by the utility.

The final consultation workbook had six 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 Guelph Hydro's customers.
3. **Guelph Hydro's Distribution System Today**: A discussion of the structure and key elements of Guelph Hydro's distribution system.
4. **System Reliability**: A brief review of system reliability figures
5. **Cost Pressures**: A discussion of the various challenges facing Guelph Hydro's distribution system and an overview of recent and current initiatives to manage the challenges. This section provided an overview on forecasted capital and operating spending for 2016.
6. **What the Plan Means for You**: A section covering the expected impact on rates and overall reaction to the investment plan.

Although customer experience and familiarity with the energy sector varied, 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 the customers went through the consultation workbook they were prompted with questions relating to system reliability, system challenges, and preferences on the direction of Guelph Hydro's proposed system plan, capital investment and operating spend.

Another key element of the workbook was the questions. In developing the questions, we looked for those that could also work on the telephone, without requiring all of the information in the workbook.

The *needs* questions were the easiest. We started with a basic satisfaction question and then asked an open-ended question about how Guelph Hydro could improve its services. We let customers discuss whatever topics they wanted to with no boundaries. Later in the workbook we probed satisfaction with the number and duration of outages and probed the impacts of those outages.

Preferences took a bit more thinking. We were looking for value choices rather than technical issues. Key topics for preferences included:

- What should Guelph Hydro's priority be when planning its level of investment in replacing aging infrastructure?
- Should Guelph Hydro invest in buildings, equipment and IT systems?
- How well does Guelph Hydro's investment plan respond to cost drivers?

The final substantive question asked about the cost of the plan and the outcomes it planned to achieve. Sometimes this question is asked with a simple support or oppose response scale, but we found that this type of scale does not effectively capture customer responses. Instead, we gave customers 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

The workbook concluded with a final set of five questions to assess the workbook and process itself.

The workbooks for residential and general service customers can be found in the **Appendix** of this report.

Executive Summary

This section provided a high level summary of the findings of the customer engagement research. Subsequent sections of the report will provide more detailed results.

This summary includes feedback from 20 customers who participated in the *qualitative* stage of the consultation where we explored the range of issues related to Guelph Hydro's rate application, as well as feedback from another 700 customers who contributed to the *quantitative* stage where we documented the incidence of needs and preferences across the customer population.

Customer Needs & Preferences

Customers are Highly Satisfied

There is a very high level of satisfaction among customers, as was demonstrated across all consultation activities and both customer rate classes.

Overall Satisfaction across Consultation Activities:

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	General Service	Residential	General Service	Residential
Very satisfied	2	2	48%	40%
Somewhat satisfied	7	9	47%	46%
Somewhat dissatisfied	0	0	3%	6%
Very dissatisfied	0	0	1%	5%
Don't know / Refused	0	0	1%	3%
TOTAL	**n=9**	**n=11**	**n=186**	**n=514**

When we asked what Guelph Hydro can do better to improve services, the primary request was for lower rates, followed (distantly) by reduced outages. So, customers want to pay less, but they want reliability to stay the same – or even improve. We investigate this dynamic in the telephone survey with questions asking customers to give feedback on what Guelph Hydro's priorities should be when it comes to spending and reliability.

Familiarity with Guelph Hydro

In both the qualitative and quantitative research, it was apparent that while customers are not overly familiar with Guelph Hydro's role within the provincial electricity system, this relative lack of familiarity does not detract from the high level of customer service.

The lack of familiarity was most apparent when discussing the breakdown of customers' electricity bills. In the consultation group discussion, it was clear that customers did not previously understand what proportion of their bill was remitted to Guelph Hydro. This was confirmed in the telephone surveys, where we found that 51% of residential customers and 59% of general service customers were not familiar with the breakdown of their electricity bill.

Reliability of Service

In the qualitative research, there was some discussion about reliability and, for the most part, participants indicated being satisfied with the reliability of their electrical service and not being overly inconvenienced by outages. This is covered in greater detail and the next section of this report.

In the telephone surveys, we found that most residential (54%) and general service (56%) were *not* impacted by the ice storm of December 2013, and that – whether they were affected or not – most (83% residential, 88% general service) were satisfied with Guelph Hydro's response to the storm.

More than half of residential and general service customers reported having experienced a power outage in the past twelve months that was not due to severe weather, but that these outages (49% residential, 35% general service) lasted for less than 15 minutes and most reported that they were only a minor inconvenience (57% of residential customers) or had barely any cost (45% of business customers).

As further evidence of customer satisfaction with current reliability, when asked how Guelph Hydro should address the current number of unexpected power outages, 62% of residential customers and 61% of general service customers think the utility should spend what is needed to maintain the current number of outages. Similarly, 60% of residential customers, and 65% of general service customers think Guelph Hydro should spend what is required to maintain the current length of outages.

Electricity Affordability

While some customers are feeling financially strained by their electricity bill, there are also those who are willing to pay more for their electricity. It should be noted, however, that due to the confusion on the part of customers with regard to the items included on an electricity bill, when asked about the impact on household finances of their "electricity bill", customers likely consider the entire bill which, in the case of Guelph Hydro customers, includes charges for water.

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

- 60% 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*";
- 66% of general service 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, when considering the cost of reliable electric service, a majority of customers say they are willing to pay a bit more if that means <u>better</u> service reliability.

- 57% of residential and 53% of general service customers agree that "*I'm [my organization would be] willing to pay a bit more for my electricity if it means better service reliability*."

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

- 63% of residential and 62% of general service 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]"*.

Customer Reaction to Rate Impacts

Rather than asking customers if they support or oppose a rate increase, we instead provided four responses to choose from:

- 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

This approach allows respondents to express their dislike for the rate increase but, at the same time, acknowledge that they think it is necessary. For the purposes of this analysis, we add together outright support (the first statement) and reluctant support (the second statement) to arrive at a *total acceptance* figure.

Referring to the generalizable results from the telephone surveys, 79% of residential customers and 75% of general service customers accept Guelph Hydro's proposed rate increase. These findings are in line with what we heard from customers during the initial focus group phase of the research.

Q: Considering what you know about the local distribution system, which of the following best represents your point of view?

Response	Directional (Focus Groups)		Generalizable (Telephone Surveys)	
	General Service	Residential	General Service	Residential
The rate increase is reasonable and I support it	1	0	32%	41%
I don't like it, but I think the rate increase is necessary	6	8	42%	38%
The rate increase is unreasonable and I oppose it	0	2	22%	18%
Don't know / Refused	2	1	4%	3%
TOTAL	**n=9**	**n=11**	**n=186**	**n=514**

Considering people are naturally resistant to any sort of cost increase, it is somewhat surprising that more than one third (32%) of general service customers and an even higher amount (41%) of residential customers reported on the telephone survey that they found the cited rate increase reasonable and supported it. Even more noteworthy is the fact that, in the case of residential customers, this amount (41%) is even higher than those who said that they didn't like the rate increase but thought it is necessary (38%).

In the focus groups, only one general service customer indicated he thought the rate increase was reasonable and supported it. The majority indicated that they didn't like the increase but thought it

was reasonable. It is not surprising that so many offer only reluctant acceptance of the proposed rate increase. We are essentially asking people if they are prepared to pay more for the same service they are receiving today, and so it is natural that so many don't like it.

However, as we saw in both the qualitative and quantitative phases of the customer engagement, customers understand that they need to pay more in order to maintain the reliability they are currently enjoying. Further, they support Guelph Hydro's plans to invest in the system to maintain this reliability.

Workbook-based Facilitated Discussions

Executive Summary

General Satisfaction:

Overall, participants felt that Guelph Hydro is providing very good service. Four of twenty participants were *very satisfied* with the service they receive, while the remaining participants were *somewhat satisfied*. This sentiment is so prevalent that when asked, the majority of participants had no suggested improvements to offer. In both groups, there were mentions of instances where Guelph Hydro had addressed an issue quickly and efficiently.

System Reliability:

General service participants were very satisfied the reliability of the service they receive at their businesses. Only one participant experienced more than three outages in the past year; all participants found the number of outages they experienced to be acceptable. Furthermore, the outages that were experienced did not have a major impact on their daily operations.

Residential participants experienced more outages; however the severity of the impact varied. For some, the outages went unnoticed until they had to reset their clocks; conversely, one customer had to purchase an uninterruptible power supply (UPS) system to mitigate the frequency of the outages. Nonetheless, only one participant was *dissatisfied* with the reliability and quality of the services provided by Guelph Hydro.

Areas for Improvement:

The majority of general service participants were satisfied enough with the service to be unable to suggest any improvements. The one common theme mentioned was to lower the rates, which none actually considered to be a realistic option.

Residential participants were most concerned with the quality of the power they receive. They recognized that large-scale blackouts, and longer power interruptions were infrequent; however power "sags" and "flickering" were mentioned several times, mainly by residents who indicated they lived in the south end of Guelph. There was also some mention of how Guelph Hydro compares to other utilities in terms of costs and expenditures. Participants inquired as to whether Guelph Hydro was looking into the practices of those utilities whose costs were lower in order to find efficiencies.

Concerns with Plan:

Almost every participant (17 of 20) felt that Guelph Hydro is adequately managing cost drivers, while also meeting customer expectations. Furthermore, all twenty participants are confident that Guelph Hydro is planning well for the future. The main concern common in both groups, was that Guelph Hydro should be held accountable in their endeavors to continue finding cost efficiencies in order to avoid future increases of this magnitude.

Social Acceptance of Plan:

Overall, the proposed increase was found to be acceptable, and is accepted by the majority of participants. Although most would not like to see costs rise, they recognize that it is a necessary investment to ensure the integrity of the system for future generations.

Q: Considering what you know about the local distribution system, which of the following best represents your point of view?

Response	GS	RS	COMBINED
The rate increase is reasonable and I support it	1	0	1
I don't like it, but I think the rate increase is necessary	6	8	14
The rate increase is unseasonable and I oppose it	0	2	2
Don't know / Refused	2	1	3
TOTAL	9	11	20

Methodology

About the General Service and Residential Customer Consultation

INNOVATIVE was engaged by Guelph Hydro to conduct general service and residential customer consultation sessions designed to identify the needs and preferences of consumers as they relate to the utility's proposed spending on the distribution system.

The consultation sessions were held in Guelph on April 14th, 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

General service customers in the under 50 kW rate class were randomly selected from customer lists and then screened by telephone for appropriateness as session participants. These customers qualified for the consultation if they manage or oversee their business' electricity bill. This was to ensure that they were at least somewhat knowledgeable of their electricity costs and could have an informed discussion on the impact of the proposed rate increase.

Residential customers were screened to ensure they are the person in the household has primary or shared responsibility for paying the electricity bill.

Recruitment lists were randomly generated and provided to INNOVATIVE by Guelph Hydro.

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

The consultation sessions were structured around the themes contained in the workbook that was developed by INNOVATIVE and Guelph Hydro staff in April 2015.

The workbook themes included the following:

1. What is this Consultation About?
2. Electricity Grid 101
3. Guelph Hydro's Distribution System Today
4. System Reliability
5. Cost Pressures
6. What the Plan Means for You

At the start of the sessions, the facilitator gave an overview explaining the purpose of the consultation and why Guelph Hydro is seeking feedback from general service and residential customers.

After explaining the purpose of the consultation, hardcopy workbooks were distributed to act as a session guide and for participants to record their answers to the questions contained within.

The facilitator then led the participants through the workbook section by section to ensure they understood the information and to answer any questions about the content.

When it came to the questions within the workbook, participants were asked to fill in their answers independently. The facilitator then led a group discussion on the answers participants provided and what the various issues meant for them or their businesses.

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 telephone survey consultation phase of Guelph Hydro's customer engagement program.

NOTE: Results contained within this report are based on a limited sample and should be interpreted as directional only.

Participant Feedback

The following sections highlight the general feedback from each consultation group.

General Service under 50 kW Rate Class

To begin the consultation, participants were introduced to the format and purpose of the consultation. The facilitator explained what the consultation is about, why Guelph Hydro is holding such a consultation and why consumer feedback is important. Additionally, a central focus of this section was to familiarize participants with the electricity system itself. They were presented with a breakdown of the different components of the system and their function. They were also shown how their electricity bill was broken down and what portion of it is devoted to distribution.

During this introduction period participants were encouraged to ask any questions that might arise. At the end of this discussion they were asked how well they felt they understood the parts of the electricity system, how they work together and which services Guelph Hydro is responsible for. All participants felt they understood this at least somewhat well (*very well*: 1; *somewhat well*: 8).

General Satisfaction

After the introduction participants recognized that there is a distinction between the different domains of the electricity system, and that this consultation pertained solely to distribution. Participants are very satisfied with the service they receive from Guelph Hydro; in the workbook, ***not a single participant expressed dissatisfaction***.

> *"I'm perfectly satisfied. I don't know if I've ever really had an issue. I don't understand the efficiency of the entire system so I can't comment on that, but I'm happy."*
>
> *"I'm moderately satisfied - because Guelph Hydro only deals with the distribution, you can't deal with Ontario Hydro[2] without them sending you back to your distributor."*

System Reliability

The general service participants were very satisfied with the reliability of the system. Only one participant experienced more than two outages in the past twelve months, while two others could not say whether they had one at all. All but two participants found their experience with outages to be acceptable (*very acceptable*: 3; *somewhat acceptable*: 4; *don't know*: 2).

> *"The longest* [outage] *we had in the last year might've been three or four minutes."*
>
> *"I've been at my company for six months and can't remember any outage more than a flicker."*

Several participants acknowledged that the overall reliability of the service has improved over the years. However, although the number and duration of actual outages is minimal, there was some concern regarding the *quality* of the power.

> *"We have more flickers now than we used to, we may not have long outages, but we have plenty more flickers now."*

[2] It is worth noting that participants in both groups made references to Ontario Hydro, which indicates a lack of knowledge and understanding when it comes to the electricity system.

"I remember as a child, how many times we had to get out the gas stove because there was no hydro. It happened enough times that I remember it being very, very often. Then when I reached the age of paying my own bills, I don't remember that ever really happening."

Impact of Outages

The inconvenience caused by power outages varies greatly depending on the nature of the business. The majority of the participants in this consultation were in the retail sector. The only consequence reported was the potential loss of sales due to lack of power to debit and credit machines. For these businesses, short outages do not do much harm to their bottom line.

"There was four hours last year downtown, we had no cash machine and couldn't do transactions."

"If it's for one or two minutes it's not going to impact anything. We have skylights and big windows. There was one big afternoon a few years ago that after two or three hours I just put a sign up and called it closed for the day."

"There isn't much cost to my business in power outages, maybe just a couple unsent emails."

The impact is much more costly in sectors that rely heavily on equipment, such as manufacturing or auto-repair - like the participant quoted below. For these types of businesses, power interruptions can affect the flow of operations, costing both time and money. Nonetheless, outages lasting no more than several minutes continue to be quite manageable.

"My charge out rate is $100 an hour and I have four bays going. That's $400 an hour plus all the business lost, it adds up. A one hour outage is thousands of dollars. Two minutes out though, isn't an issue. "

Improving Service of the Local Distribution System

The question of how the system could be improved was first explored independently – as an open-ended question in workbook – and then discussed as a group. Overall, participants a very satisfied with the service they receive from Guelph Hydro. The majority could not suggest any improvements, but maintained that Guelph Hydro should continue to work towards finding efficiencies.

The most common suggestions for improvement presented by the participants in the workbook were lower rates and the desire for more information. Participants asked that Guelph Hydro provide more information and resources regarding energy and cost savings programs.

"The only thing I'd want is lower rates."

"Actually, nothing – I have little to no trouble with my hydro at my business and at my home."

"For me, I've never had a problem with hydro but there is always room for improvement."

"I think they should switch all the lines over to underground, it would be safer and clean up the area."

Several consumers would also like to see lines put underground, particularly in the downtown core. They felt that this would be a good investment to ensure reliability in the future. However, there was some discussion and acknowledgement within the group that this could be an expensive option.

Customer Experience and Expectation

There was no mention of a negative customer experience over the duration of the consultation. One participant, while satisfied with the service at their business, related a personal experience that was quite positive.

> *"I've never had a problem at the business, but last year my neighbor had an issue and Guelph Hydro came very quickly. It affected the power at my house and I appreciated the Guelph Hydro worker coming over and telling me how and when my service would be affected. I was impressed. They knocked on my door; told me exactly what was going on. There were no surprises. Everything was well looked after."*

Investing in Aging Infrastructure

As business owners, the consensus was that they understand and can appreciate the resources required to maintain an electrical distribution system. The majority of participants felt that Guelph Hydro should invest what it takes to replace the system's aging infrastructure in order to maintain system reliability, even if that means an increase in their monthly electricity expenditure (5 participants); only one participant felt that investment in infrastructure should be reduced.

That being said, several expressed the necessity for transparency, should the rate increase be approved. Participants support paying extra in order to invest in the future, but they want to make sure that's where the extra revenue will be allocated.

> *"In my business, my costs go up that I have absolutely no control over. This $65,000 for tools - for a year, that is minimal."*
>
> *"To me, that little increase, for what they control of that whole big slice of pie* [the portion of the bill allocated to distribution] *is miniscule."*

Capital Investment

Participants were then introduced to Guelph Hydro's capital investment forecast for 2016-2020.

The participants were divided regarding the planned capital expenditures. Half felt that Guelph Hydro should make do with the buildings, equipment and IT systems it has. The others felt that while Guelph Hydro should be wise with its spending, it is important that staff have the equipment and tools they need to manage the system efficiently and reliably. (4 participants respectively; *don't know*: 1)

> *"We can look at this and have general overviews, but we don't see the numbers and how that office is run to be able to comment. If you look at the pie, this* [distribution] *is such a small portion of the whole thing so even if they cut their 14% by 20%, we're not going to buy more expensive red wine with our savings. We're happy with what we can buy now."*

There is expectation that Guelph Hydro should consistently do what it can to find efficiencies in all areas of its system. While this customer expressed hesitation in making a judgment given the perceived lack of budgetary specifics, they illustrate an understanding – that was common across the groups - that distribution is only one part of the system as a whole. For them it raised the question of the degree of impact a distribution rate increase has on consumers.

Guelph Hydro's Proposed Plan and Rate Impact

After having explored the workbook, and been introduced to the various cost drivers Guelph Hydro is responding to, participants were asked how well they felt they understood these pressures.

Almost all of them felt they understood quite well (*very well:* 1; *quite well*: 7; *not very well*: 1). With this level of understanding, participants were confident in how well Guelph Hydro can address these pressures while meeting customer expectations (*very well*: 2; *somewhat well*: 6; *don't know*: 1). Additionally, participants were asked whether or not they felt the proposed budget was reasonable. Only one felt that it was not (*yes*: 5; *no*: 1; *don't know*: 3). Furthermore, all participants felt that Guelph Hydro is planning well for the future (*very well*: 3; *somewhat well*: 6).

Overall, social acceptance is very high among general service participants. Even though the majority (6 participants) do not like the idea of a rate increase, they recognized its necessity; one participant found the increase to be reasonable, and supports it outright.

> *"Even if the cost is high, all of us scream if the power goes out for 45 seconds."*

How Could the Consultation Process be Improved?

In the final workbook exercise, participants were asked to evaluate the consultation itself. Overall, participants were satisfied with the content and amount of information. They found it to be "simple to understand, and yet quite comprehensive for the purpose". The majority of participants felt that just the right amount of information had been provided. Two participants felt there could be more, yet recognized that given the time constraint, it would not necessarily be beneficial.

The only area of additional information that was suggested was in regards to capital expenditures. Several participants inquired as to what incentive Guelph Hydro has to "keep general plant costs down". Three participants were in agreement when one expressed that "there's no incentive for the utility to save money."

Residential Rate Class

The residential rate class session began the same way as the general service section. That is, participants were introduced to the format and purpose of the consultation. The facilitator explained what the consultation is about, why Guelph Hydro is holding such a consultation and why consumer feedback is important. Discussion initially focused on the provincial electrical system and then narrowed down to a discussion about Guelph Hydro's role within that system.

Initially, none of the participants were aware that only 22% of their bill is allocated to distribution. However, following the introduction, Residential participants felt that they understood the parts of the electricity system, how they work together and which services Guelph Hydro is responsible for (*very well*: 2; *somewhat well*: 8; *not very well*: 1). Furthermore, after reviewing in more detail Guelph Hydro's role as the distributor, participants were even more confident in their understanding (*very well*: 4; *somewhat well*: 6; *not very well*: 1).

General Satisfaction

Overall, residential are satisfied with the service Guelph Hydro provides (*very satisfied*: 2; *somewhat satisfied*: 9).

> *"Understanding they only deliver, I can say the delivery is excellent."*
>
> *"Service wise, I'm very pleased. Blackouts and brownouts are exceptionally rare."*
>
> *"If the service didn't change one iota I'd be okay with that. That'd be great."*

System Reliability

Residential customers experienced more outages in the past year than general service customers, with almost half the group having experienced more than three. However, only three participants found the number of outages they experienced in the past 12 months to be unacceptable (*very acceptable*: 3; *somewhat acceptable*: 4; *not very acceptable*: 3; *missing value*: 1).

Participants agreed that fluctuations in power quality, resulting in brief power interruptions, are the most concerning. The impact of these fluctuations however, varies across individuals. For some the only indication of an outage is the need to occasionally reset their clocks, while one in particular, who works from home, had to invest in a UPS system to mitigate the frequency of outages he experienced.

> *"I'm somewhat dissatisfied with the amount of blackouts. I work with computers at home and I need to have a UPS system. I'm having them* [outages] *once or twice a month and this isn't weather related."*

> *"I get them too in the south end. You don't notice them – it's a small surge - but I'll come home from work and the clocks will be reset."*

Improving Service of the Local Distribution System

Continuity of service was the most widely agreed upon area of improvement. Very brief outages that resulted in clocks having to be reset were felt to be too commonplace, and customers would prefer to have fewer of them. Other individuals mentioned lowering rates, investing in renewable sources of energy, and reducing operation costs in order to prevent future rate increases.

> *"Full blackouts are understandable, but it's the shorter outages for no reason that are unacceptable."*

> *"It's power quality that's become more important. Blackouts aren't so much of a problem, it's the brown outs and the sags that are the problem."*

> *"As long as you flick a switch and the power comes on, what else do you want?"*

Customer Experience and Expectation

Similar to general service participants, interaction with Guelph Hydro has been positive. Participants are satisfied with how quickly and efficiently unexpected issues are managed.

> *"Guelph Hydro was so quick to come fix the transformer that blew just around the corner from me. I went out and bought a flashlight and that was my only expense."*

System Investment

Residential participants are very much in favour of accepting an increase to their monthly bill in order to ensure Guelph Hydro invests what is necessary to replace the aging infrastructure (9 participants; *don't know*: 2).

> *"We need to have reliability moving into the future, and as I read this I don't feel so horrible getting my hydro bill. We have to preserve; we have to do things right."*

Participants feel that while Guelph Hydro should be wise with its spending, it's important for staff to have the resources necessary to manage the system reliably and efficiently. Nine participants felt this way, while only one felt that Guelph Hydro should make do with the existing equipment.

"How do these costs compare to other cities of comparable size? What are they doing for the money that they're making that we're not doing, and why is that not being looked at to keep our costs downs?"

This question arose earlier in the consultation, before the section regarding the operating budget. The participants were directed to the cost comparison chart on page 19 of the workbook. This was found to offer a sufficient explanation, although one participant expressed interest in what Guelph Hydro was doing better than those utilities that have a higher annual cost per customer – and whether Guelph Hydro is looking to utilities with lower costs in order to find efficiencies.

Guelph Hydro's Proposed Plan and Rate Impact

After reviewing the cost drivers involved with both capital investment and the operating budget, participants were divided in how well they felt they understood these drivers (*quite well*: 6; *not very well*: 5). Although the general level of understanding is lower than in the general service group, the majority of residential participants still felt that Guelph Hydro is doing well in managing these costs while meeting their expectations (*somewhat well*: 9; *not very well*: 1; *don't know*: 1). Furthermore, all of the participants feel that Guelph Hydro is preparing well for the future (*very well*: 2; *somewhat well*: 8; *don't know*: 1).

Social acceptance is high – albeit reluctant – among residential participants. While no one supported the increase outright, only two participants were in opposition.

Out of Scope Comments

The structure of the consultation is designed to investigate key issues pertinent to Guelph Hydro's rate increase application. However, for most consumers, it is a unique opportunity to interact with Guelph Hydro in such a capacity. Thus it's also a forum for customers to express "out of scope" comments and concerns. While it's the facilitator's job to keep the discussion flowing in a focused direction, giving consumers an opportunity to explore issues that are important to them is useful in informing future stages of engagement.

In terms of this engagement, the expression of interest in areas outside intended scope is a statement in itself of how participants felt about the information they were presented with. None of this information was found to be problematic, nor did it raise any significant concerns warranting extensive discussion. The information in the workbook was explored, found to be acceptable, and participants continued on to other tangential avenues of interest.

The following quotations provide examples of some out of scope comments that were specific to the residential consultation.

"*When we had that black out twelve years ago – that was huge. Do we know what happened? It could happen again. Are we prepared for it? Did we learn from it?*"

"We've all got SmartMeters now, we've all conserved energy; we've done all this stuff to cut costs. Yet rates just keep going up and up and up. What's been the purpose of all that, if now they're asking for more money and none of this has addressed."

How Could the Consultation Process be Improved?

Overall, Residential participants found that given the time constraint, the consultation was an informative and an adequate overview of the distribution system. However, there was some mention of information that could have been presented in more detail. Some participants were concerned with how Guelph Hydro compared to other utilities; they were hesitant in holding

opinions due to a lack of experience outside of Guelph. Others mentioned that more specific figures regarding the operating budget would be helpful in formulating an opinion of how well Guelph Hydro is managing the system. Finally, it was suggested that a larger temporal picture of how rates have changed over time would have been useful in evaluating Guelph Hydro's current position, and how it plans to proceed into the future.

Questionnaire Results (Workbook)

The following tables 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 read so far, how well do you feel you understand the parts of the electricity system, how they work together and which services Guelph Hydro is responsible for?

	GS	RS	TOTAL
Very well	1	2	3
Somewhat well	8	8	16
Not very well	0	1	1
I don't understand at all	0	0	0
TOTAL	9	11	20

2. Generally, how satisfied are you with the service you receive from Guelph Hydro?

	GS	RS	TOTAL
Very Satisfied	2	2	4
Somewhat satisfied	7	9	16
Somewhat dissatisfied	0	0	0
Very dissatisfied	0	0	0
Don't know	0	0	0
TOTAL	9	11	20

4. How well do you feel you understand the important parts of the electricity system, how they work together, and which services Guelph Hydro is responsible for?

	GS	RS	TOTAL
Very well	1	4	5
Somewhat well	8	6	14
Not very well	0	1	1
I don't understand at all	0	0	0
TOTAL	9	11	20

5. In 2014, Guelph Hydro customers experienced about 1.05 power outages per year. Do you recall how many outage you experienced in the past year?

	GS	RS	TOTAL
None	0	2	2
One	5	0	5
Two	1	2	3
Three	0	1	1
More than three	1	5	6
Don't know	2	1	3
TOTAL	9	11	20

6. How acceptable were the number of power outages you experienced over the last 12 months?

	GS	RS	TOTAL
Very acceptable	3	3	6
Somewhat acceptable	4	4	8
Not very acceptable	0	3	3
Not acceptable at all	0	0	0
Don't know	2	0	2
Missing value	0	1	1
TOTAL	9	11	20

7. Overall, how satisfied are you with the reliability and quality of electricity services provided by Guelph Hydro?

	GS	RS	TOTAL
Very satisfied	4	3	7
Somewhat satisfied	5	6	11
Somewhat dissatisfied	0	1	1
Very dissatisfied	0	0	0
Don't know	0	0	0
Missing value	0	1	1
TOTAL	9	11	20

8. With regards to projects focused on replacing aging equipment in poor conditions, which of the following statements best represents your point of view?

	GS	RS	TOTAL
Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if that increases my monthly electricity bill by a few dollars over the next few years.	5	9	14
Guelph Hydro should lower its investment in renewing the system's aging infrastructure to lessen the impact of any bill increase, even if that means more or longer power outages.	1	0	1
Don't know	3	2	5
TOTAL	9	11	20

9. As a company, Guelph Hydro needs building to house its staff, vehicles, and tools to service the power lines and IT systems to manage the distribution system and customer information. Which of the following statements best represents you point of view?

	GS	RS	TOTAL
Guelph Hydro should find ways to make do with the buildings, equipment and IT systems it already has.	4	1	5
While Guelph 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.	4	9	13
Don't know	1	0	1
Missing value	0	1	1
TOTAL	9	11	20

10. How well do you feel you understand the cost drivers that Guelph Hydro is responding to?

	GS	RS	TOTAL
Very well	1	0	1
Quite well	7	6	13
Not very well	1	5	6
Not at all	0	0	0
Don't know	0	0	0
TOTAL	9	11	20

11. How well do you think Guelph Hydro is managing these cost drivers while meeting customer expectations?

	GS	RS	TOTAL
Very well	2	0	2
Somewhat well	6	9	15
Not very well	0	1	1
Not at all	0	0	0
Don't know	1	1	2
TOTAL	9	11	20

12. Now that you have a better sense of the operations of Guelph Hydro, including the cost drivers, do you feel the proposed budget is reasonable?

	GS	RS	TOTAL
Yes	5	4	9
No	1	2	3
Don't know	3	5	8
TOTAL	9	11	20

13. Did Guelph Hydro's plan cover the topics you expected?

	GS	RS	TOTAL
Very well	2	3	5
Somewhat well	7	8	15
No, not very well	0	0	0
TOTAL	9	11	20

14. How well do you think Guelph Hydro is planning for the future?

	GS	RS	TOTAL
Very well	3	2	5
Somewhat well	6	8	15
Not very well	0	0	0
Don't know	0	1	1
TOTAL	9	11	20

15. Considering what you know about the local distribution system, which of the following best represents your point of view?

	GS	RS	TOTAL
The rate increase is reasonable and I support it	1	0	1
I don't like it but I think the rate increase is necessary	6	8	14
The rate increase is unreasonable and I oppose it	0	2	2
Don't know	2	0	2
Missing Value	0	1	1
TOTAL	9	11	20

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 514 Guelph Hydro residential customers and 186 General Service (GS) <50 kW customers:

General Satisfaction

- Customers are very satisfied with the quality of service provided by Guelph Hydro. A strong majority (86%) of residential customers are satisfied, while almost all (95%) general service customers felt the same.
- Two-in-five (40%) residential customers and almost half (48%) of general service customers are *very* satisfied with the service.
    - When stratified by consumption, residential customers with the highest level of consumption are the least satisfied (77%). There is no statistically significant difference among these groups for general service customers.

Electricity Bill Knowledge

- Only 25% of residential customers and 22% of general service customers say they were familiar with the amount of their bill that goes to Guelph Hydro prior to the telephone survey.

System Reliability

- 39% of residential customers and 33% of general service customers experienced power outages as a result of the December 2013 ice storm. Satisfaction with Guelph Hydro's response to the ice storm is high, with 83% or residential and 88% of general service customers saying they are satisfied.
- 43% of residential customers and 44% of general service customers did not experience any outages in the past 12 months aside from those caused by extreme weather. Most of those who did experience outages reported a duration of less than an hour.
- 57% of residential customers said their most recent outage was only a minor inconvenience. Among general service customers, a plurality (45%) said their most recent outage had barely any cost to their business, just a bit of inconvenience.
- Customers (62% residential, 61% general service) want Guelph Hydro to spend what is needed to maintain the current level of unexpected outages. Likewise, customers want the utility to spend what is needed to maintain the current length of outages (60% residential, 65% general service).

System Challenges & Priorities

- The majority of residential (61%) and general service (69%) customers think Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability. Conversely, 33% or residential customers and 25% of general service customers feel the utility should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of a bill increase.
- More than half (58%) of residential customers and even more (65%) general service customer things the benefits of new technologies and infrastructure are important and should be a priority for Guelph Hydro. Only 37% of residential customers and 31% of general service customers feel these are luxuries more than necessities.
- When it comes to general plant spending, 68% of residential customers and the same proportion (68%) of general service customers feel that, while Guelph Hydro should be wise with its spending, it is important that staff have the equipment and tools they need to manage the system efficiently and reliably.

Overall Assessment of Plan

Residential Acceptance: 79%

Top 3 Reasons for Willing Acceptance ***Q: And why do you say that? [Asked of residential respondents who had an opinion on Guelph Hydro's proposed rate increase]***	
Not that big a difference/reasonable	44%
It is necessary/need to invest in the system	44%
The money should come from elsewhere	3%

General Service Acceptance: 75%

Top 3 Reasons for Willing Acceptance ***Q: And why do you say that? [Asked of general service respondents who had an opinion on Guelph Hydro's proposed rate increase]***	
Reasonable/not much of an increase	53%
Necessary to invest in the system	45%
They should find other ways to cover the cost	2%

Methodology

INNOVATIVE conducted two customer surveys by telephone for Guelph Hydro:

1. A residential customer survey conducted among **514 respondents** between April 15 and 19, 2015.
2. A general service customer survey conducted among **186 respondents** between April 15 and 19, 2015.186

Participants were randomly selected from customer lists provided by Guelph Hydro (15,143 residential records and 1,500 general service records).

- A sample of 514 residential customers is considered accurate to within ±4.3 percentage points, 19 times out of 20.
- A sample of 186 general service customers is considered accurate to within ±7.2 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 questionnaires were designed to simulate the journey that respondents in the Workbook-led Consultation Sessions 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 questionnaires were informed by and incorporated feedback from the previous phases of Guelph Hydro's customer engagement. This included sharing both supportive and non-supportive feedback in the survey from previous phases of Guelph Hydro's customer consultation as it related to Guelph Hydro's proposed capital investment and the associated rate increase. Wording of questions differed slightly between the Residential and General Service survey – for example, in the preambles the size of monthly bills differed between residential and general service customers – but otherwise remained consistent.

The average survey ran at approximately 10 minutes. Both survey instruments can be found at the end of this section of the report.

Fielding the Survey

Residential (RS) Customer Survey:

For the purposes of executing the residential survey, Guelph Hydro provided INNOVATIVE with a confidential list containing **15,143** of their residential customers' contact information.

The contact list included only residential customers with residential telephone contact information on file and who had been a customer of Guelph Hydro since at least January 1, 2013. The information contained in the contact list included customer name, telephone number, home address, service area, and total annual usage between January 1 and December 31, 2013.

Only one customer per household was eligible to complete the residential survey. Survey respondents were screened to certify that only the resident primarily responsible for paying their Guelph Hydro 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 whether Guelph Hydro's proposed rate increase would have a relative impact on their bill.

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.

Guelph Hydro's residential customers were contacted by telephone between 4pm and 9pm on weekdays; between 10am and 9pm on Saturdays; and between 11am and 9pm on Sundays.

General Service Customer Survey:

The sample for the general service survey consisted of about **1,500** customers drawn from a confidential list provided to INNOVATIVE by Guelph Hydro. General service respondents were screened to ensure they were in charge of managing the electricity bill at their organization.

General service customers were contacted on weekdays between 9am to 4pm.

All fieldwork was conducted using INNOVATIVE's 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, customer service area or electricity usage). 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 service customers were divided into quartiles based on annual electricity usage to ensure the sample had a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households.

Residential and General Service Sample Design:

Guelph Hydro customers were divided into quartiles based on annual electricity usage. The following table illustrates the segmentation of the residential and general service customer survey samples by usage quartile.

Customer Type		Total Sample	Low	Medium-Low	Medium-High	High
Residential	Target	500	125	125	125	125
	Actual	514	123	129	134	128
	Difference	+14	-2	+4	+9	+3
General Service	Target	200	50	50	50	50
	Actual	186	36	50	50	50
	Difference	-14	-14	0	0	0

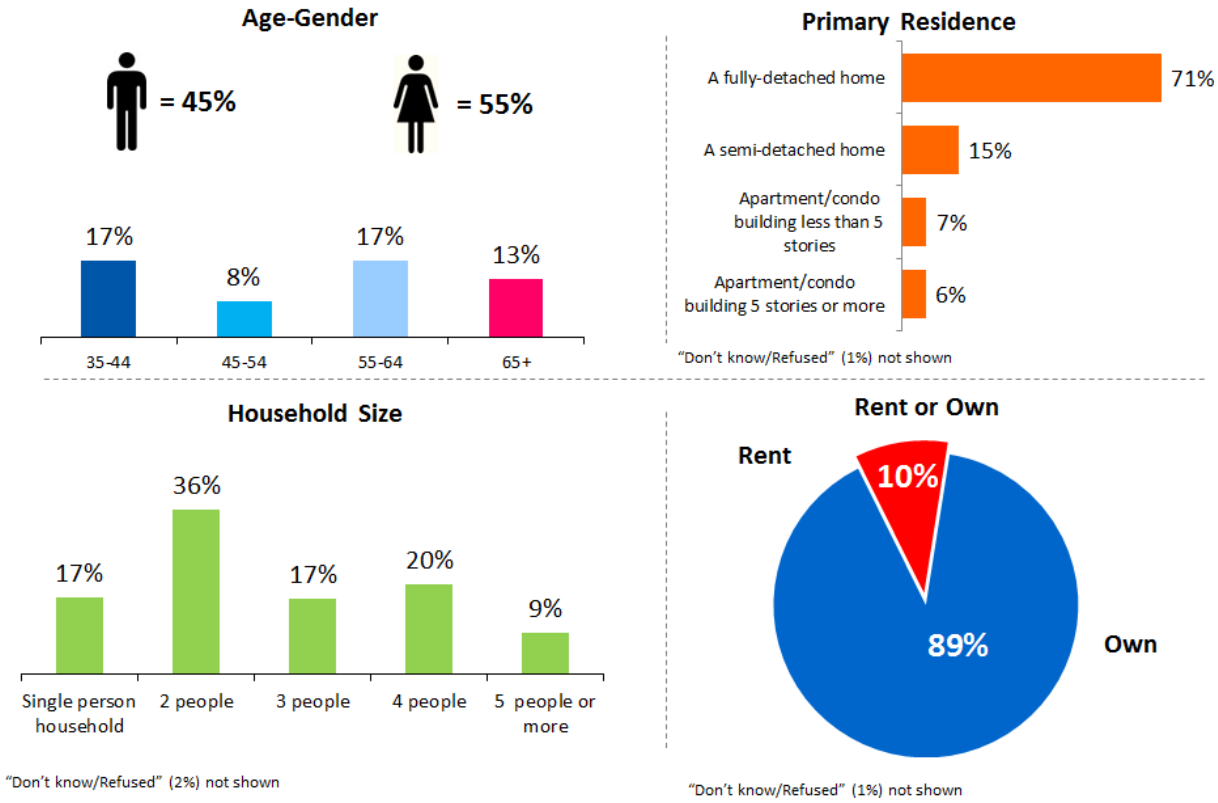
Sample Weights

Weights have not been applied to either the residential or GS data as the stratified random samples are accurate representations of Guelph Hydro's actual customer distribution and type.

Demographic Profiles

The following details the demographic characteristics of respondents who completed the Residential Ratepayer Survey [n=514].

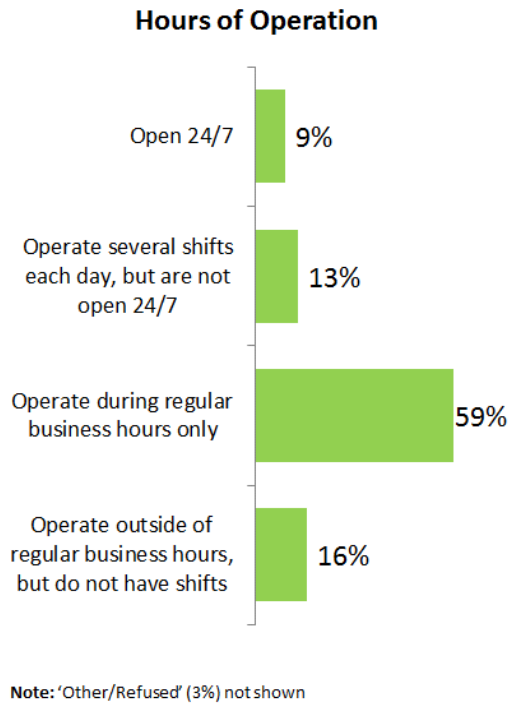
Figure A: Residential Customer Profile



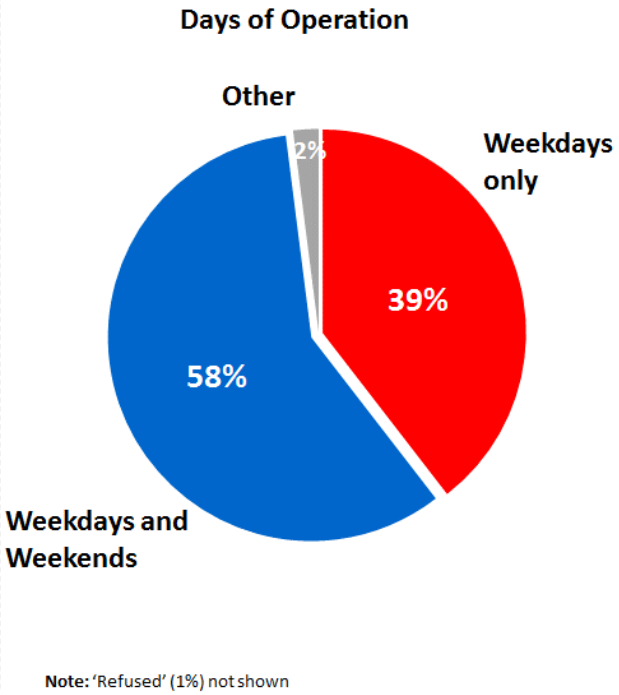
Firmographic Profiles

Below are the firmographics of respondents who completed the General Service Ratepayer Survey [n=186].

Figure B: GS Customer Profile



Note: 'Other/Refused' (3%) not shown



Note: 'Refused' (1%) not shown

Respondent Feedback

Familiarity and Satisfaction

This section of the workbook explores familiarity and experience with the local distribution system, and satisfaction with Guelph Hydro in running that system. The results for residential customers are presented first, followed by general service customers (this pattern will continue for the remainder of this report).

Familiarity and Satisfaction Summary

- Among both residential and general service customers, familiarity with the local electricity distribution system is significantly lower than satisfaction with the job Guelph Hydro is doing.
- Only 43% of residential customers are familiar with the local distribution system, but 86% of are satisfied with the job Guelph Hydro is doing.
- Similarly, 44% of general service customers say they are familiar with the system, but 95% are satisfied with Guelph Hydro.

Preamble for Familiarity and Satisfaction Section

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.*

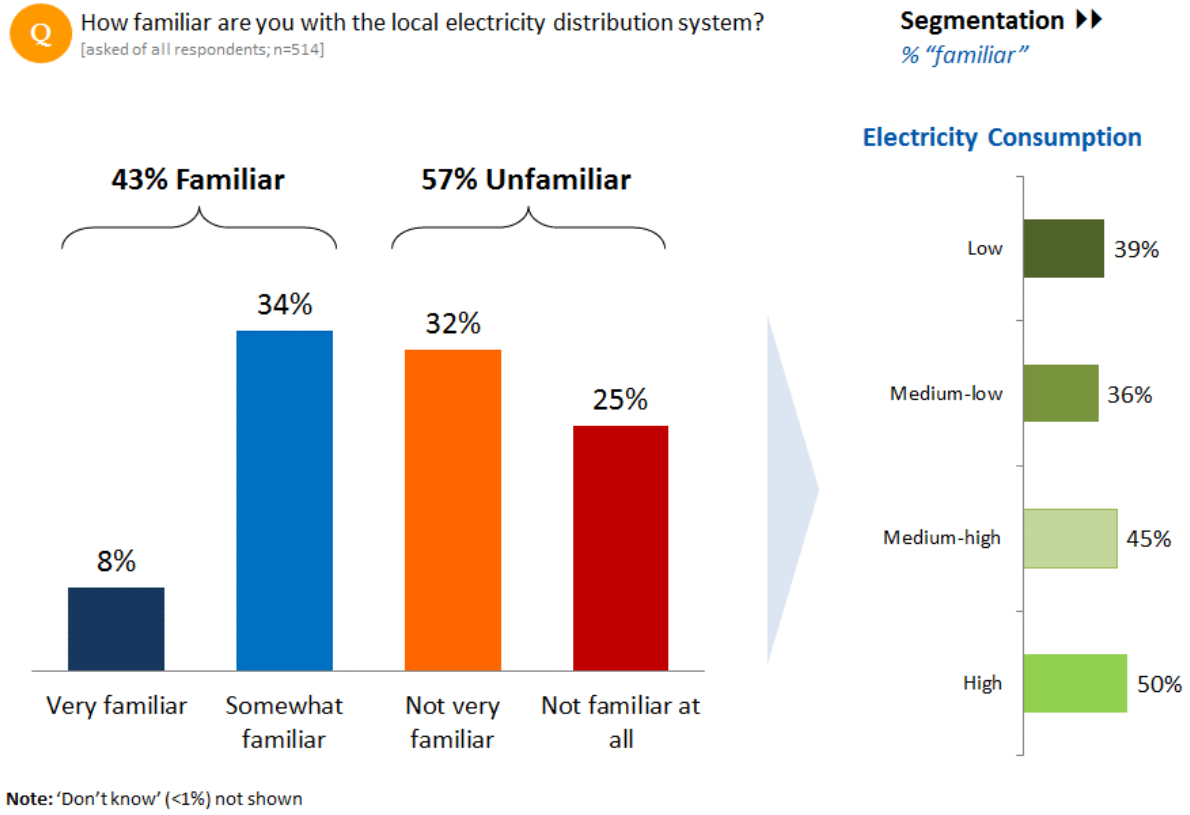
Today we're going to talk about your ***local distribution system*** *which is maintained and operated by Guelph Hydro in your community."*

Familiarity with Local Electricity Distribution System

Among residential customers the level of familiarity with the local electricity distribution system is somewhat limited, with the majority (57%) saying they are *not very familiar* (32%) or *not familiar at all* (25%). While more than two-in-five (43%) say they are familiar with the system, fewer than one-in-ten (8%) say they are *very familiar* with it.

- Households with a high level of electricity consumption are the most familiar with the system, with half (50%) reporting they are at least somewhat familiar with it.

Figure RS.1: Familiarity with the Local Distribution System

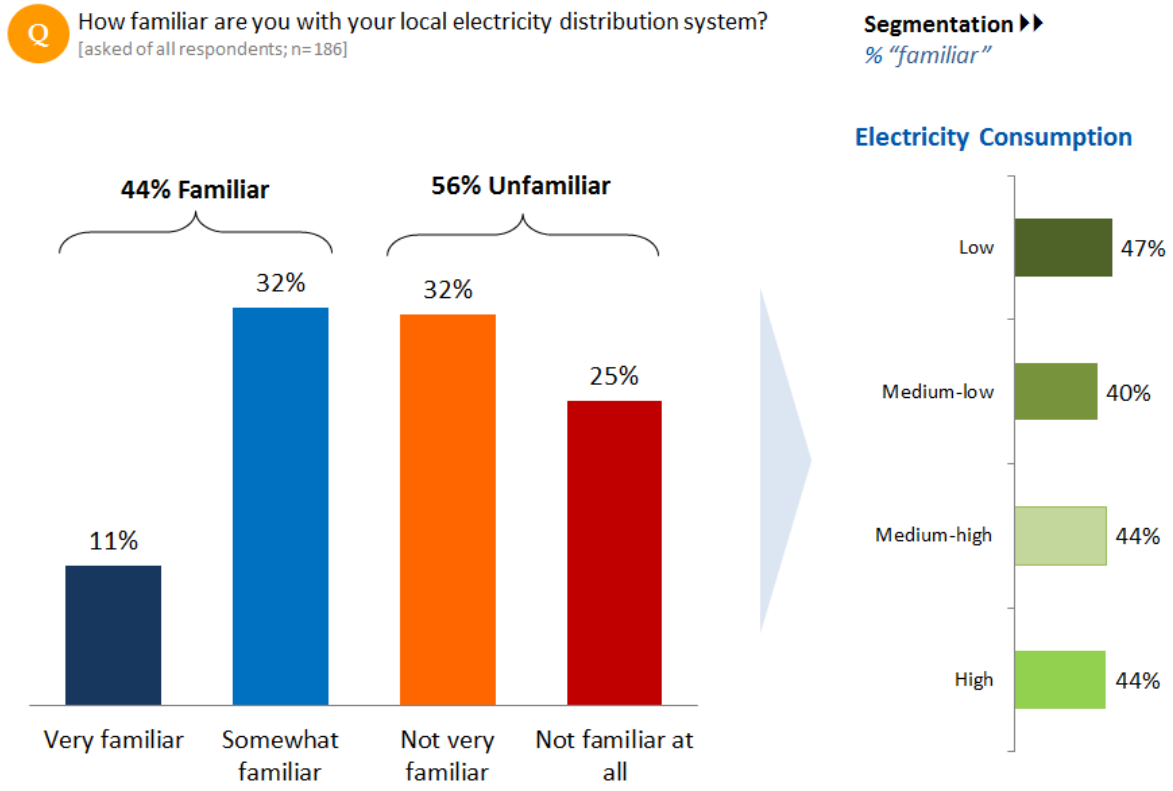


Note: 'Don't know' (<1%) not shown

The level of familiarity among general service customers is similar to that of residential customers: a majority (56%) are either *not very familiar* (32%) or *not familiar at all* (25%). One-in-ten (11%) are *very* familiar with the system, and an additional 32% are *somewhat* familiar with it.

- Respondents whose organizations are under some financial strain due to their electricity bill report a higher level of familiarity than those who are not under financial strain (49% familiar versus 33%).

Figure GS.1: Familiarity with the Local Distribution System

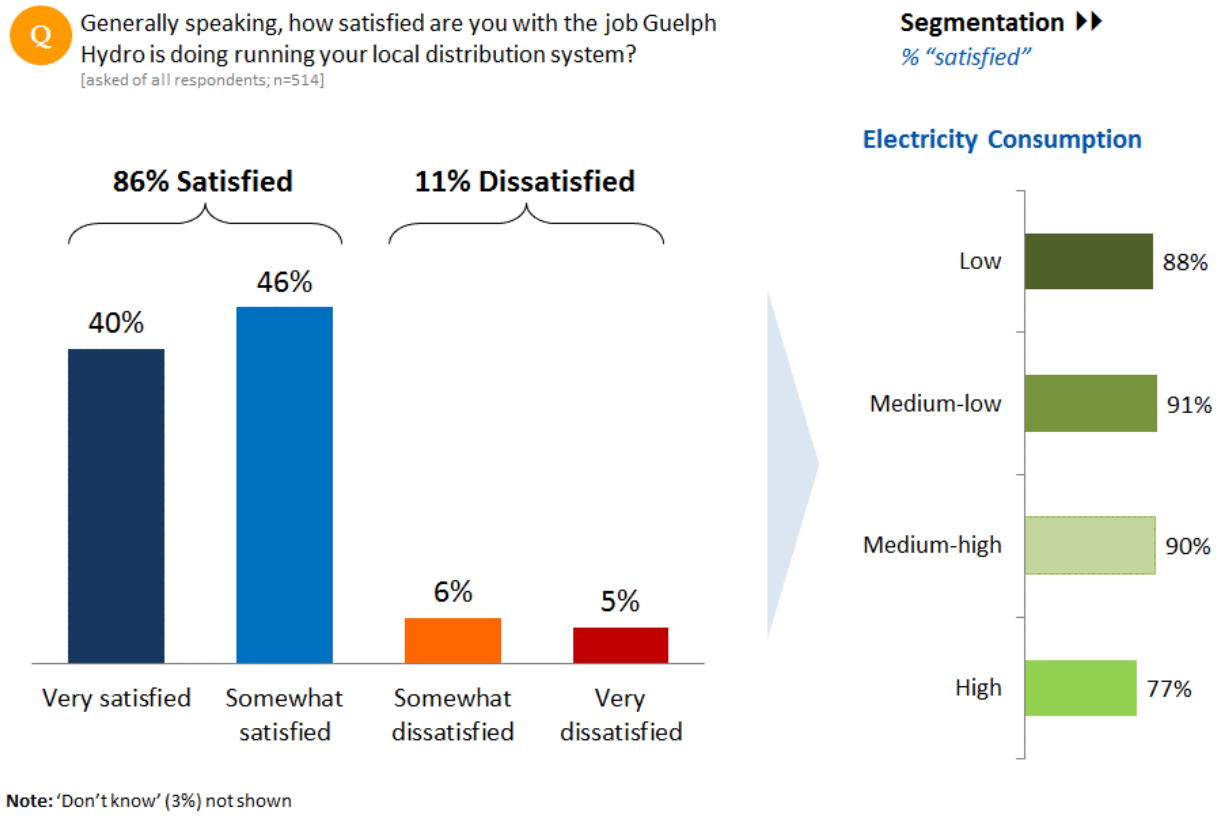


Satisfaction with Guelph Hydro Running the Distribution System

A strong majority (86%) of residential customers are satisfied with the job Guelph Hydro is doing running their local distribution system. Four-in-ten (40%) are *very* satisfied, while slightly more (46%) are *somewhat* satisfied.

- At 77%, the level of satisfaction among those with a high level of consumption is significantly lower than across all other levels of consumption.
- 82% of those who are under financial strain due to their electricity bill are satisfied with the job Guelph Hydro is doing, compared to 93% of those who are not under financial strain.

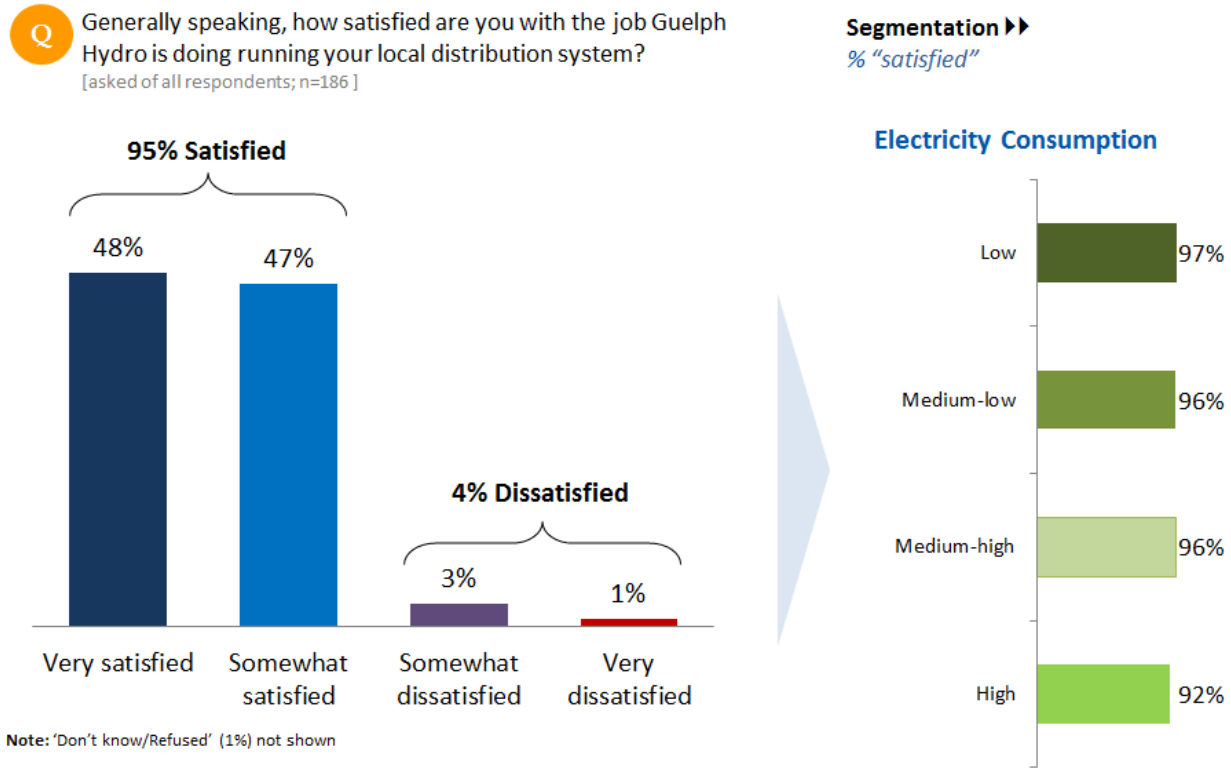
Figure RS.2: Satisfaction with Guelph Hydro



Note: 'Don't know' (3%) not shown

The overall level of satisfaction is even higher among general service customers at 95%. Almost half (48%) report being *very* satisfied, and as many again (47%) say they are *somewhat* satisfied. There are no statistically significant variations across sub-segments of this customer group.

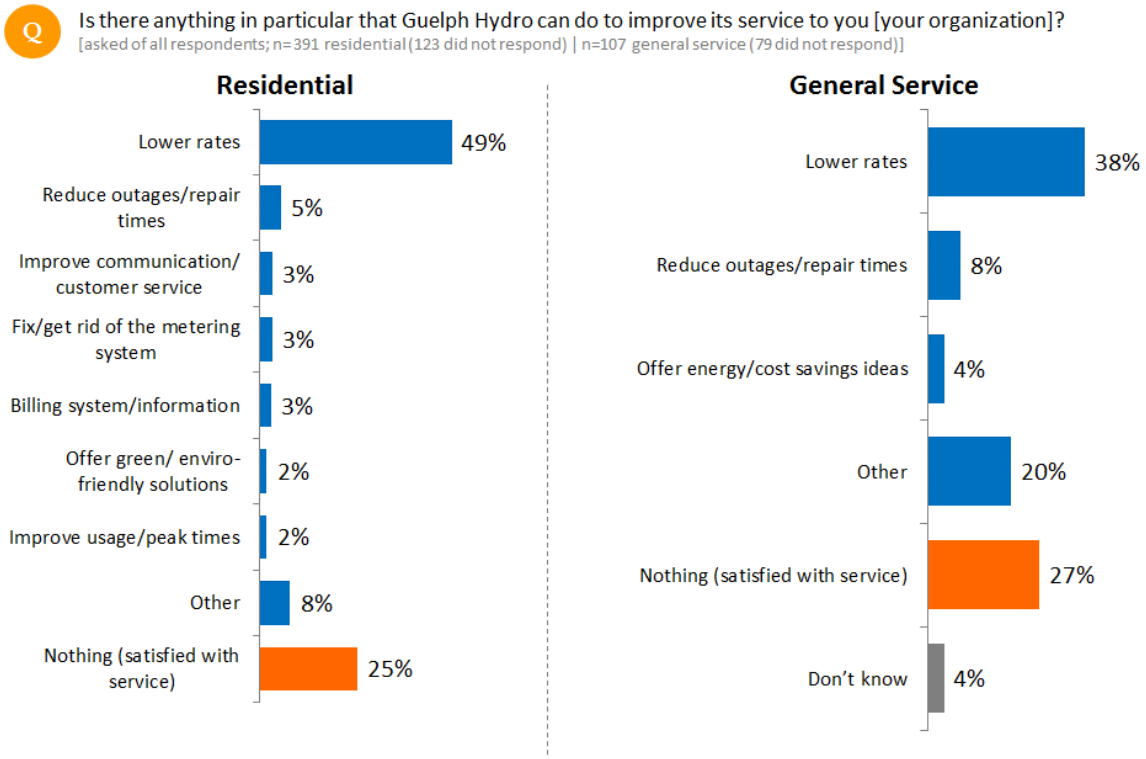
Figure GS.2: Satisfaction with Guelph Hydro



How to Improve Service

Among both residential and general service clients, the primary suggestion for improving service is "lower rates" (49% residential, 38% general service). Other suggestions from residential customers include "reduce outage/repair times" (5%), "improve communication/customer service" (3%), "fix/get rid of the metering system" (3%) and "billing system/information" (3%). Among general service customers, secondary suggestions for improvement include "reduce outages/repair times" (8%), and "offer energy/cost savings ideas" (4%).

Figure RS/GS.3: How to Improve Service



Electricity Bill Knowledge

During the qualitative phase of customer consultations, it was apparent that very few (if any) customer know what proportion of their electrical utility bill is remitted to Guelph Hydro. We included a question on the telephone surveys to quantify the extent to which residential and small business customers understand how little of their bill goes to Guelph Hydro.

Electricity Bill Knowledge Summary

- Only 25% of residential customers and 22% of general service customers say they were familiar with the amount of their bill that goes to Guelph Hydro prior to the telephone survey.

Preamble for Bill Knowledge & Impact Section

For this component of the survey, respondents were presented with a preamble concerning the breakdown of costs of an electricity bill. The two surveys provided different preambles based on targeted respondents.

The preamble for **residential customers** read as follows:

"I'd now like to talk with you about your electricity bill …

While some customers pay more and others pay less, the average residential customer pays about $135 a month for electricity of which $30 or approximately 22% goes to Guelph Hydro. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies."

The **General Service** preamble explained it slightly differently:

"I'd now like to talk with you about your electricity bill …

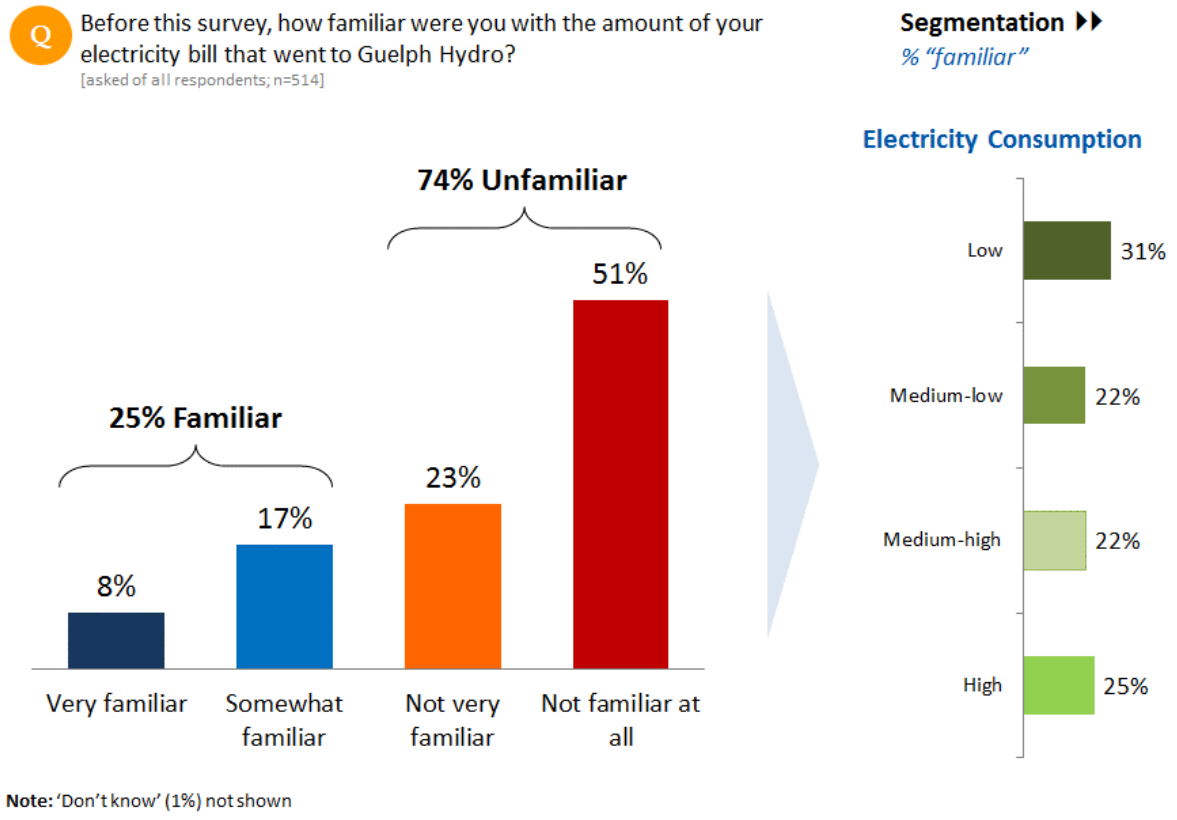
While some customers pay more and other pay less, the average small business pays about $300 a month for electricity of which $43 or approximately 14% goes to Guelph Hydro. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies."

Familiarity with Share of Bill Going to Guelph Hydro

Following the preamble that described the breakdown of their electricity bill, only one quarter (25%) of residential customers said they were previously aware of how much of their bill goes to Guelph Hydro. Half (51%) say they were *not familiar at all* with this breakdown.

- At only 22%, those with a medium-low and medium-high level of consumption are least likely to say they are *very familiar* with the breakdown of their electricity bill.

Figure RS.4: Familiarity with Share of Bill Going to Guelph Hydro

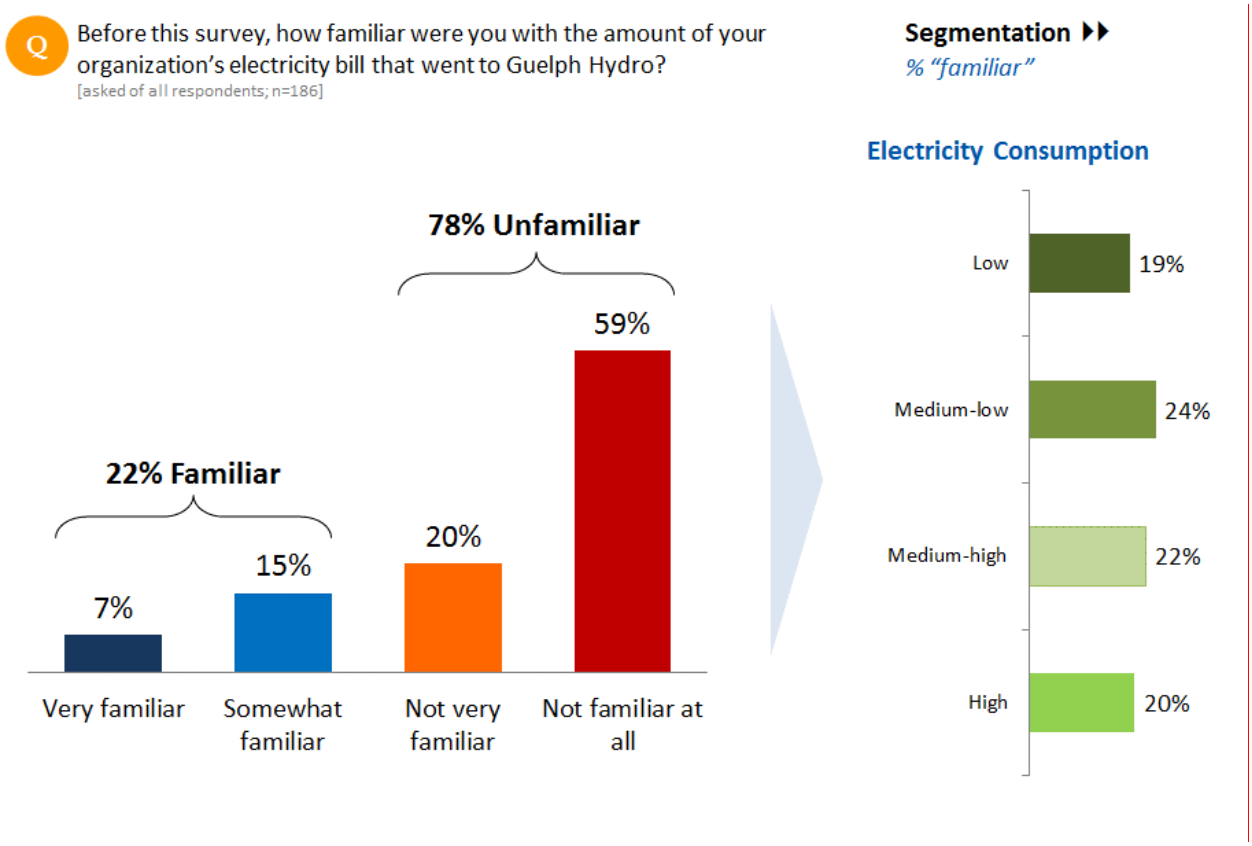


Note: 'Don't know' (1%) not shown

Among general service customers, only one-in-five (22%) claimed some level of familiarity with how much of their organization's electricity bill goes to Guelph Hydro. A solid majority (59%) are *not familiar at all* with this breakdown.

- Those whose organization is under some financial strain due to their electricity bill have a higher level of familiarity with the breakdown of their bill than those whose electricity bill does not cause financial strain (26% versus 10%).

Figure GS.4: Familiarity with Share of Bill Going to Guelph Hydro



System Reliability

This section covers the feedback provided by respondents on previous power service interruptions, as well as the impact of power interruptions. The interruptions discussed included the ice storm of December 2013. This series of questions also investigates perceptions around spending, and reducing the number and length of power service interruptions.

System Reliability Summary

- 39% of residential customers and 33% of general service customers experienced power outages as a result of the December 2013 ice storm. Satisfaction with Guelph Hydro's response to the ice storm is high, with 83% or residential and 88% of general service customers saying they are satisfied.
- 43% of residential customers and 44% of general service customers did not experience any outages in the past 12 months aside from those caused by extreme weather. Most of those who did experience outages reported a duration of less than an hour.
- 57% of residential customers said their most recent outage was only a minor inconvenience. Among general service customers, a plurality (45%) said their most recent outage had barely any cost to their business, just a bit of inconvenience.
- Customers (62% residential, 61% general service) want Guelph Hydro to spend what is needed to maintain the current level of unexpected outages. Likewise, customers want the utility to spend what is needed to maintain the current length of outages (60% residential, 65% general service).

Preamble for Power Service Interruptions

The next five questions focused on how, according to the respondent, Guelph Hydro should address the number of outages. A preamble concerning the average number of power interruptions was provided before the question addressing the number of outages.

> The preamble read as follows:
>
> *"Despite best efforts, no electrical distribution system can deliver perfectly reliable electricity. As a general rule, the more reliable the system, the more expensive the system is to build and maintain.*
>
> *With that said, the average Guelph Hydro customer experiences one unexpected power outage per year."*

The December 2013 Ice Storm

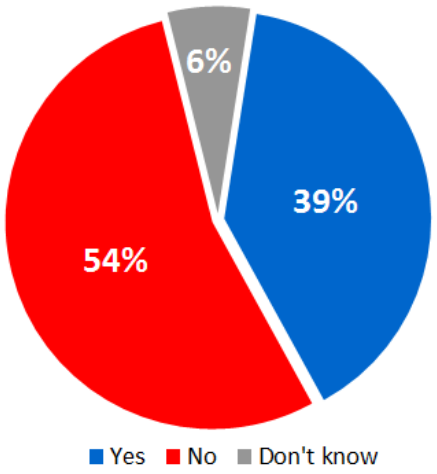
Two-in-five (39%) residential customers experienced a power outage due to the ice storm in December of 2013. One third (33%) of general service customers reported an outage due to the ice storm.

- Among residential customers, those living alone (30%) are least likely to have been impacted by the ice storm.
- Businesses that operate outside normal business hours are more likely to have had an ice storm-related outage than those that operated during regular business hours (43% versus 25%).

Figure RS.5: December 2013 Ice Storm

Q In the past year or so, **Guelph Hydro** customers experienced unusually extreme weather – *notably the ice storm in December 2013*. This major weather event caused power outages for many **Guelph Hydro** customers.

Did your household experience a power outage due to the ice storm in December 2013?
[asked of all respondents; n= 514]



Sample Breakdown
Those who say "yes"

Electricity Consumption

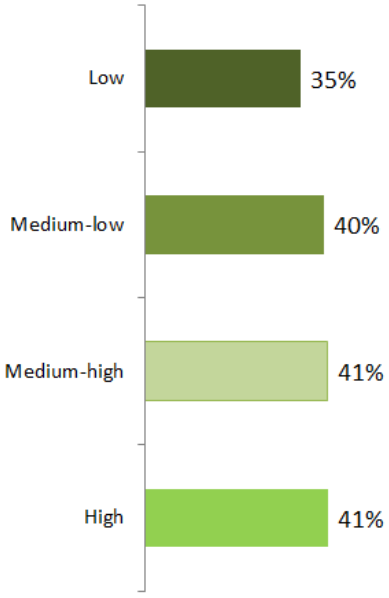
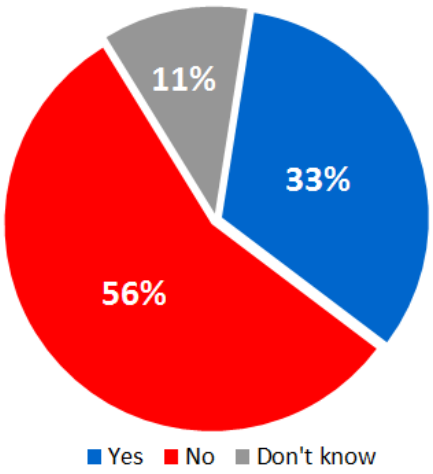


Figure GS.5: December 2013 Ice Storm

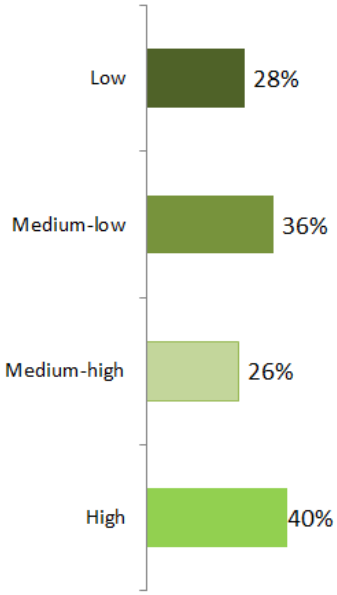
Q In the past year or so, **Guelph Hydro** customers experienced unusually extreme weather – *notably the ice storm in December 2013*. This major weather event caused power outages for many **Guelph Hydro** customers.

Did your organization experience a power outage due to the ice storm in December 2013?
[asked of all respondents; n= 186]



Sample Breakdown ▸▸
Those who say "yes"

Electricity Consumption



Guelph Hydro's Response to the Ice Storm

Whether they were impacted or not, 83% of residential customers and 88% of general service customers very satisfied with Guelph Hydro's response to the ice storm. Half (50%) of residential customers are *very* satisfied, and another 33% are *somewhat* satisfied. Among general service customers, equal proportions were *very* (44%) and *somewhat* (44%) satisfied.

- Residential customers with a high level of consumption, while still satisfied, had the lowest level of satisfaction with Guelph Hydro's response to the ice storm at 77%. Those whose electricity bill does not strain their household finances are more satisfied with Guelph Hydro's response than those whose electricity bill does cause some financial strain (87% versus 81%).
- There are no statistically significant variations across the general service respondent group.

Figure RS.6: Guelph Hydro's Response to Ice Storm

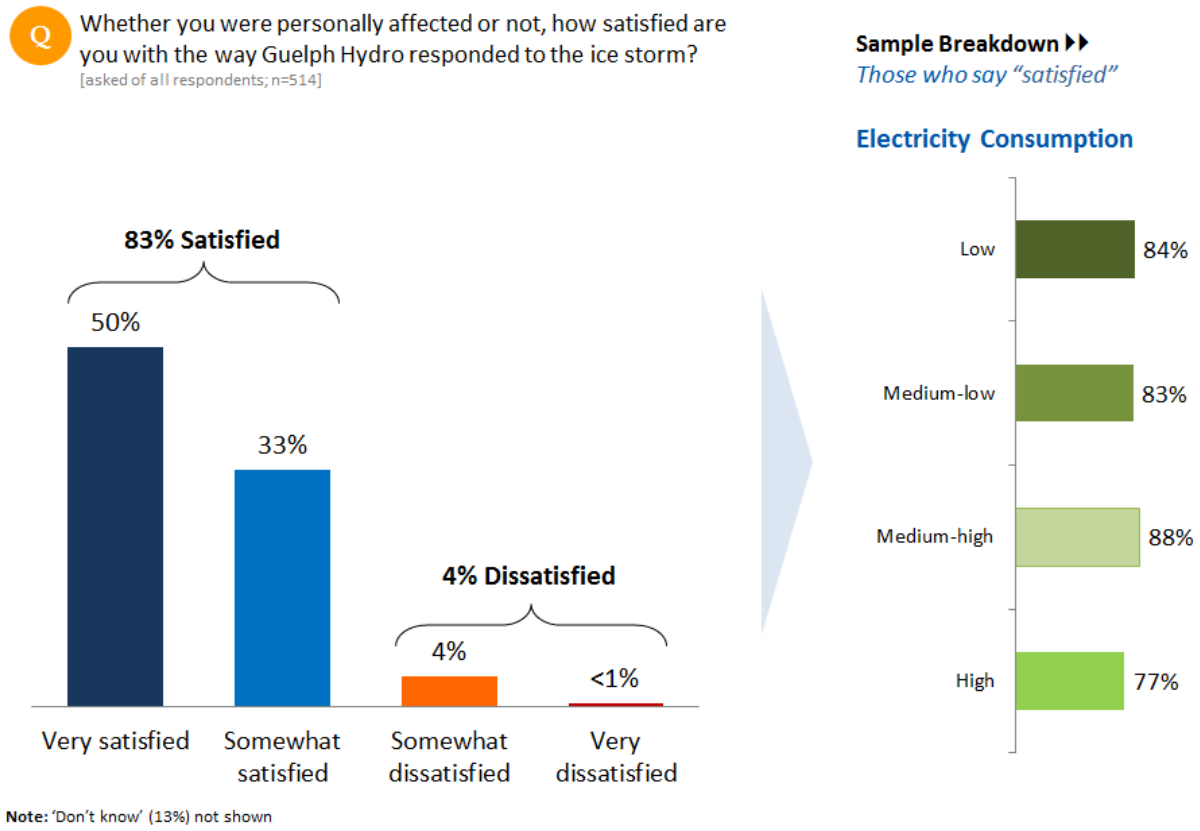
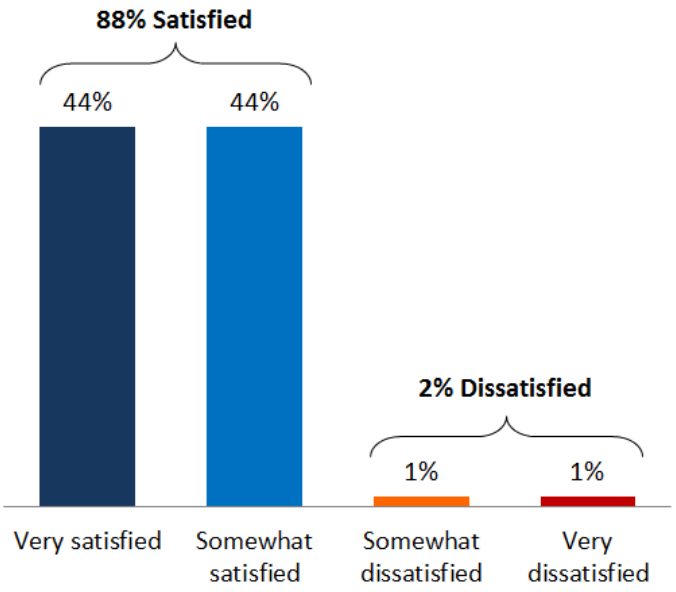


Figure GS.6: Guelph Hydro's Response to Ice Storm

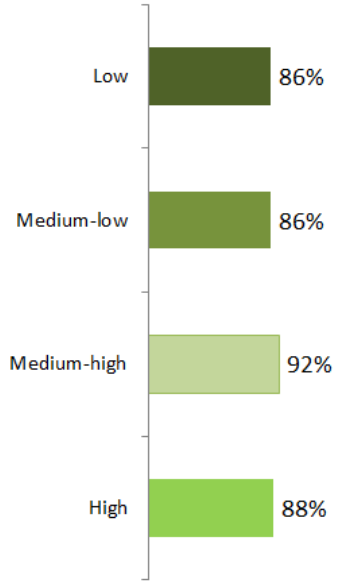
Q Whether you were personally affected or not, how satisfied are you with the way Guelph Hydro responded to the ice storm?
[asked of all respondents; n= 186]



Note: 'Don't know/Refused' (10%) not shown

Sample Breakdown ▸▸
Those who say "satisfied"

Electricity Consumption



For the most part, customers were satisfied with Guelph Hydro's service during the ice storm. Among residential customers, half (50%) said there was nothing Guelph Hydro could do because they were satisfied, 15% said they weren't affected by the storm, and 14% said the utility did their best and so had no suggestions for improvement.

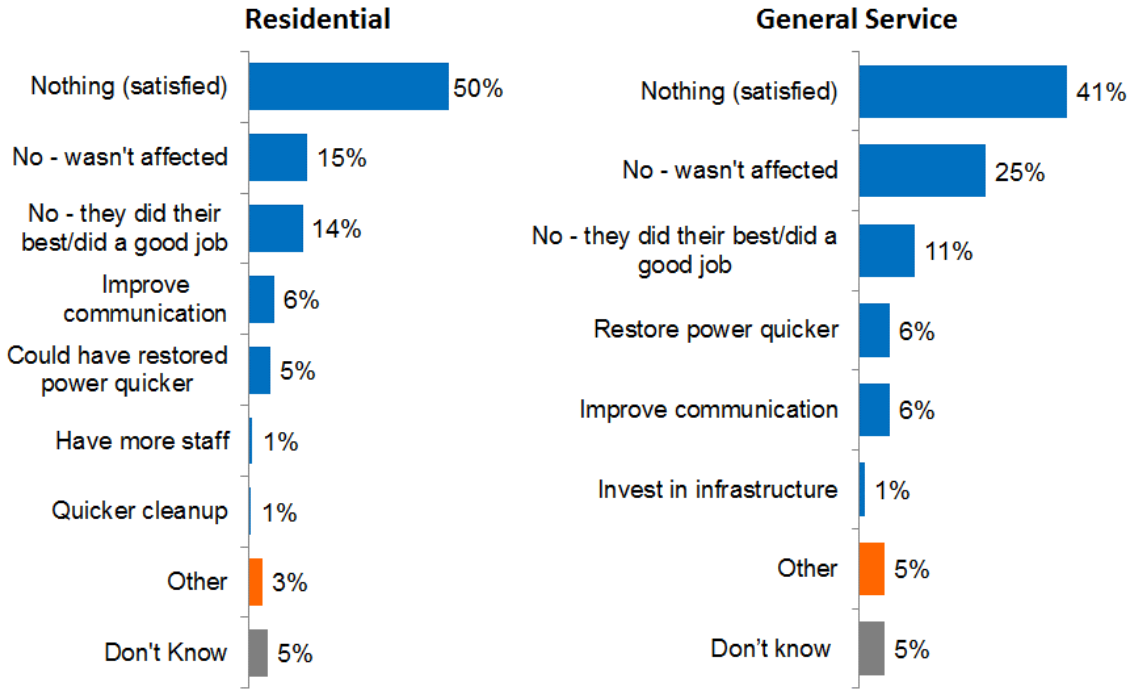
The result is similar among general service customers. Two-in-five (41%) had no suggestions for improvement, 25% said they weren't affected by the storm, and 11% said Guelph Hydro did their best.

In both customer groups, there were very few (5% to 6%) who said the utility could improve on communication or restoring power more quickly.

Figure RS/GS.7: Improvements to Service During Ice Storm

Q Is there is anything in particular that Guelph Hydro could have done to improve its service to you during the ice storm?

[asked of all respondents; residential n=361 (153 did not respond), general service n=81 (105 did not respond)]



Frequency and Duration of Power Outages

A plurality (43%) of residential customers report that they did not have any power outages in the past 12 months aside from those caused by extreme weather. About one-in-six (16%) reported one outage, and a similar proportion (17%) reported two outages. The results are similar among general service customers, with 44% reporting no outages, 23% reporting one outage, and 17% reporting two outages.

- Among residential customers, the proportion claiming no outages decreases as household size increases: single-person 55%, 2-person 45%, 3-person 40%, 4-person 35%, 5 or more 31%.
- At 26%, businesses with a high level of consumption are most likely to report having had two outages not related to extreme weather.

Of residential customers who experienced outages, half (49%) indicated that their outage lasted for less than 15 minutes. General service customers reported longer outages, with 35% saying theirs lasted for less than 15 minutes.

Figure RS.8: Frequency & Duration of Outages

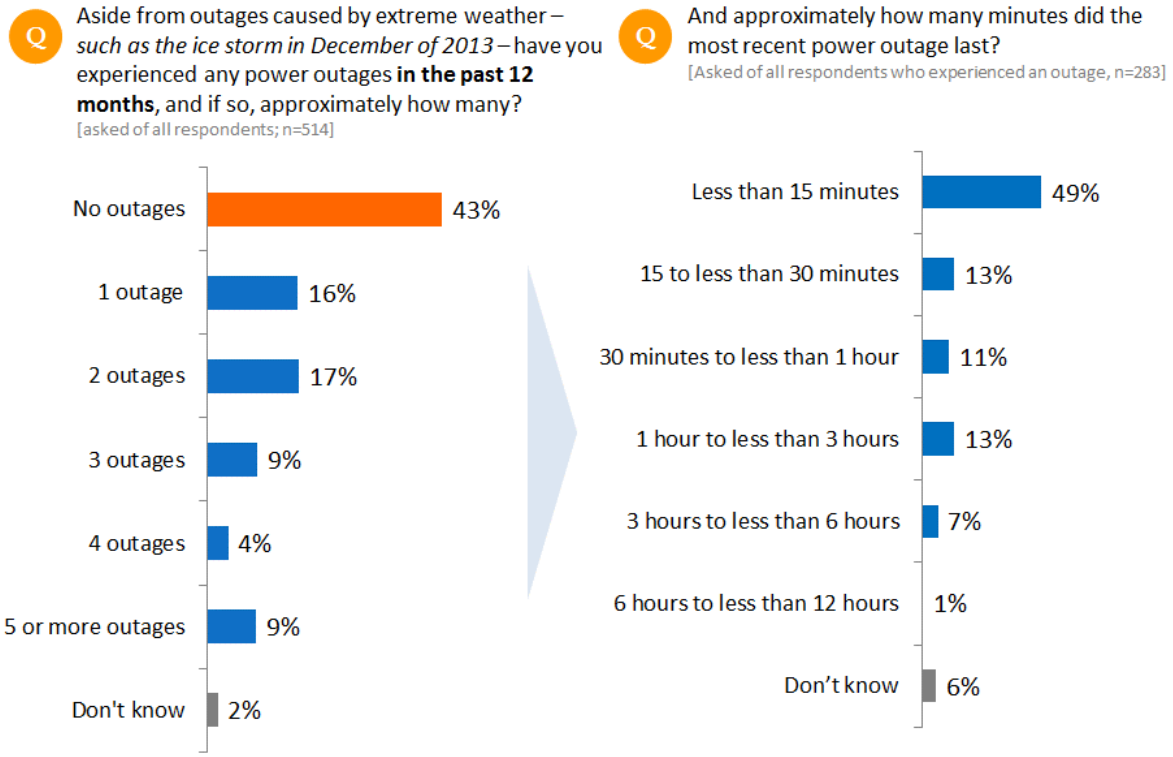
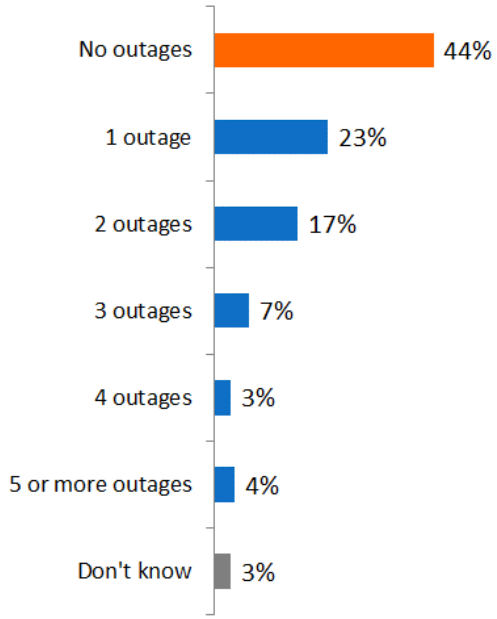
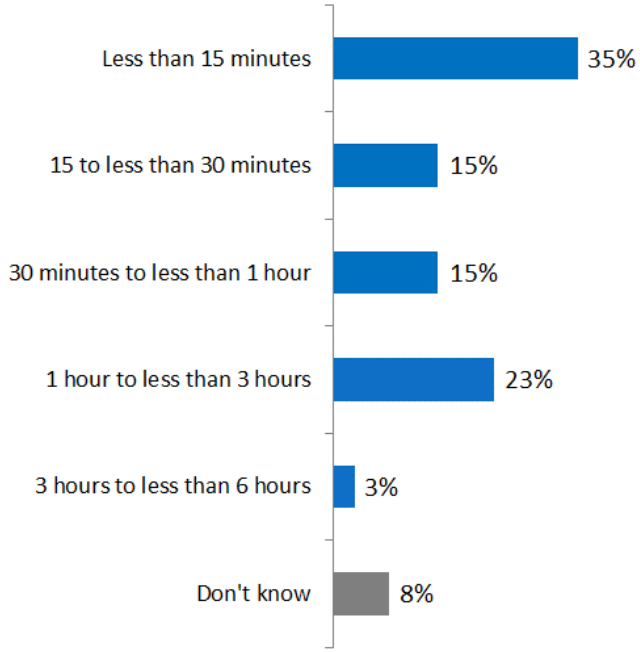


Figure GS.8: Frequency & Duration of Outages

Q Aside from outages caused by extreme weather – such as the ice storm in December of 2013 – has your organization experienced any power outages in the past 12 months, and if so, approximately how many?
[asked of all respondents; n=186]



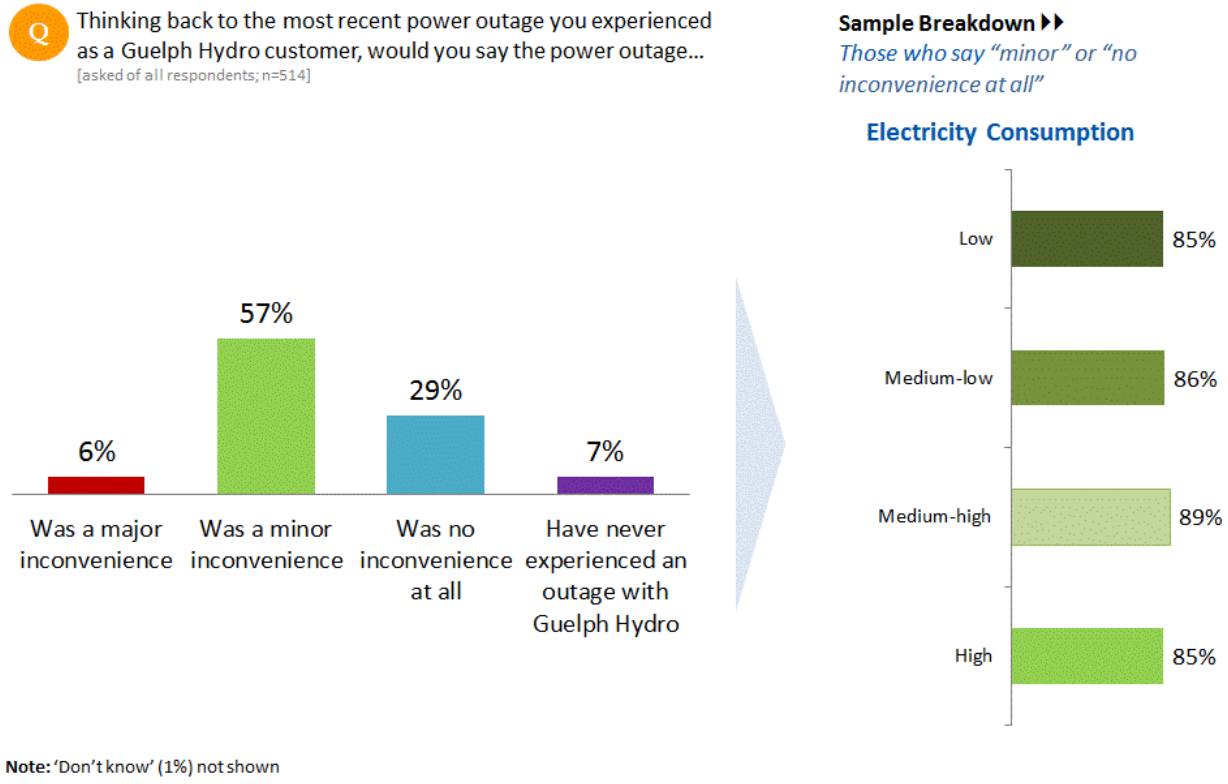
Q Approximately how many minutes did the most recent power outage last?
[Asked of all respondents who experienced an outage; n=99]



Impact of Most Recent Power Outage

When asked about the impact of their more recent power outage, most (57%) residential customers say it *was a minor inconvenience* and a further 29% said it *was no inconvenience at all*. Only 6% reported a *major inconvenience*.

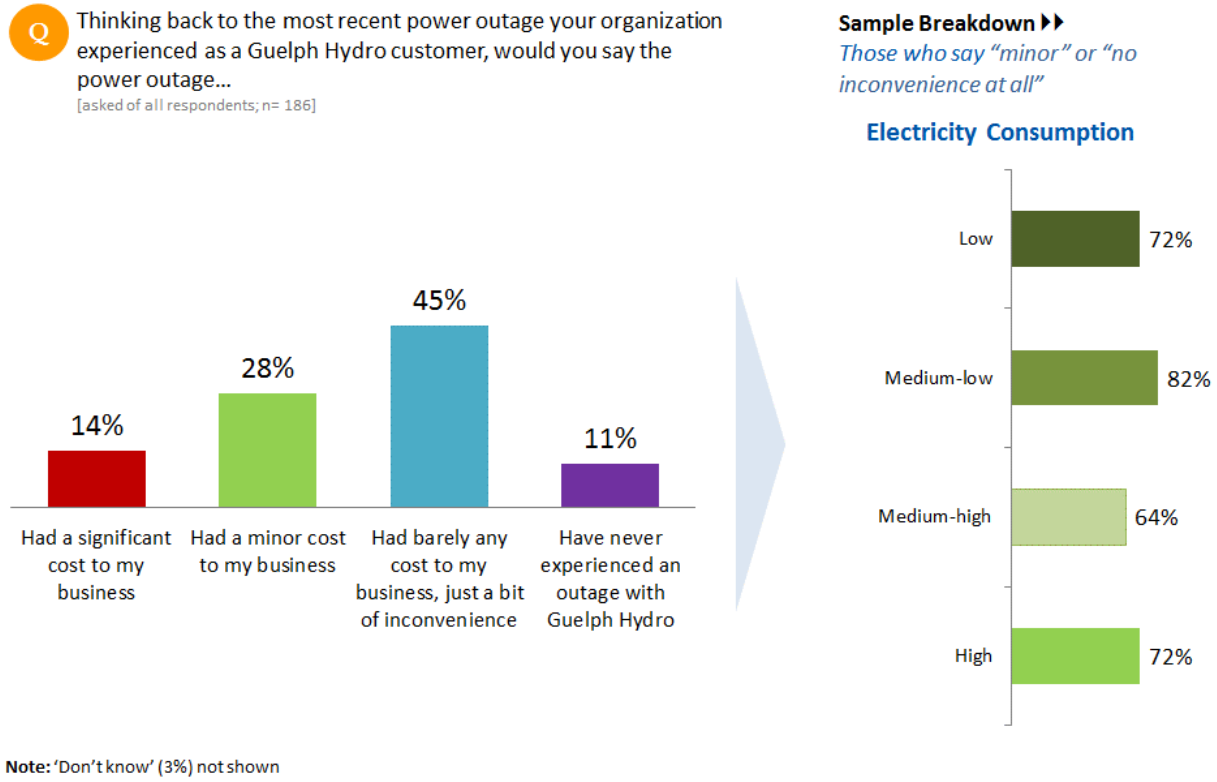
Figure RS.9: Impact of Outages



Note: 'Don't know' (1%) not shown

Almost half (45%) of general service customers say their most recent outage *had barely any cost to my business, just a bit of inconvenience*. Just over quarter (28%) say their most recent outage *had a minor cost to my business*, while half as many (14%) say theirs *had a significant cost to my business.*

Figure GS.9: Impact of Outages



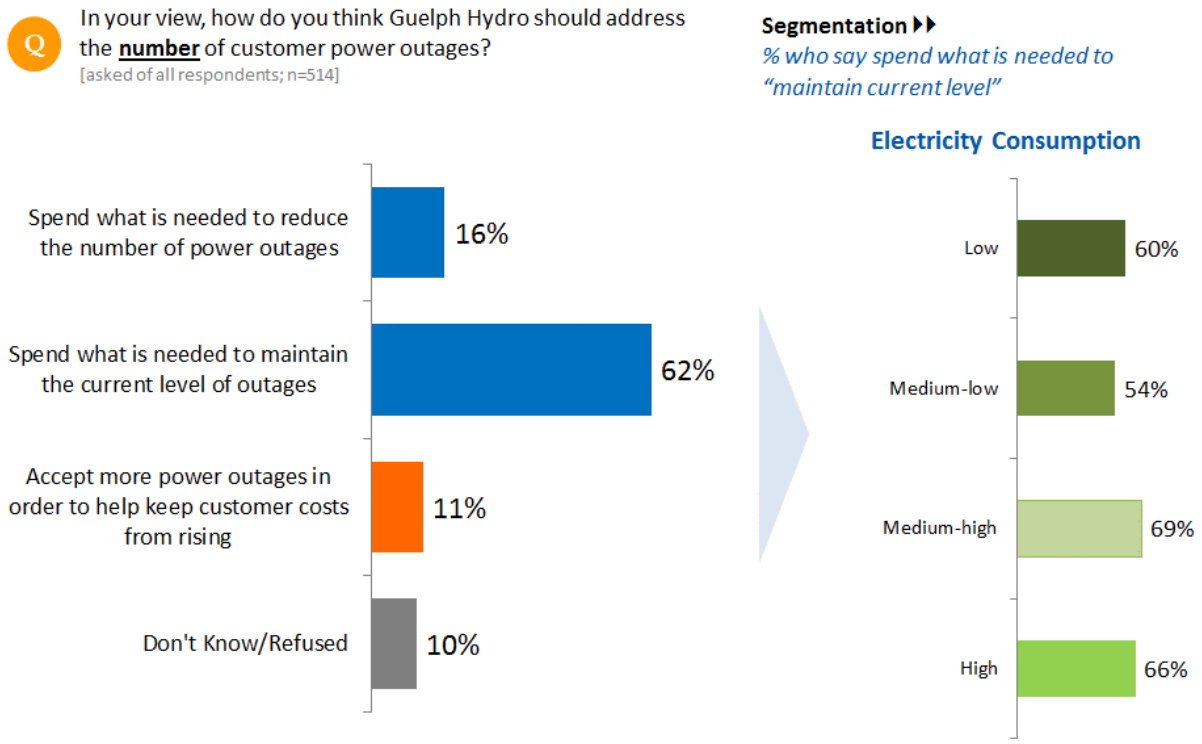
Note: 'Don't know' (3%) not shown

Addressing the Frequency of Service Outages

While 16% of residential customers would like Guelph Hydro to spend what is needed to reduce the number of unexpected power outages, almost four times as many (62%) would like the utility to spend what is needed to maintain the current level of unexpected outages. Only 11% are prepared to accept more power outages in order to keep customer costs from rising.

- 69% of residential customers who do not feel their electricity bill has a significant impact on their household finances would like Guelph Hydro to spend what is needed to maintain the current level of unexpected outages, compared to 58% who do feel a financial strain as a result of their electricity bill (this latter group is twice as likely as the former group to say they will accept more outages if it will keep costs down: 14% versus 7%).

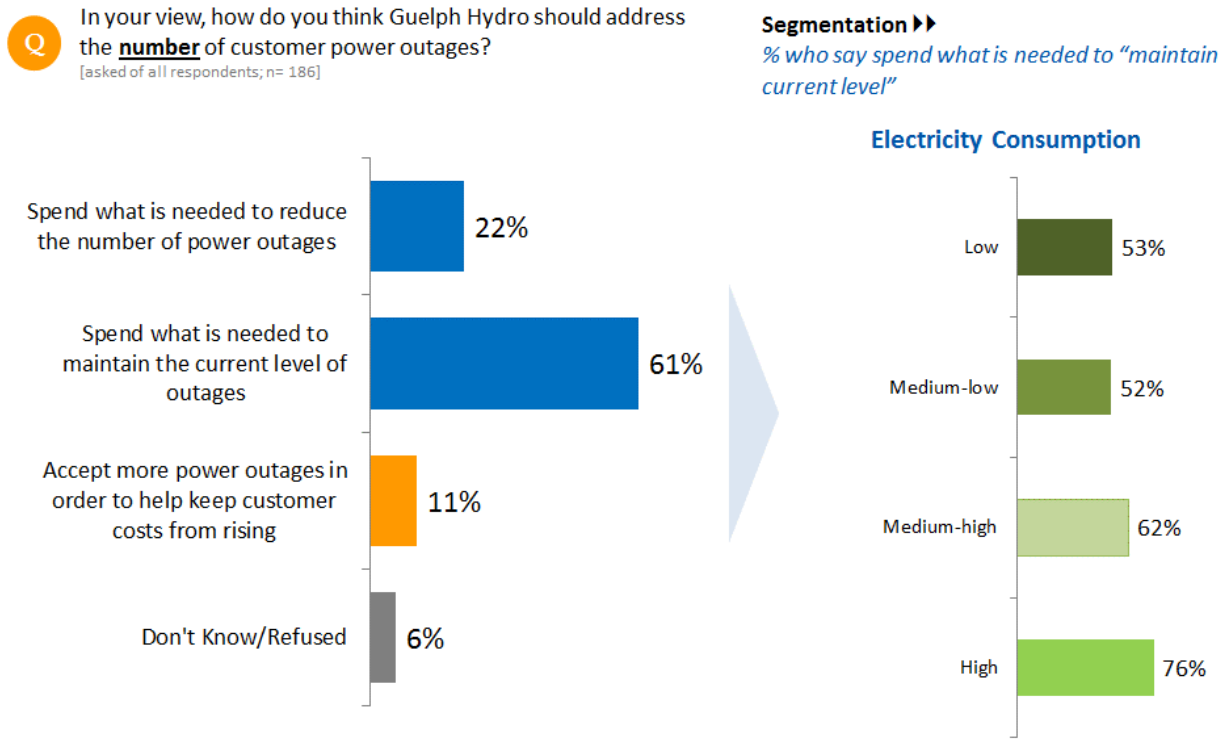
Figure RS.10: Addressing the Frequency of Service Outages



It is a similar result among general service customers: 22% would like Guelph Hydro to spend what is needed to reduce the number of unexpected power outages, 61% would like them to spend what is needed to maintain the current number, and 11% are prepared to accept more outages if it will keep customer costs from rising.

- Among general service customers, those with a high level of consumption are most likely to prefer that Guelph Hydro spend to maintain the current level of outages (76%).
- Those whose businesses are open weekdays only are more likely than those opened weekdays and weekends to prefer a "spend to maintain" strategy (71% versus 56%).

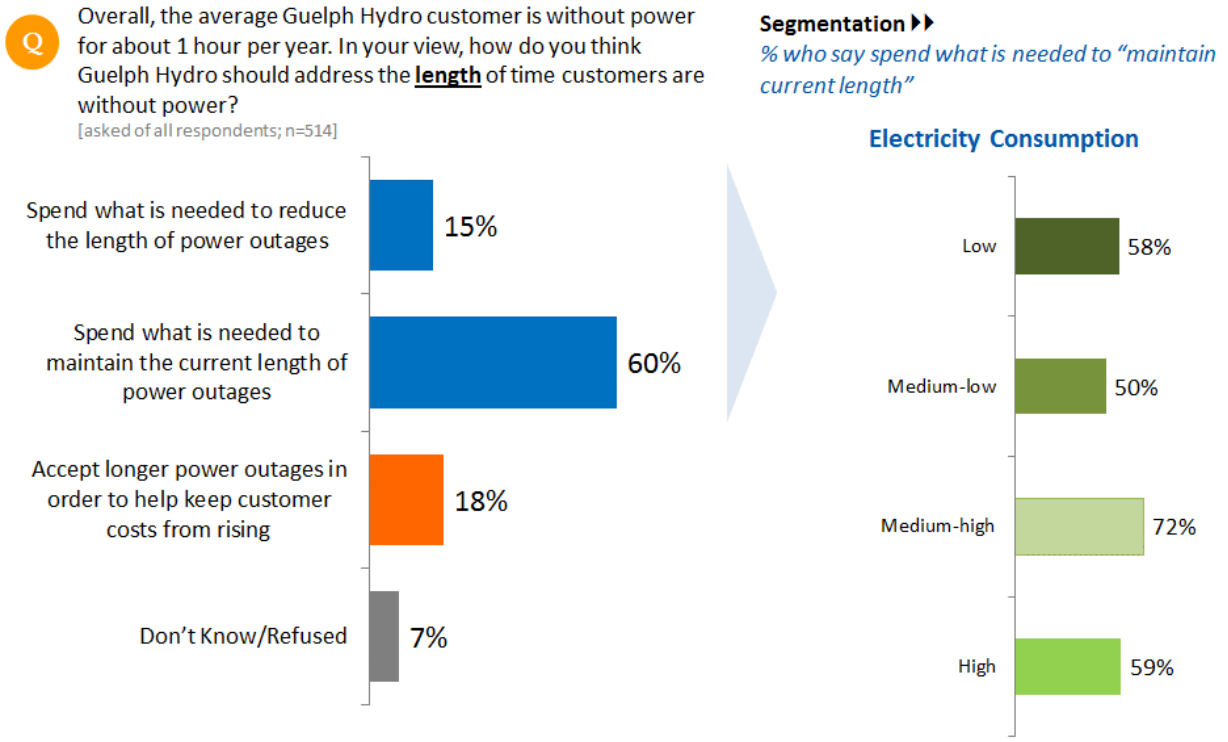
Figure GS.10: Addressing the Frequency of Service Outages



Similar to how they would like Guelph Hydro to address the number of service outages, most (60%) residential customers prefer a "spend to maintain" approach when it comes to the duration of unexpected outages. About one-in-seven (15%) would like the utility to spend what is needed to reduce the current duration, while slightly more (18%) are willing to accept longer time without power in order to keep customer costs from rising.

- Residential customers with a medium-high level of consumption are more likely than other levels of consumption to prefer a "spend to maintain" approach (72% versus 50% to 59%).
- Households who do not feel financially strained by their electricity bill are more likely than those who do feel financially strained to prefer a "spend to maintain" strategy (67% versus 56%).

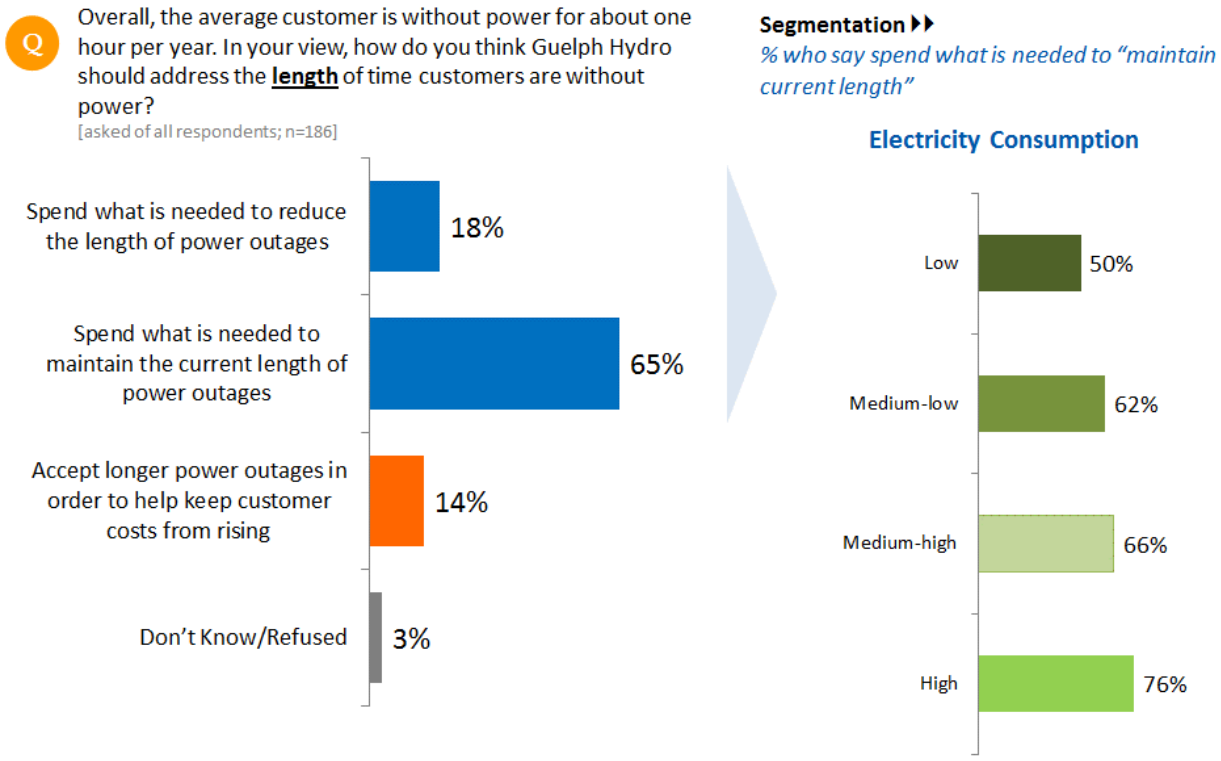
Figure RS.11: Addressing the Duration of Service Outages



Once again, the result among general service customers is similar to that of residential customers. Two-thirds (65%) would like Guelph Hydro to "spend to maintain", 18% would like the utility to spend what is needed to reduce the length of outages, and 14% are willing to accept longer outages in order to keep costs from rising.

- Preference for a "spend to maintain" approach increases with level of consumption, ranging from 50% among those with a low level of consumption to 76% among those with a high level of consumption.
- Businesses that are open weekdays only are more likely to prefer a "spend to maintain" strategy than those what are also open weekends (74% versus 59%).

Figure GS.11: Addressing the Duration of Service Outages



System Challenges & Priorities

This section explores respondents' preferences on various aspects of Guelph Hydro's Capital Investment plan and OM&A spending.

System Challenges & Priorities Summary

Investment in Aging Infrastructure

The majority of residential (61%) and general service (69%) customers think Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability. Conversely, 33% or residential customers and 25% of general service customers feel the utility should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of a bill increase.

Investment in New Technologies and Infrastructure

More than half (58%) of residential customers and even more (65%) general service customer things the benefits of new technologies and infrastructure are important and should be a priority for Guelph Hydro. Only 37% of residential customers and 31% of general service customers feel these are luxuries more than necessities.

Investment in Equipment and Tools

When it comes to general plant spending, 68% of residential customers and the same proportion (68%) of general service customers feel that, while Guelph Hydro should be wise with its spending, it is important that staff have the equipment and tools they need to manage the system efficiently and reliably.

Preamble for System Challenges & Priorities Section

The preamble reads as follow:

"As significant amount of Guelph Hydro's electrical infrastructure was built in the 1960s and 70s, and is still in-service today. While Guelph Hydro believes it has done its best to prolong the life of these assets, many of these assets are approaching or have exceeded the end of their useful life.

As part of its investment plan, Guelph Hydro is proposing a significant infrastructure renewal program. The estimated cost of this system renewal program is $4.5 million in 2016.

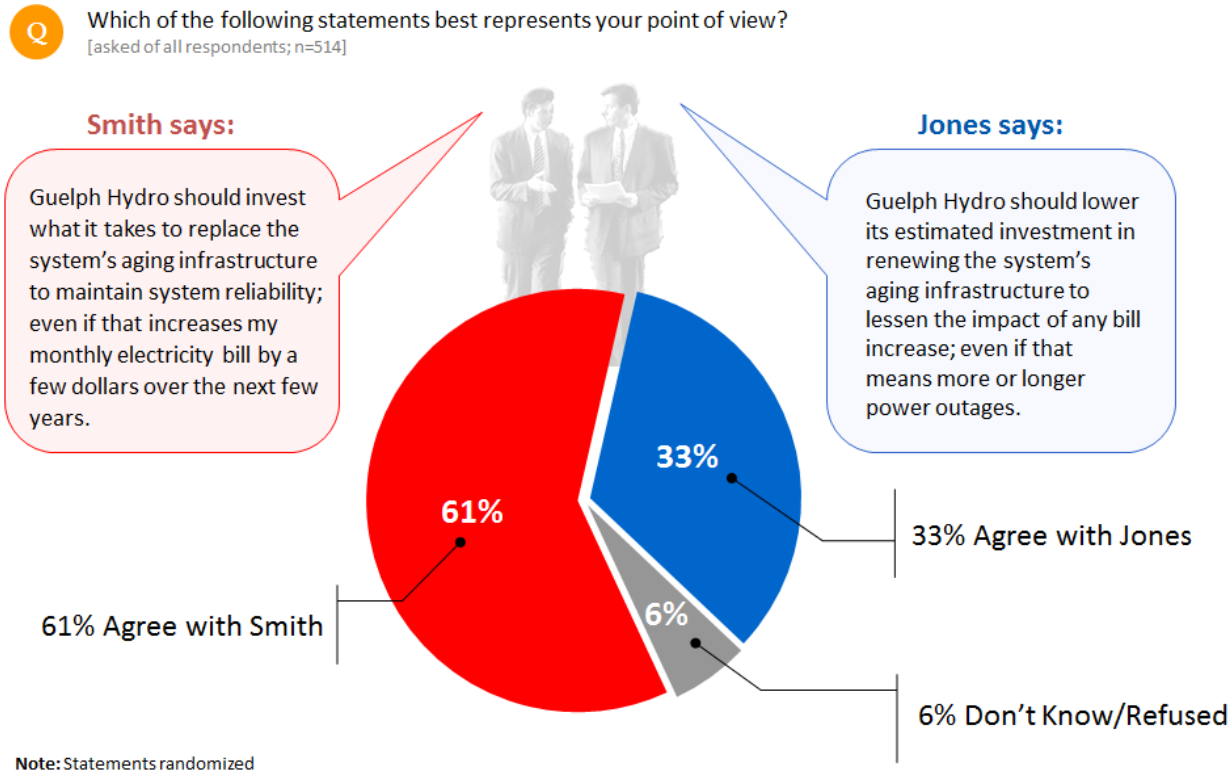
Although this plan will allow Guelph Hydro with the help of independent experts, to make the necessary investments to maintain system reliability, it will have an impact on customer bills."

Investment in Aging Infrastructure

Three-in-five (61%) residential customers think Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if it increases their monthly electricity bill by a few dollars over the next few years. One third (33%) feel the utility should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of any bill increase; even if that means more or longer power outages.

- Most likely to say Guelph Hydro should "invest what it takes" are those living in single-person households (71%).
- Those who are under financial strain from their electricity bill are less likely to share this view than those who are not under financial strain (54% versus 71%).

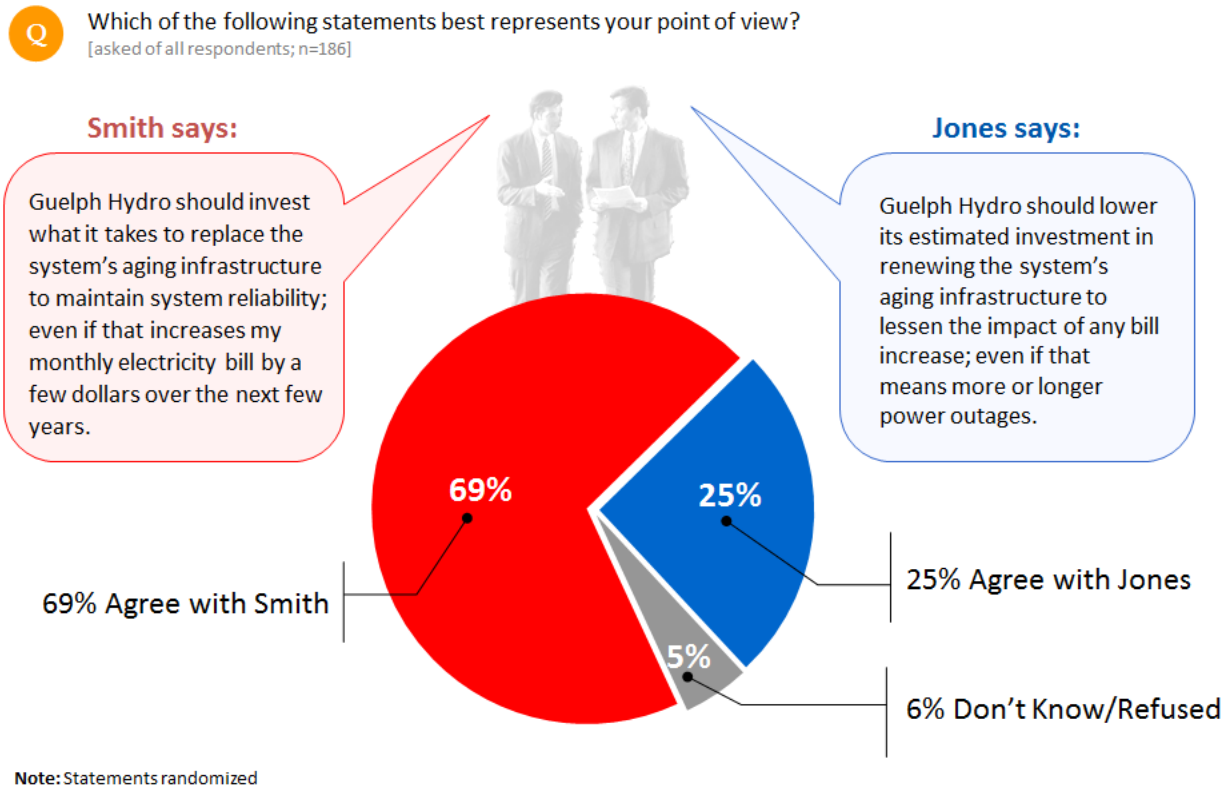
Figure RS.12: Investment in Aging Infrastructure



Looking at general service customers, the story is similar: 69% say Guelph Hydro should "invest what it takes", while only 25% feel the utility should lower its estimated investment in renewing the system's aging infrastructure.

- At 78%, businesses who are not under financial strain due to their electricity bill are more likely to favour a "spend what it takes" approach than those who are under financial strain (65%).

Figure GS.12: Investment in Aging Infrastructure



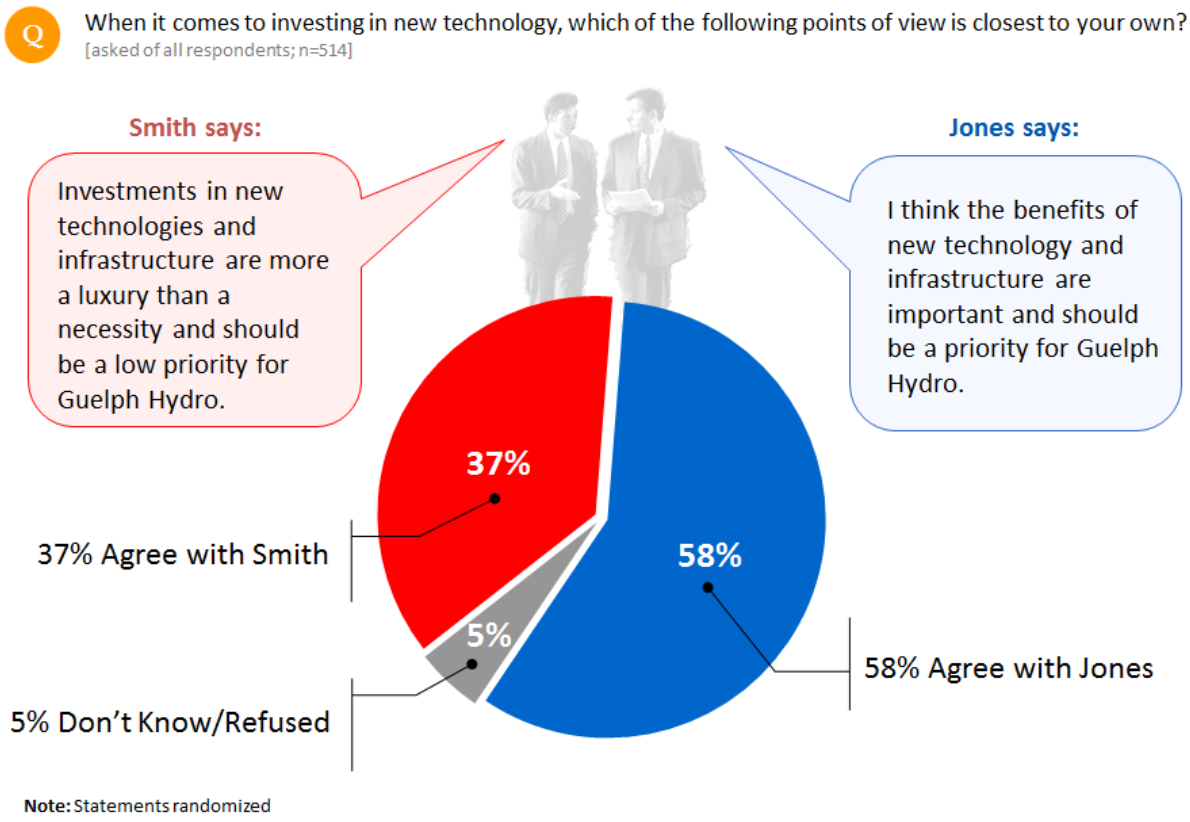
Note: Statements randomized

Investment in New Technologies and Infrastructure

The majority (58%) of residential customers think the benefits of new technology and infrastructure are important and should be a priority for Guelph Hydro, whereas 37% say these items are more a luxury than a necessity.

- The extent to which household finances are impacted by the electricity bill has a significant impact here. Households which feel a financial pinch from their electricity bill are much more likely than those who don't feel a pinch to think new technology and infrastructure are luxuries rather than priorities (41% versus 30%).

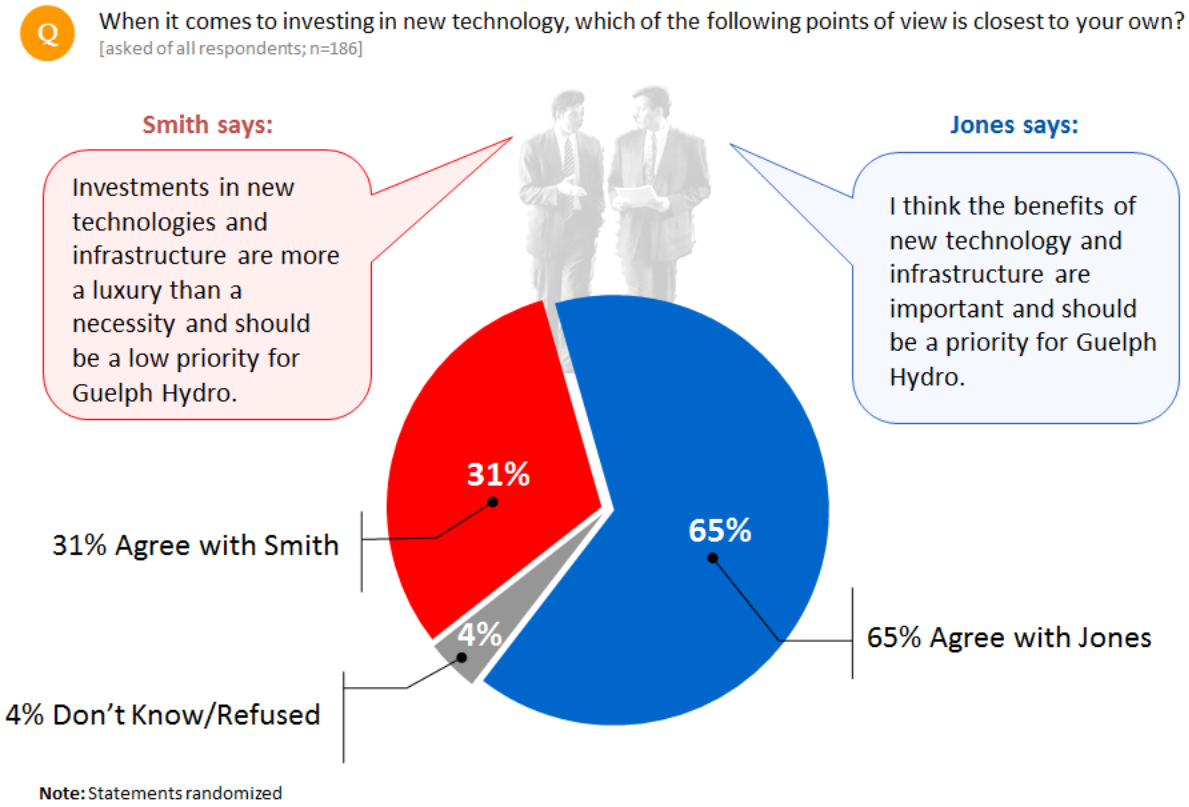
Figure RS.13: Investment in New Technologies and Infrastructure



Two thirds (65%) of general service customers think the benefits of new technologies and infrastructure are important and should be a priority for Guelph Hydro. Less than half as many (31%) think these items are luxuries and should not be a priority.

- Those whose organizations are financially strained by their electricity bill are much more likely than those who aren't to feel that new technology and infrastructure are luxuries (37% versus 21%).

Figure GS.13: Investment in New Technologies and Infrastructure



Investment in Equipment and Tools

Preamble for Investment in Equipment and Tools

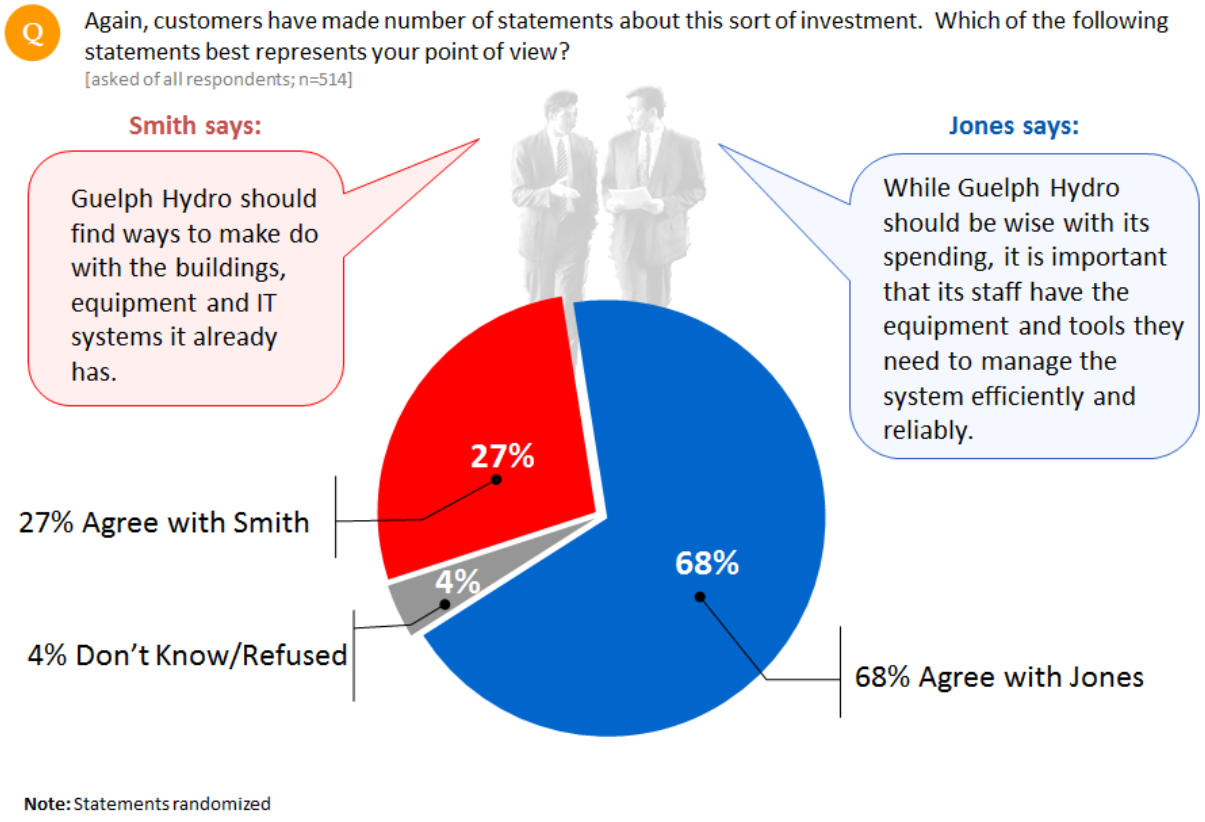
For the following question on general plant, respondents were read this brief preamble:

> *"Guelph Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, Guelph Hydro needs buildings to house its staff, vehicles and tools to service the power lines and IT systems to manage the system and customer information."*

More than two thirds (68%) of residential customers feel that, while Guelph 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. Only about one quarter (27%) say the utility should find ways to make do with the buildings, equipment and IT systems it already has.

- Customers whose electricity bill has a big impact on their finances are much more likely than those for whom it doesn't to feel that Guelph Hydro should make do with the general plant assets it currently has (33% versus 21%).

Figure RS.14: Investment in Equipment and Tools

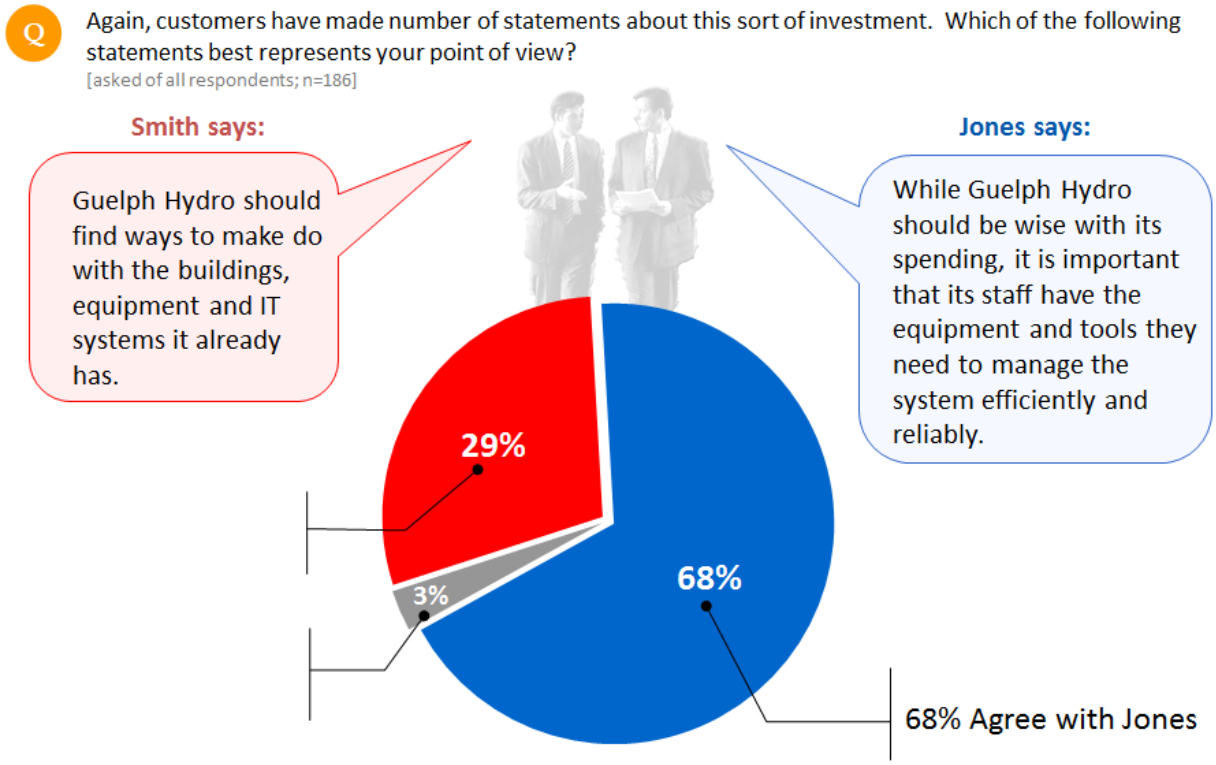


Note: Statements randomized

Similar to residential customers, most (68%) small business customers feel it is important for Guelph Hydro staff to have the equipment and tools they need to manage the system efficiently and reliably. Three-in-ten (29%) think the utility should make do with what it already has.

- Again, similar to residential customers, the financial impact of an organization's electricity bill has bearing here. One third (34%) of those whose organization is under financial strain feel Guelph Hydro should make do with its current general plant assets, compared to only 17% of those whose organization is not under financial strain.

Figure GS.14: Investment in Equipment and Tools



Note: Statements randomized

Reaction to Previous Customer Consultation Input

This section measures agreement with some of the key opinion statements provided by Guelph Hydro's customers in previous phases of the consultation.

Customer Reaction Statements

There were a total of ten customer statements in the survey. Of those ten, the statement residential customers were most likely to agree with was "a few power outages are fine for me personally, but I worry about the impact this has on more vulnerable people, such as the elderly" (49% strongly agree, 36% somewhat agree).

The statement residential customer were least likely to agree with was "when it comes to reducing power outages and improving reliability, the first priority should be business customers, then residential customers" (14% strongly agree, 29% somewhat agree).

Among general service customers, the statement "I think Guelph Hydro should do more to help customers find ways to reduce their electricity consumption and costs" received the highest level of agreement (54% strongly agree, 33% somewhat agree).

General service customers were least likely to agree that "my organization would be willing to pay a bit more for electricity if it means better service reliability" (13% strongly agree, 40% somewhat agree).

Residential Customer Reaction

A majority of residential customers agreed with all statements tested except "when it comes to reducing power outages and improving reliability, the first priority should be business customers, then residential customers" (14% strongly agree, 29% somewhat agree).

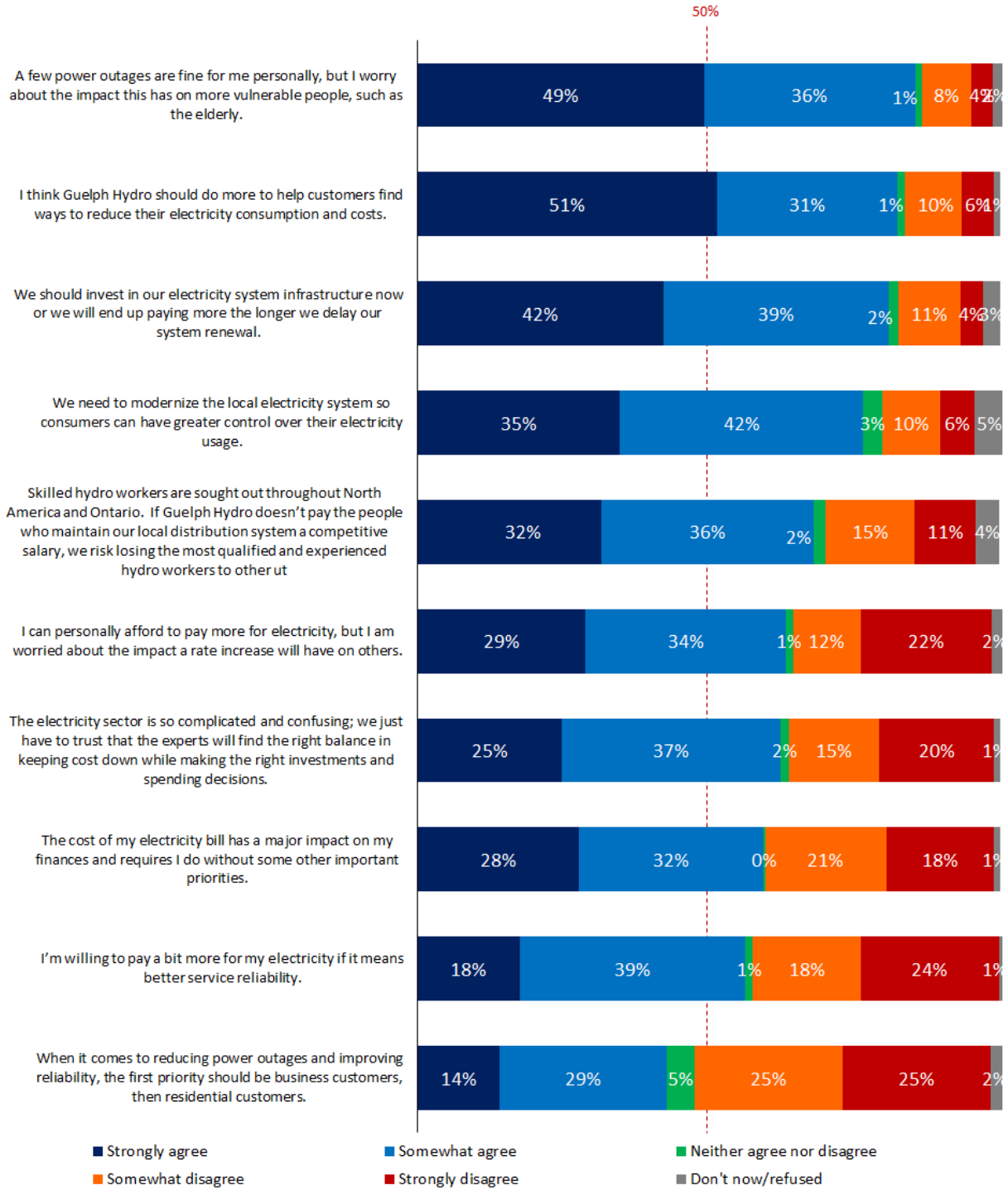
Of the ten statements tested, four received at least 75% agreement:

- "A few more power outages are fine for me personally, but I worry about the impact this has on more vulnerable people, such as the elderly" (49% strongly agree, 36% somewhat agree)
- "I think Guelph Hydro should do more to help customers find ways to reduce their electricity consumption and costs" (51% strongly agree, 31% somewhat agree)
- "We should invest in our electricity system infrastructure now or we will end up paying more the longer we delay our system renewal" (42% strongly agree, 39% somewhat agree)
- "We need to modernize the local electricity system so consumers can have greater control over their electricity usage" (35% strongly agree, 42% somewhat agree)

Throughout this report, we make reference to customers who are under financial strain due to their "electricity bill." (Note: The definition of the "electricity bill" in the minds of customers likely includes all items on their bill which, in the case of Guelph Hydro customers, includes water charges.) Those are customers who agreed with the following statement: "The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities" (28% strongly agree, 32% somewhat agree). Those who disagreed with this statement are referred to herein as not financially strained (21% somewhat disagree, 18% strongly disagree).

Figure RS.15: Reaction to Customer Input

Q The following statements have been made by customers throughout Guelph Hydro's community consultation process. For each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.
[asked of all respondents; n=514]



GS Customer Reaction

Overall, a majority of general service customers agreed with each of the ten statements tested, but with a lesser intensity than residential customers. Only one statement had more than 32% *strongly* agree: "I think Guelph Hydro should do more to help customers find ways to reduce their electricity consumption and costs" (54% strongly agree, 33% somewhat agree).

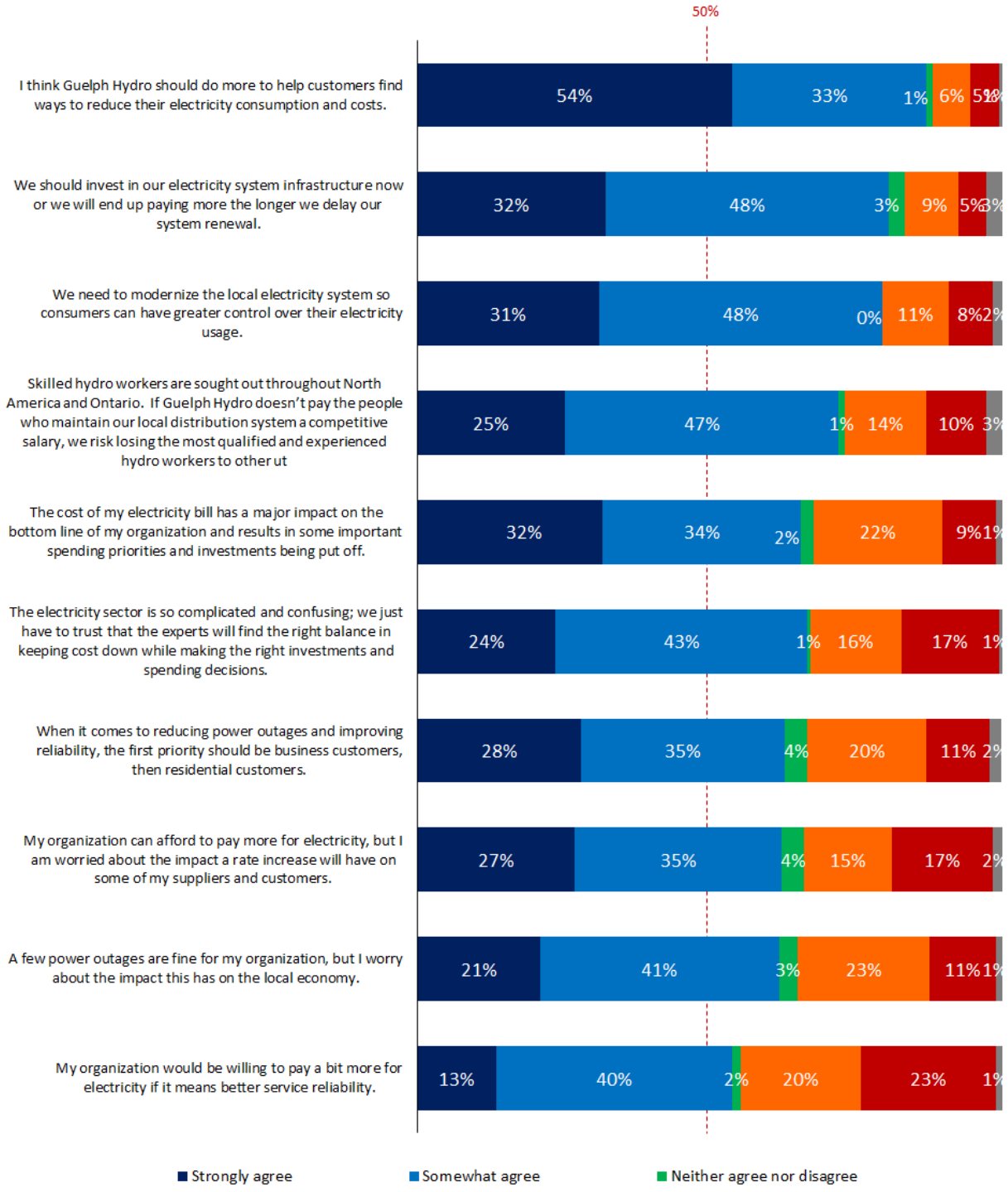
In addition to the statement noted above, two other statements garnered agreement from more than 75% of general service respondents:

- "We should invest in our electricity system infrastructure now or we will end up paying more the longer we delay our system renewal" (32% strongly agree, 48% somewhat agree)
- "We need to modernize the local electricity system so consumers can have greater control over their electricity usage" (31% strongly agree, 48% somewhat agree)

As with residential customers, we included a statement for general service customers to determine whether or not their organization was under financial strain due to their electricity bill: "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" (32% strongly agree, 34% somewhat agree, 22% somewhat disagree, 9% strongly disagree).

Figure GS.15: Reaction to Customer Input

Q The following statements have been made by customers throughout Guelph Hydro's community consultation process. For each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.
[asked of all respondents; n=186]



Assessment of Plan

This section explores the degree of acceptance that Guelph Hydro's customers express for a rate increase. Acceptance is defined as either support for a rate increase or agreement 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

More than three quarters (79%) of residential customers are prepared to accept a rate increase. In fact, the proportion who support the increase as being reasonable (41%) is slightly larger than the proportion who offer reluctant acceptance (38%).

- Most likely to *support* the rate increase are those who feel their electricity bill does not have a significant impact on their household finances (62%).

Among general service customers, acceptance of a rate increase is slightly tempered. While three quarters (74%) are willing to accept a rate increase, most (42%) don't like it but feel it is necessary. One third (32%) find it reasonable and support the increase outright.

- Those who feel their electricity bill does not have a significant impact on their organization are most likely (50%) to support the proposed rate increase.

Financial Flexibility and Level of Acceptance

The less strained they feel by their electricity bill, the more likely customers are to support the rate increase.

Among residential customers, 62% of those who don't feel strained by their electricity bill support the proposed rate increase, compared to only 28% of those who do feel a financial strain. Despite feeling a financial strain, most residential customers whose electricity bill has an impact on their household finances still feel a rate increase is either reasonable (28%) or at least necessary (45%).

The same is true among general service customers. Those who don't feel a financial strain are twice as likely to support the increase as those who do feel a strain (50% versus 24%). Still, even among those who feel a financial strain, most find the increase either reasonable (24%) or at least necessary (44%).

Reasons why customers accept or oppose Guelph Hydro's proposed DSP:

- Among residential customers who support the increase, the main two reasons are that it's "not that big a difference/reasonable" (44%) and "it is necessary/need to invest in system" (44%).
- Residential customers who offer reluctant acceptance agree that "it is necessary/need to invest in system" (42%), but they also say their "bill is already high/pay too much" (21%), or that they "can't afford it" (9%).
- And, among those who oppose the rate increase, 26% say their "bill is already high/pay too much", 20% feel that the "money should come from elsewhere", and 15% say they "can't afford the increase".

- Looking at the breakdown of general service customers, those who support the increase say it's "reasonable/not much of an increase" (53%) or that it is "necessary to invest in the system" (45%).
- Small business customer who reluctantly accept the increase say their "bill is already high" (31%), and that it is "necessary to invest in the system" (28%).
- Opposition in this rate class is based on three main reasons: "they should find other ways to cover the cost" (26%), "unreasonable/increase is too high" (23%) and "increase will affect my business/customers" (21%).

Preamble for Assessment of Plan Section

Prior to the questions given in the Assessment of Plan Section, residential customers were presented with a preamble concerning the breakdown of pricing for Guelph Hydro's 5-year plan:

Guelph Hydro believes that a proactive and consistent renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. Guelph Hydro's proposed plan will spend an estimated $14 million on capital investments in 2016. This includes …

- *$4.5 million to replace aging infrastructure;*
- *$5.5 million to serve new communities and connect customers to the grid;*
- *$2 million to invest in equipment needed to maintain and operate the system; and*
- *$2 million to integrate new technologies into the power system.*

To fund this plan, Guelph Hydro is proposing the average residential customers' rate increase by approximately $4.05 per month – or about 13.7% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average residential customer will actually only pay 2% more in 2016, or $2.68 as other costs are forecasted to come down next year. Between 2017 and 2020, it is estimated that the average residential customers' rate will increase by about 1% on the distribution portion of their electricity bill.

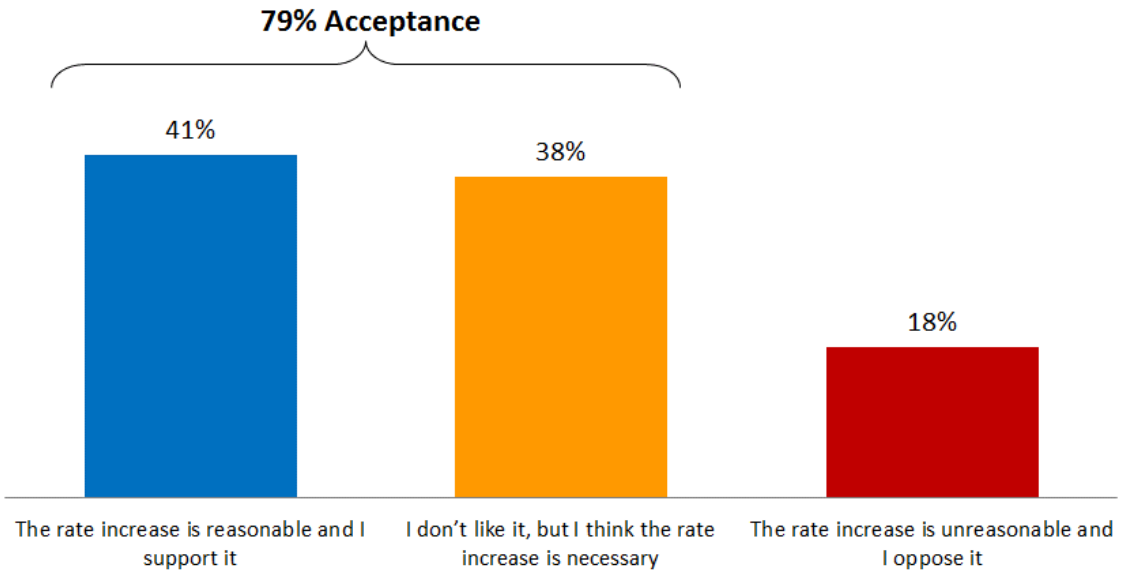
(Note: in the GS Survey, the last two paragraphs read as follows: To fund this plan, Guelph Hydro is proposing the average small business customers' rate increase by approximately $3.49 per month – or about 8.25% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average small business customer will actually only pay 0.25% more in 2016, or $0.76 as other costs are forecasted to come down next year. Between 2017 and 2020, it is estimated that the average small business customers' rate will increase by about 1% on the distribution portion of their electricity bill.)

Acceptance of Rate Increase

When presented with the estimated impact of Guelph Hydro's proposed investment plan, most customers are prepared to accept it: 41% find the rate increase reasonable and support it, while an additional 38% say they don't like it but think the rate increase is necessary. One-in-five (18%) say the rate increase is unreasonable and they oppose it.

Figure RS.16 - Acceptance of Rate Increase

Q Considering the cost of Guelph Hydro's plan, which point of view is closest to your own?
[asked of all respondents; n=514]

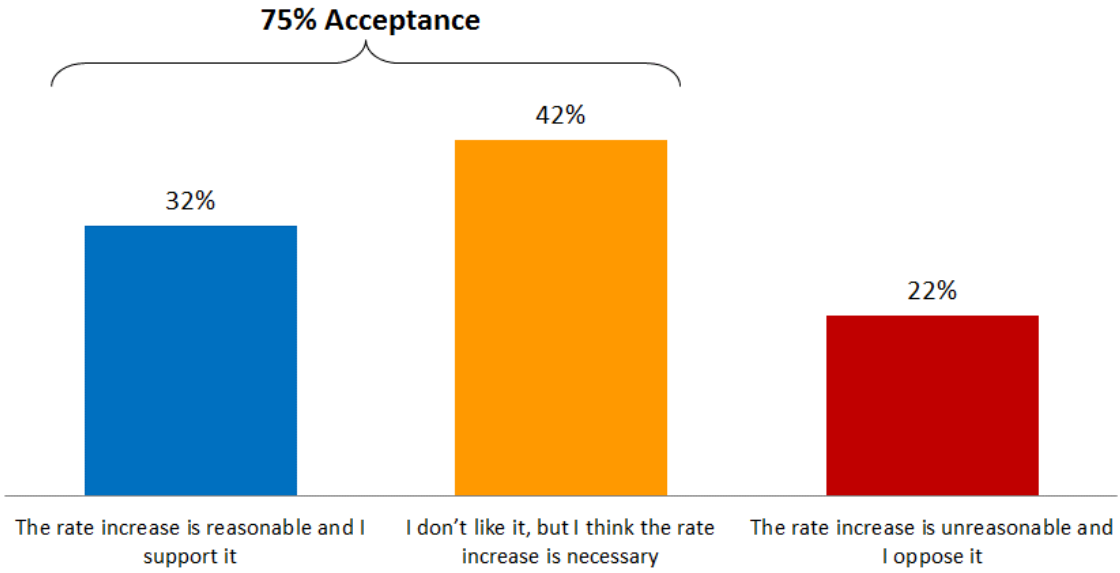


Note: 'Don't know'/'Refused' (3%) not shown

General service customers are slightly less likely to support the proposed rate increase. One third (32%) say the rate increase is reasonable and they support it, and a further 42% say they don't like the rate increase but they think it is necessary. About one-in-five (22%) say the rate increase is unreasonable and they oppose it.

Figure GS.16 - Acceptance of Rate Increase

Q Considering the cost of Guelph Hydro's plan, which point of view is closest to your own?
[asked of all respondents; n=186]



Note: 'Don't know'/'Refused' (4%) not shown

Financial Flexibility and Level of Acceptance

It is expected that the proposed rate increase would have greater financial impact on some respondents than others; consequently, the respondents' level of acceptance for rate increase could differ depending on their level of financial flexibility. That is, the extent to which the cost of electricity bill has on the respondents' personal finances or business' bottom line.

For residential respondents whose electricity bill has major impact on their finances and requires them do without some other important priorities, the level of their acceptance for the proposed rate increase (73%) is lower than those whose finances are less impacted by their electricity bill (88%).

Figure RS.17 - Financial Flexibility and Level of Acceptance

	Financially Strained Households	Not Financially Strained Households
The rate increase is reasonable and I support it	28%	62%
I don't like it, but I think the rate increase is necessary	45%	26%
The rate increase is unreasonable and I oppose it	25%	8%
Overall Permission	**73%**	**88%**

Note: 'Don't know'/'Refused' not shown

For general service respondents whose electricity bill has major impact on their organizations' bottom line and requires them to put off some important spending priorities and investments, the level of their acceptance for the proposed rate increase (68%) is lower than those whose bottom line are less impacted by their electricity bill (86%).

Figure GS.17 - Financial Flexibility and Level of Acceptance

	Financially Strained Organizations	Not Financially Strained Organizations
The rate increase is reasonable and I support it	24%	50%
I don't like it, but I think the rate increase is necessary	44%	36%
The rate increase is unreasonable and I oppose it	29%	9%
Overall Permission	**68%**	**86%**

Note: 'Don't know'/'Refused' not shown

Opinions on Proposed Rate Increase

Residential respondents who support the rate increase say it's "not that big a difference/reasonable" (44%) or that "it is necessary/need to invest in the system" (44%).

Residential respondents who say they don't like the increase but believe it is necessary hold this view because they say "it is necessary/need to invest in the system" (42%).

Residential customers who oppose the rate increase say their "bill is already high/pay too much" (26%).

Figure RS.18 – Opinion on Proposed Rate Increase

Q Why do you say that? (i.e. Guelph Hydro's proposed rate increase)

PERMISSION: Reasonable, support it	% RS
Not that big a difference/reasonable	44%
It is necessary/need to invest in system	44%
The money should come from elsewhere	3%
Bill is already high/pay too much	2%
Have no choice	1%
Other	6%
Don't know	2%
Sample Size	**n=204**

NO PERMISSION: Unreasonable, oppose it	% RS
Bill is already high/pay too much	26%
Money should come from elsewhere	20%
Can't afford the increase	15%
It is necessary/need to invest in system	8%
Going to end up paying more than they say	7%
Money is being wasted	4%
Not that big a difference/reasonable	2%
Already paying debt retirement charge	2%
Other	15%
Don't Know	1%
Sample Size	**n=92**

PERMISSION: Don't like, but necessary	% RS
It is necessary/need to invest in system	42%
Bill is already high/pay too much	21%
Can't afford increase	9%
Not that big a difference/reasonable	6%
The money should come from elsewhere	4%
Money is being wasted	3%
Already paying debt retirement charge	2%
Going to end up being more than they say	2%
Have no choice	1%
Other	8%
Don't Know	3%
Sample Size	**n=194**

General service customers who support the increase say it is "reasonable/not much of an increase" (53%) or that it is "necessary to invest in the system" (45%).

Small business customer who don't like the increase but feel it is necessary say their "bill is too high" (31%), and that it is "necessary to invest in the system" (28%).

General service customers who are opposed to the rate increase say "they should find other ways to cover the cost" (26%).

Figure GS.18 – Opinion on Proposed Rate Increase

Q Why do you say that? (i.e. Guelph Hydro's proposed rate increase)

PERMISSION: Reasonable, support it	% RS
Reasonable/not much of an increase	53%
Necessary to invest in the system	45%
They should find other ways to cover the cost	2%
Other	0%
Don't know	0%
Sample Size	**n=58**

NO PERMISSION: Unreasonable, oppose it	% RS
They should find other ways to cover the cost	26%
Unreasonable/increase is too high	23%
Increase will affect my business/customers	21%
They are making enough money	8%
Bill is already high	8%
Other	15%
Don't Know	0%
Sample Size	**n=39**

PERMISSION: Don't like, but necessary	% RS
Bill is already high	31%
Necessary to invest in the system	28%
Increase will affect my business/customers	8%
Reasonable/not much of an increase	5%
They are making enough money	4%
They should find other ways to cover the cost	3%
Other	18%
Don't Know	3%
Sample Size	**n=74**

Survey Instruments

Residential Survey Instrument

A. INTRODUCTION

Introduction

Hello, my name is _____ and I'm calling from **Innovative Research Group** on behalf of **Guelph Hydro**, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **Guelph Hydro** to help them better understand the needs and preferences of customers who are responsible for paying their household's electricity bill.

Guelph Hydro – which distributes electricity to homes and businesses in your community – is preparing to submit its 5-year investment plan to the Ontario Energy Board for regulatory review. Since this plan will impact your bill, Guelph Hydro wants to hear from you, so your views can help shape its plan.

A1. Would you mind if I had **10 minutes** of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes	1	**[continue]**
No – NOT PRIMARY BILL PAYER	2	**[go to TRANSFER-1]**
No – BAD TIME	3	**ARRANGE CALLBACK**
No – HARD REFUSAL	4	**[Terminate]**

MONIT

This call may be monitored or audio taped for quality control and evaluation purposes.

PRESS TO CONTINUE	1	

A2. Have I reached you at your home phone number?

Yes – SPEAKING, CONTINUE	1	**[continue to A3]**
No – AT OFFICE or WORKPLACE	2	**[continue to A3]**
No – **on cellular or mobile phone**	3	**[skip to CELL]**
Refused – LOG **(THANK AND TERMINATE)**	99	**[Terminate]**

CELL. Are you currently operating a car, truck or other motor vehicle?

YES (**INTERVIEWER: SCHEDULE CALLBACK**)	1	**ARRANGE CALLBACK**
NO	2	**[continue to A3]**
Refused – LOG **(THANK AND TERMINATE)**	99	**[Terminate]**

A3. Are you the person primarily responsible for paying the electricity bill in your household?

Yes – **I pay the bill**	1	**[continue to A4]**
Yes – **shared responsibility**	2	**[continue to A4]**
No	3	**[go to TRANSFER-1]**
Don't know (**DNR**)	98	**[Terminate]**

TRANSFER-1

Can I speak with the person in your household who usually pays the electricity bill?

Yes	1	[**BACK TO** *INTRO*]
No – NOT AVAILABLE/BAD TIME – **(ARRANGE CALLBACK)**	2	[**ARRANGE CALLBACK**]
No – HARD REFUSAL	3	[**Terminate**]
Don't know (**DNR**)	98	[**Terminate**]

A4. And can you confirm that your household receives an electricity bill from **Guelph Hydro**?

Yes	1	[**continue**]
No	2	[**Terminate**]
Don't know (**DNR**)	98	[**Terminate**]

GENDER Note gender by observation:

Male	1
Female	2

B. GENERAL SATISFACTION

We need to prime respondents to start thinking about electricity and the part of the system that Guelph Hydro operates.

B5. PREAMBLE-1

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 **Guelph Hydro** in your community.

B6. How familiar are you with the **local electricity distribution system**? Would you say … [READ LIST]

Very familiar	1
Somewhat familiar	2
Not very familiar	3
Not familiar at all	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

B7. Generally speaking, how satisfied are you with the job **Guelph Hydro** is doing running your local distribution system? Would you say … [**READ LIST**]

Very satisfied	1
Somewhat satisfied	2
Somewhat dissatisfied	3
Very dissatisfied	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

B8. Is there anything in particular **Guelph Hydro** can do to improve its service to you? [**OPEN**]

Don't know (**DNR**)	98
Refused (**DNR**)	99

C. BILL KNOWLEDGE & IMPACT

I'd now like to talk with you about your electricity bill …

C9. While some customers pay more and others pay less, the **average residential customer pays about $135 a month** for electricity of **which $30 or approximately 22% goes to Guelph Hydro**. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the amount of your electricity bill that went to **Guelph Hydro**? Would you say … [**READ LIST**]

Very familiar	1
Somewhat familiar	2
Not very familiar	3
Not familiar	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

D. SYSTEM RELIABILITY

These questions are about priming the respondent to think about their experience with system reliability and separate adverse weather from failing equipment.

D10. In the past year or so, **Guelph Hydro** customers experienced unusually extreme weather – *notably the ice storm in December 2013*. This major weather event caused power outages for many **Guelph Hydro** customers.

Did your household experience a power outages due to the ice storm in December 2013?

Yes	1
No	2
Don't know (**DNR**)	98
Refused (**DNR**)	99

D11. Whether you were personally affected or not, how satisfied are you with the way **Guelph Hydro** responded to the ice storm? Would you say … [READ LIST]

Very satisfied	1
Somewhat satisfied	2
Somewhat dissatisfied	3
Very dissatisfied	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

D12. Is there is anything in particular that **Guelph Hydro** could have done to improve its service to you during the ice storm? [**OPEN**]

READ PREAMABLE: Despite best efforts, no electrical distribution system can deliver *perfectly reliable* electricity. As a general rule, the more reliable the system, the more expensive the system is to build and maintain.

With that said, the average **Guelph Hydro** customer experiences **one** unexpected power outage per year.

D13. Aside from outages caused by extreme weather – *such as the ice storm in December of 2013* – have you experienced any power outages **in the past 12 months**, and if so, approximately how many? [**DO NOT READ LIST**]

No outages	0 [**SKIP to D15**]
1 outage	1 [CONTINUE]
2 outages	2 [CONTINUE]
3 outages	3 [CONTINUE]
4 outages	4 [CONTINUE]
5 outages	5 [CONTINUE]
6 outages	6 [CONTINUE]
7 outages	7 [CONTINUE]
8 or more outages	8 [CONTINUE]
Don't know (**DNR**)	98 [**SKIP to D15**]
Refused (**DNR**)	99 [**SKIP to D15**]

READ ONLY IF D13 = 1 thru 8

D14. And approximately how many minutes did the most recent power outage last? [DO NOT READ LIST; select category accordingly]

Less than 15 minutes	1
15 to less than 30 minutes	2 [specify if less than *15 minutes*, if stated "less than 30 minutes"]
30 minutes to less than 1 hour	3
1 hour to less than 3 hours	4
3 hours to less than 6 hours	5
6 hours to less than 12 hours	6
12 to less than 24 hours	7
More than 24 hours	8
Don't know (**DNR**)	98
Refused (**DNR**)	99

D15. Thinking back to the **most recent** power outage you experienced as a **Guelph Hydro** customer, would you say the power outage …
[READ LIST; ROTATE 1 and 3]

Was a major inconvenience	1
Was a minor inconvenience	2
Was no inconvenience at all	3
Have never experienced an outage with Guelph Hydro (**DNR**)	97
Don't know (**DNR**)	98
Refused (**DNR**)	99

D16. In your view, how do you think **Guelph Hydro** should address the **number** of customer power outages? Would you say … [**READ LIST**]

[Rotate response codes 1 and 3]

Spend what is needed to **reduce** the number of unexpected power outages	1
Spend what is needed to **maintain** the current level of unexpected power outages	2
Accept **more** power outages in order to help keep customer costs from rising	3
Don't Know (**DNR**)	98
Refused (**DNR**)	99

D17. Overall, the average **Guelph Hydro** customer is without power for about **one hour per year**.

In your view, how do you think **Guelph Hydro** should address the **length of time** customers are without power? Would you say … [**READ LIST**]

[Rotate response codes 1 and 3]

Spend what is needed to **reduce** the length of unexpected power outages	1
Spend what is needed to **maintain** the current length of unexpected outages	2
Accept **longer** time without power in order to help minimize customer costs from rising	3
Don't Know (**DNR**)	98
Refused (**DNR**)	99

E. SYSTEM CHALLENGES & PRIORITIES

System Renewal Question

E18. [**PREAMBLE to E19**] As significant amount of **Guelph Hydro's** electrical infrastructure was built in the 1960s and 70s, and is still in-service today. While **Guelph Hydro** believes it has done its best to prolong the life of these assets, many of these assets are approaching or have exceeded the end of their useful life.

As part of its investment plan, **Guelph Hydro** is proposing a significant infrastructure renewal program. The estimated cost of this system renewal program is **$4.5 million** in 2016.

Although this plan will allow **Guelph Hydro** with the help of independent experts, to make the necessary investments to maintain system reliability, **it will have an impact on customer bills**.

E19. Which of the following statements best represents your point of view?
[Read and Rotate statements 1 and 2]
Some customers have said …

Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years. 1

Others have said …
Guelph Hydro should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of any bill increase; even if that means more or longer power outages. 2

Don't know (**DNR**) 98
Refused (**DNR**) 99

System Service Questions

E20. [**PREAMBLE TO E21**] New technology and electricity infrastructure can have many impacts on distribution systems:

- New feeder infrastructure to ensure growing communities have the electricity capacity they need.
- New computer systems, sensors and monitoring equipment provide pinpointed information about outages to both system controllers and customers in real time.
- Remotely controlled equipment and switches allow power to be restored to many customers much more quickly than in the past.

While there are benefits from new technology and equipment, there are also costs.

E21. When it comes to investing in new technology, which of the following points of view is closest to your own?

[Read and Rotate statements 1 and 2]

Some customers have said…

Investments in new technologies and infrastructure are more a luxury than a necessity and should be a low priority for Guelph Hydro.	1

Others have said …

I think the benefits of new technology and infrastructure are important and should be a priority for Guelph Hydro.	2
Don't know (**DNR**)	98
Refused (**DNR**)	99

General Plant Questions

E22. Guelph Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, Guelph Hydro needs buildings to house its staff, vehicles and tools to service the power lines and IT systems to manage the electrical system and customer information.

Again, customers have made number of statements about this sort of investment. Which of the following statements best represents your point of view?
[Read and Rotate statements 1 and 2]

Some customers have said …

Guelph Hydro should find ways to make do with the buildings, equipment and IT systems it already has.	1

Others have said …

While Guelph 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.	2
Don't know (**DNR**)	98
Refused (DNR)	99

F. REACTION TO CUSTOMER INPUT

Below are the common themes that have appeared in qualitative customer consultations. These statements are subject to change.

The following statements have been made by customers throughout **Guelph Hydro's** community consultation process.

For each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.

Strongly agree	1
Somewhat agree	2
Neither agree nor disagree (**DNR**)	3
Somewhat disagree	4
Strongly disagree	5
Don't Know (**DNR**)	98
Refused (**DNR**)	99

RANDOMIZE QUESTIONS

Willingness / Ability to Pay

F23. The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities.

F24. I'm willing to pay a bit more for my electricity if it means better service reliability.

Impact of rate increase on others

F25. I can personally afford to pay more for electricity, but I am worried about the impact a rate increase will have on others.

Pay Now or Later

F26. We should invest in our electricity system infrastructure **now** or we will end up paying more the longer we delay our system renewal.

Deferring to the experts

F27. The electricity sector is so complicated and confusing; we just have to trust that the experts will find the right balance in keeping cost down while making the right investments and spending decisions.

CDM

F28. I think **Guelph Hydro** should do more to help customers find ways to reduce their electricity consumption and costs.

Modernizing the Grid

F29. We need to modernize the local electricity system so consumers can have greater control over their electricity usage.

F30. .

System Reliability

F31. A few power outages are fine for me personally, but I worry about the impact this has on more vulnerable people, such as the elderly.

F32. When it comes to reducing power outages and improving reliability, the first priority should be business customers, then residential customers.

Labour Costs

F33. Skilled hydro workers are sought out throughout North America and Ontario. If **Guelph Hydro** doesn't pay the people who maintain our local distribution system a competitive salary, we risk losing the most qualified and experienced hydro workers to other utilities.

G. ASSESSMENT OF PLAN

G34. PREAMBLE

Guelph Hydro believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. **Guelph Hydro's** proposed plan will spend an estimated **$14 million** on capital investments in 2016. This includes …

- **$4.5 million** to replace aging infrastructure;
- **$5.5 million** to serve new communities and connect customers to the grid;
- **$2 million** to invest in equipment needed to maintain and operate the system; and
- **$2 million** to integrate new technologies into the power system.

To fund this plan, **Guelph Hydro** is proposing the **average residential customers' rate increase by approximately $4.05 per month** – or about 13.7% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average residential customer will actually only pay 2% more in 2016, or **$2.68** as other costs are forecasted to come down next year. Between 2017 and 2020, it is estimated that the average residential customers' rate will increase by about **1%** on the distribution portion of their electricity bill.

G35. Considering the cost of Guelph Hydro's plan, would you say [**READ LIST**] …
Rotate response codes "1 "and "3"

The rate increase is reasonable and I support it	1
I don't like it, but I think the rate increase is necessary	2
The rate increase is unreasonable and I oppose it	3
Don't know (**DNR**)	98
Refused (**DNR**)	99

Ask only if G35 = 1, 2 or 3

G36. And why do you say that? [**OPEN**]

Don't know (**DNR**)	98
Refused (**DNR**)	99

H. SEGMENTATION

These last few questions are for statistical purposes only and we remind you again that all of your responses are completely confidential.

H37. In which year were you born? [**Enter YEAR**]

INTERVIEWER NOTE: if REFUSE; ask "AGE".

AGE: Can you tell me what age category do you fall into? [**READ LIST**]

Less than 18	0
18-25	1
25-34	2
35-44	3
45-54	4
55-64	5
65 years or older	6
Refused (**DNR**)	99

H38. Do you own or rent your home?

Own	1
Rent	2
Refused (**DNR**)	99

H39. How would you describe your primary residence? Would you say you live in … [**READ LIST**]

A fully-detached home;	1
A semi-detached home;	2
An apartment or condo building **less than 5 stories**; or	3
An apartment or condo building **5 stories or higher**?	4
Refused (**DNR**)	99

H40. Counting yourself, how many people live in your household?

1 person	1
Enter number of people	2---7
8 or more	8
Refused (**DNR**)	99

THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

General Service Survey Instrument

A. INTRODUCTION

Introduction

INTRO
Hello, my name is _____ and I'm calling from **Innovative Research Group** on behalf of **Guelph Hydro**, your local electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **Guelph Hydro** to help them better understand the needs and preferences of its customers.

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

1) Yes, speaking <**contact on the line**> **[skip to A1]**

2) Yes <**transferred to contact**> **[skip to A1]**

3) No <**not the right contact person**> **[GO to "NEW"]**

4) No <**busy**> "When is a good time to callback?" **[record callback time]**

5) Maybe <**may I ask who is calling?**> **[skip to GATE]**

NEW. And … can I have their …
First Name _____
Last Name _____
Title/Position _____
Phone Number _____

ASK to be transferred …

- **if transferred → go to A1**
- **if not transferred → Thank & Add to Callback List**

GATE. My name is _____ and I'm calling on behalf of your local electricity distributor, **Guelph Hydro**.

INTERVIEWER NOTE: If gatekeeper asks the purpose of call → I'd like to ask the person in-charge of managing the electricity bill at your organization a few questions concerning a **Guelph Hydro** customer consultation.

1) Yes <**transferred to contact**> **[skip to A1]**

2) No <**not available**> "When is a good time to callback? **[record callback time and GO to "NEW"]**

3) No <**not interested in talking**> **[Thank & Terminate]**

A1 QUAL PREAMBLE:

Read preamable again, if transferred to new person:
Hello, my name is _____ and I'm calling from **Innovative Research Group**, a national public opinion research firm. We have been hired by **Guelph Hydro** to help them better understand the needs and preferences of its customers.

Guelph Hydro – which distributes electricity to residential and business customers in your community– is preparing to submit its investment and spending plan to the Ontario Energy Board for regulatory review. Since this plan will impact your bill, **Guelph Hydro** wants to hear from you, so your views can help shape its plan.

A1. Would you mind if I had ten minutes of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes	1	**[continue]**
No – NOT PRIMARY BILL PAYER	2	**[go to TRANSFER-1]**
No – BAD TIME	3	**ARRANGE CALLBACK**
No – HARD REFUSAL	4	**[Terminate]**

MONIT
This call may be monitored or audio taped for quality control and evaluation purposes.

PRESS TO CONTINUE	1

A2. Just to confirm, does your organization receive an electricity bill from **Guelph Hydro**?

01	**YES**	1	**[continue]**
02	**NO**	2	**[Terminate]**
98	**DK (DO NOT READ)**	98	**[Terminate]**

A3. As part of your job, are you in-charge of managing or overseeing your organization's electricity bill?

Yes	1	[**Continue to B4**]
No	2	CAN I SPEAK TO THE PERSON WHO MANAGES YOUR ORGANIZATION'S **ELECTRICITY** BILL?[**Return to NEW**]
DK	3	CAN I SPEAK TO THE PERSON WHO MANAGES YOUR ORGANIZATION'S **ELECTRICITY** BILL? [**Return to NEW**]

B. GENERAL SATISFACTION

We need to prime respondents to start thinking about electricity and the part of the system that Guelph Hydro operates.

B4. PREAMBLE-1

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 **Guelph Hydro** in your community.

B5. How familiar are you with the **local electricity distribution system**? Would you say … [READ LIST]

Very familiar	1
Somewhat familiar	2
Not very familiar	3
Not familiar at all	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

B6. Generally speaking, how satisfied are you with the job **Guelph Hydro** is doing running your local distribution system? Would you say … [**READ LIST**]

Very satisfied	1
Somewhat satisfied	2
Somewhat dissatisfied	3
Very dissatisfied	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

B7. Is there anything in particular **Guelph Hydro** can do to improve its service to your organization? [**OPEN**]

Don't know (**DNR**)	98
Refused (**DNR**)	99

C. BILL KNOWLEDGE & IMPACT

I'd now like to talk with you about your electricity bill …

C8. While some customers pay more and other pay less, the **average small business** pays about **$300 a month** for electricity of **which $43 or approximately 14% goes to Guelph Hydro**. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the amount of your organization's electricity bill that went to **Guelph Hydro**? Would you say … [**READ LIST**]

Very familiar	1
Somewhat familiar	2
Not very familiar	3
Not familiar	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

D. SYSTEM RELIABILITY

These questions are about priming the respondent to think about their experience with system reliability and separate adverse weather from failing equipment.

D9. In the past year or so, **Guelph Hydro** customers experienced unusually extreme weather – *notably the ice storm in December 2013*. This major weather event caused power outages for many **Guelph Hydro** customers.

Did your organization experience a power outages due to the ice storm in December 2013?

Yes	1
No	2
Don't know (**DNR**)	98
Refused (**DNR**)	99

D10. Whether your organization was affected or not, how satisfied are you with the way **Guelph Hydro** responded to the ice storm? Would you say … [READ LIST]

Very satisfied	1
Somewhat satisfied	2
Somewhat dissatisfied	3
Very dissatisfied	4
Don't know (**DNR**)	98
Refused (**DNR**)	99

D11. Is there is anything in particular that **Guelph Hydro** could have done to improve its service to your organization during the ice storm? [**OPEN**]

READ PREAMABLE: Despite best efforts, no electrical distribution system can deliver *perfectly reliable* electricity. As a general rule, the more reliable the system, the more expensive the system is to build and maintain.

With that said, the average **Guelph Hydro** customer experiences **one** unexpected power outage per year.

D12. Aside from outages caused by extreme weather – *such as the ice storm in December of 2013* – has your organization experienced any power outages **in the past 12 months**, and if so, approximately how many? [**DO NOT READ LIST**]

No outages	0 [**SKIP to D14**]
1 outage	1 [CONTINUE]
2 outages	2 [CONTINUE]
3 outages	3 [CONTINUE]
4 outages	4 [CONTINUE]
5 outages	5 [CONTINUE]
6 outages	6 [CONTINUE]
7 outages	7 [CONTINUE]
8 or more outages	8 [CONTINUE]
Don't know (**DNR**)	98 [**SKIP to D14**]
Refused (**DNR**)	99 [**SKIP to D14**]

READ ONLY IF D12 = 1 thru 8

D13. And approximately how many minutes did the most recent power outage last? [DO NOT READ LIST; select category accordingly]

Less than 15 minutes	1
15 to less than 30 minutes	2 [specify if less than *15 minutes*, if stated "less than 30 minutes"]
30 minutes to less than 1 hour	3
1 hour to less than 3 hours	4
3 hours to less than 6 hours	5
6 hours to less than 12 hours	6
12 to less than 24 hours	7
More than 24 hours	8
Don't know (**DNR**)	98
Refused (**DNR**)	99

D14. Thinking back to the **most recent** power outage you experienced as a Guelph Hydro **business** customer, would you say the power outage … **[READ LIST; ROTATE 1 and 3]**

Had a significant cost to my business	1
Had a minor cost to my business	2
Had barely any cost to my business, just a bit of inconvenience	3
Have never experienced an outage with Guelph Hydro (**DNR**)	97
Don't know (**DNR**)	98
Refused (**DNR**)	99

D15. In your view, how do you think **Guelph Hydro** should address the **number** of customer power outages? Would you say … [**READ LIST**]

[Rotate response codes 1 and 3]

Spend what is needed to **reduce** the number of unexpected power outages	1
Spend what is needed to **maintain** the current level of unexpected power outages	2
Accept **more** power outages in order to help keep customer costs from rising	3
Don't Know (**DNR**)	98
Refused (**DNR**)	99

D16. Overall, the average **Guelph Hydro** customer is without power for about **one hour per year**.

In your view, how do you think **Guelph Hydro** should address the **length of time** customers are without power? Would you say … [**READ LIST**]

[Rotate response codes 1 and 3]

Spend what is needed to **reduce** the length of unexpected power outages	1
Spend what is needed to **maintain** the current length of unexpected outages	2
Accept **longer** time without power in order to help minimize customer costs from rising	3
Don't Know (**DNR**)	98
Refused (**DNR**)	99

E. SYSTEM CHALLENGES & PRIORITIES

System Renewal Question

E17. [**PREAMBLE to E18**] As significant amount of **Guelph Hydro's** electrical infrastructure was built in the 1960s and 70s, and is still in-service today. While **Guelph Hydro** believes it has done its best to prolong the life of these assets, many of these assets are approaching or have exceeded the end of their useful life.

As part of its investment plan, **Guelph Hydro** is proposing a significant infrastructure renewal program. The estimated cost of this system renewal program is **$4.5 million** in 2016.

Although this plan will allow **Guelph Hydro** with the help of independent experts, to make the necessary investments to maintain system reliability, **it will have an impact on customer bills**.

E18. Which of the following statements best represents your point of view?
[Read and Rotate statements 1 and 2]
Some customers have said …
Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years. 1

Others have said …
Guelph Hydro should lower its estimated investment in renewing the system's aging infrastructure to lessen the impact of any bill increase; even if that means more or longer power outages. 2

Don't know (**DNR**)	98
Refused (**DNR**)	99

System Service Questions

E19. [**PREAMBLE TO E20**] New technology and electricity infrastructure can have many impacts on distribution systems:

- New feeder infrastructure to ensure growing communities have the electricity capacity they need.
- New computer systems, sensors and monitoring equipment provide pinpointed information about outages to both system controllers and customers in real time.
- Remotely controlled equipment and switches allow power to be restored to many customers much more quickly than in the past.

While there are benefits from new technology and equipment, there are also costs.

E20. When it comes to investing in new technology, which of the following points of view is closest to your own?

[Read and Rotate statements 1 and 2]

Some customers have said…

Investments in new technologies and infrastructure are more a luxury than a necessity and should be a low priority for Guelph Hydro. 1

Others have said …

I think the benefits of new technology and infrastructure are important and should be a priority for Guelph Hydro. 2

Don't know (**DNR**) 98
Refused (**DNR**) 99

General Plant Questions

E21. Guelph Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, Guelph Hydro needs buildings to house its staff, vehicles and tools to service the power lines and IT systems to manage the electrical system and customer information.

Again, customers have made number of statements about this sort of investment. Which of the following statements best represents your point of view?
[Read and Rotate statements 1 and 2]

Some customers have said …

Guelph Hydro should find ways to make do with the buildings, equipment and IT systems it already has. 1

Others have said …

While Guelph 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. 2
Don't know (**DNR**) 98
Refused (DNR) 99

F. REACTION TO CUSTOMER INPUT

Below are the common themes that have appeared in qualitative customer consultations.

The following statements have been made by customers throughout **Guelph Hydro's** community consultation process.

For each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.

Strongly agree	1
Somewhat agree	2
Neither agree nor disagree (**DNR**)	3
Somewhat disagree	4
Strongly disagree	5
Don't Know (**DNR**)	98
Refused (**DNR**)	99

RANDOMIZE QUESTIONS

Willingness / Ability to Pay

F22. 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.

F23. My organization would be willing to pay a bit more for electricity if it means better service reliability.

Impact of rate increase on others

F24. My organization can afford to pay more for electricity, but I am worried about the impact a rate increase will have on some of my suppliers and customers.

Pay Now or Later

F25. We should invest in our electricity system infrastructure **now** or we will end up paying more the longer we delay our system renewal.

Deferring to the experts

F26. The electricity sector is so complicated and confusing; we just have to trust that the experts will find the right balance in keeping cost down while making the right investments and spending decisions.

CDM

F27. I think **Guelph Hydro** should do more to help customers find ways to reduce their electricity consumption and costs.

Modernizing the Grid

F28. We need to modernize the local electricity system so consumers can have greater control over their electricity usage.

System Reliability

F29. A few power outages are fine for my organization, but I worry about the impact this has on the local economy.

F30. When it comes to reducing power outages and improving reliability, the first priority should be business customers, then residential customers.

Labour Costs

F31. Skilled hydro workers are sought out throughout North America and Ontario. If **Guelph Hydro** doesn't pay the people who maintain our local distribution system a competitive salary, we risk losing the most qualified and experienced hydro workers to other utilities.

G. ASSESSMENT OF PLAN

G32. PREAMBLE

Guelph Hydro believes that a **proactive** and **consistent** renewal approach is needed to maintain system performance while keeping bill impacts manageable over the longer-term. **Guelph Hydro's** proposed plan will spend an estimated **$14 million** on capital investments in 2016. This includes …

- **$4.5 million** to replace aging infrastructure;
- **$5.5 million** to serve new communities and connect customers to the grid;
- **$2 million** to invest in equipment needed to maintain and operate the system; and
- **$2 million** to integrate new technologies into the power system.

To fund this plan, **Guelph Hydro** is proposing the **average small business customers' rate increase by approximately $3.49 per month** – or about 8.25% – on the distribution portion of their bill in 2016. Looking at the entire electricity bill, it is estimated that the average small business customer will actually only pay 0.25% more in 2016, or **$0.76** as other costs are forecasted to come down next year. Between 2017 and 2020, it is estimated that the average small business customers' rate will increase by about **1%** on the distribution portion of their electricity bill.

G33. Considering the cost of Guelph Hydro's plan, would you say [**READ LIST**] …
Rotate response codes "1 "and "3"

The rate increase is reasonable and I support it	1
I don't like it, but I think the rate increase is necessary	2
The rate increase is unreasonable and I oppose it	3
Don't know (**DNR**)	98
Refused (**DNR**)	99

Ask only if G33 = 1, 2 or 3

G34. And why do you say that? [**OPEN**]

Don't know (**DNR**)	98
Refused (**DNR**)	99

H. FIRMOGRAPHICS

These last few questions are for statistical purposes only. Again, all of your responses are completely confidential.

H35. Which of the following best describes the **hours of operation** of your business? Would you say … [**READ LIST**]

You are open 24/7	1
You operate several shifts each day, but are not open 24/7	2
You operate during regular business hours only	3
You operate outside of regular business hours, but do not have shifts	4
(**DNR**) Other (please specify): _____	88
(**DNR**) Refused	99

H36. And, which of the following best describes **when your business operates** throughout the week? Would you say … [**READ LIST**]

You operate on weekdays only	1
You operate on weekdays and weekends	2
(**DNR**) Other (please specify): _____	88
(**DNR**) Refused	99

THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

Workbook Appendix:

Guelph Hydro's Distribution System Investment Plan Review



DISTRIBUTION SYSTEM INVESTMENT PLAN REVIEW

General Service Customer Consultation Workbook

Guelph Hydro Electric Systems Inc.

As per the Accessibility for Ontarians with Disabilities Act, this workbook can be provided in an alternate format upon request by calling 519-837-4703 or emailing info@guelphhydro.com.

Guelph Hydro Electric Systems Inc. ("Guelph Hydro") is the local distribution company responsible for electricity distribution in the City of Guelph and in the Village of Rockwood.

Guelph Hydro operates and maintains a distribution system serving over 53,000 residential, commercial and industrial customers, in a service territory of 93 square km.

Guelph Hydro is 100% owned by Guelph Municipal Holdings Inc., which, in turn, is 100% owned by the City of Guelph.

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What is This Consultation About?

The purpose of this customer consultation is to collect your feedback on Guelph Hydro's investment and spending plan to maintain the local distribution system in 2015 and beyond.

Guelph Hydro's goal is to deliver safe and reliable electricity to homes and local businesses as efficiently as possible and at an affordable price. However, there is a balancing act that all utilities must consider when planning for the future: system reliability and resilience vs. the cost to consumers. No distribution system delivers perfectly reliable electricity. Generally, the more reliable the system, the more expensive the system is to build, operate and maintain.

This customer consultation is designed to collect your feedback on the reliability of the electricity distribution system and the spending choices Guelph Hydro will need to make to maintain system reliability and resiliency over the next year. Ultimately, this consultation will provide Guelph Hydro with additional insights, allowing alignment between operational and capital investment plans and customers' needs and preferences.

As a Guelph Hydro customer, this is an opportunity for you to tell Guelph Hydro what you think about the plan and the cost implications for you. This is also an opportunity for Guelph Hydro to explain to its customers the challenges in operating and maintaining the local electricity distribution system, and more importantly how Guelph Hydro intends to meet those challenges.

To participate in this review, you do not need to be an expert. The workbook explains key parts of the electrical distribution system, the challenges facing the system, Guelph Hydro's recent work to maintain the system, and the company's budgetary plan for the next year.

Guelph Hydro does not expect you to make electrical engineering decisions. Guelph Hydro wants to hear about the electricity issues that matter most to you and whether or not you feel the company's spending and investing priorities seem reasonable.

This workbook is designed to provide enough background about these issues so you can develop an informed opinion.



The process that Guelph Hydro must follow

How are electricity rates determined in Ontario?

The electricity industry in Ontario is regulated by the Ontario Energy Board, which recently developed a new regulatory requirement for electricity distributors, such as Guelph Hydro, to gather customer preferences on distribution system investments.

Guelph Hydro is mainly funded by the distribution rates paid by its customers. Periodically, Guelph Hydro is required to file an application with the Ontario Energy Board to get approval for the funding required to operate, maintain and expand the distribution system. Guelph Hydro must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity to its customers.

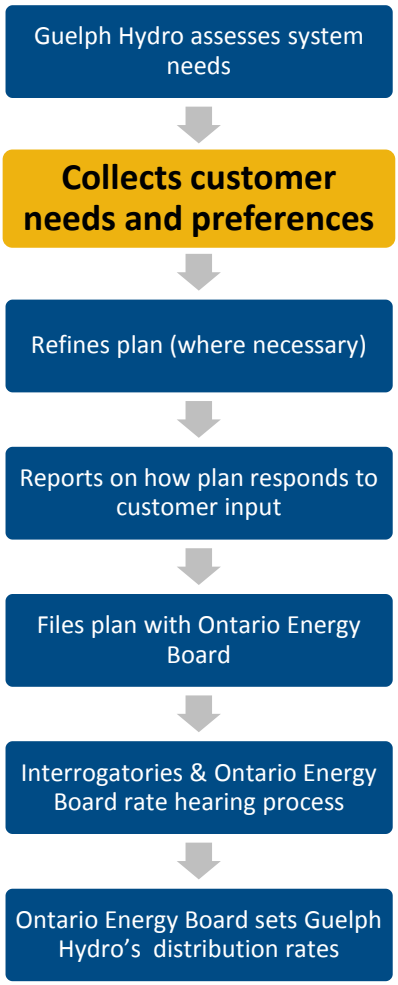
As a customer, how are my interests protected?

Guelph Hydro's evidence is assessed in an open and transparent public process known as a rate hearing. A number of public intervenors with electricity industry expertise submit their own evidence, in some cases challenging Guelph Hydro's plans and assumptions. At the end of the process, the Ontario Energy Board weighs the evidence and decides on the rates Guelph Hydro can charge for distribution.

Why is my feedback important?

Your feedback will be presented to the Ontario Energy Board and public intervenors (who represent various ratepayer groups) when Guelph Hydro files its rate application for 2016. As part of the rate hearing process, the Ontario Energy Board will review how Guelph Hydro acquired and responded to customer feedback on its distribution system plan.

Rate Application Process



Innovative Research Group Inc. has been engaged by Guelph Hydro to collect participant feedback and will deliver it to Guelph Hydro to assist them in shaping their rate application and distribution system plan.

Consumer feedback on Ontario's electricity system

There are a number of ways for consumers to voice their opinions on provincial, regional and local electricity issues. However, this consultation is about your local distribution system and your preferences on how Guelph Hydro uses your money.

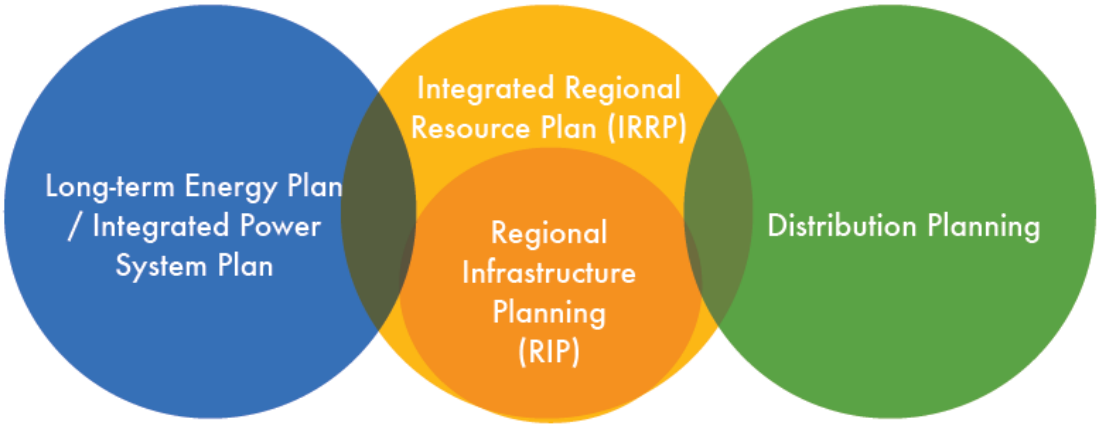
Distribution Planning: This workbook and consultation concentrates on the short-term plan for Guelph Hydro's distribution system. The graphic below shows the various planning initiatives ongoing across Ontario's electricity system. In addition to the short-term distribution plan being discussed in this workbook, there are other planning initiatives undertaken to ensure that the distribution system maintains reliability and works efficiently for the benefit of customers.

If you're interested in broader medium- and long-term electricity issues such as Ontario's Long-Term Energy Plan, regional planning, conservation planning and general energy policy in the province, there are other opportunities to provide your feedback.

Ontario's Long Term Energy Plan: The Ontario Government's plan details how electricity will be generated and the longer-term conservation strategy for the province. It can be found at this website: http://www.energy.gov.on.ca/en/ltep/

Regional Planning: The Independent Electricity System Operator (IESO, recently merged with the Ontario Power Authority (OPA)) looks ahead to the future electricity needs of your region and how those needs can be addressed through energy conservation programs, local generation, and electricity from outside the region. You can follow the IESO's regional planning process at this website: http://www.powerauthority.on.ca/power-planning/regional-planning

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 near- 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 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 adequate infrastructure to meet required reliability and safety standards, and to otherwise meet the needs of customers.

Guelph Hydro Electric Systems Inc.

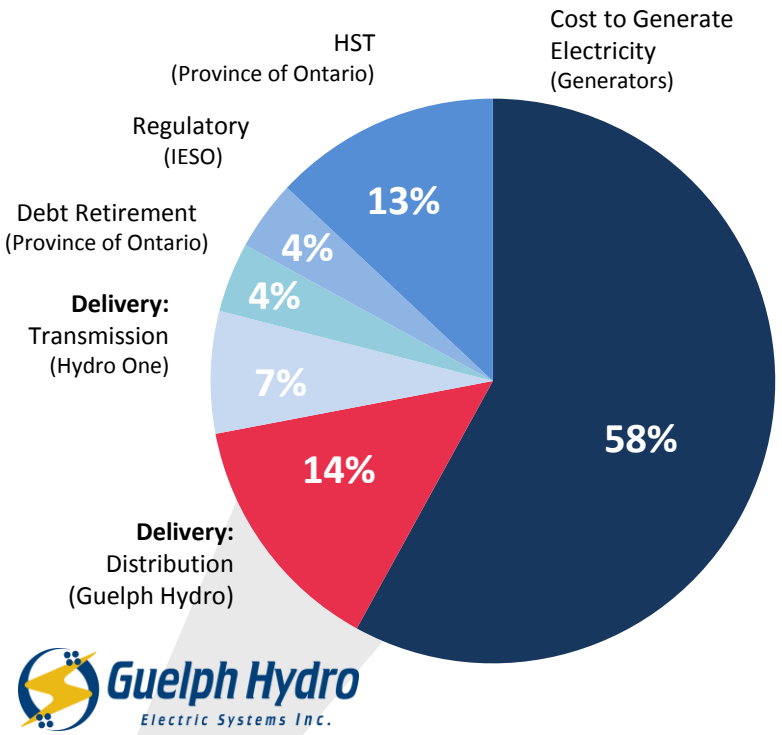


General Service Customer Electricity Bills

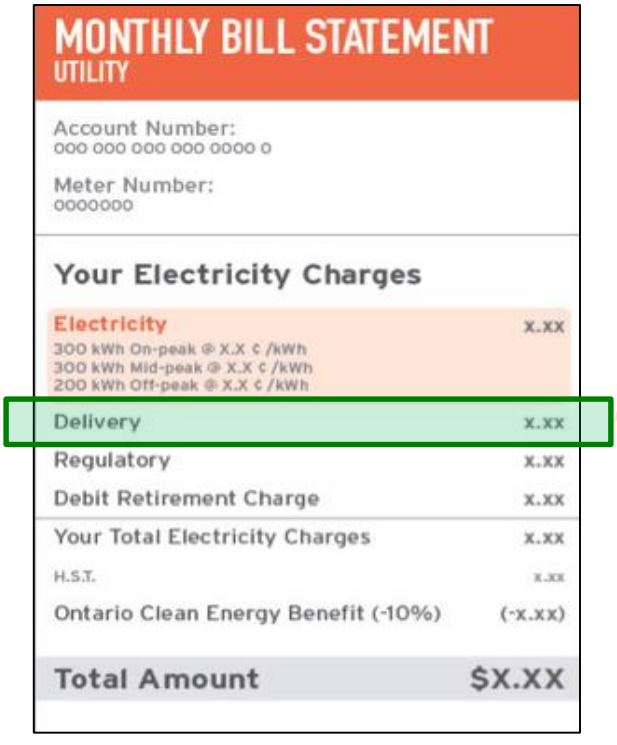
Your Electricity Bill: Every item and charge on your bill is mandated by the provincial government or regulated by the Ontario Energy Board. There are two distinct cost areas that make up the "Delivery" charge on your bill: ***distribution*** and ***transmission***. While Guelph Hydro collects both, it remits the transmission charge to Hydro One, who manages and operates Ontario's transmission system. The distribution charges are what Guelph Hydro uses to fund its utility needs. Distribution costs make up about 14% of the typical General Service <50 kWh customer's (2,000 kWh per month) total electricity bill.

Guelph Hydro's distribution rates are subject to the review and approval of the Ontario Energy Board. The revenues collected from customers cover Guelph Hydro's capital investments and operating expenses.

About 14% of the average General Service < 50 kWh electricity bill goes to Guelph Hydro



Guelph Hydro
Electric Systems Inc.



MONTHLY BILL STATEMENT
UTILITY

Account Number:
000 000 000 000 0000 0

Meter Number:
0000000

Your Electricity Charges

Electricity 300 kWh On-peak @ X.X ¢ /kWh 300 kWh Mid-peak @ X.X ¢ /kWh 200 kWh Off-peak @ X.X ¢ /kWh	x.xx
Delivery	x.xx
Regulatory	x.xx
Debit Retirement Charge	x.xx
Your Total Electricity Charges	x.xx
H.S.T.	x.xx
Ontario Clean Energy Benefit (-10%)	(-x.xx)
Total Amount	**$X.XX**

Current monthly distribution charges are approximately **$42.53 or 14% of the total monthly bill** for a typical Guelph Hydro General Service <50 kWh who consumes 2,000 kWh in a month.

It is estimated that an additional **$3.49** per month will be required in 2016 to operate, maintain, and modernize Guelph Hydro's electricity distribution system. Looking at the entire bill, it will be an estimated increase of **0.26%** or an average of **$0.76**.



Electricity Grid 101

Who Does What in Ontario's Power 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.

EXAMPLE

Ontario Power Generation
TransCanada Energy Ltd
Bruce Power
Samsung Renewable

TRANSMISSION

Transmission lines connect the power produced at generating facilities to substations.

EXAMPLE

Hydro One

DISTRIBUTION

Distribution lines carry electricity to homes and businesses.

EXAMPLE

Guelph Hydro
Kitchener-Wilmot Hydro
Waterloo North Hydro

CONSUMERS

Electricity is delivered to homes and businesses.

EXAMPLE

Residential
Commercial
Industrial



Electricity Grid 101:
How is Ontario's Electricity System Regulated?

Ontario Ministry of Energy:
The Ontario Ministry of Energy sets energy policy. It sets the rules and establishes key planning and regulatory agencies through legislation.

Ontario Energy Board:
The mission of the Ontario Energy Board is to promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at reasonable cost. It is an independent body established by legislation that sets the rules and regulations for the provincial electricity sector. One of the Ontario Energy Board's roles is to review the distribution plans of all electricity distributors and set their rates.

The Independent Electricity System Operator:
The Independent Electricity System Operator (IESO) – which merged with the Ontario Power Authority on January 1, 2015 – is responsible for short-, medium- and long-term electricity planning to ensure an adequate supply of electricity is available for Ontario residents and businesses. It operates the electricity grid in real-time to ensure that Ontario has the electricity it needs, where and when it needs it. The IESO receives directives from the Ministry of Energy (i.e., energy supply mix, Green Energy Act), but otherwise works at arm's-length from the government.



Customer Feedback

1. Given what you know and what you have read so far, how well do you feel you understand the parts of the electricity system, how they work together and which services Guelph Hydro is responsible for?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ I don't understand at all

2. Generally, how satisfied are you with the service you receive from Guelph Hydro?
   - ❑ Very satisfied
   - ❑ Somewhat satisfied
   - ❑ Somewhat dissatisfied
   - ❑ Very dissatisfied
   - ❑ Don't know

3. Is there anything in particular that Guelph Hydro can do to improve its service to you?

Guelph Hydro's Distribution System Today

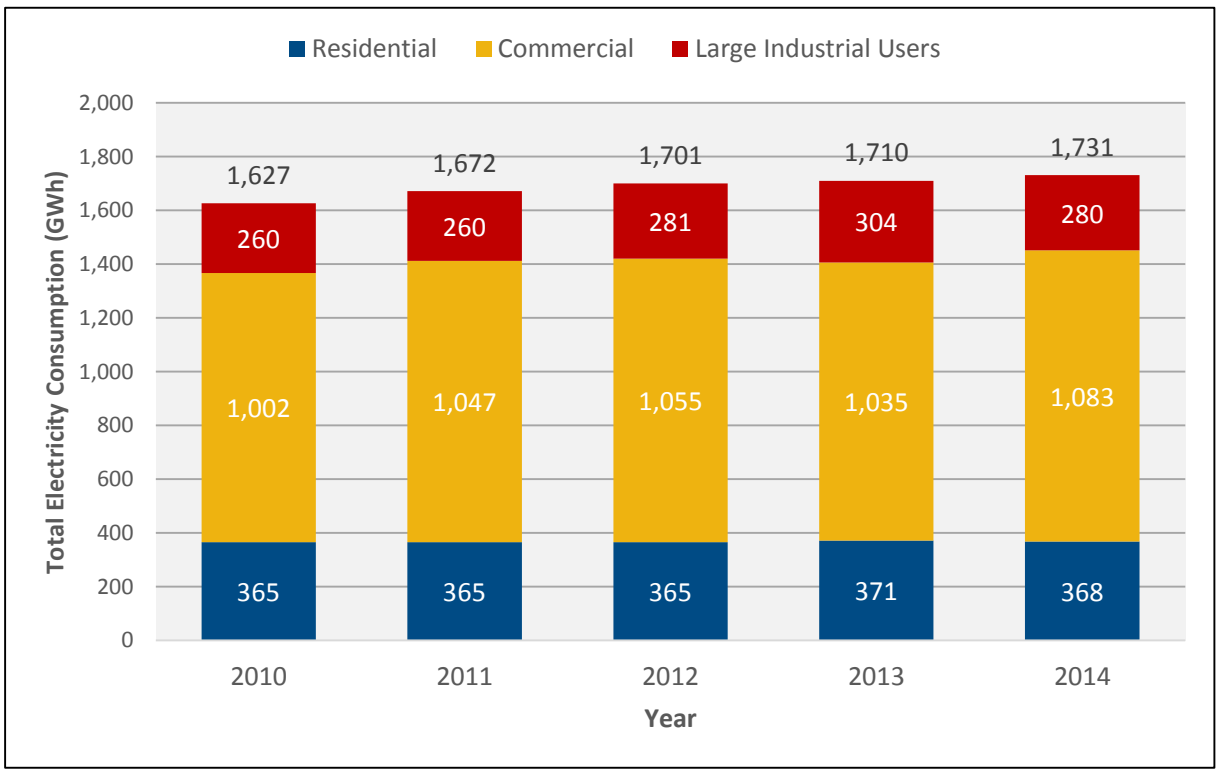
This section describes the construction of Guelph Hydro's electricity distribution grid including its substations, overhead and underground systems. It also explains the company's historical growth and current electrical infrastructure.

Background on Guelph Hydro's Distribution System

Guelph Hydro Electric Systems Inc. ("Guelph Hydro") was established in 1907 and now provides electrical service to a service territory of 93 square kilometers, encompassing the City of Guelph and the Village of Rockwood. The Village of Rockwood is located in the Township of Guelph-Eramosa, a service territory that was acquired by Guelph Hydro in 2001.

Guelph is currently one of Ontario's fastest growing communities, and it continues to attract new businesses and residents due to its strategic geographic location. Plans are underway to further promote local economic development. The result of this local development is increased pressure on the electricity distribution system. To address this growing demand for electricity, Guelph Hydro has made investment plans to maintain and upgrade its distribution system to allow it to continue to provide a reliable and quality power supply to existing and future customers.

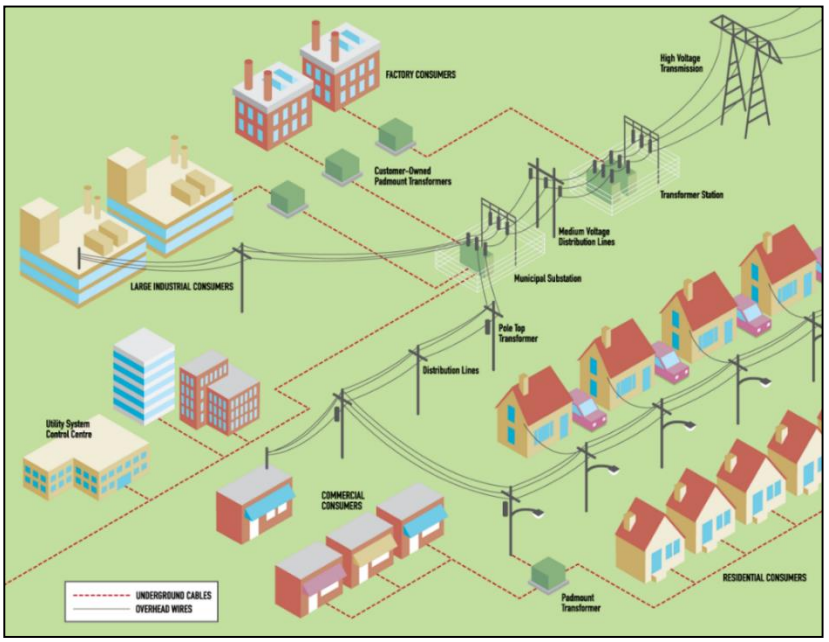
As the community has grown, so has Guelph Hydro's customer base, and the level of electricity consumption.



Guelph Hydro's Distribution System Today

Every distribution system is unique with its own history and challenges. In order to better understand the current Guelph Hydro distribution system, we first have to understand all of the different components and how they impact the way in which you receive electricity when you need it. The diagram below and following terms will help guide you through the system.

Guelph Hydro's electricity distribution system is made up of a number of components which work together to transport electricity to homes and businesses across the service territory. Guelph Hydro owns, maintains and operates approximately 431 km of overhead feeders and 672 km of underground cables. In the City of Guelph the power is provided by three Hydro One-owned Transformer Stations and one Guelph Hydro-owned Transformer Station. In the Village of Rockwood, the power is provided by two Guelph Hydro-owned Municipal Substations and one Hydro One-owned Distribution Station.



Hydro One's Transmission System:

High Voltage Transmission – Connects our distribution system to electricity generating stations across the province.

Transmission Station – Reduces high voltage electricity from transmission lines to medium voltage which is fed into Guelph Hydro's distribution grid.

Guelph Hydro's Distribution System:

Municipal Substations: Municipal substations are a critical element of the electricity distribution system —they are the local hubs from where electricity is distributed to an area. Municipal substations contain:

Transformers - Important pieces of equipment that reduce the voltage of electricity from a high level to a level that can be safely distributed to your area.

Feeder Circuits - The wires that connect the transformer station to the broader distribution system in order to deliver electricity to customers

Breakers - Devices that protect the distribution system by interrupting a circuit if a higher than normal amount of electricity is detected.

Switches - Control the flow of electricity and steer the current to the correct circuits.

Guelph Hydro's Distribution System Today:
Paying for the Distribution System

Operating the Distribution System

Serving an area with a total population of more than 134,000 takes a lot of resources. As of December 31, 2014, Guelph Hydro employed 116 full-time employees to serve 48,384 residential accounts and 4,623 commercial accounts – including 4 large industrial users. The value of Guelph Hydro's system assets tops $140 million.

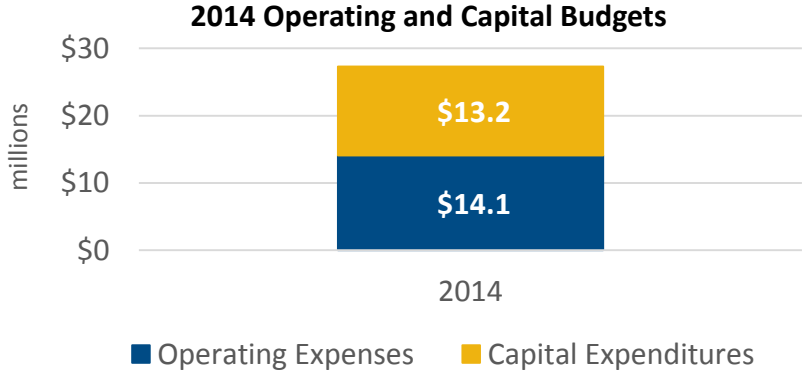
431 kilometres	Overhead lines
672 kilometres	Underground cable
1,103 kilometres	Total circuit length
1	Transformer station
2	Municipal sub-stations
5,882	Transformers
11,166	Poles
57	Fleet vehicles

Paying for the Distribution System

As is typical of most businesses, Guelph Hydro manages its spending in two budgets – an operating budget and a capital budget.

Guelph Hydro's **operating budget** covers regularly recurring expenses such as the costs of running service vehicles, the payroll for employees, and the maintenance of distribution equipment and buildings.

Its **capital budget** covers items that, when purchased, do not need to be repurchased for some time and that have lasting benefits over many years. This can include much of the equipment that is part of the distribution system, such as poles, wires and transformers, major computer systems, and vehicles.

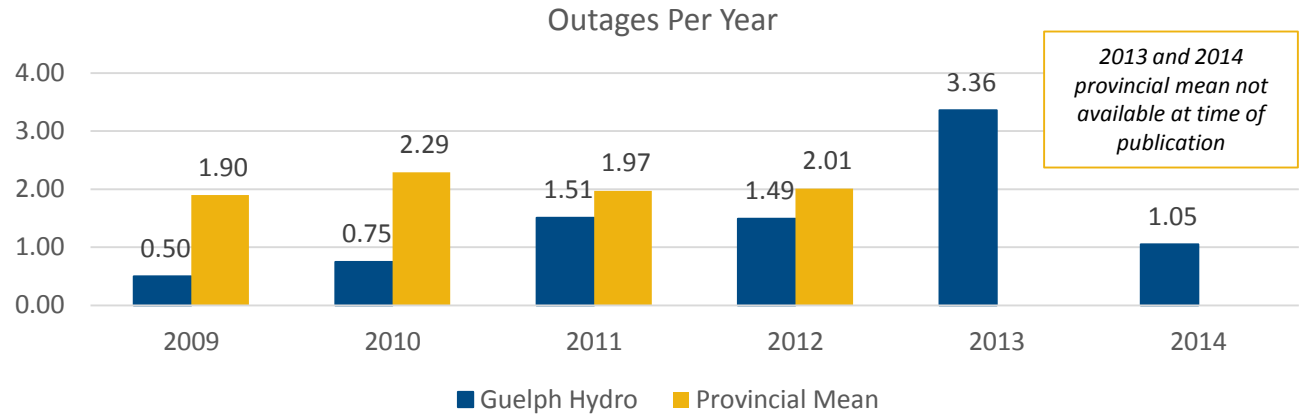


Managing the distribution system requires millions of dollars in maintenance, system renewal and running the day-to-day operations. In its last fiscal year (2014), Guelph Hydro's operating expenses and capital expenditure totalled $27.3 million.

4. How well do you feel you understand the important parts of the electricity system, how they work together, and which services Guelph Hydro is responsible for?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ I don't understand at all

System Reliability

No system delivers perfectly reliable electricity. There is a balancing act between reliability and the cost of running the system. Historically, there have been years when Guelph Hydro has experienced more outages per year than the provincial average, but over a 6-year period (2009-2014), including during the 2013 ice storm, Guelph Hydro has experienced fewer than the provincial average.



5. In 2014, Guelph Hydro customers experienced about 1.05 power outages per year. Do you recall how many outages you experienced in the past year?
   - ❑ One
   - ❑ Two
   - ❑ Three
   - ❑ More than three
   - ❑ Don't know

6. How acceptable were the number of power outages you experienced over the last 12 months?
   - ❑ Very acceptable
   - ❑ Somewhat acceptable
   - ❑ Not very acceptable
   - ❑ Not acceptable at all
   - ❑ Don't know

7. Overall, how satisfied are you with the reliability and quality of electricity services provided by Guelph Hydro?
   - ❑ Very satisfied
   - ❑ Somewhat satisfied
   - ❑ Somewhat dissatisfied
   - ❑ Very dissatisfied
   - ❑ Don't know



Cost Pressures

From the day-to-day operation to repairing damage caused by severe weather events, there are a variety of ever-present pressures on Guelph Hydro's operating and capital budget.

Many of these expenditures are items over which Guelph Hydro has little or no control – major storms, and the implementation of interval meters for all customers with a demand above 50 kW, for example.

Other costs are associated with preventative maintenance like replacing aging equipment. Over recent years, Guelph Hydro has undertaken several large scale projects to maintain or upgrade the system, and more are planned.

How does Guelph Hydro prioritize repairs or upgrades to aging infrastructure?

Guelph Hydro monitors the health of its electric infrastructure very closely. As part of its rate application, it must show the Ontario Energy Board third-party audits of the health of its system's assets. These asset health audits help Guelph Hydro prioritize which parts of its system get upgraded or rebuilt first.

Why hasn't Guelph Hydro set aside funds to pay for required upgrades?

The Ontario Energy Board does not allow utilities in Ontario (including Guelph Hydro) to create reserve funds. If reserve funds were allowed, a utility would have to charge customers a premium on their rates to set money aside. In accordance with the Ontario Electricity Act and the regulatory codes, a utility can only charge customers the rate required to run the distribution system at a reliability standard set by regulatory bodies.



Paying for Guelph Hydro's Distribution System:
Capital Investment Drivers

Guelph Hydro has developed a list of capital investment drivers and proposes investment programs based on these key drivers.

Reliability: There are two main measures of reliability in the distribution system:

1) How often does the power go out?
2) How long does the power stay out?

To maintain or improve reliability, projects are developed to improve asset performance and decrease the frequency and duration of power outages.

Service Requests: Guelph Hydro has a legal obligation to connect customers to its distribution system. This includes both traditional demand customers (new homes and businesses) and distributed generation customers (e.g. customers who have feed-in-tariff [FIT and micro-FIT] contracts to generate and sell electricity back to the grid, such as those who have rooftop solar panels). Requests can also include system modifications to support infrastructure development by government agencies, road authorities and developers.

Support Capacity Delivery: Where there are forecasted changes in demand that will limit the ability of the system to provide consistent service delivery or where it is incapable of meeting the demand requirements, new build or expansion is required. This is the fundamental infrastructure (such as the new transformer station that was built in recent years to service the south end of Guelph) that ensures there is enough electricity to accommodate municipal growth.

System Efficiency: To provide customers with the best service possible, Guelph Hydro adheres to a continuous improvement standard to improve power outage restoration capability.

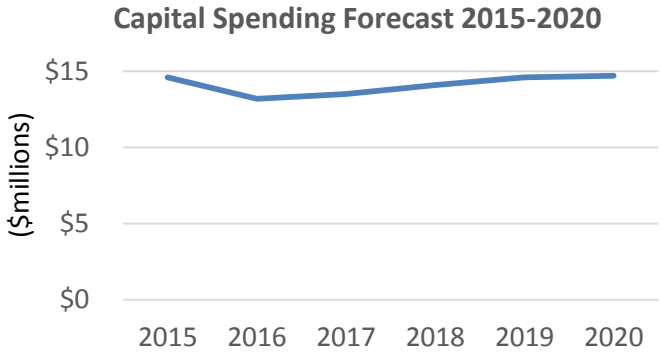
Mandated Compliance: Compliance with all legal and regulatory requirements and government directives, including compliance with the Ministry of Energy, the Ontario Energy Board, the Independent Electricity System Operator, Measurement Canada and other regulations, which may impact capital spending, such as energy conservation initiatives or investments in smart grid.

Obsolescence:
Asset installations that no longer align with Guelph Hydro's current operating practices or current standards. This can include those assets that:

- are no longer manufactured,
- lack spare parts,
- cannot be readily accessed, as in an emergency,
- lack the ability to have maintenance performed on them,
- have operational constraints or conflicts, which can result in increased reliability and/or safety related risks.

Aging or Poorly Performing Equipment: Where there is the imminent risk of equipment failure due to age or deterioration, and these potential failures pose a safety risk to crew workers or to the public, or may result in severe reliability impacts to, remediation, through refurbishment or replacement, is required.

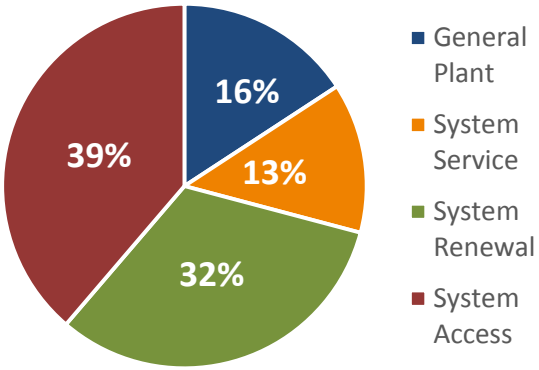
Business Support Costs: Guelph Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, it needs buildings to house the staff, vehicles and tools which service the power lines, and IT systems to manage the system and customer information.





Cost Drivers
Capital Investments

2016 Forecasted Capital Expenditures



What are the major issues Guelph Hydro needs to address?

Over the years, Guelph Hydro has worked hard to keep its equipment working well beyond its originally expected life, to get maximum value for money. However, now there are many parts of the system for which the utility will not be able to continue to extend the operating life. While there are some areas in Guelph Hydro's service territory that will need additional capacity, its key challenges come from the need to replace aging equipment.

In 2016, the capital expenditures required to maintain system reliability are estimated by Guelph Hydro to be **$14 million**.

SYSTEM ACCESS projects are non-discretionary. Projects are planned as a result of new customers wanting to connect to services

Project	Budget
Apartment, Commercial, Industrial Customer Connections	646,894
Meter Installations	415,000
Distribution System Modifications / Expansions for Customers	784,249
System Relocations Property Development	1,299,884
Expansions for New Residential Subdivisions	1,443,261
New Residential Service Connections	238,954
Expansions for New Residential Subdivisions	568,803
Total System Access Expenditure:	**$5,397,045**

SYSTEM SERVICE projects are identified through a variety of load monitoring and forecasting tools

Project	Budget
Distribution System Feeder Infrastructure	1,177,833
SCADA (Supervisory Control And Data Acquisition) Infrastructure	224,911
SCADA / Remotely Operated Switches	256,248
Transformer Stations & Distribution Stations	199,409
Total System Service Expenditure	**$1,858,400**

SYSTEM RENEWAL projects are discretionary. Guelph Hydro uses its Asset Condition Assessment to identify which system assets need to be replaced

Project	Budget
Distribution System Replacement	4,163,741
Distribution System Transformer replacement upgrades	315,193
Total System Renewal Expenditure	**$4,478,934**

GENERAL PLANT projects are identified using a combination of inspections, policies and expert knowledge

Project	Budget
Building / Fixtures	804,135
Office Equipment / Graphics	163,100
Fleet / Rolling Stock	572,886
IT Capital	590,000
Major Tools	65,564
Total General Plant Expenditure	**$2,195,685**



Cost Drivers:
Operating Cost Drivers

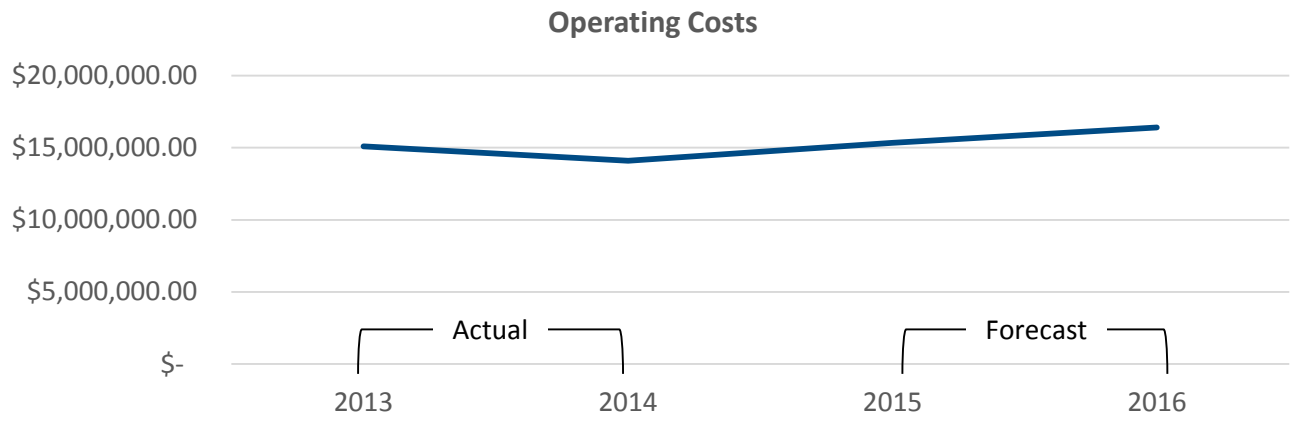
In addition to its capital budget, Guelph Hydro needs to consider its operating budget which also impacts customer bills.

After a slight decrease in operating costs in 2014, Guelph Hydro is forecasting increases for 2015 and 2016. There are three main factors that are causing this increase:

Succession Planning: A significant proportion of Guelph Hydro employees in its line trade, metering and systems operations departments will be retiring in the next five years. As a result, plans are in place to hire replacements in 2015 and 2016 because it can take up to five years to fully train replacement staff in these frontline positions.

Government Mandated Initiatives: The Ontario Energy Board requires that new full-time staff adhere to initiatives such as the Green Energy and Economy Act plan. Therefore, Guelph Hydro is planning to hire specialized technicians and other staffing resources in 2015 and 2016 in order to further advance Smart Grid development and Conservation Demand Management programs.

Base Compensation Changes: The budget assumes a base salary increase arising from the recent collective bargaining agreement with the union and a commensurate percentage increase for management staff based on performance and the market.



The operating budget must also take into account business environment changes. Since Guelph Hydro's last rate increase request to the Ontario Energy Board in 2012, there have been two significant, government-mandated business environment changes that have increased operating costs:

- The introduction of Metering Inside the Settlement Timeframe (MIST) which mandated interval metering for all small- to medium-sized business customers, and;
- The introduction of a new framework for Conservation Demand Management program design and delivery.

Finding Efficiencies and Cost Savings

Guelph Hydro has worked hard to identify efficiencies and cost savings within the system. These are some of the efficiencies Guelph Hydro will be focussing on in the next few years.

Asset Condition Assessment: The results of this study will lead to reduced emergency replacement costs. Unplanned replacements result in higher labour costs due to after-hours trouble calls, higher replacement material costs and higher costs to mitigate impact on reliability.

Life Extension Programs can reduce costs when compared to replacement programs. An example of a life-extension program at Guelph Hydro is the wood pole treatment program. In this program, boron is injected into wood poles, extending the life of the pole as compared to untreated poles for less than the cost of pole replacement.

Distribution Automation: Automating switches within the system has a positive impact on reliability statistics, but is also a labour savings option when applied on switching devices that are remote from the service centre. A planned upgrade to the Rockwood Municipal Distribution Station is an example where labour savings is expected through distribution automation.

Standardized Designs save money both by reducing the engineering costs of specific projects, and by reducing installation costs and material stock costs. Guelph Hydro is part of the Utilities Standard Forum ("USF") group. This group facilitates standardized installation drawings for use in the projects Guelph Hydro has planned over the next five years.

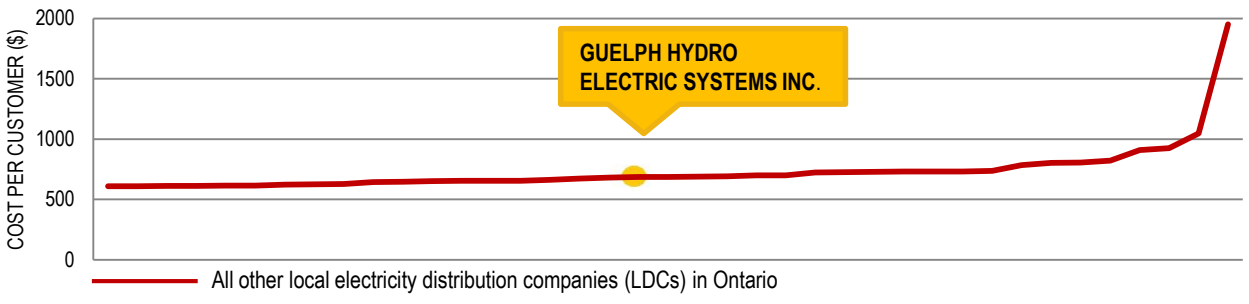
Devices such as portable computing devices and the use of web-based applications to replace paper-based data collection and processes will improve operational efficiency, reduce the possibility of data translation errors, and provide cost savings at the time of collection, and at the time of data entry. Improved data is used to optimize the planning process for future projects and to improve Asset Condition Assessment processes.

Distribution System Losses are being improved through renewal projects. Specifically, increased conductor sizes and better balancing of transformer station loading results in reduced power losses. Guelph Hydro has an annual program to run simulations on the Distribution System configuration and optimize for losses using distribution system analysis software.

How Efficient is Our Operation?

Guelph Hydro's ability to run an efficient and productive operation can be measured by comparing our costs per customer against those of other utilities. (See below) Because we have invested in smart, cost efficient technologies and worked hard to keep operating costs down, the bill of a typical residential customer using 800 kilowatt hours of electricity per month compares favourably against those of other utilities.

COST COMPARISON: GUELPH HYDRO ELECTRIC SYSTEMS INC. VS OTHER ONTARIO UTILITIES
ANNUAL COSTS PER CUSTOMER - 2013



Source: Ontario Energy Board

Customer Feedback

8. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?
    - ❑ Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if that increases my monthly electricity bill by a few dollars over the next few years.
    - ❑ Guelph Hydro should lower its investment in renewing the system's aging infrastructure to lessen the impact of any bill increase, even if that means more or longer power outages.
    - ❑ Don't know

9. As a company, Guelph Hydro needs buildings to house its staff, vehicles, and tools to service the power lines and IT systems to manage the distribution system and customer information. Which of the following statements best represents your point of view?
    - ❑ Guelph Hydro should find ways to make do with the buildings, equipment and IT systems it already has.
    - ❑ While Guelph 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.
    - ❑ Don't know

10. How well do you feel you understand the cost drivers that Guelph Hydro is responding to?
    - ❑ Very well
    - ❑ Quite well
    - ❑ Not very well
    - ❑ Not at all
    - ❑ Don't know

11. How well do you think Guelph Hydro is managing these cost drivers while meeting customer expectations and keeping rates reasonable?
    - ❑ Very acceptable
    - ❑ Somewhat acceptable
    - ❑ Not very acceptable
    - ❑ Not acceptable at all
    - ❑ Don't know

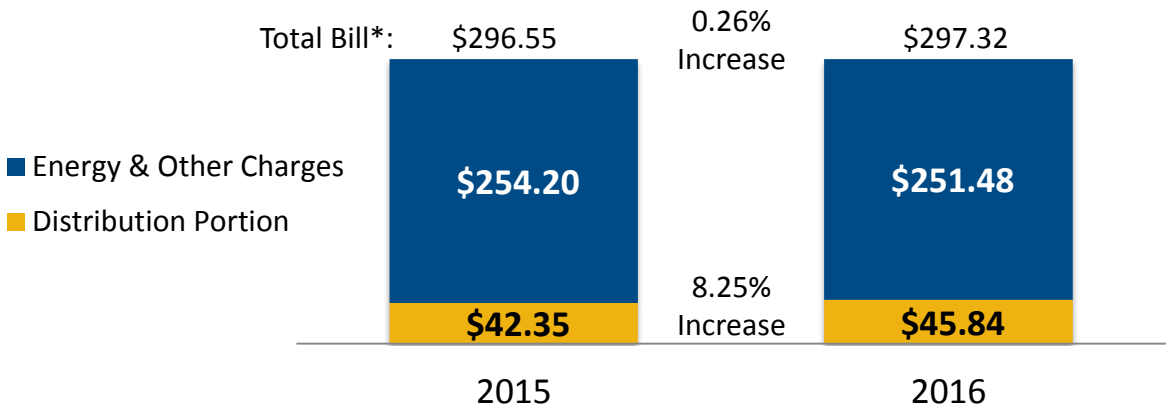
12. Now that you have a better sense of the operations of Guelph Hydro, including the cost drivers, do you feel the proposed budget is reasonable?
    - ❑ Yes
    - ❑ No
    - ❑ Don't know

What Guelph Hydro's Plan Means for You – Small Commercial Customer Impact

As has been described in this workbook, Guelph Hydro is funded by the distribution rates paid by its customers. Periodically, Guelph Hydro is required file an application with the Ontario Energy Board to request funding to operate and maintain the distribution system according to their capital and operating investment plan. Guelph Hydro must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity.

Estimated Typical General Service <50 kWh Annual Increase in Monthly Bill

General Service Customers: In 2016, General Service < 50 kWh customers with an average monthly consumption of 2,000 kWh will see an estimated increase of **8.25%** or an average of **$3.49** per month on the distribution portion of their electricity bills. Looking at the entire bill, it will be an estimated increase of **0.26%** or an average of **$0.76**.



* Based on an average monthly consumption of 2,000 kWh.

Please note that these are preliminary estimates and are subject to change as the rate application process continues.

Customer Feedback

13. Did Guelph Hydro's plan cover the topics you expected?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ No, not very well

If no, what is missing?

14. How well do you think Guelph Hydro is planning for the future?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ Not very well
    - ❑ I don't know

15. Considering what you know about the local 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

Glossary

Breakers: Devices that protect the distribution system by interrupting a circuit if a higher than normal amount on power flow is detected.

Distribution Station: These substations are located near to the end-users. Distribution station transformers change the voltage to lower levels for use by end-users.

Feeder Circuit: Is a wire that connects the transformer station to the broader distribution system in order to deliver electricity to customers.

Generation Station: A facility designed to produce electric energy from another form of energy, such as fossil fuel, nuclear, water, geothermal, solar, and wind.

Kilowatt (kW): 1000 watts.

Local Distribution Company (LDC): In Ontario, these are the companies that take electricity from the transmission grid and distribute it around a community.

OM&A: Operations, Maintenance and Administration, or operating budget.

Substations: These include transmission stations and distribution stations. They are used to switch generators, equipment, and circuits or lines in and out of a system. It is also used to change alternating current (AC) voltages from one level to another.

Switches: These control the flow of electricity—they direct which supply of electricity is used and which circuits are energized. Distribution systems have switches installed at strategic locations to redirect power flows for load balancing or sectionalizing.

System Access: Projects required to respond to customer requests for new connections or new infrastructure development. These are usually a regulatory requirement to complete.

System Renewal: Projects to replace aging infrastructure in poor condition.

System Service: Primarily projects that improve reliability.

General Plant: Investments in things like tools, vehicles, buildings and information technology (IT) equipment that are needed to support the distribution system.

Switches: Control the flow of electricity and steer the current to the correct circuits.

Transmission lines: Transmit high-voltage electricity from the generation source or substation to another substation in the electricity grid.

Transformer: Is an important piece of equipment that reduces the voltage of electricity from a high level to a level that can be safely distributed to your area or to your residence/business.

Underground Cable: A conductor with insulation, or a stranded conductor with or without insulation and other coverings (single-conductor cable), or a combination of conductors insulated from one another (multiple-conductor cable).

Volt (V): A unit of measure of the force, or 'push,' given the electrons in an electric circuit. One volt produces one ampere of current when acting on a resistance of one ohm.

Watt (W): The unit of electric power, or amount of work (J), done in a unit of time. One ampere of current flowing at a potential of one volt produces one watt of power.

Wire: A conductor wire or combination of wires not insulated from one another, suitable for carrying electric current.



DISTRIBUTION SYSTEM INVESTMENT PLAN REVIEW

Residential Customer Consultation Workbook

Guelph Hydro Electric Systems Inc.

As per the Accessibility for Ontarians with Disabilities Act, this workbook can be provided in an alternate format upon request by calling 519-837-4703 or emailing info@guelphhydro.com.

Guelph Hydro Electric Systems Inc. ("Guelph Hydro") is the local distribution company responsible for electricity distribution in the City of Guelph and in the Village of Rockwood.

Guelph Hydro operates and maintains a distribution system serving over 53,000 residential, commercial and industrial customers, in a service territory of 93 square km.

Guelph Hydro is 100% owned by Guelph Municipal Holdings Inc., which, in turn, is 100% owned by the City of Guelph.

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What is This Consultation About?

The purpose of this customer consultation is to collect your feedback on Guelph Hydro's investment and spending plan to maintain the local distribution system in 2015 and beyond.

Guelph Hydro's goal is to deliver safe and reliable electricity to homes and local businesses as efficiently as possible and at an affordable price. However, there is a balancing act that all utilities must consider when planning for the future: system reliability and resilience vs. the cost to consumers. No distribution system delivers perfectly reliable electricity. Generally, the more reliable the system, the more expensive the system is to build, operate and maintain.

This customer consultation is designed to collect your feedback on the reliability of the electricity distribution system and the spending choices Guelph Hydro will need to make to maintain system reliability and resiliency over the next year. Ultimately, this consultation will provide Guelph Hydro with additional insights, allowing alignment between operational and capital investment plans and customers' needs and preferences.

As a Guelph Hydro customer, this is an opportunity for you to tell Guelph Hydro what you think about the plan and the cost implications for you. This is also an opportunity for Guelph Hydro to explain to its customers the challenges in operating and maintaining the local electricity distribution system, and more importantly how Guelph Hydro intends to meet those challenges.

To participate in this review, you do not need to be an expert. The workbook explains key parts of the electrical distribution system, the challenges facing the system, Guelph Hydro's recent work to maintain the system, and the company's budgetary plan for the next year.

Guelph Hydro does not expect you to make electrical engineering decisions. Guelph Hydro wants to hear about the electricity issues that matter most to you and whether or not you feel the company's spending and investing priorities seem reasonable.

This workbook is designed to provide enough background about these issues so you can develop an informed opinion.



The process that Guelph Hydro must follow

How are electricity rates determined in Ontario?

The electricity industry in Ontario is regulated by the Ontario Energy Board, which recently developed a new regulatory requirement for electricity distributors, such as Guelph Hydro, to gather customer preferences on distribution system investments.

Guelph Hydro is mainly funded by the distribution rates paid by its customers. Periodically, Guelph Hydro is required to file an application with the Ontario Energy Board to get approval for the funding required to operate, maintain and expand the distribution system. Guelph Hydro must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity to its customers.

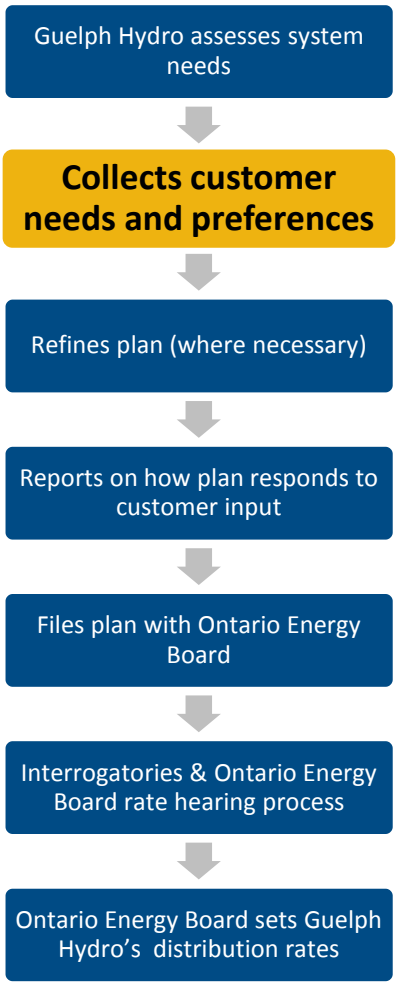
As a customer, how are my interests protected?

Guelph Hydro's evidence is assessed in an open and transparent public process known as a rate hearing. A number of public intervenors with electricity industry expertise submit their own evidence, in some cases challenging Guelph Hydro's plans and assumptions. At the end of the process, the Ontario Energy Board weighs the evidence and decides on the rates Guelph Hydro can charge for distribution.

Why is my feedback important?

Your feedback will be presented to the Ontario Energy Board and public intervenors (who represent various ratepayer groups) when Guelph Hydro files its rate application for 2016. As part of the rate hearing process, the Ontario Energy Board will review how Guelph Hydro acquired and responded to customer feedback on its distribution system plan.

Rate Application Process



Innovative Research Group Inc. has been engaged by Guelph Hydro to collect participant feedback and will deliver it to Guelph Hydro to assist them in shaping their rate application and distribution system plan.

Consumer feedback on Ontario's electricity system

There are a number of ways for consumers to voice their opinions on provincial, regional and local electricity issues. However, this consultation is about your local distribution system and your preferences on how Guelph Hydro uses your money.

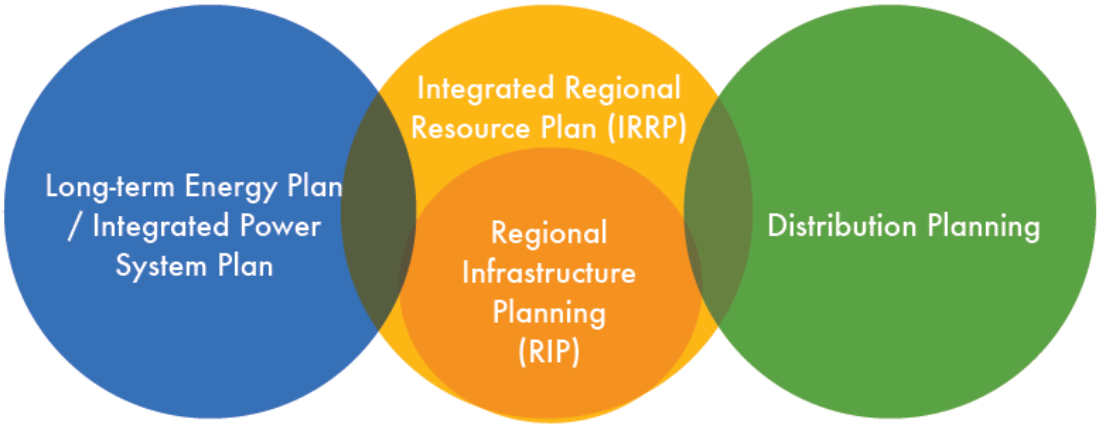
Distribution Planning: This workbook and consultation concentrates on the short-term plan for Guelph Hydro's distribution system. The graphic below shows the various planning initiatives ongoing across Ontario's electricity system. In addition to the short-term distribution plan being discussed in this workbook, there are other planning initiatives undertaken to ensure that the distribution system maintains reliability and works efficiently for the benefit of customers.

If you're interested in broader medium- and long-term electricity issues such as Ontario's Long-Term Energy Plan, regional planning, conservation planning and general energy policy in the province, there are other opportunities to provide your feedback.

Ontario's Long Term Energy Plan: The Ontario Government's plan details how electricity will be generated and the longer-term conservation strategy for the province. It can be found at this website: http://www.energy.gov.on.ca/en/ltep/

Regional Planning: The Independent Electricity System Operator (IESO, recently merged with the Ontario Power Authority (OPA)) looks ahead to the future electricity needs of your region and how those needs can be addressed through energy conservation programs, local generation, and electricity from outside the region. You can follow the IESO's regional planning process at this website: http://www.powerauthority.on.ca/power-planning/regional-planning

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 near- 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 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 adequate infrastructure to meet required reliability and safety standards, and to otherwise meet the needs of customers.

Guelph Hydro Electric Systems Inc.

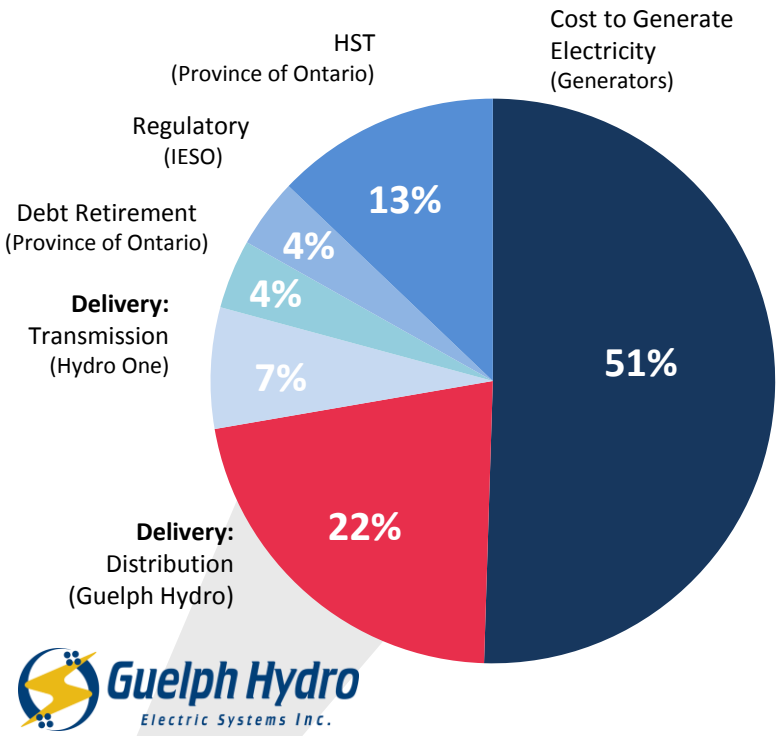


Residential Customer Electricity Bills

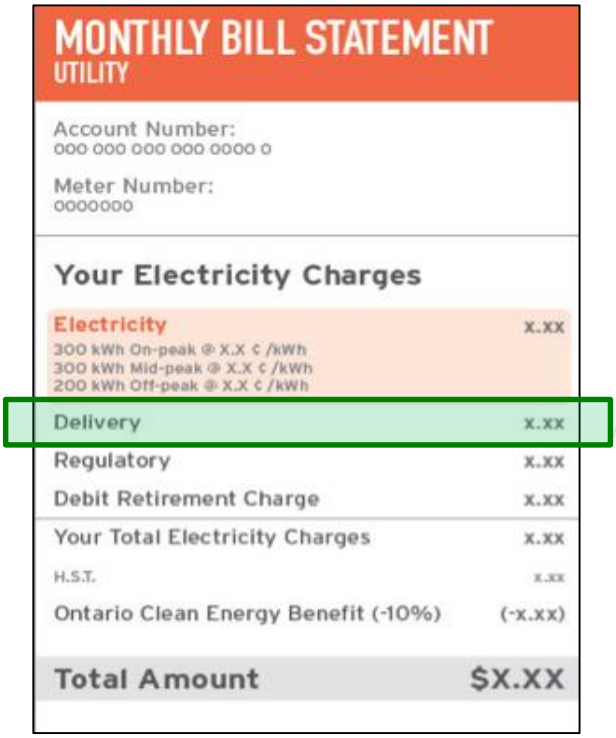
Your Electricity Bill: Every item and charge on your bill is mandated by the provincial government or regulated by the Ontario Energy Board. There are two distinct cost areas that make up the "Delivery" charge on your bill: ***distribution*** and ***transmission***. While Guelph Hydro collects both, it remits the transmission charge to Hydro One, who manages and operates Ontario's transmission system. The distribution charges are what Guelph Hydro uses to fund its utility needs. Distribution costs make up about 22% of the typical residential customer's (800 kilowatt hours [kWh] per month) total electricity bill.

Guelph Hydro's distribution rates are subject to the review and approval of the Ontario Energy Board. The revenues collected from customers cover Guelph Hydro's capital investments and operating expenses.

About 22% of the average residential electricity bill goes to Guelph Hydro



Guelph Hydro
Electric Systems Inc.



MONTHLY BILL STATEMENT
UTILITY

Account Number:
000 000 000 000 0000 0

Meter Number:
0000000

Your Electricity Charges

Electricity	x.xx
300 kWh On-peak @ X.X ¢ /kWh	
300 kWh Mid-peak @ X.X ¢ /kWh	
200 kWh Off-peak @ X.X ¢ /kWh	
Delivery	x.xx
Regulatory	x.xx
Debit Retirement Charge	x.xx
Your Total Electricity Charges	x.xx
H.S.T.	x.xx
Ontario Clean Energy Benefit (-10%)	(-x.xx)
Total Amount	$X.XX

Current monthly distribution charges are approximately **$29.51 or 22% of the total monthly bill** for a typical Guelph Hydro residential customer who consumes 800 kWh in a month.

It is estimated that an additional **$4.05** per month will be required in 2016 to operate, maintain, and modernize Guelph Hydro's electricity distribution system. Looking at the entire bill, it will be an estimated increase of **2%** or an average of **$2.68**.



Electricity Grid 101

Who Does What in Ontario's Power 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.

EXAMPLE

Ontario Power Generation
TransCanada Energy Ltd
Bruce Power
Samsung Renewable

TRANSMISSION

Transmission lines connect the power produced at generating facilities to substations.

EXAMPLE

Hydro One

DISTRIBUTION

Distribution lines carry electricity to homes and businesses.

EXAMPLE

Guelph Hydro
Kitchener-Wilmot Hydro
Waterloo North Hydro

CONSUMERS

Electricity is delivered to homes and businesses.

EXAMPLE

Residential
Commercial
Industrial



Electricity Grid 101:
How is Ontario's Electricity System Regulated?

Ontario Ministry of Energy:
The Ontario Ministry of Energy sets energy policy. It sets the rules and establishes key planning and regulatory agencies through legislation.

Ontario Energy Board:
The mission of the Ontario Energy Board is to promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at reasonable cost. It is an independent body established by legislation that sets the rules and regulations for the provincial electricity sector. One of the Ontario Energy Board's roles is to review the distribution plans of all electricity distributors and set their rates.

The Independent Electricity System Operator:
The Independent Electricity System Operator (IESO) – which merged with the Ontario Power Authority on January 1, 2015 – is responsible for short-, medium- and long-term electricity planning to ensure an adequate supply of electricity is available for Ontario residents and businesses. It operates the electricity grid in real-time to ensure that Ontario has the electricity it needs, where and when it needs it. The IESO receives directives from the Ministry of Energy (i.e., energy supply mix, Green Energy Act), but otherwise works at arm's-length from the government.



Customer Feedback

1. Given what you know and what you have read so far, how well do you feel you understand the parts of the electricity system, how they work together and which services Guelph Hydro is responsible for?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ I don't understand at all

2. Generally, how satisfied are you with the service you receive from Guelph Hydro?
   - ❑ Very satisfied
   - ❑ Somewhat satisfied
   - ❑ Somewhat dissatisfied
   - ❑ Very dissatisfied
   - ❑ Don't know

3. Is there anything in particular that Guelph Hydro can do to improve its service to you?

Guelph Hydro's Distribution System Today

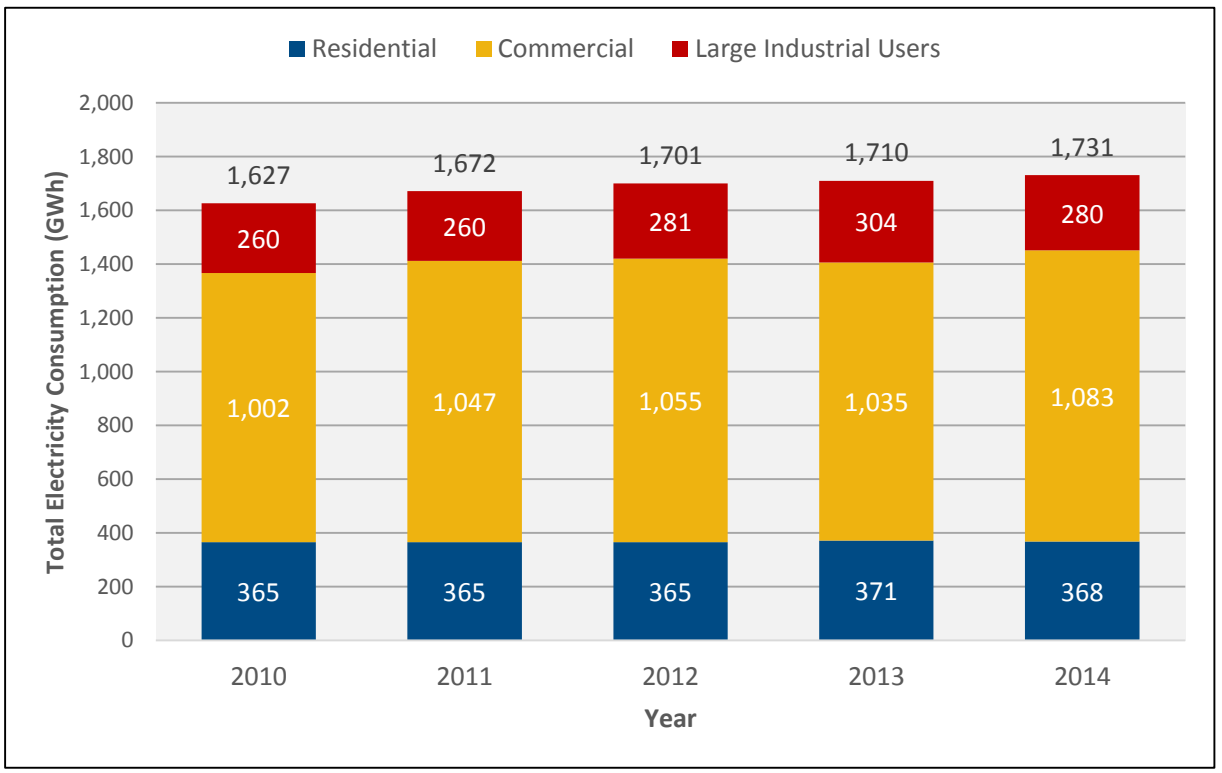
This section describes the construction of Guelph Hydro's electricity distribution grid including its substations, overhead and underground systems. It also explains the company's historical growth and current electrical infrastructure.

Background on Guelph Hydro's Distribution System

Guelph Hydro Electric Systems Inc. ("Guelph Hydro") was established in 1907 and now provides electrical service to a service territory of 93 square kilometers, encompassing the City of Guelph and the Village of Rockwood. The Village of Rockwood is located in the Township of Guelph-Eramosa, a service territory that was acquired by Guelph Hydro in 2001.

Guelph is currently one of Ontario's fastest growing communities, and it continues to attract new businesses and residents due to its strategic geographic location. Plans are underway to further promote local economic development. The result of this local development is increased pressure on the electricity distribution system. To address this growing demand for electricity, Guelph Hydro has made investment plans to maintain and upgrade its distribution system to allow it to continue to provide a reliable and quality power supply to existing and future customers.

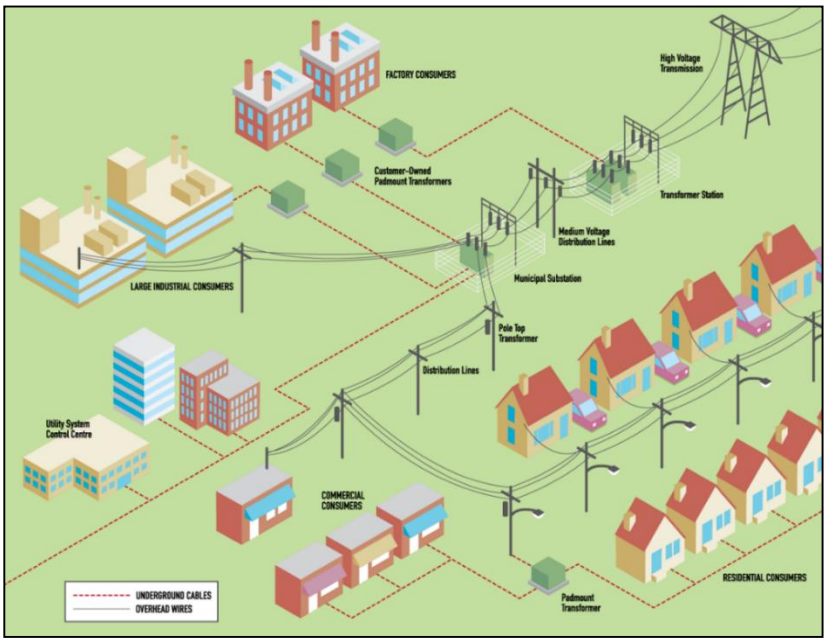
As the community has grown, so has Guelph Hydro's customer base, and the level of electricity consumption.



Guelph Hydro's Distribution System Today

Every distribution system is unique with its own history and challenges. In order to better understand the current Guelph Hydro distribution system, we first have to understand all of the different components and how they impact the way in which you receive electricity when you need it. The diagram below and following terms will help guide you through the system.

Guelph Hydro's electricity distribution system is made up of a number of components which work together to transport electricity to homes and businesses across the service territory. Guelph Hydro owns, maintains and operates approximately 431 km of overhead feeders and 672 km of underground cables. In the City of Guelph the power is provided by three Hydro One-owned Transformer Stations and one Guelph Hydro-owned Transformer Station. In the Village of Rockwood, the power is provided by two Guelph Hydro-owned Municipal Substations and one Hydro One-owned Distribution Station.



Hydro One's Transmission System:

High Voltage Transmission – Connects our distribution system to electricity generating stations across the province.

Transmission Station – Reduces high voltage electricity from transmission lines to medium voltage which is fed into Guelph Hydro's distribution grid.

Guelph Hydro's Distribution System:

Municipal Substations: Municipal substations are a critical element of the electricity distribution system —they are the local hubs from where electricity is distributed to an area. Municipal substations contain:

Transformers - Important pieces of equipment that reduce the voltage of electricity from a high level to a level that can be safely distributed to your area.

Feeder Circuits - The wires that connect the transformer station to the broader distribution system in order to deliver electricity to customers

Breakers - Devices that protect the distribution system by interrupting a circuit if a higher than normal amount of electricity is detected.

Switches - Control the flow of electricity and steer the current to the correct circuits.

Guelph Hydro's Distribution System Today:
Paying for the Distribution System

Operating the Distribution System

Serving an area with a total population of more than 134,000 takes a lot of resources. As of December 31, 2014, Guelph Hydro employed 116 full-time employees to serve 48,384 residential accounts and 4,623 commercial accounts – including 4 large industrial users. The value of Guelph Hydro's system assets tops $140 million.

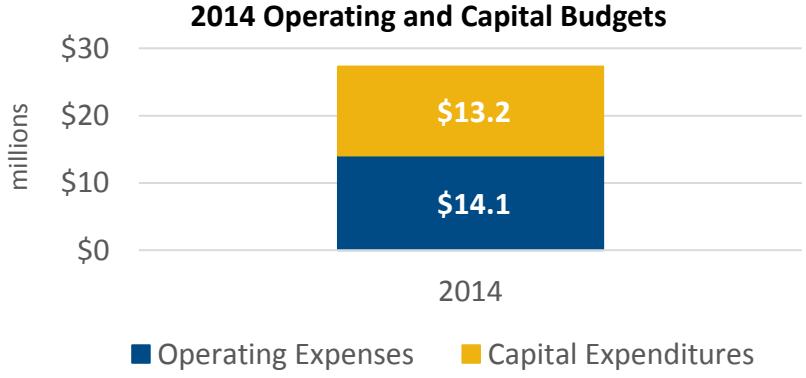
431 kilometres	Overhead lines
672 kilometres	Underground cable
1,103 kilometres	Total circuit length
1	Transformer station
2	Municipal sub-stations
5,882	Transformers
11,166	Poles
57	Fleet vehicles

Paying for the Distribution System

As is typical of most businesses, Guelph Hydro manages its spending in two budgets – an operating budget and a capital budget.

Guelph Hydro's **operating budget** covers regularly recurring expenses such as the costs of running service vehicles, the payroll for employees, and the maintenance of distribution equipment and buildings.

Its **capital budget** covers items that, when purchased, do not need to be repurchased for some time and that have lasting benefits over many years. This can include much of the equipment that is part of the distribution system, such as poles, wires and transformers, major computer systems, and vehicles.

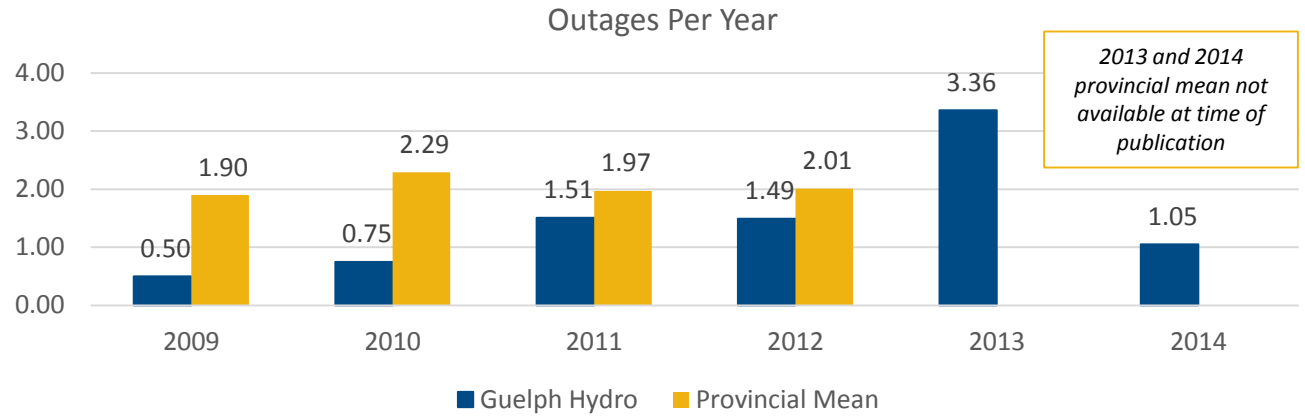


Managing the distribution system requires millions of dollars in maintenance, system renewal and running the day-to-day operations. In its last fiscal year (2014), Guelph Hydro's operating expenses and capital expenditure totalled $27.3 million.

4. How well do you feel you understand the important parts of the electricity system, how they work together, and which services Guelph Hydro is responsible for?
   - ❑ Very well
   - ❑ Somewhat well
   - ❑ Not very well
   - ❑ I don't understand at all

System Reliability

No system delivers perfectly reliable electricity. There is a balancing act between reliability and the cost of running the system. Historically, there have been years when Guelph Hydro has experienced more outages per year than the provincial average, but over a 6-year period (2009-2014), including during the 2013 ice storm, Guelph Hydro has experienced fewer than the provincial average.



5. In 2014, Guelph Hydro customers experienced about 1.05 power outages per year. Do you recall how many outages you experienced in the past year?
   - ❑ One
   - ❑ Two
   - ❑ Three
   - ❑ More than three
   - ❑ Don't know

6. How acceptable were the number of power outages you experienced over the last 12 months?
   - ❑ Very acceptable
   - ❑ Somewhat acceptable
   - ❑ Not very acceptable
   - ❑ Not acceptable at all
   - ❑ Don't know

7. Overall, how satisfied are you with the reliability and quality of electricity services provided by Guelph Hydro?
   - ❑ Very satisfied
   - ❑ Somewhat satisfied
   - ❑ Somewhat dissatisfied
   - ❑ Very dissatisfied
   - ❑ Don't know



Cost Pressures

From the day-to-day operation to repairing damage caused by severe weather events, there are a variety of ever-present pressures on Guelph Hydro's operating and capital budget.

Many of these expenditures are items over which Guelph Hydro has little or no control – major storms, and the implementation of interval meters for all customers with a demand above 50 kW, for example.

Other costs are associated with preventative maintenance like replacing aging equipment. Over recent years, Guelph Hydro has undertaken several large scale projects to maintain or upgrade the system, and more are planned.

How does Guelph Hydro prioritize repairs or upgrades to aging infrastructure?

Guelph Hydro monitors the health of its electric infrastructure very closely. As part of its rate application, it must show the Ontario Energy Board third-party audits of the health of its system's assets. These asset health audits help Guelph Hydro prioritize which parts of its system get upgraded or rebuilt first.

Why hasn't Guelph Hydro set aside funds to pay for required upgrades?

The Ontario Energy Board does not allow utilities in Ontario (including Guelph Hydro) to create reserve funds. If reserve funds were allowed, a utility would have to charge customers a premium on their rates to set money aside. In accordance with the Ontario Electricity Act and the regulatory codes, a utility can only charge customers the rate required to run the distribution system at a reliability standard set by regulatory bodies.



Paying for Guelph Hydro's Distribution System:
Capital Investment Drivers

Guelph Hydro has developed a list of capital investment drivers and proposes investment programs based on these key drivers.

Reliability: There are two main measures of reliability in the distribution system:

1) How often does the power go out?
2) How long does the power stay out?

To maintain or improve reliability, projects are developed to improve asset performance and decrease the frequency and duration of power outages.

Service Requests: Guelph Hydro has a legal obligation to connect customers to its distribution system. This includes both traditional demand customers (new homes and businesses) and distributed generation customers (e.g. customers who have feed-in-tariff [FIT and micro-FIT] contracts to generate and sell electricity back to the grid, such as those who have rooftop solar panels). Requests can also include system modifications to support infrastructure development by government agencies, road authorities and developers.

Support Capacity Delivery: Where there are forecasted changes in demand that will limit the ability of the system to provide consistent service delivery or where it is incapable of meeting the demand requirements, new build or expansion is required. This is the fundamental infrastructure (such as the new transformer station that was built in recent years to service the south end of Guelph) that ensures there is enough electricity to accommodate municipal growth.

System Efficiency: To provide customers with the best service possible, Guelph Hydro adheres to a continuous improvement standard to improve power outage restoration capability.

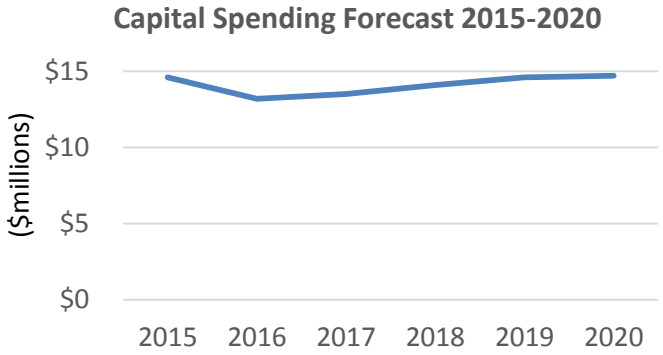
Mandated Compliance: Compliance with all legal and regulatory requirements and government directives, including compliance with the Ministry of Energy, the Ontario Energy Board, the Independent Electricity System Operator, Measurement Canada and other regulations, which may impact capital spending, such as energy conservation initiatives or investments in smart grid.

Obsolescence:
Asset installations that no longer align with Guelph Hydro's current operating practices or current standards. This can include those assets that:

- are no longer manufactured,
- lack spare parts,
- cannot be readily accessed, as in an emergency,
- lack the ability to have maintenance performed on them,
- have operational constraints or conflicts, which can result in increased reliability and/or safety related risks.

Aging or Poorly Performing Equipment: Where there is the imminent risk of equipment failure due to age or deterioration, and these potential failures pose a safety risk to crew workers or to the public, or may result in severe reliability impacts to, remediation, through refurbishment or replacement, is required.

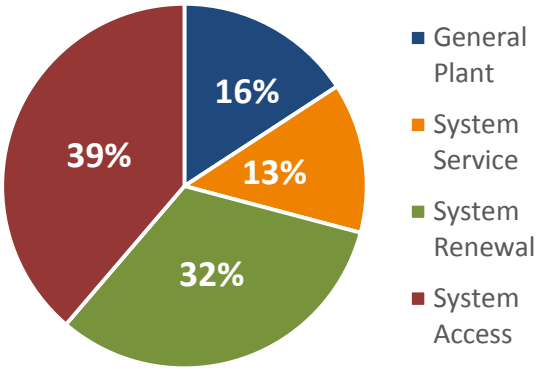
Business Support Costs: Guelph Hydro is not just the local electricity distribution system itself, but a company that operates the system. As a company, it needs buildings to house the staff, vehicles and tools which service the power lines, and IT systems to manage the system and customer information.





Cost Drivers
Capital Investments

2016 Forecasted Capital Expenditures



What are the major issues Guelph Hydro needs to address?

Over the years, Guelph Hydro has worked hard to keep its equipment working well beyond its originally expected life, to get maximum value for money. However, now there are many parts of the system for which the utility will not be able to continue to extend the operating life. While there are some areas in Guelph Hydro's service territory that will need additional capacity, its key challenges come from the need to replace aging equipment.

In 2016, the capital expenditures required to maintain system reliability are estimated by Guelph Hydro to be **$14 million**.

SYSTEM ACCESS projects are non-discretionary. Projects are planned as a result of new customers wanting to connect to services

Project	Budget
Apartment, Commercial, Industrial Customer Connections	646,894
Meter Installations	415,000
Distribution System Modifications / Expansions for Customers	784,249
System Relocations Property Development	1,299,884
Expansions for New Residential Subdivisions	1,443,261
New Residential Service Connections	238,954
Expansions for New Residential Subdivisions	568,803
Total System Access Expenditure:	**$5,397,045**

SYSTEM SERVICE projects are identified through a variety of load monitoring and forecasting tools

Project	Budget
Distribution System Feeder Infrastructure	1,177,833
SCADA (Supervisory Control And Data Acquisition) Infrastructure	224,911
SCADA / Remotely Operated Switches	256,248
Transformer Stations & Distribution Stations	199,409
Total System Service Expenditure	**$1,858,400**

SYSTEM RENEWAL projects are discretionary. Guelph Hydro uses its Asset Condition Assessment to identify which system assets need to be replaced

Project	Budget
Distribution System Replacement	4,163,741
Distribution System Transformer replacement upgrades	315,193
Total System Renewal Expenditure	**$4,478,934**

GENERAL PLANT projects are identified using a combination of inspections, policies and expert knowledge

Project	Budget
Building / Fixtures	804,135
Office Equipment / Graphics	163,100
Fleet / Rolling Stock	572,886
IT Capital	590,000
Major Tools	65,564
Total General Plant Expenditure	**$2,195,685**



Cost Drivers:
Operating Cost Drivers

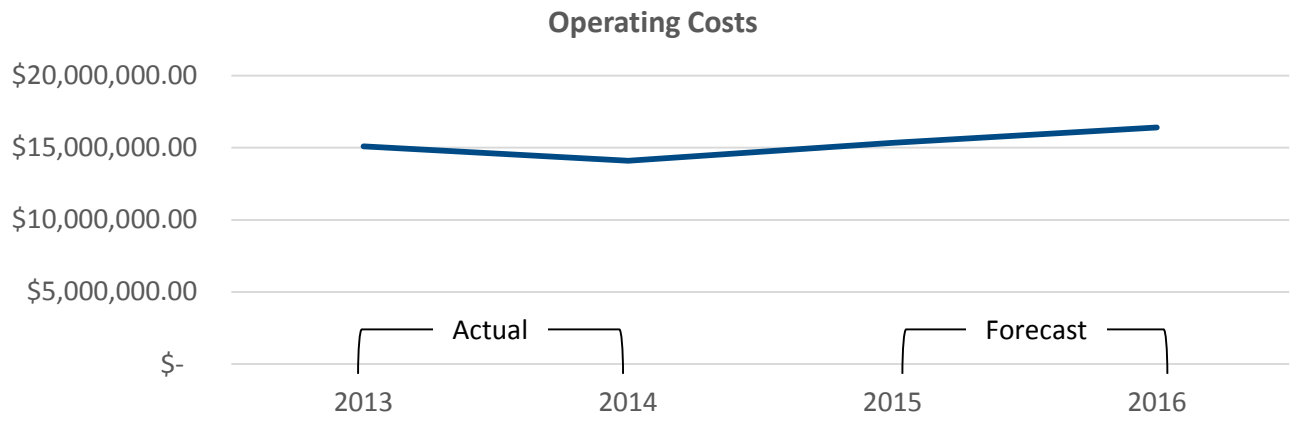
In addition to its capital budget, Guelph Hydro needs to consider its operating budget which also impacts customer bills.

After a slight decrease in operating costs in 2014, Guelph Hydro is forecasting increases for 2015 and 2016. There are three main factors that are causing this increase:

Succession Planning: A significant proportion of Guelph Hydro employees in its line trade, metering and systems operations departments will be retiring in the next five years. As a result, plans are in place to hire replacements in 2015 and 2016 because it can take up to five years to fully train replacement staff in these frontline positions.

Government Mandated Initiatives: The Ontario Energy Board requires that new full-time staff adhere to initiatives such as the Green Energy and Economy Act plan. Therefore, Guelph Hydro is planning to hire specialized technicians and other staffing resources in 2015 and 2016 in order to further advance Smart Grid development and Conservation Demand Management programs.

Base Compensation Changes: The budget assumes a base salary increase arising from the recent collective bargaining agreement with the union and a commensurate percentage increase for management staff based on performance and the market.



The operating budget must also take into account business environment changes. Since Guelph Hydro's last rate increase request to the Ontario Energy Board in 2012, there have been two significant, government-mandated business environment changes that have increased operating costs:

- The introduction of Metering Inside the Settlement Timeframe (MIST) which mandated interval metering for all small- to medium-sized business customers, and;
- The introduction of a new framework for Conservation Demand Management program design and delivery.

Finding Efficiencies and Cost Savings

Guelph Hydro has worked hard to identify efficiencies and cost savings within the system. These are some of the efficiencies Guelph Hydro will be focussing on in the next few years.

Asset Condition Assessment: The results of this study will lead to reduced emergency replacement costs. Unplanned replacements result in higher labour costs due to after-hours trouble calls, higher replacement material costs and higher costs to mitigate impact on reliability.

Life Extension Programs can reduce costs when compared to replacement programs. An example of a life-extension program at Guelph Hydro is the wood pole treatment program. In this program, boron is injected into wood poles, extending the life of the pole as compared to untreated poles for less than the cost of pole replacement.

Distribution Automation: Automating switches within the system has a positive impact on reliability statistics, but is also a labour savings option when applied on switching devices that are remote from the service centre. A planned upgrade to the Rockwood Municipal Distribution Station is an example where labour savings is expected through distribution automation.

Standardized Designs save money both by reducing the engineering costs of specific projects, and by reducing installation costs and material stock costs. Guelph Hydro is part of the Utilities Standard Forum ("USF") group. This group facilitates standardized installation drawings for use in the projects Guelph Hydro has planned over the next five years.

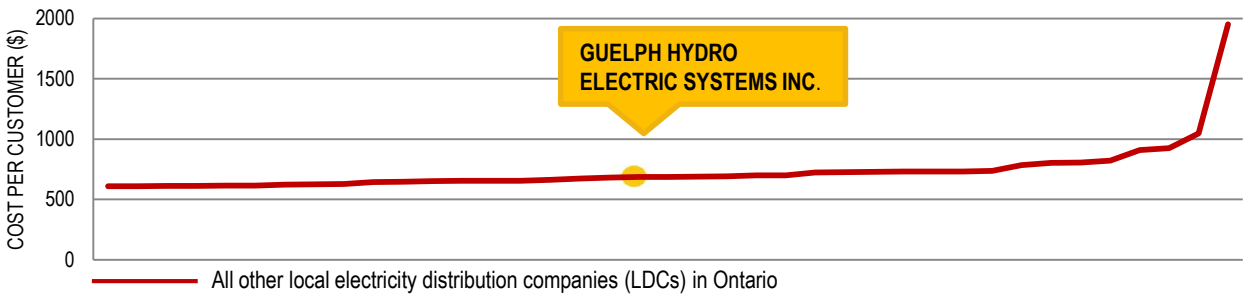
Devices such as portable computing devices and the use of web-based applications to replace paper-based data collection and processes will improve operational efficiency, reduce the possibility of data translation errors, and provide cost savings at the time of collection, and at the time of data entry. Improved data is used to optimize the planning process for future projects and to improve Asset Condition Assessment processes.

Distribution System Losses are being improved through renewal projects. Specifically, increased conductor sizes and better balancing of transformer station loading results in reduced power losses. Guelph Hydro has an annual program to run simulations on the Distribution System configuration and optimize for losses using distribution system analysis software.

How Efficient is Our Operation?

Guelph Hydro's ability to run an efficient and productive operation can be measured by comparing our costs per customer against those of other utilities. (See below) Because we have invested in smart, cost efficient technologies and worked hard to keep operating costs down, the bill of a typical residential customer using 800 kilowatt hours of electricity per month compares favourably against those of other utilities.

COST COMPARISON: GUELPH HYDRO ELECTRIC SYSTEMS INC. VS OTHER ONTARIO UTILITIES
ANNUAL COSTS PER CUSTOMER - 2013



Source: Ontario Energy Board

Customer Feedback

8. With regards to projects focused on replacing aging equipment in poor condition, which of the following statements best represents your point of view?
    - ❑ Guelph Hydro should invest what it takes to replace the system's aging infrastructure to maintain system reliability, even if that increases my monthly electricity bill by a few dollars over the next few years.
    - ❑ Guelph Hydro should lower its investment in renewing the system's aging infrastructure to lessen the impact of any bill increase, even if that means more or longer power outages.
    - ❑ Don't know

9. As a company, Guelph Hydro needs buildings to house its staff, vehicles, and tools to service the power lines and IT systems to manage the distribution system and customer information. Which of the following statements best represents your point of view?
    - ❑ Guelph Hydro should find ways to make do with the buildings, equipment and IT systems it already has.
    - ❑ While Guelph 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.
    - ❑ Don't know

10. How well do you feel you understand the cost drivers that Guelph Hydro is responding to?
    - ❑ Very well
    - ❑ Quite well
    - ❑ Not very well
    - ❑ Not at all
    - ❑ Don't know

11. How well do you think Guelph Hydro is managing these cost drivers while meeting customer expectations and keeping rates reasonable?
    - ❑ Very acceptable
    - ❑ Somewhat acceptable
    - ❑ Not very acceptable
    - ❑ Not acceptable at all
    - ❑ Don't know

12. Now that you have a better sense of the operations of Guelph Hydro, including the cost drivers, do you feel the proposed budget is reasonable?
    - ❑ Yes
    - ❑ No
    - ❑ Don't know

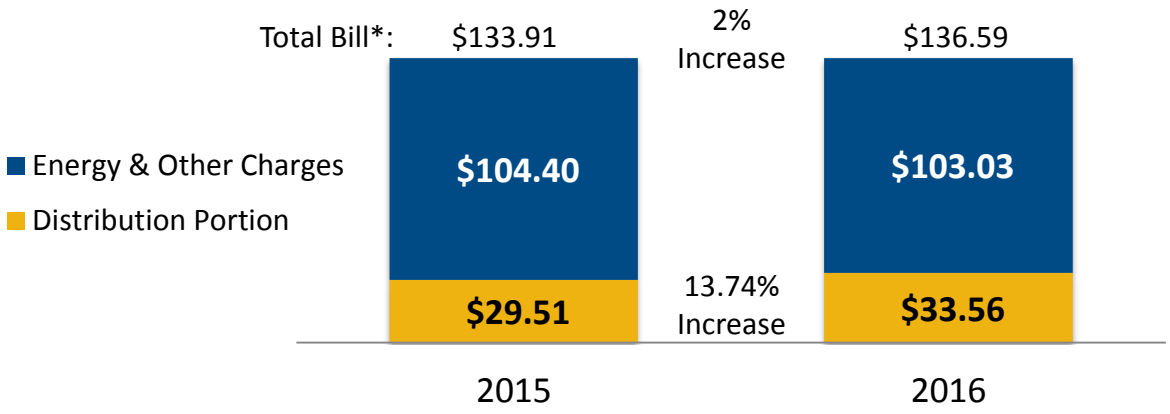


What Guelph Hydro's Plan Means for You – Residential Customer Impact

As has been described in this workbook, Guelph Hydro is funded by the distribution rates paid by its customers. Periodically, Guelph Hydro is required file an application with the Ontario Energy Board to request funding to operate and maintain the distribution system according to Guelph Hydro's capital and operating investment plan. Guelph Hydro must submit evidence to justify the amount of funding it needs to safely and reliably distribute electricity.

Estimated Typical Residential Annual Increase in Monthly Bill

Residential Customers: In 2016, residential customers with an average monthly consumption of 800 kWh will see an estimated increase of **13.74%** or an average of **$4.05** per month on the distribution portion of their electricity bills. Looking at the entire bill, it will be an estimated increase of **2%** or an average of **$2.68**.



* Based on an average monthly consumption of 800 kWh.

Please note that these are preliminary estimates and are subject to change as the rate application process continues.

Customer Feedback

13. Did Guelph Hydro's plan cover the topics you expected?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ No, not very well

If no, what is missing?

14. How well do you think Guelph Hydro is planning for the future?
    - ❑ Very well
    - ❑ Somewhat well
    - ❑ Not very well
    - ❑ I don't know

15. Considering what you know about the local 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

Glossary

Breakers: Devices that protect the distribution system by interrupting a circuit if a higher than normal amount on power flow is detected.

Distribution Station: These substations are located near to the end-users. Distribution station transformers change the voltage to lower levels for use by end-users.

Feeder Circuit: Is a wire that connects the transformer station to the broader distribution system in order to deliver electricity to customers.

Generation Station: A facility designed to produce electric energy from another form of energy, such as fossil fuel, nuclear, water, geothermal, solar, and wind.

Kilowatt (kW): 1000 watts.

Local Distribution Company (LDC): In Ontario, these are the companies that take electricity from the transmission grid and distribute it around a community.

OM&A: Operations, Maintenance and Administration, or operating budget.

Substations: These include transmission stations and distribution stations. They are used to switch generators, equipment, and circuits or lines in and out of a system. It is also used to change alternating current (AC) voltages from one level to another.

Switches: These control the flow of electricity—they direct which supply of electricity is used and which circuits are energized. Distribution systems have switches installed at strategic locations to redirect power flows for load balancing or sectionalizing.

System Access: Projects required to respond to customer requests for new connections or new infrastructure development. These are usually a regulatory requirement to complete.

System Renewal: Projects to replace aging infrastructure in poor condition.

System Service: Primarily projects that improve reliability.

General Plant: Investments in things like tools, vehicles, buildings and information technology (IT) equipment that are needed to support the distribution system.

Switches: Control the flow of electricity and steer the current to the correct circuits.

Transmission lines: Transmit high-voltage electricity from the generation source or substation to another substation in the electricity grid.

Transformer: Is an important piece of equipment that reduces the voltage of electricity from a high level to a level that can be safely distributed to your area or to your residence/business.

Underground Cable: A conductor with insulation, or a stranded conductor with or without insulation and other coverings (single-conductor cable), or a combination of conductors insulated from one another (multiple-conductor cable).

Volt (V): A unit of measure of the force, or 'push,' given the electrons in an electric circuit. One volt produces one ampere of current when acting on a resistance of one ohm.

Watt (W): The unit of electric power, or amount of work (J), done in a unit of time. One ampere of current flowing at a potential of one volt produces one watt of power.

Wire: A conductor wire or combination of wires not insulated from one another, suitable for carrying electric current.

APPENDIX 1-J: Control Room Shared Services Business Case and Agreement

CONTROL ROOM SERVICES AGREEMENT

Dated as of the 17th day of October, 2014

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CONTROL ROOM SERVICES AGREEMENT

THIS AGREEMENT made effective the 17th day of October, 2014,

BETWEEN:

Guelph Hydro Electric Systems Inc., a corporation incorporated under the laws of the Province of Ontario

(hereinafter referred to as the "**Service Provider**")

- and -

Milton Hydro Distribution Inc., a corporation incorporated under the laws of the Province of Ontario

(hereinafter referred to as the "**Service Recipient**")

WHEREAS the Service Recipient is engaged in the business of the distribution of electricity in its licensed service territory and for such purposes has determined that its ability to serve its customers would be significantly enhanced if it had access to additional electricity distribution system control room resources to enable it to more effectively manage its electricity distribution system generally;

AND WHEREAS the Service Provider is engaged in the business of the distribution of electricity in its licensed service territory and for such purposes has personnel, premises, and a Control Room, which Control Room has available capacity which could be deployed as is and/or could be augmented to also provide Control Room Services to the Service Recipient;

AND WHEREAS the Service Provider and the Service Recipient have agreed on the basis upon which the Control Room Services may be made available to the Service Recipient;

AND WHEREAS the Service Provider and the Service Recipient wish to enter into this Agreement to record their mutual understandings.

NOW THEREFORE, in consideration of the premises and the covenants and agreements herein and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each Party to this Agreement, the Parties covenant and agree as follows:

ARTICLE 1 - DEFINITIONS

1.1 Words and Phrases Defined

In this Agreement, unless the subject matter or context is inconsistent therewith, the words and phrases set forth below shall have the meanings attributed below:

"**Agreement**" means this Agreement and includes all schedules to this Agreement and, further, includes all amendments and supplements as may be made from time to time;

"**Business Day**" means a day that is not a Saturday, Sunday or a public holiday in the Province of Ontario;

"**Control**" shall have the meaning given thereto for the purposes of the *Ontario Business Corporations Act*;

"**Control Room**" means the Service Provider's electrical distribution system control room and any complementary, substituted or auxiliary control room facilities operated by the Service Provider from time to time;

"Deliverables" has the meaning outlined in Section 3.1(a) hereof;

"**Dispute Resolution Provisions**" means the provisions of Article 18;

"**Force Majeure**" means in relation to the performance of any obligation under this Agreement, any cause, condition or event of any nature whatsoever which is beyond the reasonable control of the Party responsible for such obligation which prevents in whole or in part the performance by a Party of its respective obligations including acts of war, revolution, riot, sabotage, vandalism, earthquakes, storms, flooding, lightning and other acts of God, local or national emergencies, strikes, lockouts, work slowdowns and all other labour disputes, whether lawful or unlawful;

"**GAAP**" means Canadian generally accepted accounting principles approved or recommended from time to time by the Canadian Institute of Chartered Accountants or the Financial Accounting Standards Board, as applicable, or any successor institutes, or if a Person is required to use the International Financial Reporting Standards adopted by the International Accounting Standards Board, then such standards or any replacement standards that may be similarly mandated for a Person's use, all applied on a consistent basis;

"**Good Engineering and Operating Practices**" means any of the practices, methods and activities adopted by a significant portion of the Ontario electric utility industry as good practices applicable to the design, building, and operation of electricity distribution facilities of similar type, size and capacity or any of the practices, methods or activities which, in the exercise of skill, diligence, prudence, foresight and reasonable judgement by a prudent electricity distributor in light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, expedition and Laws. Good Engineering and Operating Practices are not intended to be limited to the optimum practices, methods or acts to the exclusion of all others, but rather are intended to delineate acceptable practices, methods, or acts generally accepted in the Ontario electric utility industry. Without limiting the generality of the foregoing and in respect of the operation of the Control Room, Good Engineering and Operating Practices include taking reasonable steps to ensure that:

(a) adequate materials, resources and supplies are available to meet the Control Room's needs under reasonable conditions and reasonably anticipated abnormal conditions;

(b) sufficient operating personnel are available and are adequately experienced and trained to operate the Control Room properly, efficiently and taking into account

manufacturers' guidelines and specifications and are capable of responding to abnormal conditions;

(c) preventative, routine and non-routine maintenance and repairs are performed on a basis that ensures reliable long-term and safe operation and taking into account manufacturers' recommendations and are performed by knowledgeable, trained and experienced personnel utilising proper equipment, tools and procedures; and

(d) appropriate monitoring and testing is done to ensure equipment is functioning as designed and to provide assurance that equipment will function properly under both normal and abnormal conditions.

"**Governmental Authority**" means any federal, provincial, municipal or local government, parliament or legislature, or any regulatory authority, agency, tribunal, commission, board or department of any such government, parliament or legislature, or any court or other law, regulation or rule-making entity, having jurisdiction in the relevant circumstances, including, for greater certainty, the Independent Electricity System Operator, the Ontario Energy Board, the Electrical Safety Authority, and any Person acting under the authority of any Governmental Authority.

"**Include**" means including without limitation;

"**Information**" means: (i) all business, financial and technical information and data, whether oral or written, in whatever media or form, which is disclosed, directly or indirectly, by a Party to another Party whether before, on or after the date hereof including any other information or data relating to, comprising, describing or incorporating a Party's current or proposed products, services, prices, suppliers, customers, dealers, agents, employees, businesses, business opportunities, addresses, locations, systems, specifications, drawings, sketches, designs, ideas, creations, inventions, formulas, improvements, models, samples, processes, codes, equipment, methods, techniques, experiments, demonstrations, prototypes, procedures, design methodology, evaluation methodology and criteria, trade secrets, business operations; reports, plans, forecasts, costs, salaries, sales, income, profit, profitability, pricing, business information, financial information and situation, business or marketing plans, distribution and other business strategies, current or historical data, test data, research, technology, computer systems, computer programs, source, object and any other codes, routines and other software and documentation, scientific, computer or technical information and network architecture maps, specifications and service; (ii) any information marked "**private**", "**restricted**", "**confidential**", "**proprietary**" (or otherwise marked or described so as to indicate confidentiality) or which, by the nature of the circumstances surrounding the disclosure thereof, ought in good faith be treated as confidential, in all cases in its original form or whether it is converted to different forms or combined with additional information, and including any information relating to third parties contained therein; and (iii) any notes, memoranda, summaries, analyses, compilations or any other writings relating howsoever to any of the foregoing prepared relative thereto by the receiving Party or on its behalf;

"**Laws**" means:

(a) applicable federal, provincial or municipal laws, orders-in-council, by-laws, codes, rules, policies, regulations and statutes;

(b) applicable orders, decisions, codes, judgments, injunctions, decrees, awards and writs of any court, tribunal, arbitrator, Governmental Authority or other Person having jurisdiction, including the Ontario Energy Board's Distribution System Code and Affiliate Relationships Code for Distributors and any other applicable rules and codes of the Ontario Energy Board;

(c) applicable rulings and conditions of any licence, permit, certificate, registration, authorization, consent and approval issued by a Governmental Authority;

(d) any requirements under or prescribed by applicable common law; and

(e) the Independent Electricity System Operator's Market Rules, as well as any manuals or interpretation bulletins issued by the Independent Electricity System Operator from time to time that are binding on the supplier;

"**LDC**" means a local electricity distribution company licensed and regulated by the Ontario Energy Board;

"**Material Adverse Effect**" means any change (or changes taken together) in, or effect on, the affected Party that materially and adversely affects the ability of such Party to perform its obligations hereunder;

"**Notice**" is defined in Section 21.1;

"**Parties**" means at any time the Service Provider and the Service Recipient that is a Party to this Agreement;

"**Person**" means an individual, partnership, limited partnership, joint venture, syndicate, sole proprietorship, company or corporation with or without share capital, unincorporated association, trust, trustee, executor, administrator or other legal personal representative, regulatory body or agency, government or governmental agency, authority or entity however designated or constituted;

"**Personal Information**" means information about an identifiable individual including a person's name, address, phone number, fax number, e-mail address, social insurance number or other government-issued identifier, credit card information and IP addresses, in any media or format including computerized or electronic records as well as paper-based files, used or collected from the Service Provider or the Service Recipient or their respective consumers, utility customers or employees or any other person or individual (collectively, "Individuals");

"**Representatives**" has the meaning outlined in Section 20.1(iv) hereof;

"**Service Personnel**" means the operations staff of the Service Provider responsible for the provision of the Services, which may include operation of the Control Room and related electricity distribution functions as identified by the Service Provider from time to time;

"Services" has the meaning outlined in Section 3.1(a) hereof;

"SOW" has the meaning outlined in Section 3.1(a) hereof;

"**Term**" means the period of time that this Agreement is in effect pursuant to the provisions of Article 9, unless terminated earlier in accordance with this Agreement.

1.2 Derivations

Where a word or phrase is defined for the purposes of this Agreement, a derivative of that word or phrase shall have a corresponding meaning.

1.3 Extended Meanings

In this Agreement words importing the singular number only include the plural and vice versa, words importing any gender include all genders and words importing persons include all Persons.

1.4 Accounting Terms

All accounting terms not otherwise defined in this Agreement shall have the meanings assigned to them in accordance with GAAP, except where inappropriate in the context in which such accounting term is used in this Agreement.

1.5 Industry Terms

Unless expressly defined herein, words having well known technical or trade meanings within the electricity distribution and related industries shall be so construed.

1.6 Schedules

The following are the Schedules attached to and forming part of this Agreement:

Schedule "A" – Statement of Work.

ARTICLE 2 - INTERPRETATION

2.1 Recitals

The recitals to this Agreement are intended to be a general introduction to this Agreement and are not intended to expand the scope of the Parties' obligations hereunder or to alter the plain meaning of the terms and conditions of this Agreement.

2.2 Entire Agreement and Paramountcy

This Agreement, together with all Schedules attached hereto and any agreements and other documents to be delivered pursuant to this Agreement (including all duly executed SOWs), constitute the complete agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior agreements and understandings. In the event of any conflict or

inconsistency between the terms of this Agreement and any SOW, such conflict or inconsistency shall be resolved according to the following order of paramountcy:

(a) This Agreement; and

(b) The SOW.

2.3 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in the Province of Ontario and shall be treated in all respects as an Ontario contract.

2.4 Legislation, Regulations and Rules

Any reference in this Agreement to all or any part of any statute, regulation, rule or other Laws shall, unless otherwise expressly stated herein, be a reference to the statute, regulation, rule, or other Laws or part thereof, as amended from time to time

2.5 Headings and Division of Agreement

The inclusion of headings and a table of contents in this Agreement and the division of this Agreement into Articles, Sections and Subsections are for convenience of reference only and shall not affect or be considered to affect the construction or interpretation of the provisions of this Agreement. References in this Agreement or in a Schedule to this Agreement to an Article, Section or Subsection shall mean a reference to an Article, Section or Subsection within the body of this Agreement. References herein to an item without identifying the Section in which the item is contained shall mean a reference to the item in the same Section where the reference is made

2.6 "Hereof" Etc.

The terms "**this Agreement**", "**hereof**", "**hereunder**", "**herein**", "**hereto**" and similar expressions refer to this Agreement in its entirety and not to any particular Article, Section, Subsection or other portion of this Agreement.

2.7 Currency

All references in this Agreement to money shall denote the lawful currency of Canada, except as may be otherwise expressly stated.

2.8 Waiver of Contra Proferentem Rule

Each Party acknowledges and agrees that it has participated in the drafting of this Agreement and, accordingly, this Agreement shall not be interpreted either *more* or less favorably in favor of any Party by virtue of the fact that one Party or its counsel has been principally responsible for the drafting of all or a portion of this Agreement.

ARTICLE 3 - CONTROL ROOM SERVICES

3.1 Services

(a) *The Services.* The Service Provider shall supply the services (the "**Services**") and provide the deliverables (the "**Deliverables**") as described in one or more Statements of Work (each a "**SOW**") signed by the Parties in the form attached hereto as Schedule "A".

(b) *Transition.* The Parties shall mutually undertake the activities required to transfer responsibility and accountability for the provision of the Services and Deliverables as more fully specified in the applicable SOW.

(c) *Implementation.* The Service Provider shall use commercially reasonable efforts to ensure the orderly and timely provision of the Services and Deliverables contemplated herein. Service Recipient will perform those tasks and fulfill those responsibilities specified in the SOW (the "**Service Recipient Responsibilities**"). Service Recipient understands that Service Provider's performance is dependent upon Service Recipient's performance of the Service Recipient Responsibilities and the issuance of decisions and approvals in a timely manner.

(d) *Fees.* In consideration for the Services and Deliverables to be provided for a particular SOW, Service Recipient agrees to pay to the Service Provider the fees payable as set forth in the applicable SOW.

(e) *Project Manager.* In respect of each SOW, the Parties each agree to designate an individual from their respective organizations with adequate authority and full technical competence to deal with matters relating to the provision of the Services and Deliverables (each, being a "**Project Manager**"). These individuals will, on behalf of their respective Parties, manage day-to-day needs and issues arising from performance of the Services and provision of the Deliverables.

(f) *Experience and Qualifications.* The Service Provider shall ensure that the Service Personnel are, at all times during the Term, appropriately qualified and experienced to provide the Services. Service Provider shall be responsible for the management and supervision of, and the performance by, the Service Personnel.

(g) *Inspection.* No more than once per calendar year, the Service Recipient and its Representatives shall have the right from time to time to inspect the Control Room on not less than two (2) Business Days' prior written notice during regular business hours.

(h) *Subcontracting.* The Service Provider shall not subcontract or delegate any of its obligations hereunder to any third party without the prior written consent of the Service Recipient, such consent not to be unreasonably withheld or delayed. In the event that the Service Recipient's approves any such subcontracting, the Service Provider shall remain liable for all of its obligations hereunder and shall be liable for the acts and omissions of any subcontractor.

(i) *Compliance with Applicable Laws.* The Service Provider's performance of the Services shall at all times be in accordance with all applicable Laws, industry standards and Good Engineering and Operating Practices.

3.2 Seconded Personnel

(a) *Seconded Personnel.* The Service Provider and the Service Recipient agree that certain employees of Service Recipient (the "**Seconded Personnel**") may, from time to time, in the Service Recipient's sole and unfettered discretion, be placed on secondment to the Service Provider from the Service Recipient for the purpose of working in the Control Room and providing the Services under the direction and control of the Service Provider. In such circumstances, the Service Provider and Service Recipient shall enter into a separate agreement with respect to any such secondment, as needed.

(b) *Experience and Qualifications.* The Service Recipient shall ensure that any Seconded Personnel provided by it to the Service Provider are appropriately qualified and experienced. The Service Recipient shall ensure that its Seconded Personnel shall comply with all of the Service Provider's reasonable practices, rules and regulations (including its data security, privacy, safety and security procedures) when performing Services.

3.3 Conflicts of Interest and Release of Service Personnel

(a) The Parties acknowledge that the Service Personnel and the Seconded Personnel may perceive, from time to time, that they may have a conflict of interest with respect to matters which may involve business relations between the Service Provider and the Service Recipient. Any such conflict of interest shall be resolved in accordance with the terms and conditions of this section.

(b) The Service Recipient agrees that, insofar as this Agreement is concerned, any duties of care, allegiance, fidelity or employment obligation that the Service Personnel or the Seconded Personnel may owe, or believe they owe, to the Service Provider directly regarding the day-to-day operation of the Control Room which is paramount to any duty of care, allegiance, fidelity or employment obligation that they may owe or believe they owe to the Service Recipient in relation to the day-to-day operation of the Control Room; provided, however, that for greater certainty, the foregoing shall not affect any duty of care, allegiance, fidelity or employment obligation which the Seconded Personnel, as the case may be, may owe to the Service Recipient (other than directly regarding the day-to-day operation of the Control Room) including, without limitation, any confidentiality and non-disclosure obligations which any Seconded Personnel has in favour of the Service Recipient.

(c) Accordingly, in each event of an unresolved conflict of interest in the obligations that any Service Personnel or Seconded Personnel owes to the Service Provider and the obligations they may owe, or believe that they may owe, to the Service

Recipient as a Control Room operator, they may be excused by the Service Provider from performing such obligations and the particular event shall be referred by the Service Provider to officers or employees of the Service Provider and officers or employees of the Service Recipient respectively, who do not have such a conflict, for resolution.

3.4 Indemnity

(a) Subject to Article 17, the Service Recipient hereby indemnifies and holds harmless the Service Provider and each of the Service Personnel from and against all losses, claims, demands, actions, causes of action, liability, damages, costs and expenses whatsoever that they may suffer or incur arising from or in connection with: (1) any breach or default of any of the Service Recipient's obligations pursuant to this Agreement or the SOW; (2) any act, omission, negligence or wilful misconduct by Service Recipient or Seconded Personnel in connection with the Services, this Agreement and/or any SOW; or (3) the acts, omissions, negligence or wilful misconduct in the performance by any Seconded Personnel of their responsibilities with respect to the Control Room or Services.

(b) Subject to Article 17, the Service Provider hereby indemnifies and holds harmless the Service Recipient and each of the Seconded Personnel from and against all losses, claims, demands, actions, causes of action, liability, damages, costs and expenses whatsoever that they may suffer or incur arising from or in connection with: (1) any breach or default of any of Service Provider's obligations pursuant to this Agreement or the SOW; (2) any act, omission, negligence or wilful misconduct by Service Provider or Service Personnel in connection with the Services, this Agreement and/or any SOW; or (3) the acts, omissions, negligence or wilful misconduct in the performance by any Service Personnel of their responsibilities with respect to the Control Room or Services.

3.5 Service Personnel Not Employees of Service Recipient

The Service Personnel are not, and shall in no event be considered to be, employees of the Service Recipient for the purposes of this Agreement. In no event shall the Service Recipient become obligated howsoever to pay, or make any contribution of any kind whatsoever to the Service Provider in respect of, the salaries, wages, benefits or other compensation payable, including all payments required under the *Workplace Safety and Insurance Act* (Ontario), by the Service Provider in respect of the Service Personnel. As between the Service Recipient and the Service Provider, the Service Provider will pay the employment and benefits compensation and pension contributions owing to the Service Personnel or which may be required to be deducted, remitted and/or paid to any Governmental Authority with respect to the Service Personnel, and the Service Provider shall indemnify and hold harmless the Service Recipient with respect to any claims, liabilities, damages, costs or expenses in connection therewith. In no event shall the use by the Service Recipient of the Services of the Control Room become the basis for any labour union or similar organization to become the bargaining agent for any employees of the Service Recipient.

3.6 Non-Solicitation

During the Term, and for a period of two (2) years following, neither Party shall hire, employ, retain or solicit any person (including Service Personnel or Seconded Personnel) who is an employee, officer, director or full-time independent contractor of the other Party and who, but for this Agreement, would otherwise be unknown to the Party. The Parties acknowledge that, in view of the recruitment difficulties and costs of training staff in the electricity distribution industry, this restriction is reasonable, however exceptions could be possible through prior notification and communication between the Parties.

3.7 Seconded Personnel Not Employees of Service Provider

The Seconded Personnel are not, and shall in no event be considered to be, employees of the Service Provider. In no event shall the Service Provider become obligated howsoever to pay, or make any contribution, of any kind whatsoever, to the Service Recipient in respect of, the salaries, wages, benefits or other compensation payable, including all payments required under the *Workplace Safety and Insurance Act* (Ontario), by the Service Recipient in respect of the Seconded Personnel. In no event shall the use by the Service Provider of the services of any Seconded Personnel become the basis for any labour union or similar organization to become the bargaining agent for any employees of the Service Provider.

ARTICLE 4 – CHANGE ORDER PROCESS

4.1 Change Order Process

Either Party may, at any time and from time to time, request in writing additions, deletions, amendments or any other changes to a SOW, including to the specifications applicable to the Services or the Deliverables (each, a "**Change**"). The request ("**Change Request**") shall include a reasonably detailed description of the scope and nature of the requested Change, and in the case of a Change Request by Service Provider, the fees, expenses and other changes to the SOW necessitated by the Change. Any Change Request shall be made on the SOW Change Request Form annexed to each SOW and forwarded by e-mail to the Project Manager of the applicable Party as defined in the SOW. Unless a different Change Order Process is set forth in the applicable SOW, the receiving Party shall respond within ten (10) Business Days of the receipt. No Change shall come into effect unless and until it has been approved by Service Provider and Service Recipient in writing in accordance with this Section 4.1 (the "**Change Order Process**").

ARTICLE 5- TAXES

5.1 Taxes

The amounts stated in this Agreement to be payable by the Service Recipient to the Service Provider pursuant to this Agreement do not include any taxes. The Service Recipient shall be responsible for the payment of (and shall pay or reimburse the Service Provider if such tax is paid by the Service Provider) all Goods and Services Taxes, Harmonized Sales Tax, Provincial Sales Tax and other taxes of a similar nature applicable to, or arising from the fees or

other amounts payable to the Service Provider by the Service Recipient pursuant to this Agreement.

ARTICLE 6 - INSURANCE

6.1 Maintenance

During the term of this Agreement and at its sole expense, each Party shall maintain commercial general liability insurance which shall have a minimum limit of liability of five million dollars ($5,000,000.00) per occurrence and shall include premises and operations liability, contractor's contingency liability with respect to the operations of subcontractors, completed operations liability and contractual liability and shall name the Service Provider (in the case of the Service Recipient) and the Service Recipient (in the case of the Service Provider) as co-insured.

ARTICLE 7 - PAYMENTS INTEREST, ADJUSTMENTS AND SET OFF

7.1 Payments

Service Recipient shall pay Service Provider the invoiced amount within thirty (30) days of receipt of such invoice. If Service Recipient disputes that a particular amount is owing, Service Recipient shall promptly pay the amounts not in dispute and the Parties shall, in good faith, consider resolving any disputed amounts. If the Parties cannot resolve whether a specific amount is owing within 10 days, either Party can escalate the matter to the chief executive officers of both organizations for resolution.

7.2 Interest

All amounts not paid by a Party hereto within ten (10) days after demand for the payment thereof shall bear interest until paid at the rate of 1.5% per month (18% per annum) and all such interest payable by a Party hereto shall be paid at the same time as the amount to which such interest relates is paid.

7.3 Set-Off

A Party obliged to make a payment to another Party, pursuant to this Agreement or a SOW, may set off against the amount otherwise payable any amount to which the first Party is then entitled to receive from the other Party, pursuant to this Agreement or a SOW, and to remit to the other Party the amount by which the amount owed by the first Party to the other Party, pursuant to this Agreement or a SOW, exceeds the amount owed to it by the other Party, pursuant to this Agreement or a SOW, if any, provided the first Party informs the other Party of it having so done prior to the date upon which the other Party is obliged to remit to the first Party the amount which the first Party has set off against the amount otherwise payable by the first Party to the other Party.

ARTICLE 8 - STANDARDS

8.1 Standard of Performance

Except as specifically set forth herein, the Service Provider shall provide the Services in accordance with applicable Laws, Good Engineering and Operating Practices and industry standards and shall comply with the applicable policies and procedures set out in the applicable SOW.

ARTICLE 9 - TERM

9.1 Original Term

Subject to Sections 9.2 and 9.3, the term of this Agreement shall begin on the date of this Agreement and will, unless otherwise specified in the applicable SOW, terminate on the date which is three (3) years after the date of this Agreement, such period being referred to as the "**Original Term**".

9.2 Extension of Original Term

Unless a Party gives the other Party written notice of termination of this Agreement at least ninety (90) days prior to the end of the Original Term or of any Extension Term, as the case may be, this Agreement shall automatically be extended at the end of the Original Term or of any such Extension Term, as the case may be, for a one (1) year period upon the same terms and conditions in effect under this Agreement at the end of the Original Term or the end of the Extension Term, as the case may be (each such one (1) year period, an "Extension Term").

9.3 Termination by Agreement

This Agreement may be terminated as follows:

(a) at any time by the written agreement of both Parties, a matter not to be determined pursuant to the Dispute Resolution Provisions; or

(b) in accordance with the terms of Section 12.2(a)(iii).

ARTICLE 10 - TERMINATION

10.1 Expiry of Term

Upon expiration or termination of this Agreement as between the Service Provider and Service Recipient the rights granted by each such Party to the other such Party shall immediately terminate and neither Party shall have any further obligations to the other except:

(i) to finally settle accounts between the Parties regarding the activities of the Parties during the Term of this Agreement;

(ii) regarding those matters that this Agreement provides will be done upon expiration or termination of this Agreement; and

(iii) as expressly otherwise provided in this Agreement.

10.2 Removal

Promptly upon termination or expiration of this Agreement for any reason as between the Service Provider and Service Recipient, each such Party shall, at its sole cost and expense, remove all of its equipment, facilities and other associated property from the property and facilities of the other Party under the supervision of such other Party should such other Party desire. Should a Party fail to effect such removal within thirty (30) days following termination or expiration of this Agreement, the equipment, facilities and other associated property of the Party shall be deemed abandoned and may be removed by the other Party at the expense of the Party whose property is removed.

10.3 Effect of Termination

Notwithstanding the foregoing or any other provision of this Agreement, no termination or expiration of this Agreement as between the Service Provider and the Service Recipient shall effect the rights or obligations of either such Party:

(i) with respect to any prior breach or any other existing defaults pursuant to this Agreement, of the obligation to make any payment hereunder attributable to the period prior to the date of termination or expiration; or

(ii) with respect to those provisions of this Agreement which survive the termination or expiry of the Term of the Agreement by virtue of the express provisions of this Agreement or necessary implication based upon the terms of this Agreement or the course of dealing between the Parties to the Agreement.

ARTICLE 11 - FORCE MAJEURE

11.1 Generally

No Party shall be liable to the other Party for any default in performance or compliance with provisions of this Agreement if such default is due to a Force Majeure. Notwithstanding anything in the preceding sentence of this Section, none of the foregoing shall excuse any default in payment of any amount payable pursuant to this Agreement.

ARTICLE 12 - DEFAULT

12.1 Events of Default

A Party shall be in default under this Agreement (a "**Default**") if:

(i) it fails to pay any amount which is due and unpaid within thirty (30) days of receipt from the Party to which the amount is due of a written notice (a "**Payment Notice**") that the amount is due and unpaid;

(ii) the other Party gives it written notice that it has given it three (3) or more Payment Notices in any given twelve (12) month period;

(iii) in the case of any breach of this Agreement other than as provided in paragraph (i) and (ii), it fails to cure such breach within thirty (30) days after written notice specifying such breach;

(iv) it fails or ceases to hold a valid licence, permit, certificate, registration, authorization, consent or approval issued by a Governmental Authority where such failure or cessation results in or could reasonably be expected to result in a Material Adverse Effect on the Party and it fails to cure such breach within thirty (30) days after receiving written notice specifying such breach;

(v) it breaches any Law where such breach results in or could reasonably be expected to result in a Material Adverse Effect on the Party and it fails to cure such breach within thirty (30) days after notice specifying such breach;

(vi) it becomes insolvent or bankrupt or any bankruptcy, reorganization, debt arrangement or other proceeding under any bankruptcy or insolvency law or any dissolution or liquidation proceeding being instituted by or against it; or

(vii) the private or court appointment of a receiver or receiver and manager or officer with similar powers over any part of its property.

12.2 Remedies

(a) In the event of a Default by a Party, the non-defaulting Party may avail itself of one or more of the following remedies as against the defaulting Party:

(i) take such action or actions as it determines reasonable or necessary, in its sole discretion, to correct the Default; or

(ii) pursue any remedies it may have under applicable Laws or principles of equity, including specific performance; or

(iii) terminate this Agreement with respect to the defaulting Party upon written notice to the defaulting Party.

(b) Except as set forth to the contrary herein, any right or remedy of a Party hereto shall be cumulative and without prejudice to any other right or remedy, whether contained herein or not.

ARTICLE 13 - TRANSFER

13.1 Prohibition

Subject to Section 13.2, this Agreement may not be assigned, in whole or in part, by any Party without the prior written consent of the other Party. Subject to Section 3.1(h) above, each Party shall have the right to arbitrarily withhold, delay or condition such consent.

13.2 Exception re: Security

Notwithstanding any other provision of this Agreement, a Party may assign this Agreement as collateral security to a lender as part of a bona fide financing transaction with the consent of the other Parties, which consent may not be unreasonably withheld, conditional or delayed.

13.3 Change in Control

In the event of a change in Control of a Party, the other Party shall have the right to terminate this Agreement as between such other Party and the Party undergoing the change at Control by giving Notice of termination to the Party who has had a change in Control within one (1) year after such change of Control and such Notice shall provide for a six (6) month notice of termination.

ARTICLE 14 - UPGRADES

14.1 New Arrangements

From time to time the Service Provider may propose to improve or upgrade the capabilities or physical assets of the Control Room (an "**Upgrade**") and may propose by Notice by way of the Change Order Process to the Service Recipient that they share in the cost thereof, including capital costs. The Service Recipient may (but shall not be obligated), following appropriate consultations and receipt of all relevant information, agree to share such costs or decline in its sole and absolute discretion in accordance with the Change Order Process. The Parties may, by way of separate agreement, enter into arrangements regarding such cost sharing and any reduction or change in the costs of the Services for the Service Recipient or other appropriate arrangements with respect to the Upgrades.

14.2 Collaboration

(a) Because the effort of settling and moving forward with agreements, if any, related to any Upgrade will involve business risks and necessarily will require the full co-operation of the Parties, the Parties agree to work collaboratively, and in good faith with one another, to proceed with the development, commissioning, operation and maintenance of the Control Room.

(b) Each Party shall respond in a timely manner to the other Party's requests for data and information (including, without limitation, operating procedures, engineering, management, technical and cost information, as well as exhibits, designs, technical data, technical know-how, and plans) only as may be deemed reasonably necessary or desirable to facilitate the successful completion and subsequent operation of the Control Room and delivery of the Services.

ARTICLE 15 - REPRESENTATIONS AND CONDITIONS PRECEDENT

15.1 Mutual Representations

Each Party represents to the other, while acknowledging that such representations are conditions precedent to the entering into of this Agreement:

(a) it is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation;

(b) it has all requisite power and authority to enter into this Agreement and all agreements contemplated in connection therewith and to carry out all related transactions, including having obtained any requisite shareholder approvals;

(c) no consents or approvals are required from any Governmental Authority or other person or entity for it to enter into this Agreement; and

(d) its execution and delivery of this Agreement, and the consummation of the transactions contemplated hereby does not conflict with or violate the provisions of any agreement or instrument by which it is bound (including any shareholders' agreement) or by any Law to which it is subject.

OTHER THAN AS EXPRESSLY PROVIDED IN THIS AGREEMENT, EACH PARTY MAKES NO WARRANTIES OR CONDITIONS RESPECTING THE SERVICES OR ANY EQUIPMENT, SOFTWARE OR LABOUR USED IN CONNECTION WITH THE SERVICES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 16- GENERAL ADMINISTRATION

16.1 Acknowledgment

The Parties acknowledge that the successful delivery of the Services and the provision of the Seconded Personnel shall require their full and mutual good faith cooperation, including, without limitation, the fulfillment by each Party of its obligations under this Agreement and any applicable SOW.

16.2 Books and Records

(a) The Service Provider shall cause to be maintained accurate and complete books and records (the "**Records**") of the Control Room showing all:

(i) costs, expenditures, sales, receipts, assets and liabilities;

(ii) the contributions by and in favour of each of the Parties, if applicable;

and such other records as may be necessary, convenient or incidental in relation to the foregoing.

16.3 Right to Audit and Annual Account

(a) The Service Recipient shall have the right to audit the Records at its own expense, and such Party will be provided reasonable access to such Records by the Service Provider during regular business hours on not less than two (2)Business Days' prior written notice.

(b) The Service Recipient shall be entitled, within ninety (90) days after the end of the Service Provider's fiscal year, to an accurate account, setting forth all information and data with respect to business transactions affected by or involving the Control Room during such fiscal year.

16.4 Maintenance of Books and Records

All books and records required to be kept hereunder shall be retained by the Service Provider for a period of time as outlined in the Service Provider's retention schedule.

ARTICLE 17 - EXCLUSIONS AND LIMIT OF LIABILITY

17.1 Limitation of Liability

Notwithstanding anything to the contrary contained in this Agreement, the aggregate liability of each Party and its respective employees, directors and officers relating to, or arising out of, this Agreement, a SOW and/or the Services whether in contract, tort or otherwise, shall not exceed the greater of the total amount of insurance proceeds which such Party actually recovers, or would have recovered, from its insurers in connection with any claim if it complied with its obligations to maintain insurance as required in Section 6.1 hereof.

ARTICLE 18 - DISPUTE RESOLUTION PROVISIONS

18.1 Generally

Should any dispute or disagreement of any kind arise at any time between any Parties with respect to the interpretation or application of this Agreement or the carrying out by a Party of its obligations hereunder, the Parties agree that good faith negotiations shall take place between the Parties in respect of which the dispute has arisen with the objective of resolving such dispute or disagreement, and the dispute or disagreement shall thereafter be referred to the Chief Executive Officers of disputing Parties who shall attempt in good faith to resolve such dispute or disagreement. If within the next following thirty (30) day period, the dispute or disagreement has not been resolved to the satisfaction of such Parties, any Party to whose satisfaction such dispute or disagreement has not been resolved (the "**Aggrieved Party**") may refer the dispute or disagreement to binding arbitration pursuant to the *Arbitration Act, 1991* (Ontario) in accordance with this Section by notice in writing to the other disputing Party. Within ten (10) days of giving of such notice of arbitration, the disputing Parties shall jointly select a single arbitrator who shall be independent of and acceptable to the Parties. In the event that the disputing Parties are unable to agree upon a suitable arbitrator within such ten (10) day period, the arbitrator shall be selected by a Justice of the Ontario Superior Court of Justice upon application by any such disputing Party.

18.2 Fees and Expenses

The fees and expenses of the arbitrator shall be split equally between the Parties to the dispute.

18.3 Procedures

The arbitrator shall fix the appropriate procedures for the arbitration which may include an oral hearing. Unless the disputing Parties wish to mutually set the points at issue, the arbitrator shall order the Parties to file statements pursuant to S. 25 of the *Arbitration Act, 1991*. The arbitrator may order interest on any award and the arbitrator may award costs to either disputing Party. In the absence of any such award of costs, each of the disputing Parties shall bear its own costs of any arbitration pursuant to this Section. The arbitrator shall be strictly bound by legal principles and the nature of this Agreement in rendering his decision.

18.4 Private Arbitration

The arbitration shall be completely private (subject to the regulatory requirements of any Party or its Affiliates as a public company or regulated company) and shall take place in Toronto, Ontario unless the Parties agree otherwise.

18.5 Arbitration Binding

The Parties agree that good faith negotiations and arbitration shall all be without recourse to the Courts and that the award of the arbitrator or arbitrators shall be final and binding, except that:

(i) either disputing Party may appeal an arbitration award to the Courts of the Province of Ontario on a question of law; and

(ii) either disputing Party may apply to a court of competent jurisdiction for an interim measure of protection or to enforce the award of the arbitration.

ARTICLE 19 - INTELLECTUAL PROPERTY

19.1 No Transfer of Rights

Except as otherwise expressly provided herein, this Agreement does not convey to a Party any right, title, estate or interest whatsoever in or to any of the copyrights, patent rights and other intellectual property rights of the other Party hereto including any rights regarding any Party's Control Room, SCADA system, distribution system maps and drawings or other intellectual property rights used to operate any electrical system, grid, computer system or equipment; provided that the Service Recipient hereby grants to the Service Provider for the Term of this Agreement and any renewals, a non-transferrable licence to use any and all intellectual property rights owned or licenced by the Service Recipient which may be necessary or desirable to enable the Service Provider to operate the Control Room for the benefit of the Service Recipient, all as appropriate in support of the Parties mutual co-operation and the spirit of this Agreement.

19.2 Jointly Developed Rights

The Parties shall own jointly and equally any copyrights, patent rights and other intellectual property rights that are identified in the SOW and developed by the Parties pursuant to this Agreement. Should a Party wish to sell any or all of its interest in any jointly owned copyrights, patent rights and other intellectual property rights then the other Party shall have a right of first offer with respect to the interests wished to be sold, the terms of which shall be settled by arbitration pursuant to the Dispute Resolution Provisions in the event that such terms cannot be agreed by the Parties.

19.3 Logos

No Party shall use the name, logo, trade dress, trademarks or other distinguishing characteristics of any other Party; (i) without the prior written consent of that other Party; and (ii) in the event that a Party consents to such use by the other Party, that other Party must not undertake such use in a manner which might reasonably be construed as misleading to consumers as to the distinction between the Service Provider and Service Recipient.

ARTICLE 20 - NON-DISCLOSURE AND PERSONAL INFORMATION

20.1 Obligations Arising From Disclosure

During the course of the relationship established between the Parties pursuant to this Agreement, each Party may disclose to another Party or permit another Party access to certain Information, either directly or indirectly. Alternatively, a Party may learn of Information independent of any disclosure by another Party. Each disclosure of Information will be made or permitted upon the basis of, and all Information of the other Party otherwise learned by a Party is received on the basis of, the confidential relationship established between the Parties by this Agreement and upon each Party's agreement that, unless otherwise specifically authorized in writing by the other, it will:

(i) use the Information solely for the purpose for which it was disclosed;

(ii) take all reasonable care and precautions, at least as great as the care and precautions that it takes to protect its own confidential or proprietary information, to keep the Information confidential;

(iii) not disclose, or allow the disclosure of, any Information before or after the termination of this Agreement, except as permitted by this Agreement;

(iv) restrict disclosure of the Information only to its employees or other personnel, advisors, consultants and agents (collectively, "**Representatives**") with a need to know the Information and who are bound to maintain the Information confidential;

(v) notify each Representative that receives any Information of the requirements of this Agreement and of the restrictions on use and disclosure of Information imposed by this Agreement;

(vi) ensure that no Representative breaches or causes or allows to be breached any of the receiving Party's obligations hereunder and direct each Representative to abide by the terms of this Agreement;

(vii) not use, or allow to be used, howsoever any Information to compete with or in a manner detrimental or adverse to the commercial interests of the disclosing Party;

(viii) except in connection with the purpose for which Information is disclosed, not copy or duplicate such Information or knowingly allow anyone else to copy or duplicate such Information; and

(ix) promptly return to the disclosing Party, upon its request made before or after termination or expiration of this Agreement, or certify as destroyed, the Information in whatever form and regardless of whether such Information was made or compiled by the receiving Party or furnished by the disclosing Party, together with all copies thereof, howsoever made, except that where deletion of Information is necessary to fulfill this requirement, it shall be performed within the confines afforded by existing technology limitations, and shall exclude archival or long term back up storage provided, however, that any such archival or long term back up storage of Information shall continue to be subject to the terms and conditions of this Agreement and, if retrieved, shall be deleted and shall not be used or disclosed.

20.2 Exceptions

The confidentiality and non-disclosure obligations under Section 20.1 of this Agreement shall not apply to any Information that the receiving Party can demonstrate:

(i) became public and generally known through no act or omission of the receiving Party or its Representatives;

(ii) was disclosed on a non-confidential basis in good faith to the receiving Party by a third party which the receiving Party had reasonable grounds to believe had legitimate possession thereof and the right to make such disclosure;

(iii) was in legitimate possession of the receiving Party prior to its disclosure by the disclosing Party to the receiving Party;

(iv) that the receiving Party is required by law, judicial or arbitration process to disclose, provided that, prior to disclosing any Information, the receiving Party shall promptly notify the disclosing Party of such requirement to disclose and take such steps, at the disclosing Party's cost, as are reasonably requested, and cooperate with the disclosing Party, to lawfully limit such disclosure and to maintain the confidentiality of the

Information in the hands of the receiving Party, including obtaining appropriate protective orders; or

(v) is Information independently developed by the receiving Party as evidenced by the written records of the receiving Party and without access to the Information of the disclosing Party; or

(vi) is approved in writing by the disclosing Party for release or other use by the receiving Party according to the terms set out in such written approval.

The burden of demonstrating the applicability of any exception in this Section shall be upon the Party seeking to rely upon any such exception.

20.3 Discretionary Disclosure

Each Party acknowledges that, notwithstanding the execution of this Agreement, each Party maintains the sole and absolute discretion to determine what, if any, Information it will release to the other Parties. The receiving Party acknowledges that, subject to Section 20.2, the Information disclosed in any manner whatsoever is proprietary to the disclosing Party.

20.4 Privacy and Security of Personal Information

The Parties, their employees, agents, subcontractors and any authorized third parties shall comply with all applicable Laws, including, without limitation, municipal, provincial, and federal laws and regulations governing the privacy and security of Personal Information including the *Municipal Freedom of Information and Protection of Privacy Act*, Ontario. Each Party shall treat any Personal Information received from the other Party, including without limitation any Personal Information of any customers of such Party, as Information of the disclosing Party which shall be subject to the terms and conditions of this Article 20 and the receiving Party agrees to comply with all applicable Laws governing the privacy and security of Personal Information.

20.5 No Warranty

Each Party warrants that it has all requisite authorization to enter into this Agreement and that it has the right to disclose any Information disclosed to the other Parties. Each Party acknowledges and understands that the other Parties make no other representation or warranty in relation to any Information disclosed including, without limiting the generality of the foregoing, as to its adequacy, accuracy, or suitability for any purpose and, except as expressly agreed in writing, shall not be liable for any loss or damage arising from the use of the Information howsoever caused.

20.6 Intellectual Property

Each Party acknowledges and agrees that, subject to Section 20.2, all Information shall be owned solely by the disclosing Party. Each Party further agrees that nothing contained in this Agreement shall be construed as granting any rights, by licence or otherwise, under any intellectual property rights in, or concerning any of, the disclosing Party's Information.

20.7 Indemnity

The receiving Party shall indemnify and save harmless the disclosing Party from and against all losses, liabilities, damages, costs and expenses (including reasonable legal fees and disbursements) suffered or incurred by the disclosing Party as a result of a breach of a term of Article 20 of this Agreement by the receiving Party or its Representatives.

20.8 Equitable Remedies

In the event of a breach or threatened breach of any term of this Article 20, the receiving Party agrees that the harm suffered or that may be suffered by the disclosing Party would not be compensable by monetary damages alone and, accordingly, that the disclosing Party shall, in addition to other available legal or equitable remedies, be entitled to seek the issuance of immediate injunctive relief, specific performance and any other remedies in law or equity for such breach or threatened breach of the receiving Party's obligations pursuant to this Article 20 without the obligation to post security. The receiving Party shall reimburse the disclosing Party for all reasonable costs and expenses, including reasonable legal fees and disbursements, incurred by the disclosing Party in attempting to enforce the obligations under this Article 20 of the receiving Party or its Representatives.

20.9 Independent Activities

Each Party, as a disclosing Party, understands that the receiving Party may currently or in the future be developing information internally, or receiving information from a third party that may be similar to the disclosing Party's Information. Accordingly, nothing in this Agreement shall be construed as a representation or warranty that the receiving Party will not develop products or services, or have products or services developed for it, or enter into any arrangement that, without violation of any of the provisions of this Agreement, compete with the products or services which are contemplated by, or which are the subject of, the disclosing Party's Information or the purpose for which Information was disclosed.

20.10 No Implied Obligations

Neither this Agreement, nor the disclosure or receipt of any Information, shall imply or confirm any intention to enter into any contract or other business relationship, or to purchase any product or service, by any of the Parties or any commitment by any of the Parties with respect to the present or future development, production or distribution of any product or service.

20.11 Termination and Survival

In the event that this Agreement is terminated or expires, this Agreement shall not apply to any Information disclosed after such termination or expiration but, notwithstanding the termination or expiration of this Agreement, shall continue to apply to any and all Information disclosed prior to the termination or expiration of this Agreement.

ARTICLE 21- NOTICES

21.1 Addresses

All notices and other communications from one Party hereto to another (a "**Notice**") that are required or permitted under this Agreement shall be in writing and shall be delivered by hand or by courier, transmitted by facsimile, sent by mail or sent by e-mail to the Party hereto to whom it is to be given at the address for such Party below:

(i) to Services Provider

Postal Address:	395 Southgate Drive, Guelph, ON N1G 4Y1
Attention:	Kazi Marouf
Fax. Number:	(519) 836-1055
E-mail Address:	kmarouf@guelphhydro.com

(ii) to Service Recipient

Postal Address:	8069 Lawson Road, Milton, ON L9T 5C4
Attention:	Frank Lasowski
Fax Number:	(905) 876-2044
E-mail Address:	franklasowski@miltonhydro.com

21.2 Time of Receipt

A Notice will be received for the purposes of this Agreement when actually received by intended recipient thereof. Notices shall be deemed to have been received in the following circumstances:

(i) when transmitted by facsimile or e-mail transmission, at 10:00 in the forenoon (local time of the recipient) on the next Business Day following the day upon which the Notice is transmitted, provided that another copy of the Notice is received or deemed received by the recipient by delivery, courier or post within ten days of the date of deemed receipt of the Notice by facsimile or e-mail transmission; and

(ii) by mail, on the fifth Business Day (days upon which there is an interruption of postal service in Canada excepted) following the day on which the Notice was mailed.

21.3 Change of Address

A Party hereto may change its address for the purposes of Section 21.1 by giving Notice to the other Party hereto and in such event all Notices thereafter given to that Party shall be to such changed address.

ARTICLE 22- GENERAL

22.1 Prior Agreements

This Agreement supersedes and terminates all prior agreements, understandings or writings between the Parties hereto and their predecessors, whether written or oral and whether legally enforceable or not, in connection with the matters dealt with in this Agreement.

22.2 Inurement

This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors, permitted assigns and, as provided for herein, receivers, receiver managers and trustees.

22.3 Relationship of Parties

The relationship between the Parties hereto shall not be that of partners, agents, or joint ventures for one another, and nothing contained in this Agreement shall be deemed to constitute a partnership or agency or joint venture agreement between them for any purposes, including federal or provincial income tax purposes. The Parties hereto, in performing any of their obligations hereunder, shall be independent contractors or independent parties and shall discharge their contractual obligations at their own risk subject, however, to the terms and conditions of this Agreement.

22.4 Waiver in Writing

No waiver by a Party hereto of any provision, or the breach of any provision, of this Agreement shall be effective unless it is contained in a written instrument signed by authorized officers or representatives of the Parties hereto. Such written waiver shall affect only the matter specifically identified in the instrument granting the waiver and shall not extend to any other matter, provision or breach.

22.5 Delay Not Waiver

The failure of a Party hereto to give notice to any other Party hereto or to take any other steps in exercising any right, or in respect of the breach or nonfulfillment of any provision of this Agreement, shall not operate as a waiver of that right, breach or provision nor shall any single or partial exercise of any right preclude any other or future exercise of that right or the exercise of any other right, whether in law or in equity or otherwise.

22.6 Acceptance of Payment Not Waiver

Acceptance of payment by a Party hereto after the breach or nonfulfillment of any provision of this Agreement by another Party shall not constitute a waiver of the provisions of this Agreement, other than any breach cured by such payment.

22.7 Amendments

This Agreement may only be amended by a written agreement executed on behalf of the Parties hereto by their duly authorized representatives in such regards.

22.8 Time of the Essence

Time shall be of the essence of this Agreement.

22.9 Further Assurances

Each of the Parties hereto shall at its own cost and expense, from time to time and without further consideration, execute or cause to be executed all documents and shall take or refrain from taking all actions which are reasonably necessary or reasonably desirable to give effect to the provisions of this Agreement.

22.10 Severability

In the event that any provision of this Agreement shall be adjudged to be invalid for any reason whatsoever, such invalidity shall not affect the operation of any other provision of this Agreement and such invalid provision shall be deemed to have been deleted from this Agreement.

22.11 Use of Name

Each Party hereto agrees that it will not use, suffer or permit to be used, directly or indirectly, the name of any other Party hereto for any purpose whatsoever without, in each instance, first obtaining the written consent of such other Party.

22.12 No Third Party Beneficiaries

Except as otherwise expressly provided in this Agreement, nothing in this Agreement shall entitle any Person other than the Parties and their respective successors to any claim, cause of action, remedy or right of any kind in respect of this Agreement or the subject matter of this Agreement.

22.13 Attornment

Subject to Article 18, each Party irrevocably submits to and accepts the jurisdiction of the courts of the Province of Ontario, Canada and all courts of appeal therefrom as regards any legal proceedings relative to this Agreement. Each Party irrevocably waives, to the fullest extent that it may effectively do so, the defense of an inconvenient forum to the maintenance in the courts of the Province of Ontario and all courts of appeal therefrom as regards any legal proceedings relative to this Agreement. Each of the Parties hereto agrees that a final judgment of the courts of the Province of Ontario, Canada or any court of appeal therefrom and in respect of which all appeal periods have expired without appeal shall be conclusive and may be enforced in other jurisdictions by legal proceedings on the judgment or in any other manner provided by law.

22.14 Good Faith

Each of the Parties hereto shall have a duty to act in good faith in the performance and enforcement of this Agreement. All actions, activities, consents, approvals and other undertakings of the Parties hereto shall be performed in a reasonable and timely manner.

22.15 Entire Agreement

This Agreement (including all Schedules and any SOWs hereto) states and comprises the entire agreement between the Parties hereto relative to the subject matter hereof. There is no representation, warranty or collateral agreement relating to this transaction except as expressly set forth herein.

22.16 Counterparts, Facsimile and Execution

(a) This Agreement and any amendment, supplement, restatement or termination of any provision of this Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered is an original but all of which taken together constitute one and the same instrument.

(b) This Agreement may be executed by facsimile or email and the facsimile or email execution pages will be binding upon the executing Party to the same extent as the original executed pages. The executing Party covenants to provide originals of the facsimile or email execution pages for insertion into the original Agreement in place of the facsimile or email pages.

22.17 Expenses

Except as expressly provided for in this Agreement, or the particular SOW, any and all expenses or liabilities reasonably incurred by a Party in fulfilling such Party's obligations hereunder shall be borne by the Party incurring such expense or liability.

IN WITNESS WHEREOF the Parties have executed and delivered this Agreement effective as of the date first above written.

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Per: _____
Name: Kazi Marouf
Title: Chief Operating Officer

Per: _____
Name: Pankaj Sardana
Title: Chief Financial Officer
I/We have the authority to bind the corporation

MILTON HYDRO DISTRIBUTION INC.

Per: _____
Name: Frank Lasowski
Title: Chief Executive Officer

Per: _____
Name: Mary-Jo Corkum
Title: VP Finance
I/We have the authority to bind the corporation

SCHEDULE "A"

STATEMENT OF WORK

Statement of Work #: 1

SOW Effective Date: [●]

This Statement of Work ("SOW") is entered into between Guelph Hydro Electric Systems Inc., a corporation incorporated under the laws of the Province of Ontario ("**Service Provider**"), and Milton Hydro Distribution Inc., a corporation incorporated under the laws of the Province of Ontario ("**Service Recipient**") (Service Recipient and Service Provider are collectively the "**Parties**", or each individually a "**Party**").

BACKGROUND:

A. The Parties have entered into a Control Room Services Agreement, with effective date **October 17, 2014** (the "**Master Agreement**"), with the objective of, amongst other matters, documenting the terms and conditions under which from time-to-time Service Recipient agrees to retain Service Provider to provide, and Service Provider agrees to provide, certain services and deliverables as detailed in one or more Statements of Work.

B. The Parties agree to the provision of Control Room Services with 24/7/365 monitoring based on a staffed control room 16 hours per weekday and on call System Control Operators ("SCOs") for after-hours coverage upon the terms and conditions of this SOW and the Master Agreement.

NOW THEREFORE, IN CONSIDERATION of the covenants, agreements and promises set forth herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Service Provider and Service Recipient agree as follows:

1. *Incorporation of Master Agreement.* The Parties agree that this SOW is entered into pursuant to the Master Agreement and is a SOW referred to in the Master Agreement. Accordingly, all of the terms and conditions of the Master Agreement are incorporated herein by reference.

2. *Term.* The term of this SOW shall commence on the SOW Effective Date and expire upon **[the completion of the Services to be provided hereunder / [date]]**, subject to early termination in accordance with the Master Agreement (the "**SOW Term**").

3. *Exhibits.* The attached Exhibits "A" through "D" shall form an integral part of this SOW.

4. *Services and Deliverables.* The specifications for the Services and Deliverables and applicable timelines for the provision of such Services and Deliverables shall be as described in Exhibit "A".

5. *Fees.* The fee for the Services and Deliverables shall be as described in Exhibit "B".

6. *Change Request.* The SOW Change Request Form is attached to this SOW as Exhibit "C".

7. *Service Recipient Responsibilities.* Service Recipient will perform the Service Recipient Responsibilities specified in Exhibit "D".

8. *Defined Terms.* All terms used in this SOW and not otherwise specifically defined herein shall have the meanings ascribed to them in the Master Agreement.

9. *Project Managers.* The following individuals shall act as their respective Party's Project Manager for the purposes of this SOW.

Service Provider		**Service Recipient**	
Name	**[Name]**	Name:	**[Name]**
Telephone:	**[Telephone]**	Telephone:	**[Telephone]**
Email:	**[Email]**	Email:	**[Email]**
Fax:	**[Fax]**	Fax:	**[Fax]**

IN WITNESS WHEREOF the Parties have executed this SOW with effect as of the SOW Effective Date.

- Per: _____
  Name: Kazi Marouf
  Title: Chief Operating Officer

Per: _____
Name: PRAKASH SRESHTHA
Title: CFO
I/We have the authority to bind the corporation

- Per: _____
  Name: FRANK LASOWSKI
  Title: CEO

Per: _____

Name: Mary Jo Corkum
Title: VP Finance
I/We have the authority to bind the corporation

EXHIBIT "A"

Services and Deliverables

1. Transition and Implementation

Timeline to Implement

Once the shared services terms have been finalized and an agreement is put in place, it is estimated that it will take approximately 12 weeks to achieve basic level control room operations services to Milton Hydro. Major milestones will include:

- Establishing the VPN SCADA connection,
- Establishing radio communications link,
- Physical copy of the Milton Hydro maps in place in the Services Provider Control Room
- Training for the Services Provider Operators on the Milton Hydro maps, distribution system and operating procedures
- Develop and Implement a change management plan for Milton Line and Supervisory staff including on site meetings to explain revised operating procedures.

This will enable Service Provider to very quickly begin issuing selected work protection, dispatching crews, and tracking trouble calls.

Milton Hydro agrees to provide the following resources to facilitate:

- Guelph SCO training/orientation as it relates to the Milton distribution system,
- Lines staff to be able to participate in Utility Work Protection Code refresher training, and
- IT support staff to facilitate the installation and commissioning of communications systems.

2. Control Room Services

Overview

Immediate

- 24/7/365 active system monitoring via 16 hour staffed control room day shift coverage and after hours on call System Control Operator (SCO) coverage.

- Access to advanced systems currently in operation within the control room and ongoing system enhancements including: issuing hold offs, operating map review and implementation, and truck dispatch communications

- Trained and experienced operator staff seasoned in coordinating both planned and unplanned outages, and accustomed to working with both Hydro One and the IESO

Ultimately – (which for clarity are not in-scope for this SOW)

- Outage management reporting both during and after system outage events.

- Work protection transition to exclusively issued permits and switching for all planned field work.

Service Provider Control Room background

Service Provider has a state of the art control room with 24/7/365 monitoring based on a staffed control room 16 hours per weekday and on call SCOs for after-hours coverage. A Siemens SCADA system monitors and controls roughly 60 distribution feeders, 100 remote controlled switches in conjunction with remote enable faulted circuit indicators, two municipal substations and four transmission connected stations, including the Guelph Hydro owned Arlen MTS.

There are currently three journeymen operators and two apprentices on staff, in addition to one supervisor who oversees control room operation in addition to looking after distribution automation and the smart metering/communication systems. Backup support includes GIS staff, a SCADA technician, Engineering, and Metering staff - depending on the situation and department needs.

Investments in excess of one million dollars have been made in the control room and system automation areas over the last few years including, SCADA system enhancements, GIS system integration including fully paperless operating maps, SCO workstation enhancements and video wall.

Utility Work Protection Code — Roles & Responsibilities

- **Controlling Authority** - Milton Hydro will authorize Service Provider as the Controlling Authority. This will enable Service Provider to issue supporting guarantees on behalf of Milton Hydro, as well as operate Milton Hydro equipment after hours in line with established procedures.

- **Issuing Authority** - Milton Hydro will authorize Service Provider as their issuing authority. Service Provider will ensure that the condition requested by the Milton Hydro applicant has been established. Service Provider is responsible for making effective and terminating the PC2 Work Permit or Supporting Guarantee and keeping a written log of all such events.

- **Establishing Authority** — this authority will be shared between Services Provider and Milton Hydro. Services Provider will be the authority to prepare the conditions for a

Work Permit or Supporting Guarantee by filling out the "**PC2**" and "**PC17A**" forms. Milton Hydro will then check and establish the conditions for said Work Permit or Supporting Guarantee.

Initial Expectations

Milton Hydro will be contacting the Service Provider's Control Room Operator via phone, IP radio, or email.

The Service Provider's Control Room will have an up to date physical paper or digital copy of the Milton distribution system maps as a starting point for operating purposes, with updates issued via email.

Service Provider has begun the process of upgrading the Milton Hydro GIS mapping system in preparation for operating map creation and roll-out (under separate contract).

Alarm enunciation from the Milton Hydro SCADA directly to the Service Provider's Operator via email will be established by Milton Hydro initially, to be replaced by an ICCP link to the Service Provider's SCADA at a later date.

Service Provider Service Model Scope

Monitoring

- Monitor SCADA
- Alarms
- Tagging
- Current and Voltage Levels
- Switch and Breaker Positions
- Communication Issues
- Load monitoring and coordination with Milton Hydro based on pre-defined load levels.

Communication and Reporting

- Integration into existing Emergency Power Outage Procedure including communication activities;
- Track Milton Hydro outage information
- Daily reporting directly to specific Milton Hydro employees with regards to emergency work and outstanding issues.

- Weekly interruption report with outage summaries (cause, duration, affected area, etc.).
- Monthly performance report with SAIDI, SAIFI, CAIDI, MAIFI, worst feeder, etc.

Work Protection and Switching Activities

- Service Provider will receive work protection requests via PCt forms that have been signed, scanned and emailed/faxed by Milton Hydro.
- Fill out the required PC2 and PC17A forms signed as "**prepared by**" Service Provider, then scan and email/fax back to Milton Hydro.
- Milton Hydro to review and sign both forms as "**checked by**" Milton Hydro, then scan and email/fax back to Service Provider.
- Milton Hydro to coordinate PCI 7A switching activities with Service Provider.
- Once Service Provider has the completed PC17A-form, PC2 form will be signed as "**issued by**" Service Provider, issue work protection and supporting guarantee as required.
- Record and track work permit holders.
- Retention and filing of all documents
- Switching Activities
    - Issue and Log remote hold offs when requested (both in field and Hydro One)
    - Perform remote switching (when enabled).
    - Keep a current record of system configuration when field changes are made.
    - Communicate with other Utilities as required.

Trouble Calls

- Receive trouble calls originating from the Milton Hydro service area
- Dispatch and coordinate crews during storms, emergency events and power outages
- Update Milton Hydro in real time on outage status
- Monitor vehicle GPS locations within the ESRI mapping system

Future Development Opportunities

- ICCP link - implementation plans and costs estimate required.

- Developing the Milton Hydro SCADA content in the Service Provider's SCADA - scope and costs estimate required.

- Integration of all GIS operating maps including updates, into Milton Hydro's dataset.

- Integration of Milton Hydro's smart meter and CIS data into GIS system providing accurate transformer loading, customer counts, and meter outage data via layers added to the ESRI operating map.

Service Level Targets

The Service Provider will use commercially reasonable efforts to provide the Control Room Services to the Service Recipient in accordance with the same standard Service Provider provides for its own service territory.

EXHIBIT "B"

Fees

FEES:

- Annual Fee for the year beginning SOW Effective Date will be $50,000. The Annual Fee will be paid quarterly in advance by Service Recipient upon receipt of an invoice from Service Provider.

- Costs for communications and other systems implementation are estimated as follows for initial project implementation (based on a proposal provided by Guelph Hydro to Milton Hydro dated June 5, 2014):

	Item	One-Time Cost
1.	Modify existing Guelph to Hydro One ICCP link to provide Holdoff Control of Milton Hydro's distribution feeders.	$ 2,500
2.	Two additional antennae to be installed at Guelph Hydro's location to provide communication services for all Milton Hydro trucks via Guelph.	$ 5,000 – $10,000
3.	ESRI map GPS integration to provide near real time truck locations on local ESRI maps.	$ 20,000

- Costs for implementation will be due and payable upon receipt of an invoice from Service Provider for such implementation effort.

- In the absence of any contrary agreement by the Parties, the Annual Fee will increase by 2.5% per year.

ADDITIONAL FEES AND COSTS WHICH MAY BECOME NECESSARY IN THE FUTURE:

- Costs that the Parties may (but shall not be obligated) in the future agree, in writing, to share for enhancements designed to augment Control Room services to the benefit of Milton Hydro while increasing Control Room operating costs. This could include improvements to in-person coverage as well as system upgrades or installations.

- Costs that the Parties may (but shall not be obligated in the future) agree, in writing, to share for one time or future costs necessary to advance system integration between Service Recipient and Service Provider or between systems local to either Party.

EXHIBIT "C"

Change Request Form

Sponsor Name		**Change #**	
Project Name	Guelph/Milton Control Room Shared Services	**Date Submitted**	
Requested By		**Date Reply Due**	

Description of Change:

Justification:

Effect on Schedule, Deliverables, and Project Cost

No.	Deliverable / Item	Revised End Date	Net Change, Hours Increase or (Decrease)	Net Change, Cost Increase or (Decrease)
	Totals			
	Revised Project End Date			

Project Manager Approval:

Signature Title Date

Comments/Follow up:

EXHIBIT "D"

Service Recipient Responsibilities

Milton Hydro agrees to provide or continue to provide the following resources:

- Customer service/call center during regular business hours
- After hours telephone answering service
- Line crews to respond to power outage calls during regular hours
- On call Line crew to respond to after hours calls
- After hours additional support in the event of a storm or other major system outage including but not limited to:
    a. scouts for outage area triage,
    b. customer service staff for phone calls, and
    c. stores staff for managing material issues.

In addition, Milton agrees to provide permission to Hydro One to allow Guelph Hydro access to all Transmission Connected station data and control providing information on the status of all monitored feeder breakers, telemetry including three phase amps and volts, and control as it relates to Guelph's current ability to issue and surrender hold-offs via the Hydro One ICCP link.

Guelph Hydro Electric Systems Inc. Business Case Analysis

Recommendation

To expand the current Control Room shift coverage in two stages, with the end result being 24 hour per day x 7 day per week x 365 day per year staffed coverage. For the purposes of this rate filing submission, the addition of one FTE System Control Operator (SCO) in 2016 and a dedicated Supervisor position have been included.

Background Information and Context:

The Guelph Hydro Control Room currently operates with a schedule that includes 5 days per week of staffed daytime coverage. After hours coverage (including evenings, weekends and stat holidays) is provided via on-call SCOs, who answer calls from Hydro One and the IESO, and a telephone answering service that processes calls from customers and the general public in accordance with instructions from Guelph Hydro.

Recent changes to the Utility Work Protection Code (UWPC), increased customer counts, and distribution automation all necessitate the eventual move to 24/7 control room coverage. In addition, by the time 24/7 coverage is fully implemented, Guelph Hydro will have reached the amount of LDC-owned transmission connected station load (Arlen MTS – commissioned in 2012) to warrant the planned 24/7 shift expansion. Load growth includes distribution system growth in addition to North to South load transfers to relieve adjacent congested areas/stations. Enhanced response requirements include feedback from key customer engagement(s) and IESO/NERC transmission system code compliance.

Given our current customer and load growth projections, the timing of the requirement for 24/7 Control Room coverage is 2018. The apprenticeship program for SCOs is a four module program that includes a requirement of four years of work experience prior to being able to attain Journeyperson status. Typically, however, SCOs can be on their own shift within two years of their start date, depending on the individual's ability and progression through the program. Based on this, planning for additional staff to cover the shift in 2018 must begin no later than 2016.

The first step in extending control room coverage is to move from 5 to 7 day per week of daytime coverage. This will start in 2015 utilizing existing and succession planning SCO staff.

Shared Services - Guelph Hydro Electric Systems Inc. has entered into an agreement with Milton Hydro Distribution Inc. to provide them with full control room services. This arrangement impacts SCO workload and hence the requirement for added shift coverage as well. Further information is provided in the "Benefits" section below.

The timing of the move to 24/7 coverage may be accelerated if:

2. Shared service provisions expand,
3. Additional station or feeder monitoring is needed, or
4. Other new assets (Envida) require monitoring or emergency response.

Rationale for Recommendation:

Items considered for the expanded shift coverage include:

- After hours outage response timing and impact,
- Legislated operational requirements for Arlen MTS (2018), Rockwood MS1 and 2,
- Compliance with UWPC safety/notification requirements,
- Increasing workload of SCOs including from other departments,
- On-call rotation and overtime costs, and
- Improved facilitation of planned weekend work.

Consistency with Strategic Plan:

This initiative is consistent with the strategic plan as it relates to improved system reliability, legislative compliance, enhanced internal/external customer service, and worker safety.

Regulatory, Due Diligence and Legal Implications, if any:

Guelph Hydro has a regulatory obligation to respond to provincial grid issues or emergencies via the operation of Arlen MTS. Immediate resources may be required - depending on the nature of the emergency or operational requirement - to implement possible grid security measures including load shedding or rotating blackouts.

A new requirement under the UWPC (revised in 2014) includes all work in proximity to energized primary equipment being recorded by the Controlling Authority. Meeting due diligence requirements means that after hours work, previously done without the assistance of an on duty SCO, must now be done with an SCO present to direct and record all switching actions and other work completed on the primary distribution system.

Impacts on Stakeholders (Shareholder, Community, Customers, Employees, Union, Partnerships and Alliances) Include a summary of any related customer engagement

Results from the most recent customer meeting – 2014 Large Customer Breakfast – clearly indicated the customer expectation of Guelph Hydro running a 24/7 operation. Some expect an immediate personal response to questions related to system reliability, outage conditions, and power quality issues. Feedback included support for reasonably higher rates in return for extended hours of operation. Moving forward - as more real-time system information becomes available through continued automation and monitoring - this customer expectation will increase and become the norm.

Other Alternatives

Other alternatives considered include maintaining status quo and contracting out for services. Continuing with the status quo is not feasible given existing regulatory, reliability, and service obligations. Contracting out services becomes problematic due to the fact that external contractors are not able to provide Control Room services and local compatible utilities have very little interest in providing this type of service.

Detailed Cost/Benefit Impact Analysis Comparing Preferred Option with Status Quo and Alternatives (include charts, etc. if required)

Costs:

Expanding shift coverage requires additional resources. For the purposes of this rate filing submission, the addition of one FTE System Control Operator (SCO) in 2016 and a dedicated Supervisor position have been included. The cost of these additions is provided in Appendix 2-K.

Benefits:

Direct and indirect benefits to Guelph Hydro and the community include the following:

Direct Cost Savings –

Shared Control Room Services –

f) The initial agreement with Milton Hydro includes an annual payment of $50,000. This translates to an estimated 400 hours of effort for the existing Guelph Hydro SCOs to accommodate Milton's service territory - at a market rate of $125 per hour. This estimate is based on the expected number of calls originating from Milton and the additional workload associated with the initial stages of the project. Later on, as coverage hours and service levels increase, the annual fee will be re-visited to reflect actual levels of services provided.

g) Ultimately, it is envisioned that one control room would provide 24/7

services to 4 to 6 LDCs. In this (minimum) 5 year scenario, total costs could be split based on the number of customers served per utility, as an example.

4.

System Control Operator On-Call/Overtime Costs

- Annual average on call premiums equal approximately $5,250. This number could be reduced given extensions in staffed control room coverage.
- Average overtime per SCO is roughly 10 hours per week. Given current rates without burdens, the resultant annual cost would be $41,000. Note that while extended coverage reduces this cost in principle, overtime would still be required to adequately cover "short staffed" situations such as storms, sick time, etc.

Telephone Answering Service Charges

- Answering service costs total approximately $12,000 annually. The requirement for this service will be reduced under the new arrangement given that there will be less hours for the contract service to cover and therefore fewer calls to process, on average.

Improved System Reliability -

Costs to the community are incurred with each and every power outage. While these costs are not directly related to GHESI accounts, there is a value associated with improving power system reliability as it relates to outages. A significant OEB reporting indicator is SAIDI which measures average system outage duration. With 40,000 customer-hours of interruption time per year, 50% of these outages occur outside of staffed control room hours. If initial switching and restoration response time is improved by just 15% (or 3,000 customer hours), the total annual savings to the community could be $525,000, assuming an aggregated outage cost of $175 per customer-hour.

Lost Revenue –

Customer hours of outage time can be converted to a percentage of annual revenue from power sales. Using the previous simple example, the same customer hour improvement would result in $110,000 in annual lost revenue savings, assuming a total of 50,000 customers and annual electricity sales of $160M.

APPENDIX 1-K: Guelph Hydro 2013 Audited Financial Statements

Financial Statements of

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Year ended December 31, 2013
(Expressed in thousands of dollars)

KPMG LLP
115 King Street South
2nd Floor
Waterloo ON N2J 5A3
Canada

Telephone 519-747-8800
Fax 519-747-8830
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the shareholder of Guelph Hydro Electric Systems Inc.

We have audited the accompanying financial statements of Guelph Hydro Electric Systems Inc., which comprise the balance sheet as at December 31, 2013 and the statements of comprehensive income, changes in equity and cash flows for the year 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 International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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 consolidated financial statements.

KPMG LLP, is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.
KPMG Canada provides services to KPMG LLP.

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 Guelph Hydro Electric Systems Inc. as at December 31, 2013, and its results of operations and its cash flows for the year ended in accordance with International Financial Reporting Standards.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

April 16, 2014
Waterloo, Canada

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Balance Sheets

December 31, 2013, with comparative information for 2012
(Expressed in thousands of dollars)

	2013	As restated 2012
Assets		
Current assets:		
Cash	$ 620	$ 2,274
Accounts receivable (note 4)	19,501	18,134
Unbilled revenue	9,983	11,645
Income taxes recoverable	1,468	1,027
Inventory (note 5)	1,504	1,875
Other current assets	554	395
Total current assets	33,630	35,350
Property, plant and equipment (note 6)	134,275	128,900
Intangible assets (note 7)	327	289
Deferred income taxes (note 8)	3,247	4,376
Total non-current assets	137,849	133,565
Total assets	$ 171,479	$ 168,915

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Balance Sheets

December 31, 2013, with comparative information for 2012
(Expressed in thousands of dollars)

	2013	As restated 2012
Liabilities and Shareholder's Equity		
Current liabilities:		
Accounts payable and accrued liabilities	21,160	$ 17,394
Deferred credits - budget billing	1,059	1,983
Customer deposits - current portion (note 9)	3,442	3,689
Due to related parties	734	859
Total current liabilities	26,395	23,925
Senior unsecured debentures (note 12)	64,575	64,550
Employee future benefits (note 11)	8,549	8,513
Customer deposits - long-term portion (note 9)	2,874	2,898
Deferred revenue	13,514	10,611
Total non-current liabilities	89,512	86,572
Total liabilities	115,907	110,497
Shareholder's equity:		
Share capital (note 18)	43,374	43,374
Other comprehensive income (loss)	(159)	(465)
Retained earnings	12,357	15,509
	55,572	58,418
Commitments and contingencies (note 17)		
Guarantees (note 20)		
	$ 171,479	$ 168,915

The accompanying notes are an integral part of these consolidated financial statements.

On behalf of the Board:

Director

Director

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Comprehensive Income

Year ended December 31, 2013, with comparative information for 2012
(Expressed in thousands of dollars)

	2013	As restated 2012
Electricity sales	$ 165,568	$ 144,441
Cost of electricity sold	145,253	119,872
	20,315	24,569
Other operating revenue (note 13)	3,243	2,935
Net operating revenue	23,558	27,504
Expenses:		
Operations and maintenance	11,901	10,626
General and administrative	10,350	9,176
	22,251	19,802
Earnings before the undernoted	1,307	7,702
Financial and other expenses (income):		
Interest on notes payable, less amounts capitalized	3,332	3,446
Interest income	(62)	(94)
Other	43	95
	3,313	3,447
Earnings (loss) from operations before income taxes	(2,006)	4,255
Income taxes: (note 9)		
Provision for payments in lieu of corporate taxes	(1,383)	472
Deferred income taxes	1,129	30
	(254)	502
Net earnings (loss) from operations for the year	(1,752)	3,753
Other Comprehensive Income (loss):		
Actuarial gains (losses) on employee future benefit plan	306	(465)
Total Comprehensive income (loss) for the year	$ (1,446)	$ 3,288

The accompanying notes are an integral part of these consolidated financial statements.

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Changes in Equity
(In thousands of Canadian dollars)

Year ended December 31, 2013, with comparative information for 2012

	Share capital	Other Comprehensive Income (loss)	Retained earnings	Total
Balance at December 31, 2011, restated	$43,374	$ -	$ 17,756	$ 61,130
Dividends	-	-	(6,000)	(6,000)
Total comprehensive income (loss) for the year		- (465)	3,753	3,288
Balance at December 31, 2012, restated	43,374	(465)	15,509	58,418
Dividends	-	-	(1,400)	(1,400)
Total comprehensive income (loss) for the year		306	(1,752)	(1,446)
Balance, December 31, 2013	$43,374	$ (159)	$ 12,357	$ 55,572

The accompanying notes are an integral part of these financial statements.

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Cash Flows

Year ended December 31, 2013, with comparative information for 2012
(Expressed in thousands of dollars)

		2013		As restated 2012
Cash flows from operating activities:				
Total Comprehensive income (loss) for the year	$	(1,446)	$	3,288
Adjustments for:				
Income tax expense		(254)		502
Depreciation and amortization		6,153		5,700
Amortization of deferred revenue		(367)		(281)
Interest income		(62)		(94)
Interest expense		3,375		3,541
(Gain) / loss on disposal of property, plant and equipment		(55)		(8)
		7,344		12,648
Change in:				
Receivables		(1,367)		2,932
Unbilled revenue		1,662		(1,381)
Inventory		371		(194)
Other current assets		(159)		(125)
Accounts payable and accrued liabilities		3,766		(1,495)
Deferred credits - budget billing		(924)		(21)
Employee future benefits		36		903
		3,385		619
Income taxes refunded		942		1,426
Net cash from operating activities		11,671		14,693
Cash flows from investing activities:				
Purchase of property, plant and equipment		(11,396)		(11,492)
Purchase of intangible assets		(116)		(80)
Proceeds from disposal of property, plant and equipment		115		24
		(11,397)		(11,548)
Cash flows from financing activities:				
Contributions in aid of construction		3,270		2,680
Net change in customer deposits		(271)		(4,895)
Dividends paid		(1,400)		(6,000)
Interest received		62		94
Interest paid		(3,464)		(3,516)
Change in amounts due to related parties		(125)		(401)
		(1,928)		(12,038)
Decrease in cash		(1,654)		(8,893)
Cash, beginning of year		2,274		11,167
Cash, end of year	$	620	$	2,274

The accompanying notes are an integral part of these consolidated financial statements.

1. Reporting entity:

Guelph Hydro Electric Systems Inc. (the “Corporation” or “GHESI”) is a wholly-owned subsidiary of Guelph Hydro Inc. (“GHI”). GHI, in turn is a wholly-owned corporation of Guelph Municipal Holdings Inc. (“GMHI”), which is a wholly-owned subsidiary of the City of Guelph. GHESI was incorporated on October 31, 2000 under the laws of the Province of Ontario, Canada. The address of the Corporation’s registered office is 395 Southgate Drive, Guelph, Ontario.

The principal activity of the Corporation is to distribute electricity to the residents and businesses in the City of Guelph, under a licence issued by the Ontario Energy Board (“OEB”). The Corporation is regulated by the OEB and adjustments to the Corporation’s distribution and power rates require OEB approval.

2. Basis of presentation:

(a) Statement of compliance:

The Corporation's financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the International Accounting Standards Board ("IASB") and interpretations as issued by the International Financial Reporting Interpretations Committee ("IFRIC") of the IASB.

(b) Approval of the financial statements:

The financial statements were approved by the Board of Directors on April 16, 2014.

(c) Change in accounting policy

As a result of amendments to IAS 19 “Employee Benefits”, the Company has changed its accounting policy with respect to the basis for determining the income or expense related to its post-employment defined benefit plans. These amendments are to be applied for annual periods beginning January 1, 2013. Under IAS19, actuarial gains and losses must be recognized when they occur in other comprehensive income as the option to defer the recognition of actuarial gains and losses, known as the “corridor method” is no longer available. These amendments are applied retrospectively by the Company, in accordance with IAS 19. See detailed impact of change in accounting policy in Note 11, Employee future benefits.

2. Basis of presentation (continued):

(d) Basis of measurement:

The financial statements have been prepared on the historical cost basis except for the following:

(i) Where held, financial instruments at fair value through profit or loss, including those held for trading, are measured at fair value.

(ii) Contributed assets are initially measured at fair value.

The methods used to measure fair values are discussed further in note 3 (c) and note 20.

(e) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Corporation's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest thousand.

(f) Use of estimates and judgments:

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities. Actual results may differ from those estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future periods affected.

In particular, information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in these financial statements is included in the following notes:

(i) Note 4 and note 20(a) - Receivables: allowance for impairment.
(ii) Note 6 - Property, plant and equipment: useful lives and the identification of significant components of property, plant and equipment.
(iii) Note 11 - Employee future benefits: measurement of the defined benefit obligation.
(iv) Note 19 - Financial instruments and risk management: valuation of long-term debt.

2. Basis of presentation (continued):

(g) Rate regulation:

Effect of rate-setting regulations on the Corporation's activities and on these financial statements:

The Corporation is regulated by the OEB, under the authority granted by the *Ontario Energy Board Act (1988)*. Among other things, the OEB has the power and responsibility to approve or set rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from IFRS for enterprises operating in a non-rate regulated environment.

On March 14, 2011, the OEB approved a 0.18% price cap index adjustment to the Company's distribution rates effective May 1, 2012, in accordance with the OEB's 3rd Generation Incentive Rate Mechanism. The adjustment was applied to fixed and variable distribution rates uniformly across all customer classes.

On June 30, 2011, the Corporation submitted a rate rebasing application to the OEB for new distribution rates. On February 22, 2012, the Corporation received a Decision from the OEB that approved an overall increase of 7.86% to distribution rates effective January 1, 2012. The Decision incorporated the Corporation's increase in fixed assets and operating expenses since the last rate rebasing application in 2008 and established rates that allowed for return on invested capital of 6.80% and return on equity of 9.42% based on a deemed 60% debt-to-40% equity capital structure.

On July 24, 2012, GHESI filed its 2013 electricity distribution rates application using the OEB's 3rd Generation Incentive Regulation Mechanism ("IRM") as the basis for its application. The OEB rendered its Decision on December 6, 2012, which approved a distribution rate increase of 1.08 per cent for all customers.

On August 16, 2013, GHESI filed its 2014 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered its Decision on December 5, 2013 which approved a distribution rate increase of 1.4 per cent for all customers.

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultation between the OEB and interested stakeholders, may affect the distribution rates that the Corporation may charge and the costs that the Corporation may recover, including the balance of its regulatory assets.

Smart Meter Initiative:

The Province of Ontario committed to have Smart Meter electricity meters installed in all homes and small businesses throughout Ontario by the end of 2010. Smart Meters permit

2. Basis of presentation (continued):

consumption to be recorded within specific time intervals and specific tariffs to be levied within such intervals. *Bill 21, Energy Conservation and Responsibility Act*, provides the legislative framework and regulations to support this initiative. The Corporation's Smart Meter installation program was completed in 2012 and despite completing the meter installation program after the Province's 2010 date, substantially all costs associated with the smart meter installation program were approved for recovery by the OEB as part of the Corporation's 2012 rate rebasing application.

3. Significant accounting policies:

The accounting policies set out below have been applied consistently in all years presented in these financial statements.

(a) Cash and cash equivalents:

Cash equivalents include short-term investments with maturities of three months or less when purchased.

(b) Revenue recognition:

Revenue for the Corporation is recognized as electricity is delivered to customers and is recorded on the basis of regular meter readings and estimated customer usage since the last meter reading date to the end of the year. The related cost of power is recorded on the basis of power used.

The Corporation is licensed by the OEB to distribute electricity. As a licensed distributor, the Corporation is responsible for billing customers for electricity generated by third parties and the related costs of providing electricity service, such as transmission services and other services provided by third parties. The Corporation is required, pursuant to regulation, to remit such amounts to these third parties, irrespective of whether the Corporation ultimately collects these amounts from customers. The Corporation has determined that it is acting as a principal for the electricity distribution and, therefore, has presented electricity revenue on a gross basis.

Customer billings for debt retirement charges are recorded on a net basis as the Corporation is acting as an agent for this revenue stream. The Corporation may file to recover uncollected debt retirement charges from Ontario Electricity Financial Corporation ("OEFC") once each year.

Deferred revenue relating to contributions in aid of construction 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.

All other revenues are recorded on a gross basis and are recognized when services are rendered.

3. Significant accounting policies (continued):

(c) Inventory:

Inventory is valued at the lower of cost and net realizable value, with cost being determined on an average cost basis, and items considered major spare parts are recorded as capital assets.

(d) Property, plant and equipment:

Items of property, plant and equipment are measured at cost or deemed cost established on the transition date, or, where the item is transferred from customers, its fair value, less accumulated depreciation and accumulated impairment losses.

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, and any other costs directly attributable to bringing the asset to a working condition for its intended use.

Borrowing costs on qualifying assets are capitalized as part of the cost of the asset and are based on the Corporation's average cost of borrowing.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The cost of replacing a part of an item of property, plant and equipment is recognized in the net book value of the item if it is probable that the future economic benefits embodied within the part will flow to the Corporation and its cost can be measured reliably. In this event, the replaced part of property, plant and equipment is written off, and the related gain or loss is included in profit or loss. The costs of the day-to-day servicing of property, plant and equipment are recognized in profit or loss as incurred.

Depreciation is recognized in profit or loss on a straight-line basis over the estimated useful life of each part or component of an item of property, plant and equipment. Land is not depreciated. Construction-in-progress assets are not amortized until the project is complete and in service. The estimated useful lives are as follows:

Buildings and fixtures	15 - 50 years
Distribution lines	50 years
Distribution transformers	40 years
Distribution meters	30 years
Smart meters	15 years
General office equipment	5 - 10 years
Computer equipment	5 years
Major tools	5 - 15 years
Data acquisition system	5 years
Trucks and rolling stock	5 - 10 years
Other capital assets	10 - 25 years

3. Significant accounting policies (continued):

Depreciation methods, useful lives, and residual values are reviewed at each reporting date.

(e) Intangible assets:

(i) Computer software:

Computer software that is acquired or developed by the Corporation, including software that is not integral to the functionality of equipment purchased which has finite useful lives, is measured at cost less accumulated amortization and accumulated impairment losses.

(ii) Land rights:

Payments to obtain rights to access land ("land rights") are classified as intangible assets. These include payments made for easements, right of access and right of use over land for which the Corporation does not hold title. Land rights are measured at cost less accumulated amortization and accumulated impairment losses.

(iii) Amortization:

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives for the current and comparative years are:

Computer software	5 years

Amortization methods and useful lives of all intangible assets are reviewed at each reporting date.

(f) Impairment:

(i) Financial assets:

A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its current carrying amount (using prevailing interest rates), and the present value of the estimated future cash flows discounted at the original effective interest rate. Interest on the impaired assets continues to be recognized through the unwinding of the discount.

3. Significant accounting policies (continued):

All impairment losses are recognized in profit or loss. An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognized. For financial assets measured at amortized cost the reversal is recognized in profit or loss.

(ii) Non-financial assets:

The carrying amounts of the Corporation's non-financial assets, other than inventories and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit"). The Corporation has determined that it is a single cash-generating unit. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss is recognized if the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

For assets other than goodwill, impairment recognized in prior periods is assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(g) Provisions:

A provision is recognized if, as a result of a past event, the Corporation has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

3. Significant accounting policies (continued):

Decommissioning or dismantling:

When there is a legal or constructive obligation to remove and dispose of property, plant and equipment at the end of their useful life, a provision is recorded to cover such future removal and disposal costs.

(h) Employee future benefits:

(i) Pension plan:

The Corporation provides a pension plan for all its full-time employees through 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 and public utilities. 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. To the extent that the Fund finds itself in an under-funded position, additional contribution rates may be assessed to participating employers and members. In this case, GHESI and its employees could face the prospect of higher contributions until the funded status of the Fund is restored. GHESI is only likely to recover additional contribution amounts in distribution rates if increased contribution rates are factored into GHESI's rebasing rates applications.

(ii) Post-employment benefits, other than pension:

The Corporation provides some of its retired employees with life insurance and medical benefits beyond those provided by government sponsored plans.

The cost of these benefits is expensed as earned by employees through employment service. The accrued benefit obligations and the current service costs are actuarially determined by applying the projected unit credit method and reflect management's best estimate of certain underlying assumptions. Any actuarial gains (losses) will require a remeasurement of the net defined benefit liability or asset and will be recognized as other comprehensive income or loss in the year that it is known.

(i) Deferred revenue and assets transferred from customers:

Certain customers and developers are required to contribute towards the capital cost of construction in order to provide ongoing service. Cash contributions are initially recorded as current liabilities. Once the distribution system asset is completed or modified as outlined in the terms of the contract, the contribution amount is transferred to contributions in aid of construction.

When an asset is received as a capital contribution, the asset is initially recognized at its fair value, with the corresponding amount recognized as contributions in aid of construction.

3. Significant accounting policies (continued):

The contributions in aid of construction account, which represents the Corporation's obligation to continue to provide the customers access to the supply of electricity, is 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.

(j) Leased assets:

Leases in terms of which the Corporation assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition, the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Other leases are operating leases and the leased assets are not recognized on the Corporation’s balance sheet. Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease.

(k) Finance income and finance costs:

Finance income is recognized as it accrues in profit or loss, using the effective interest method. Finance income comprises interest earned on cash and cash equivalents and on regulatory assets.

Finance costs comprise interest expense on borrowings, finance lease obligations, regulatory liabilities and unwinding of the discount on provisions and impairment losses on financial assets.

(l) Income taxes:

The income tax expense comprises current and deferred tax. Income tax expense is recognized in profit or loss except to the extent that it relates to items recognized directly in equity, in which case, it is recognized in equity.

Under the *Electricity Act, 1998*, the Corporation makes payments in lieu of corporate taxes to the OEFC. These payments are calculated in accordance with the rules for computing taxable income and taxable capital and other relevant amounts contained in the *Income Tax Act (Canada) and the Corporations Tax Act (Ontario)* as modified by the *Electricity Act, 1998*, and related regulations. Prior to October 1, 2001, the Corporation was not subject to income or capital taxes. Payments in lieu of taxes are referred to as income taxes.

Current tax is the tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

3. Significant accounting policies (continued):

Deferred tax is recognized using the balance sheet method. Under this method, deferred income taxes reflect the net tax effects of temporary differences between the tax basis of assets and liabilities and their carrying amounts for accounting purposes, as well as for tax losses available to be carried forward to future years that are likely to be realized. Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates, at the reporting date, expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the year that includes the date of enactment or substantive enactment.

4. Accounts receivable:

	2013	2012
Revenue	$ 17,462	$ 15,971
Regulatory	970	1,169
Due from the City of Guelph	1,300	1,319
	19,732	18,459
Less allowance for doubtful accounts	(231)	(325)
	$ 19,501	$ 18,134

5. Inventory:

The amount of inventories consumed by the Corporation and recognized as an expense during 2013 was $295 (2012 - $289).

6. Property, plant and equipment:

(a) Cost or deemed cost:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2012	$ 20,414	$ 103,466	$ 5,421	$ 1,618	$ 130,919
Additions	-	9,362	1,069	1,061	11,492
Transfers	-	1,618	-	(1,618)	-
Disposals/retirements	-	-	(22)	-	(22)
Balance at December 31, 2012	$ 20,414	$ 114,446	$ 6,468	$ 1,061	$ 142,389

6. Property, plant and equipment (continued):

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2013	$ 20,414	$ 114,446	$ 6,468	$ 1,061	$ 142,389
Additions	98	7,125	1,306	2,981	11,510
Transfers		1,061		(1,061)	-
Disposals/retirements	(38)	(8)	(219)		(265)
Balance at December 31, 2013	$ 20,474	$ 122,624	$ 7,555	$ 2,981	$ 153,634

(b) Accumulated depreciation:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2012	$ 742	$ 5,514	$ 1,583	$ -	$ 7,839
Depreciation charge for the year	553	4,118	987	-	5,658
Disposals/retirements	-	-	(8)	-	(8)
Balance at December 31, 2012	$ 1,295	$ 9,632	$ 2,562	$ -	$ 13,489

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2013	$ 1,295	$ 9,632	$ 2,562	$ -	$ 13,489
Depreciation charge for the year	690	4,265	1,120	-	6,075
Disposals/retirements	-	-	(205)	-	(205)
Balance at December 31, 2013	$ 1,985	$ 13,897	$ 3,477	$ -	$ 19,359

(c) Carrying amounts:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
December 31, 2012	$ 19,118	$ 104,813	$ 3,905	$ 1,061	$ 128,900
December 31, 2013	$ 18,490	$ 108,727	$ 4,077	$ 2,981	$ 134,275

6. Property, plant and equipment (continued):

(d) Borrowing costs:

During the year, borrowing costs of $114 (2012 - $nil) were capitalized as part of the cost of property, plant and equipment.

(e) Allocation of depreciation and amortization:

The depreciation of property, plant and equipment and the amortization of intangible assets has been allocated to profit or loss as follows:

	Cost of electricity sold	Distribution expenses	Administration expenses	Total
December 31, 2012:				
Depreciation of property, plant and equipment	$ -	$ 5,411	$ 247	$ 5,658
Amortization of intangible assets	-	-	42	42
	$ -	$ 5,411	$ 289	$ 5,700
December 31, 2013:				
Depreciation of property, plant and equipment	$ -	$ 5,805	$ 270	$ 6,075
Amortization of intangible assets	-	-	78	78
	$ -	$ 5,805	$ 348	$ 6,153

7. Intangible assets:

(a) Cost or deemed cost:

	Computer software	Land rights	Total
Balance at January 1, 2012	$ 251	$ -	$ 251
Additions in 2012	80	-	80
Balance at December 31, 2012	331	-	331
Additions in 2013	116	-	116
Balance at December 31, 2013	$ 447	$ -	$ 447

(b) Accumulated amortization:

	Computer software	Land rights	Total
Balance at January 1, 2012	$ -	$ -	$ -
Amortization charges in 2012	42	-	42
Balance at December 31, 2012	42	-	42
Amortization charges in 2013	78	-	78
Balance at December 31, 2013	$ 120	$ -	$ 120

(c) Carrying amounts:

	Computer software	Land rights	Total
Balance at December 31, 2012	$ 289	$ -	$ 289
Balance at December 31, 2013	$ 327	$ -	$ 327

8. Income taxes:

The income tax expense varies from amounts which would be computed by applying the Corporation's combined statutory income tax rate as follows:

	2013	2012
Basic rate applied to profit before income tax	$ (532)	$ 1,185
Increase (decrease) in income tax resulting from:		
Change in tax rate	(47)	(248)
Other	325	(435)
Income tax expense (recovery)	$ (254)	$ 502
Effective rate applied to profit (loss) before income taxes	12.6%	11.8%

Significant components of the Corporation's deferred tax balances are as follows:

	2013	2012
Deferred tax assets (liabilities):		
Plant and equipment	$ (3,295)	$ (1,317)
Cumulative eligible capital	696	748
Employee benefits	2,265	2,133
Deferred revenue – contributed capital	3,581	2,812
Net deferred tax asset	$ 3,247	$ 4,376

At December 31, 2013, a future tax asset of $3,247 (2012 - $4,376) has been recorded. The utilization of this tax asset is dependent on future taxable profits in excess of profits arising from the reversal of existing taxable temporary differences. The Corporation believes that this asset should be recognized as it will be recovered through future rates.

9. Customer deposits:

Customer deposits represent cash deposits from electricity distribution customers and retailers, as well as construction deposits.

Deposits from electricity distribution customers are refundable to customers who demonstrate an acceptable level of credit risk as determined by the Corporation in accordance with policies set out by the OEB or upon termination of their electricity distribution service.

Construction deposits represent cash prepayments for the estimated cost of capital projects recoverable from customers and developers. Upon completion of the capital project, these deposits are transferred to contributions in aid of construction.

Customer deposits comprise:

	2013	2012
Customer deposits	$ 4,096	$ 4,112
Construction deposits	2,220	2,475
Total customer deposits	$ 6,316	$ 6,587

10. Pension agreement:

GHESI 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 Employee 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. GHESI uses defined contribution plan accounting as it is only liable for contributions to the Plan. GHESI's contribution for employees' current service for the year ended December 31, 2013 was $976 (2012 - $792).

11. Employee future benefits:

Components of employee future benefits recognized are as follows:

	2013	As restated 2012
Post-retirement benefits - accrued benefit liability, as previously reported	$7,929	$7,475
Restatement due to change in accounting policy:		
Remeasurement of accrued benefit liability – actuarial (gain) loss	-	465
Accrued sick leave benefit	620	573
	$8,549	$8,513

Post-retirement benefits:

The Corporation pays certain medical and life insurance benefits on behalf of some of its retired employees. The Corporation recognizes these post-retirement costs in the period in which employees' services were rendered. The accrued benefit liability at December 31, 2013 of $7,929 for the year ended December 31, 2013, was based on an actuarial valuation completed in 2013 using a discount rate of 4.9%. The restated accrued benefit liability at December 31, 2012 of $7,940 (previously reported to be $7,475) and the expense for the year ended December 31, 2012, were based on an actuarial valuation completed in 2013, using a discount rate of 4.5%.

11. Employee future benefits (continued):

Changes in the present value of the defined benefit unfunded obligation and the accrued benefit liability:

		2013		As restated 2012
Defined benefit obligation, beginning of year	$	7,940	$	7,106
Current service cost		229		212
Interest cost		317		414
Remeasurement of obligation		(306)		465
Benefits paid during the year		(251)		(257)
Accrued benefit liability, end of year	$	7,929	$	7,940

Components of net benefit expense recognized are as follows:

		2013		2012
Current service cost	$	229	$	212
Interest cost		317		414
Net benefit expense recognized	$	546	$	626

The full amount of the Corporation's net benefit expense was charged to operations in 2012 and 2013.

11. Employee future benefits (continued):

The significant actuarial assumptions used in the valuation are as follows (weighted average):

	2013	2012
Accrued benefit obligation:		
Discount rate	4.90%	4.50%
Benefit cost for the year:		
Withdrawal rate	1%	1%
Assumed health care cost trend rates:		
Initial health care cost trend rate	5%	5%
Cost trend rate declines to year that rate reaches the rate it is assumed to remain at		

The approximate effect on the accrued benefit obligation of the entire plan and the estimated net benefit expense of the entire plan if the health care trend rate assumption was increased or decreased by 1%, and all other assumptions were held constant, is as follows:

	Defined Benefit Obligation	Periodic Benefit Cost
1% increase in health care trend rate	$ 9,184	$ 652
1% decrease in health care trend rate	6,957	458

Historical information

Amounts for the current and previous year, for the entire plan, are as follows:

	2013	As restated 2012
Defined benefit obligation	$ 7,929	$ 7,940
Experience adjustments	(1,376)	(1,535)

11.Employee future benefits (continued):

The main actuarial assumptions utilized for the valuation are as follows:

General inflation - future general inflation levels, as measured by the changes in the Consumer Price Index, were assumed at 2.0% in 2013, and thereafter (2012 - 2.0%).

Discount (interest) rate - the discount rate used to determine the present value of future liabilities and the expense for the year ended December 31, 2013, was 4.9% (2012 – 4.5%).

Salary levels - future general salary and wage levels were assumed to increase at 3.3% (2012 - 3.3%) per annum.

Medical costs - medical costs were assumed to increase 5% for 2012, 5% for 2013, 5% for 2013, 5% for 2014, and 5% thereafter.

Dental costs - dental costs were assumed to increase 5% for 2012, 5% for 2013, 5% for 2013, 5% for 2014, and 5% thereafter.

Accrued sick leave benefit:

The Corporation allows regular employees the equivalent of one and one-half days per month sick time credit to be applied in case of illnesses or accidents not covered by Workers' Compensation. A maximum of eighteen days sick time credit is accrued to each employee's credit each year and is reduced by the amount of sick time utilized each year. At the end of the year, the remaining credit, if any, is added to each employee's sick time credit accumulation. Any unused sick time credit is forfeited when employment ceases with the Corporation. As at December 31, 2013, the estimated valued of the expected future payment to be made as a result of the unused sick time credits amounts to $620 (2012 - $573).

12. Long-term debt:

The senior unsecured debentures have a maturity date of December 6, 2030 and have an interest rate of 5.264% per annum. Interest is payable in equal semi-annual installments, in arrears, on June 6 and December 6 each year commencing June 6, 2012 until maturity. The debentures were issued on December 6, 2012. The debentures are represented by a single Global Debenture Certificate registered in the name of CDS & Co. In order to put the debentures in place, the Corporation incurred debt issuance costs in the amount of $500.

	2013	2012
Senior unsecured debentures	$ 65,000	$ 65,000
Less: cost of debt issuance	(425)	(450)
Senior unsecured debentures, net proceeds	$ 64,575	$ 64,550

13. Other income:

Other income comprises:

	2013	2012
Late payment charges	$ 125	$ 122
Pole and other rental income	360	333
Collection and other service charges	236	243
Waterworks revenue	1,156	1,045
Intercompany services	848	803
Customer contributions	367	281
Miscellaneous	151	108
Total other income	$ 3,243	$ 2,935

14. Employee benefits:

		2013		2012
Salaries, wages and benefits	$	7,379	$	7,381
Contributions to multi-employer plan		976		792
Expenses related to defined benefit plans		546		626
	$	8,901	$	8,799

15. Finance income and expense:

		2013		2012
Interest income on bank deposits	$	(62)	$	(94)
Finance income		(62)		(94)
Interest expense on long-term debt		3,446		3,446
Interest adjustment re: capitalized borrowing costs		(114)		-
Interest expense on deposits		15		61
Other		28		34
		3,375		3,541
Net finance costs recognized in profit or loss	$	3,313	$	3,447

16. Related party transactions:

(a) Parent and ultimate controlling party:

The sole shareholder of the Corporation is Guelph Hydro Inc. ("GHI"), which in turn is wholly-owned by Guelph Municipal Holdings Inc. ("GMHI"). GMHI is a wholly-owned subsidiary of the City of Guelph. The City produces financial statements that are available for public use.

(b) Key management personnel:

The key management personnel of the Corporation have been defined as members of its board of directors and executive management team members, and is summarized below.

	2013	2012
Directors' fees	$ 98	$ 98
Salaries and other short-term benefits	1,967	1,624
Post-employment benefits	19	25
	$ 2,084	$ 1,747

(c) Transactions with ultimate parent (the City):

The following summarizes the Corporation's related party transactions, recorded at the exchange amounts and balances with the City for the years ended December 31:

	2013	2012
Revenue:		
Energy sales (at commercial rates)	$ 7,752	$ 7,261
Waterworks revenue	1,156	1,045
Street light maintenance	331	263
Expenses:		
Subcontracting	68	32
Property taxes	332	343
Balances:		
Accounts receivable	1,300	1,319
Accounts payable and accrued charges	-	69

16. Related party transactions (continued):

(d) Transactions with subsidiaries of the City:

A listing of the various entities under the control of the City is set out on the City's website.

The Corporation had the following transactions with GHI and its subsidiary, Envida Community Energy Inc.:

	2013	2012
Revenue:		
Energy sales (at commercial rates)	$ 22	$ 14
Multiple function support services	848	803
Expenses:		
Planning services through Board of Directors	163	133
Management services	658	323
Management fees	1,500	-
Balances:		
Accounts receivable	603	316
Accounts payable and accrued charges	1,352	1,175

17. Commitments and contingencies:

From time to time, the Corporation is involved in various litigation matters arising in the ordinary course of its business. The Corporation has no reason to believe that the disposition of any such current matter could reasonably be expected to have a materially adverse impact on the Corporation's financial position, results of operations or its ability to carry on any of its business activities.

An action was commenced against GHESI in November, 2013 in the Ontario Superior Court of Justice with the plaintiff seeking damages in the amount of $2.0 million as compensation for damages allegedly suffered to the plaintiff's business and reputation in relation to the supply and installation of energy efficient lighting equipment, plus $1.0 million punitive damages as a result of interference in economic relations or slander of goods. This action is at a preliminary stage. The statement of claim has been served on GHESI, parent company Guelph Hydro Inc. (and a specific GHESI employee). A Statement of Defense was filed on behalf of GHESI in mid-February, 2014. Given the preliminary status of this action, it is not possible to reasonably quantify the effect, if any, of this action on the financial performance of the Corporation. If damages are awarded, GHESI would be liable to pay the amounts awarded by the Court.

17. Commitments and contingencies (continued):

General Liability Insurance:

The Corporation is a member of the Municipal Electric Association Reciprocal Insurance Exchange (MEARIE). MEARIE is a pooling of public liability insurance risks of many of the electrical utilities in Ontario. All members of the pool are subjected to assessment for losses

experienced by the pool for the years in which they were members on a pro-rata basis based on the total of their respective service revenues. As at December 31, 2013, no assessments have been made.

18. Share capital:

	2013	2012
Authorized:		
Unlimited number of common shares		
Issued:		
1,000 common shares	$ 43,374	$ 43,374

19. Financial instruments and risk management:

Cash and cash equivalents are measured at fair value. The carrying values of receivables, and accounts payable and accrued charges approximate fair value because of the short maturity of these instruments. The carrying value of the customer deposits approximates fair value because the amounts are payable on demand.

The fair value of the senior unsecured debentures at December 31, 2013 is $68,431 (2012 - $74,654). The fair value is calculated based on the present value of future principal and interest cash flows, discounted at the current rate of interest at the reporting date. The interest rate used to calculate fair value at December 31, 2013 was 4.84% (2012 - 4.12%).

The Corporation's activities provide for a variety of financial risks, particularly credit risk, market risk and liquidity risk.

(a) Credit risk:

Financial assets carry credit risk that a counterparty will fail to discharge an obligation which could result in a financial loss. Financial assets held by the Corporation, such as accounts receivable, expose it to credit risk. The Corporation earns its revenue from a broad base of customers located in the City. No single customer accounts for revenue in excess of 10% of total revenue.

19. Financial instruments and risk management (continued):

The carrying amount of accounts receivable is reduced through the use of an allowance for impairment and the amount of the related impairment loss is recognized in the income statement. Subsequent recoveries of receivables previously provisioned are credited to the

income statement. The balance of the allowance for impairment at December 31, 2013 is $231 (2012 - $325). An impairment loss of $226 (2012 - $61) was recognized during the year. The Corporation's credit risk associated with accounts receivable is primarily related to payments from distribution customers. At December 31, 2013, approximately $310 (2012 - $425) is considered 60 days past due. The Corporation has over 52 thousand customers, the

majority of whom are residential. Credit risk is managed through collection of security deposits from customers in accordance with directions provided by the OEB. As at December 31, 2013, the Corporation holds security deposits in the amount of $4,096 (2012 - $4,112).

(b) Market risk:

Market risks primarily refer to the risk of loss resulting from changes in commodity prices, foreign exchange rates, and interest rates. The Corporation currently does not have any material commodity or foreign exchange risk. The Corporation is exposed to fluctuations in interest rates as the regulated rate of return for the Corporation's distribution business is derived using a complex formulaic approach which is in part based on the forecast for long-term Government of Canada bond yields. This rate of return is approved by the OEB as part of the approval of distribution rates.

A 1% increase in the interest rate at December 31, 2013 would have increased interest expense on the long-term debt by $ 650 (2012 - $650), assuming all other variables remain constant. A 1% decrease in the interest rate would have an equal but opposite effect.

(c) Liquidity risk:

The Corporation monitors its liquidity risk to ensure access to sufficient funds to meet operational and investing requirements. The Corporation's objective is to ensure that sufficient liquidity is on hand to meet obligations as they fall due while minimizing interest exposure. The Corporation has access to a $10,000 credit facility and monitors cash balances daily to ensure that a sufficient level of liquidity is on hand to meet financial commitments as they come due. As at December 31, 2013, no amounts had been drawn under GHESI's $10,000 credit facility (2012, $nil).

The Corporation also has a bilateral facility for $5.0 million (the "LC" facility) for the purpose of issuing letters of credit mainly to support the prudential requirements of the IESO, of which $4.0 million has been drawn and posted with the IESO (2012 - $nil).

The majority of accounts payable, as reported on the balance sheet, are due within 30 days.

20. Financial instruments and risk management (continued):

(d) Capital disclosures:

The main objectives of the Corporation, when managing capital, are to ensure ongoing access to funding to maintain and improve the electricity distribution system, compliance with covenants related to its credit facilities, prudent management of its capital structure with regard for recoveries of financing charges permitted by the OEB on its regulated electricity distribution business, and to deliver the appropriate financial returns.

The Corporation's definition of capital includes shareholder's equity and long-term debt. As at December 31, 2013, shareholder's equity amounts to $55,572 (2012 - $58,418) and long-term debt amounts to $64,575 (2012 - $64,550).

21. Guarantees:

GHESI has a Connection and Cost Recovery Agreement with Hydro One Networks Inc. (Networks) for the supply of two additional breaker positions at the Campbell transformer station (cost $599), and the installation of a new metal clad switchgear to the two existing idle windings at Cedar TS (transformer station) with eight new feeder positions (cost $5,582). The costs of the connections are debts owed to Networks that will be forgiven provided that GHESI meets or exceeds the specific load requirement and the incremental transformation connection revenue received by Networks. GHESI expects to meet the conditions of the guarantee and does not anticipate any additional payments to Networks.

GHESI has another Connection and Cost Recovery Agreement with Networks for the line connection associated with the Arlen municipal transformer station. The $1,688 cost of the connection is a debt owed to Networks that will be forgiven provided that GHESI meets or exceeds the specific load requirement and the incremental transformer connection revenue received by Networks. GHESI expects to meet the conditions of the guarantee and does not anticipate an additional payment to Networks.

APPENDIX 1-L: Guelph Hydro 2014 Audited Financial Statements

Financial Statements of

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Year ended December 31, 2014
(Expressed in thousands of dollars)

KPMG LLP
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2nd Floor
Waterloo ON N2J 5A3

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INDEPENDENT AUDITORS' REPORT

To the shareholder of Guelph Hydro Electric Systems Inc.

We have audited the accompanying financial statements of Guelph Hydro Electric Systems Inc., which comprise the balance sheet as at December 31, 2014 and the statements of comprehensive income, changes in equity and cash flows for the year 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 International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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 consolidated financial statements.

KPMG LLP, is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.
KPMG Canada provides services to KPMG LLP.

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 Guelph Hydro Electric Systems Inc. as at December 31, 2014, and its results of operations and its cash flows for the year ended in accordance with International Financial Reporting Standards.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

April 16, 2015
Waterloo, Canada

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Balance Sheets

December 31, 2014, with comparative information for 2013
(Expressed in thousands of dollars)

	2014	2013
Assets		
Current assets:		
Cash	$ -	$ 620
Accounts receivable (note 4)	17,887	19,501
Unbilled revenue	10,889	9,983
Income taxes recoverable	1,706	1,468
Inventory (note 5)	1,832	1,504
Other current assets	552	554
Total current assets	32,866	33,630
Property, plant and equipment (note 6)	141,277	134,275
Intangible assets (note 7)	388	327
Deferred income taxes (note 8)	2,758	3,247
Total non-current assets	144,423	137,849
Total assets	$ 177,289	$ 171,479

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Balance Sheets

December 31, 2014, with comparative information for 2013
(Expressed in thousands of dollars)

	2014	2013
Liabilities and Shareholder's Equity		
Current liabilities:		
Bank indebtedness	$ 1,090	$ -
Accounts payable and accrued liabilities	22,556	21,160
Deferred credits - budget billing	1,142	1,059
Customer deposits - current portion (note 9)	5,577	3,442
Due to related parties	711	734
Total current liabilities	31,076	26,395
Senior unsecured debentures (note 12)	64,600	64,575
Employee future benefits (note 11)	10,039	8,549
Customer deposits - long-term portion (note 9)	2,874	2,874
Deferred revenue	15,460	13,514
Total non-current liabilities	92,973	89,512
Total liabilities	124,049	115,907
Shareholder's equity:		
Share capital (note 18)	43,374	43,374
Other comprehensive income (loss)	(933)	(159)
Retained earnings	10,799	12,357
	53,240	55,572
Commitments and contingencies (note 17)		
Guarantees (note 20)		
	$ 177,289	$ 171,479

The accompanying notes are an integral part of these consolidated financial statements.

On behalf of the Board:

Director

Director

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Comprehensive Income

Year ended December 31, 2014, with comparative information for 2013
(Expressed in thousands of dollars)

	2014	2013
Electricity sales	$ 212,562	$ 195,186
Cost of electricity sold	190,844	174,871
	21,718	20,315
Other operating revenue (note 13)	4,718	3,243
Net operating revenue	26,436	23,558
Expenses:		
Operations and maintenance	11,861	11,901
General and administrative	9,373	10,350
	21,234	22,251
Earnings before the undernoted	5,202	1,307
Financial and other expenses (income):		
Interest on notes payable, less amounts capitalized	3,323	3,332
Interest income	(19)	(62)
Other	92	43
	3,396	3,313
Earnings (loss) from operations before income taxes	1,806	(2,006)
Income taxes: (note 8)		
Provision for payments in lieu of corporate taxes	(403)	(1,383)
Deferred income taxes	767	1,129
	364	(254)
Net earnings (loss) from operations for the year	1,442	(1,752)
Other Comprehensive Income (loss):		
Actuarial gains (losses) on employee future benefit plan	(774)	306
Total Comprehensive income (loss) for the year	$ 668	$ (1,446)

The accompanying notes are an integral part of these consolidated financial statements.

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Changes in Equity
(In thousands of Canadian dollars)

Year ended December 31, 2014, with comparative information for 2013

	Share capital	Other Comprehensive Income (loss)	Retained earnings	Total
Balance at December 31, 2012	$43,374	(465)	15,509	$ 58,418
Dividends	-	-	(1,400)	(1,400)
Total comprehensive income (loss) for the year		306	(1,752)	(1,446)
Balance at December 31, 2013	43,374	(159)	12,357	55,572
Dividends	-	-	(3,000)	(3,000)
Total comprehensive income (loss) for the year		(774)	1,442	668
Balance, December 31, 2014	$43,374	$ (933)	$ 10,799	$ 53,240

The accompanying notes are an integral part of these financial statements.

GUELPH HYDRO ELECTRIC SYSTEMS INC.

Statements of Cash Flows

Year ended December 31, 2014, with comparative information for 2013
(Expressed in thousands of dollars)

		2014		2013
Cash flows from operating activities:				
Total Comprehensive income (loss) for the year	$	668	$	(1,446)
Adjustments for:				
Income tax expense		85		(254)
Depreciation and amortization		6,041		6,153
Amortization of deferred revenue		(426)		(367)
Interest income		(19)		(62)
Interest expense		3,415		3,375
(Gain) / loss on disposal of property, plant and equipment		22		(55)
		9,786		7,344
Change in:				
Receivables		1,614		(1,367)
Unbilled revenue		(906)		1,662
Inventory		(328)		371
Other current assets		2		(159)
Accounts payable and accrued liabilities		1,395		3,766
Deferred credits - budget billing		83		(924)
Employee future benefits		1,490		36
		3,350		3,385
Income taxes refunded		165		942
Net cash from operating activities		13,301		11,671
Cash flows from investing activities:				
Purchase of property, plant and equipment		(12,924)		(11,396)
Purchase of intangible assets		(167)		(116)
Proceeds from disposal of property, plant and equipment		90		115
		(13,001)		(11,397)
Cash flows from financing activities:				
Contributions in aid of construction		2,372		3,270
Net change in customer deposits		2,135		(271)
Dividends paid		(3,000)		(1,400)
Interest received		19		62
Interest paid		(3,513)		(3,464)
Change in amounts due to related parties		(23)		(125)
		(2,010)		(1,928)
Decrease in cash		(1,710)		(1,654)
Cash, beginning of year		620		2,274
Cash / (bank indebtedness), end of year	$	(1,090)	$	620

The accompanying notes are an integral part of these consolidated financial statements.

1. Reporting entity:

Guelph Hydro Electric Systems Inc. (the “Corporation” or “GHESI”) became a wholly-owned subsidiary of Guelph Municipal Holdings Inc. (“GMHI”) on September 6, 2014 when GMHI amalgamated with Guelph Hydro Inc. (“GHI”). GMHI is a wholly-owned subsidiary of the City of Guelph. GHESI was incorporated on October 31, 2000 under the laws of the Province of Ontario, Canada. The address of the Corporation’s registered office is 395 Southgate Drive, Guelph, Ontario.

The principal activity of the Corporation is to distribute electricity to the residents and businesses in the City of Guelph and the Village of Rockwood, under a license issued by the Ontario Energy Board (“OEB”). The Corporation is regulated by the OEB and adjustments to the Corporation’s distribution rates require OEB approval.

2. Basis of presentation:

(a) Statement of compliance:

The Corporation’s financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the International Accounting Standards Board ("IASB") and interpretations as issued by the International Financial Reporting Interpretations Committee ("IFRIC") of the IASB.

(b) Approval of the financial statements:

The financial statements were approved by the Board of Directors on April 16, 2015.

(c) Change in accounting policy in 2013

As a result of amendments to IAS 19 “Employee Benefits”, the Company has changed its accounting policy with respect to the basis for determining the income or expense related to its other post-employment defined benefit plans. These amendments are to be applied for annual periods beginning January 1, 2013. Under IAS19, actuarial gains and losses must be recognized when they occur in other comprehensive income as the option to defer the recognition of actuarial gains and losses, known as the “corridor method” is no longer available. These amendments are applied retrospectively by the Company, in accordance with IAS 19. See detailed impact of change in accounting policy in Note 11, Employee future benefits.

2. Basis of presentation (continued):

(d) Basis of measurement:

The financial statements have been prepared on the historical cost basis except for the following:

(i) Where held, financial instruments at fair value through profit or loss, including those held for trading, are measured at fair value.

(ii) Contributed assets are initially measured at fair value.

The methods used to measure fair values are discussed further in note 3 (c) and note 20.

(e) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Corporation's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest thousand.

(f) Use of estimates and judgments:

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities. Actual results may differ from those estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future periods affected.

In particular, information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in these financial statements is included in the following notes:

(i) Note 4 and note 20(a) - Receivables: allowance for impairment.
(ii) Note 6 - Property, plant and equipment: useful lives and the identification of significant components of property, plant and equipment.
(iii) Note 11 - Employee future benefits: measurement of the defined benefit obligation.
(iv) Note 19 - Financial instruments and risk management: valuation of long-term debt.

2. Basis of presentation (continued):

(g) Rate regulation:

Effect of rate-setting regulations on the Corporation's activities and on these financial statements:

The Corporation is regulated by the OEB, under the authority granted by the *Ontario Energy Board Act (1988)*. Among other things, the OEB has the power and responsibility to approve or set rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from IFRS for enterprises operating in a non-rate regulated environment.

On March 14, 2011, the OEB approved a 0.18% price cap index adjustment to the Company's distribution rates effective May 1, 2012, in accordance with the OEB's 3rd Generation Incentive Rate Mechanism. The adjustment was applied to fixed and variable distribution rates uniformly across all customer classes.

On June 30, 2011, the Corporation submitted a rate rebasing application to the OEB for new distribution rates. On February 22, 2012, the Corporation received a Decision from the OEB that approved an overall increase of 7.86% to distribution rates effective January 1, 2012. The Decision incorporated the Corporation's increase in fixed assets and operating expenses since the last rate rebasing application in 2008 and established rates that allowed for return on invested capital of 6.80% and return on equity of 9.42% based on a deemed 60% debt-to-40% equity capital structure.

On July 24, 2012, GHESI filed its 2013 electricity distribution rates application using the OEB's 3rd Generation Incentive Regulation Mechanism ("IRM") as the basis for its application. The OEB rendered its Decision on December 6, 2012, which approved a distribution rate increase of 1.08 per cent for all customers.

On August 16, 2013, GHESI filed its 2014 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered its Decision on December 5, 2013 which approved a distribution rate increase of 1.4 per cent for all customers.

On August 13, 2014, GHESI filed its 2015 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered its Decision on December 4, 2014 which approved a distribution rate increase of 1.3 per cent for all customers.

2. Basis of presentation (continued):

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultation between the OEB and interested stakeholders, could affect the distribution rates that the Corporation may charge and the costs that the Corporation may recover, including the balance of its regulatory assets.

3. Significant accounting policies:

The accounting policies set out below have been applied consistently in all years presented in these financial statements.

(a) Cash and cash equivalents:

Cash equivalents include short-term investments with maturities of three months or less when purchased.

(b) Revenue recognition:

Revenue for the Corporation is recognized as electricity is delivered to customers and is recorded on the basis of regular meter readings and estimated customer usage since the last meter reading date to the end of the year. The related cost of power is recorded on the basis of power used.

The Corporation is licensed by the OEB to distribute electricity. As a licensed distributor, the Corporation is responsible for billing customers for electricity generated by third parties and the related costs of providing electricity service, such as transmission services and other services provided by third parties. The Corporation is required, pursuant to regulation, to remit such amounts to these third parties, irrespective of whether the Corporation ultimately collects these amounts from customers. The Corporation has determined that it is acting as a principal for the electricity distribution and, therefore, has presented electricity revenue on a gross basis.

Customer billings for debt retirement charges are recorded on a net basis as the Corporation is acting as an agent for this revenue stream. The Corporation may file to recover uncollected debt retirement charges from Ontario Electricity Financial Corporation ("OEFC") once each year.

Deferred revenue relating to contributions in aid of construction 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.

All other revenues are recorded on a gross basis and are recognized when services are rendered.

3. Significant accounting policies, continued:

(c) Inventory:

Inventory is valued at the lower of cost and net realizable value, with cost being determined on an average cost basis, and items considered major spare parts are recorded as capital assets.

(d) Property, plant and equipment:

Items of property, plant and equipment are measured at cost or deemed cost established on the transition date, or, where the item is transferred from customers, its fair value, less accumulated depreciation and accumulated impairment losses.

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, and any other costs directly attributable to bringing the asset to a working condition for its intended use.

Borrowing costs on qualifying assets are capitalized as part of the cost of the asset and are based on the Corporation's average cost of borrowing.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The cost of replacing a part of an item of property, plant and equipment is recognized in the net book value of the item if it is probable that the future economic benefits embodied within the part will flow to the Corporation and its cost can be measured reliably. In this event, the replaced part of property, plant and equipment is written off, and the related gain or loss is included in profit or loss. The costs of the day-to-day servicing of property, plant and equipment are recognized in profit or loss as incurred.

Depreciation is recognized in profit or loss on a straight-line basis over the estimated useful life of each part or component of an item of property, plant and equipment. Land is not depreciated. Construction-in-progress assets are not amortized until the project is complete and in service. The estimated useful lives are as follows:

Buildings and fixtures	15 - 50 years
Distribution lines	40 – 70 years
Distribution transformers	35 – 55 years
Distribution meters	30 years
Smart meters	15 years
General office equipment	5 - 10 years
Computer equipment	5 years
Major tools	5 - 15 years
Data acquisition system	5 years
Trucks and rolling stock	5 - 10 years
Other capital assets	10 - 25 years

3. Significant accounting policies, continued:

Depreciation methods, useful lives, and residual values are reviewed at each reporting date.

(e) Intangible assets:

(i) Computer software:

Computer software that is acquired or developed by the Corporation, including software that is not integral to the functionality of equipment purchased which has finite useful lives, is measured at cost less accumulated amortization and accumulated impairment losses.

(ii) Land rights:

Payments to obtain rights to access land ("land rights") are classified as intangible assets. These include payments made for easements, right of access and right of use over land for which the Corporation does not hold title. Land rights are measured at cost less accumulated amortization and accumulated impairment losses.

(iii) Amortization:

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives for the current and comparative years are:

Computer software	5 years

Amortization methods and useful lives of all intangible assets are reviewed at each reporting date.

(f) Impairment:

(i) Financial assets:

A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its current carrying amount (using prevailing interest rates), and the present value of the estimated future cash flows discounted at the original effective interest rate. Interest on the impaired assets continues to be recognized through the unwinding of the discount.

3. Significant accounting policies, continued:

All impairment losses are recognized in profit or loss. An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognized. For financial assets measured at amortized cost the reversal is recognized in profit or loss.

(ii) Non-financial assets:

The carrying amounts of the Corporation's non-financial assets, other than inventories and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit"). The Corporation has determined that it is a single cash-generating unit. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss is recognized if the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

For assets other than goodwill, impairment recognized in prior periods is assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(g) Provisions:

A provision is recognized if, as a result of a past event, the Corporation has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

3. Significant accounting policies, continued:

Decommissioning or dismantling:

When there is a legal or constructive obligation to remove and dispose of property, plant and equipment at the end of their useful life, a provision is recorded to cover such future removal and disposal costs.

(h) Employee future benefits:

(i) Pension plan:

The Corporation provides a pension plan for all its full-time employees through 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 and public utilities. 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. To the extent that the Fund finds itself in an under-funded position, additional contribution rates may be assessed to participating employers and members. In this case, GHESI and its employees could face the prospect of higher contributions until the funded status of the Fund is restored. GHESI is only likely to recover additional contribution amounts in distribution rates if increased contribution rates are factored into GHESI's rebasing rates applications before the OEB.

(ii) Post-employment benefits, other than pension:

The Corporation provides some of its retired employees with life insurance and medical benefits beyond those provided by government sponsored plans.

The cost of these benefits is expensed as earned by employees through employment service. The accrued benefit obligations and the current service costs are actuarially determined by applying the projected unit credit method and reflect management's best estimate of certain underlying assumptions. Any actuarial gains (losses) will require a re-measurement of the net defined benefit liability or asset and will be recognized as other comprehensive income or loss in the year that it is known.

(i) Deferred revenue and assets transferred from customers:

Certain customers and developers are required to contribute towards the capital cost of construction in order to provide ongoing service. Cash contributions are initially recorded as current liabilities. Once the distribution system asset is completed or modified as outlined in the terms of the contract, the contribution amount is transferred to contributions in aid of construction.

When an asset is received as a capital contribution, the asset is initially recognized at its fair value, with the corresponding amount recognized as contributions in aid of construction.

3. Significant accounting policies, continued:

The contributions in aid of construction account, which represents the Corporation's obligation to continue to provide the customers access to the supply of electricity, is 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.

(j) Leased assets:

Leases in terms of which the Corporation assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition, the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Other leases are operating leases and the leased assets are not recognized on the Corporation's balance sheet. Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease.

(k) Finance income and finance costs:

Finance income is recognized as it accrues in profit or loss, using the effective interest method. Finance income comprises interest earned on cash and cash equivalents and on regulatory assets.

Finance costs comprise interest expense on borrowings, finance lease obligations, regulatory liabilities and unwinding of the discount on provisions and impairment losses on financial assets.

(l) Income taxes:

The income tax expense comprises current and deferred tax. Income tax expense is recognized in profit or loss except to the extent that it relates to items recognized directly in equity, in which case, it is recognized in equity.

Under the *Electricity Act, 1998*, the Corporation makes payments in lieu of corporate taxes to the OEFC. These payments are calculated in accordance with the rules for computing taxable income and taxable capital and other relevant amounts contained in the *Income Tax Act (Canada) and the Corporations Tax Act (Ontario)* as modified by the *Electricity Act, 1998*, and related regulations. Prior to October 1, 2001, the Corporation was not subject to income or capital taxes. Payments in lieu of taxes are referred to as income taxes.

Current tax is the tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

3. Significant accounting policies, continued:

Deferred tax is recognized using the balance sheet method. Under this method, deferred income taxes reflect the net tax effects of temporary differences between the tax basis of assets and liabilities and their carrying amounts for accounting purposes, as well as for tax losses available to be carried forward to future years that are likely to be realized. Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates, at the reporting date, that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the year that includes the date of enactment or substantive enactment.

4. Accounts receivable:

	2014	2013
Revenue	$ 15,603	$ 17,462
Regulatory	1,047	970
Due from the City of Guelph	1,612	1,300
	18,262	19,732
Less allowance for doubtful accounts	(375)	(231)
	$ 17,887	$ 19,501

5. Inventory:

The amount of inventories consumed by the Corporation and recognized as an expense during 2014 was $285 (2013 - $295).

6. Property, plant and equipment:

(a) Cost or deemed cost:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2013	$ 20,414	$ 114,446	$ 6,468	$ 1,061	$ 142,389
Additions	98	7,125	1,306	2,981	11,510
Transfers	-	1,061	-	(1,061)	-
Disposals/retirements	(38)	(8)	(35)	-	(81)
Balance at December 31, 2013	$ 20,474	$ 122,624	$ 7,739	$ 2,981	$ 153,818

6. Property, plant and equipment, continued:

(a) Cost or deemed cost, continued:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2014	$ 20,474	$ 122,624	$ 7,739	$ 2,981	$ 153,818
Additions	484	5,403	2,487	4,675	13,049
Transfers	-	2,981	-	(2,981)	-
Disposals/retirements	-	-	(132)	-	(132)
Balance at December 31, 2014	$ 20,958	$ 131,008	$ 10,094	$ 4,675	$ 166,735

(b) Accumulated depreciation:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2013	$ 1,295	$ 9,632	$ 2,562	$ -	$ 13,489
Depreciation charge for the year	690	4,265	1,120	-	6,075
Disposals/retirements	-	-	(21)	-	(21)
Balance at December 31, 2013	$ 1,985	$ 13,897	$ 3,661	$ -	$ 19,543

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
Balance at January 1, 2014	$ 1,985	$ 13,897	$ 3,661	$ -	$ 19,543
Depreciation charge for the year	700	3,616	1,619	-	5,935
Disposals/retirements	-	-	(20)	-	(20)
Balance at December 31, 2014	$ 2,685	17,513	$ 5,260	$ -	$ 25,458

(c) Carrying amounts:

	Land and buildings	Distribution equipment	Other fixed assets	Construction -in- Progress	Total
December 31, 2013	$ 18,489	$ 108,727	$ 4,078	$ 2,981	$ 134,275
December 31, 2014	$ 18,273	$ 113,495	$ 4,834	$ 4,675	$ 141,277

6. Property, plant and equipment, continued:

(d) Borrowing costs:

During the year, borrowing costs of $123 (2013 - $114) were capitalized as part of the cost of property, plant and equipment.

(e) Allocation of depreciation and amortization:

The depreciation of property, plant and equipment and the amortization of intangible assets have been allocated to profit or loss as follows:

	Cost of electricity sold	Distribution expenses	Administration expenses	Total
December 31, 2013:				
Depreciation of property, plant and equipment	$ -	$ 5,805	$ 270	$ 6,075
Amortization of intangible assets	-	-	78	78
	$ -	$ 5,805	$ 348	$ 6,153
December 31, 2014:				
Depreciation of property, plant and equipment	$ -	$ 5,778	$ 157	$ 5,935
Amortization of intangible assets	-	-	106	106
	$ -	$ 5,778	$ 263	$ 6,041

7. Intangible assets:

(a) Cost or deemed cost:

	Computer software	Land rights	Total
Balance at January 1, 2013	$ 331	$ -	$ 331
Additions in 2013	116	-	116
Balance at December 31, 2013	447	-	447
Additions in 2014	167	-	167
Balance at December 31, 2014	$ 614	$ -	$ 614

(b) Accumulated amortization:

	Computer software	Land rights	Total
Balance at January 1, 2013	$ 42	$ -	$ 42
Amortization charges in 2013	78	-	78
Balance at December 31, 2013	120	-	
		120	
Amortization charges in 2014	106	-	106
Balance at December 31, 2014	$ 226	$ -	$ 226

(c) Carrying amounts:

	Computer software	Land rights	Total
Balance at December 31, 2013	$ 327	$ -	$ 327
Balance at December 31, 2014	$ 388	$ -	$ 388

8. Income taxes:

The income tax expense varies from amounts which would be computed by applying the Corporation's combined statutory income tax rate as follows:

	2014	2013
Basic rate applied to profit before income tax	$ 479	$ (532)
Increase (decrease) in income tax resulting from:		
Change in tax rate	-	(47)
Other	(115)	325
Income tax expense (recovery)	$ 364	$ (254)
Effective rate applied to profit (loss) before income taxes	20.2%	12.6%

Significant components of the Corporation's deferred tax balances are as follows:

	2014	2013
Deferred tax assets (liabilities):		
Plant and equipment	$ (4,647)	$ (3,295)
Cumulative eligible capital	648	696
Employee benefits	2,660	2,265
Deferred revenue - contributed capital	4,097	3,581
Net deferred tax asset	$ 2,758	$ 3,247

As at December 31, 2014, a future tax asset of $2,758 (2013 - $3,247) has been recorded. The utilization of this tax asset is dependent on future taxable profits in excess of profits arising from the reversal of existing taxable temporary differences. The Corporation believes that this asset should be recognized as it will be recovered through future rates.

9. Customer deposits:

Customer deposits represent cash deposits from electricity distribution customers and retailers, as well as construction deposits.

Deposits from electricity distribution customers are refundable to customers who demonstrate an acceptable level of credit risk as determined by the Corporation in accordance with policies set out by the OEB or upon termination of their electricity distribution service.

Construction deposits represent cash prepayments for the estimated cost of capital projects recoverable from customers and developers. Upon completion of the capital project, these deposits are transferred to contributions in aid of construction.

Customer deposits comprise:

	2014	2013
Customer deposits	$ 4,040	$ 4,096
Construction deposits	4,411	2,220
Total customer deposits	$ 8,451	$ 6,316

10. Pension agreement:

GHESI 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 Employee 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. GHESI uses defined contribution plan accounting as it is only liable for contributions to the Plan. GHESI's contribution for employees' current service for the year ended December 31, 2014 was $1,054 (2013 - $976).

11. Employee future benefits:

Components of employee future benefits recognized are as follows:

	2014	2013
Post-retirement benefits - accrued benefit liability, as previously reported	$ 9,359	$ 7,929
Accrued sick leave benefit	680	620
	$ 10,039	$ 8,549

Post-retirement benefits:

The Corporation pays certain medical and life insurance benefits on behalf of some of its retired employees. The Corporation recognizes these post-retirement costs in the period in which employees' services were rendered. The accrued benefit liability at December 31, 2014 of $9,359 for the year ended December 31, 2014, was based on an actuarial valuation completed in 2014 using a discount rate of 4.0%. The accrued benefit liability at December 31, 2013 of $7,929 was based on an actuarial valuation completed in 2013, using a discount rate of 4.9%.

Changes in the present value of the defined benefit unfunded obligation and the accrued benefit liability:

	2014	2013
Defined benefit obligation, beginning of year	$ 7,929	$ 7,940
Current service cost	211	229
Interest cost	387	317
Re-measurement of obligation	1,053	(306)
Benefits paid during the year	(221)	(251)
Accrued benefit liability, end of year	$ 9,359	$ 7,929

11. Employee future benefits (continued):

Components of net benefit expense recognized are as follows:

	2014	2013
Current service cost	$ 211	$ 229
Interest cost	387	317
Net benefit expense recognized	$ 598	$ 546

The full amount of the Corporation's net benefit expense was charged to operations in 2013 and 2014.

The significant actuarial assumptions used in the valuation are as follows (weighted average):

	2014	2013
Accrued benefit obligation:		
Discount rate	4.05%	4.90%
Benefit cost for the year:		
Withdrawal rate	1%	1%
Assumed health care cost trend rates:		
Initial health care cost trend rate	5%	5%

The approximate effect on the accrued benefit obligation of the entire plan and the estimated net benefit expense of the entire plan if the health care trend rate assumption was increased or decreased by 1%, and all other assumptions were held constant, is as follows:

	Defined Benefit Obligation	Periodic Benefit Cost
1% increase in health care trend rate	$ 10,994	$ 703
1% decrease in health care trend rate	8,047	496

11. Employee future benefits (continued):

Historical information

Amounts for the current and previous year, for the entire plan, are as follows:

	2014	2013
Defined benefit obligation	$ 9,359	$ 7,929
Experience adjustments	1,053	(1,376)

The main actuarial assumptions utilized for the valuation are as follows:

General inflation - future general inflation levels, as measured by the changes in the Consumer Price Index, were assumed at 2.0% in 2014, and thereafter (2013 - 2.0%).

Discount (interest) rate - the discount rate used to determine the present value of future liabilities and the expense for the year ended December 31, 2014, was 4.05% (2013 - 4.9%).

Salary levels - future general salary and wage levels were assumed to increase at 3.3% (2013 - 3.3%) per annum.

Medical costs - medical costs were assumed to increase 5% for 2013, 5% for 2014, 5% for 2015, 5% for 2016, and 5% thereafter.

Dental costs - dental costs were assumed to increase 5% for 2013, 5% for 2014, 5% for 2015, 5% for 2016, and 5% thereafter.

Accrued sick leave benefit:

The Corporation allows regular employees the equivalent of one and one-half days per month sick time credit to be applied in case of illnesses or accidents not covered by Workers' Compensation. A maximum of eighteen days sick time credit is accrued to each employee's credit each year and is reduced by the amount of sick time utilized each year. At the end of the year, the remaining credit, if any, is added to each employee's sick time credit accumulation. Any unused sick time credit is forfeited when employment ceases with the Corporation. As at December 31, 2014, the estimated valued of the expected future payment to be made as a result of the unused sick time credits amounts to $681 (2013 - $620).

12. Long-term debt:

The senior unsecured debentures have a maturity date of December 6, 2030 and have an interest rate of 5.264% per annum. Interest is payable in equal semi-annual installments, in arrears, on June 6 and December 6 each year commencing June 6, 2013 until maturity. The debentures were issued on December 6, 2013. The debentures are represented by a single Global Debenture Certificate registered in the name of CDS & Co. In order to put the debentures in place, the Corporation incurred debt issuance costs in the amount of $500.

	2014	2013
Senior unsecured debentures	$ 65,000	$ 65,000
Less: cost of debt issuance	(400)	(425)
Senior unsecured debentures, net proceeds	64,600	$ 64,575

13. Other income:

Other income comprises:

	2014	2013
Late payment charges	$ 116	$ 125
Pole and other rental income	343	360
Collection and other service charges	436	236
Waterworks revenue	1,172	1,156
Intercompany services	734	848
Customer contributions	426	367
Conservation and Demand Management Performance Bonus	1,255	-
Miscellaneous	236	151
Total other income	$ 4,718	$ 3,243

14. Employee benefits:

		2014		2013
Salaries, wages and benefits	$	8,182	$	7,379
Contributions to multi-employer plan		1,054		976
Expenses related to defined benefit plans		598		546
	$	9,834	$	8,901

15. Finance income and expense:

		2014		2013
Interest income on bank deposits	$	(19)	$	(62)
Finance income		(19)		(62)
Interest expense on long-term debt		3,446		3,446
Interest adjustment re: capitalized borrowing costs		(123)		(114)
Interest expense on deposits		37		15
Other		55		28
		3,415		3,375
Net finance costs recognized in profit or loss	$	3,396	$	3,313

16. Related party transactions:

(a) Parent and ultimate controlling party:

The sole shareholder of the Corporation is Guelph Municipal Holdings Inc. ("GMHI"), effective September 8, 2014 when GMHI amalgamated with Guelph Hydro Inc. ("GHI"). GMHI is a wholly-owned subsidiary of the City of Guelph. The City produces financial statements that are available for public use.

(b) Key management personnel:

The key management personnel of the Corporation have been defined as members of its board of directors and executive management team members, and is summarized below.

	2014	2013
Directors' fees	$ 115	$ 98
Salaries and other short-term benefits	2,024	1,967
Post-employment benefits	64	19
	$ 2,203	$ 2,084

(c) Transactions with ultimate parent (the City):

The following summarizes the Corporation's related party transactions, recorded at the exchange amounts and balances with the City for the years ended December 31:

	2014	2013
Revenue:		
Energy sales (at commercial rates)	$ 8,238	$ 7,752
Waterworks revenue	1,172	1,156
Street light maintenance	303	331
Expenses:		
Subcontracting	16	68
Property taxes	327	332
Balances:		
Accounts receivable	1612	1,300
Accounts payable and accrued charges	-	-

16. Related party transactions (continued):

(d) Transactions with subsidiaries of the City:

A listing of the various entities under the control of the City is set out on the City's website.

The Corporation had the following transactions with GMHI and its subsidiary, Envida Community Energy Inc.:

	2014	2013
Revenue:		
Energy sales (at commercial rates)	$ 14	$ 22
Multiple function support services	734	848
Expenses:		
Planning services through Board of Directors	93	163
Management services	648	658
Management fees	-	1,500
Balances:		
Accounts receivable	853	603
Accounts payable and accrued charges	2,654	1,352

17. Commitments and contingencies:

From time to time, the Corporation is involved in various litigation matters arising in the ordinary course of its business. The Corporation has no reason to believe that the disposition of any such current matter could reasonably be expected to have a materially adverse impact on the Corporation's financial position, results of operations or its ability to carry on any of its business activities.

The action that commenced against GHESI in November, 2013 in the Ontario Superior Court of Justice with the plaintiff seeking damages in the amount of $2.0 million as compensation for damages allegedly suffered to the plaintiff's business and reputation in relation to the supply and installation of energy efficient lighting equipment, plus $1.0 million punitive damages as a result of interference in economic relations or slander of goods has been discontinued without prejudice. The discontinuance was effective August 25, 2014.

17. Commitments and contingencies (continued):

General Liability Insurance:

The Corporation is a member of the Municipal Electric Association Reciprocal Insurance Exchange (MEARIE). MEARIE is a pooling of public liability insurance risks of many of the electrical utilities in Ontario. All members of the pool are subjected to assessment for losses experienced by the pool for the years in which they were members on a pro-rata basis based on the total of their respective service revenues. As at December 31, 2014, no assessments have been made.

18. Share capital:

	2014	2013
Authorized:		
Unlimited number of common shares		
Issued:		
1,000 common shares	$ 43,374	$ 43,374

19. Financial instruments and risk management:

Cash and cash equivalents are measured at fair value. The carrying values of receivables, and accounts payable and accrued charges approximate fair value because of the short maturity of these instruments. The carrying value of the customer deposits approximates fair value because the amounts are payable on demand.

The fair value of the senior unsecured debentures at December 31, 2014 was $75,008 (2013 - $68,431). The fair value is calculated based on the present value of future principal and interest cash flows, discounted at the current rate of interest at the reporting date. The interest rate used to calculate fair value at December 31, 2014 was 3.985% (2013 - 4.84%).

The Corporation's activities provide for a variety of financial risks, particularly credit risk, market risk and liquidity risk.

(a) Credit risk:

Financial assets carry credit risk that a counterparty will fail to discharge an obligation which could result in a financial loss. Financial assets held by the Corporation, such as accounts receivable, expose it to credit risk. The Corporation earns its revenue from a broad base of customers located in the City. No single customer accounts for revenue in excess of 10% of total revenue.

19. Financial instruments and risk management (continued):

The carrying amount of accounts receivable is reduced through the use of an allowance for impairment and the amount of the related impairment loss is recognized in the income statement. Subsequent recoveries of receivables previously provisioned are credited to the income statement. The balance of the allowance for impairment at December 31, 2014 is $375 (2013 - $231). An impairment loss of $135 (2013 - $226) was recognized during the year. The Corporation's credit risk associated with accounts receivable is primarily related to payments from ratepayers. At December 31, 2014, approximately $478 (2013 - $310) was considered 60 days past due. The Corporation has over 53 thousand customers, the majority of whom are residential customers. Credit risk is managed through collection of security deposits from customers in accordance with directions provided by the OEB. As at December 31, 2014, the Corporation held security deposits amounting to $4,411 (2013 - $4,096).

(b) Market risk:

Market risks primarily refer to the risk of loss resulting from changes in commodity prices, foreign exchange rates, and interest rates. The Corporation currently does not have any material commodity or foreign exchange risk. The Corporation is exposed to fluctuations in interest rates as the regulated rate of return for the Corporation's distribution business is derived using a complex formulaic approach which is in part based on the forecast for long-term Government of Canada bond yields. This rate of return is approved by the OEB as part of the approval of distribution rates.

The Corporation estimates that a 1% increase in interest rates at December 31, 2014 would have increased interest expense on the long-term debt by $650 (2013 - $650), assuming all other variables remained constant. A 1% decrease in the interest rate would have an equal but opposite effect.

(c) Liquidity risk:

The Corporation monitors its liquidity risk to ensure access to sufficient funds to meet operational and investing requirements. The Corporation's objective is to ensure that sufficient liquidity is on hand to meet obligations as they fall due while minimizing interest exposure. As at December 31, 2014, the Corporation had access to a $10,000 credit facility. The Corporation monitors cash balances daily to ensure that a sufficient level of liquidity is on hand to meet financial commitments as they come due. As at December 31, 2014, no amounts had been drawn under GHESI's $10,000 credit facility (2013, $nil).

The Corporation also has a bilateral facility for $5.0 million (the "LC" facility) for the purpose of issuing letters of credit mainly to support the prudential requirements of the IESO, of which $4.0 million has been drawn and posted with the IESO (2013 - $nil).

The majority of accounts payable, as reported on the balance sheet, are due within 30 days.

20. Financial instruments and risk management (continued):

(d) Capital disclosures:

The main objectives of the Corporation, when managing capital, are to ensure ongoing access to funding to maintain and improve the electricity distribution system, compliance with covenants related to its credit facilities, prudent management of its capital structure with regard for recoveries of financing charges permitted by the OEB on its regulated electricity distribution business, and to deliver the appropriate financial returns.

The Corporation's definition of capital includes shareholder's equity and long-term debt. As at December 31, 2014, shareholder's equity amounted to $53,240 (2013 - $55,572) and long-term debt amounted to $64,600 (2013 - $64,575).

21. Guarantees:

GHESI has a Connection and Cost Recovery Agreement with Hydro One Networks Inc. (Networks) for the supply of two additional breaker positions at the Campbell transformer station (cost $599), and the installation of a new metal clad switchgear to the two existing idle windings at Cedar TS (transformer station) with eight new feeder positions (cost $5,582). The costs of the connections are debts owed to Networks that will be forgiven provided that GHESI meets or exceeds the specific load requirement and the incremental transformation connection revenue received by Networks. GHESI expects to meet the conditions of the guarantee and does not anticipate any additional payments to Networks.

GHESI has another Connection and Cost Recovery Agreement with Networks for the line connection associated with the Arlen municipal transformer station. The $1,688 cost of the connection is a debt owed to Networks that will be forgiven provided that GHESI meets or exceeds the specific load requirement and the incremental transformer connection revenue received by Networks. GHESI expects to meet the conditions of the guarantee and does not anticipate an additional payment to Networks.

APPENDIX 1-M: Management Discussion and Analysis



MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2014

GUELPH HYDRO ELECTRIC SYSTEMS INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS
FOR THE YEAR ENDED DECEMBER 31, 2014

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Introduction

The following Management's Discussion and Analysis ("MD&A") should be read in conjunction with Guelph Hydro Electric Systems Inc.'s ("GHESI" or the "Corporation") audited financial statements and accompanying notes as at and for the year ended December 31, 2014 (the "Financial Statements"). The Financial Statements are prepared in accordance with International Financial Reporting Standards ("IFRS") and are presented in Canadian dollars (see "Significant Accounting Policies" below). Unless otherwise noted, all financial information is presented in thousands of dollars and rounded to the nearest thousand.

Forward-Looking Statements and Information

The Corporation includes forward-looking information in its Management's Discussion and Analysis ("MD&A") within the meaning of applicable securities laws in Canada ("forward-looking information"). The purpose of the forward-looking information is to provide management's expectations regarding GHESI's future results of operations, performance, business prospects and opportunities and may not be appropriate for other purposes. The words "anticipates," "believes," "budgets," "could," "estimates," "expects," "forecasts," "intends," "may," "might," "plans," "projects," "schedule," "should," "will," "would," and similar expressions are often intended to identify forward-looking information, although not all forward-looking information contains these identifying words. The forward-looking information reflects management's current beliefs and is based on information currently available to GHESI's management.

The forward-looking information in the MD&A includes, but is not limited to, statements regarding GHESI's distribution revenue, the outcome of rate applications and other proceedings before the Ontario Energy Board ("OEB"), GHESI's plans to finance investments in distribution infrastructure and other activities, operating performance, business prospects and opportunities, the effect of changes in interest rates on future revenue requirements, and changes in accounting estimates. The statements that make up the forward-looking information are based on assumptions that include, but are not limited to, the future course of the economy and financial markets, the receipt of applicable regulatory approvals and requested rate orders, the receipt of favourable judgments, the level of interest rates, and on GHESI's ability to borrow.

Although GHESI believes that it has a reasonable basis for the forward-looking information included herein, such information is subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the forward-looking information. Some of the factors that could cause such differences include legislative or

regulatory developments, financial market conditions, general economic conditions and the weather.

GHESI does not undertake any obligation to update publicly or to revise any of the forward-looking information included herein after the date hereof, whether as a result of new information, future events, or otherwise.

Business of Guelph Hydro Electric Systems Inc.

Guelph Hydro Electric Systems Inc. is a regulated local distribution company that owns and operates electricity distribution infrastructure serving over 52,000 residential and commercial customers in the City of Guelph and the Village of Rockwood, Ontario.

Until September 6, 2014, Guelph Hydro Electric Systems Inc. was 100 per cent owned by Guelph Hydro Inc. ("GHI") and was the principal subsidiary of this entity. Guelph Hydro Inc. was, in turn, 100 per cent owned by Guelph Municipal Holdings Inc. ("GMHI").

On September 6th, 2014, the City of Guelph amalgamated GHI and GMHI. As a result, GHESI is now 100 per cent owned by GMHI and is the principal subsidiary of the amalgamated body Corporate, accounting for about 95 per cent of Guelph Municipal Holdings Inc.'s capital assets and about 99 per cent of its revenues. GMHI was originally incorporated by the City of Guelph in August of 2011 to hold the City's investment in GHI and other City-owned incorporated bodies.

The business of Guelph Hydro Electric Systems Inc. is regulated by the OEB, a Crown Corporation of the Government of Ontario, under the *Ontario Energy Board Act*, 1998 (Ontario). ("OEB Act"). The OEB has broad powers relating to licensing, rules of conduct and services, compliance, performance, as well as to the regulation of rates charged by Guelph Hydro Electric Systems Inc. and about 76 other local electricity distribution companies in Ontario.

The Government of Ontario, through the Ministry of Energy, sets the legal and policy framework—passing legislation and regulations—that governs the energy sector.

GHESI receives electricity from the provincial electricity grid and transports it safely and reliably across a distribution network covering a service territory of 93 square kilometers and comprising one municipal transformer station, two municipal substations, 431 kilometers of overhead lines, 672 kilometers of underground cable, 5,772 transformers and 11,116 hydro poles.

GHESI earns revenue from this business by charging its customers for the use of the distribution system. Such electricity distribution charges comprise a fixed periodic

service charge combined with a volumetric charge based on electricity consumption. All distribution charges are subject to the approval of the OEB. As a condition of its distribution license, GHESI is also required to meet energy conservation and demand management ("CDM") targets established by the OEB.

GHESI also provides certain non-regulated water billing and customer care services to the City of Guelph and other services to the Village of Rockwood.

Pursuant to industry regulation, GHESI is required to be the default billing and collecting entity for all electricity related charges for all electricity customers in the City of Guelph and the Village of Rockwood. In addition to its own distribution charges, other electricity charges include transmission charges accruing to the provincially-owned Hydro One Networks Inc., commodity costs for electricity payable to the Independent Electricity System Operator ("IESO") and accruing to generators such as the provincially-owned Ontario Power Generation Inc. ("OPGI"), service charges for market participants such as the IESO, and the "Debt Retirement Charge," which is a provincial charge directed to the repayment of certain stranded debt obligations of the former Ontario Hydro, which continue in the provincially-owned Ontario Electricity Financial Corporation ("OEFC"). These other non-distribution charges represent "pass-through" charges accruing to these and other electricity industry participants and amounted to approximately 86 per cent per cent of gross service revenue billed by GHESI. GHESI must remit these non-distribution charges to other industry participants, irrespective of whether or not such charges are ultimately collected from customers, thus exposing GHESI to credit risk well in excess of its own capacity to generate revenue. GHESI has instituted credit policies to mitigate such risk.

Executive Summary

- Net income was $0.7 million in 2014 compared to a net loss of $1.5 million in 2013;
- Capital expenditures were $13.0 million in 2014 compared to $11.4 million in 2013;
- On August 13, 2014, GHESI filed its 2015 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered its Decision on December 4, 2014 which approved a distribution rate increase of 1.3 per cent for all customers, effective January 1, 2015.
- In addition to the distribution rate increase, the OEB approved GHESI's recovery of deferral and variance accounts balances in amount of $6.9M to be recovered over a one-year period. These recoveries relate to past differences between the

costs charged by the IESO and Hydro One and OEB-approved non-distribution charges billed to GHESI's customers.

Electricity Distribution — Industry Overview

In April 1999, the Government of Ontario began restructuring Ontario's electricity industry. Under regulations passed pursuant to the restructuring, GHESI and other electricity distributors have been purchasing their electricity from the wholesale market administered by the IESO and recovering the costs of electricity and certain other costs at a later date in accordance with procedures mandated by the OEB.

The OEB has regulatory oversight of electricity and other energy-related matters in Ontario. The *OEB Act* sets out the OEB's authority to issue a distribution license which must be obtained by owners or operators of an electricity distribution system in Ontario. The OEB prescribes license requirements and conditions including, among other things, specified accounting records, regulatory accounting principles, separation of accounts for separate businesses, and filing process requirements for rate-setting purposes.

Among other things, the OEB's authority and responsibilities include the power to approve and fix rates for the transmission and distribution of electricity, the power to provide continued rate protection for rural and remote electricity customers and the responsibility for ensuring that electricity distribution companies fulfill their obligations to connect and service customers.

GHESI is required to charge its customers for the following amounts (all of which, other than distribution charges, represent a pass through of amounts payable to third parties):

- *Distribution Charges* – Distribution charges are designed to recover the costs incurred by GHESI in delivering electricity to customers and to achieve the OEB-allowed rate of return. Distribution charges are regulated by the OEB and are comprised of a fixed charge and a usage-based (consumption) charge. The volume of electricity consumed by GHESI's customers during any period is governed by events largely outside GHESI's control (principally, sustained periods of hot or cold weather) which increase the consumption of electricity, and sustained periods of moderate weather which decrease the consumption of electricity).

- *Electricity Price and Related Regulated Adjustments* – The electricity price and related regulated adjustments represent a pass through of the commodity cost of electricity. Additionally, GHESI, as with all other distributors, is required to apply the Ontario Clean Energy Benefit ("OCEB") as a credit of 10 per cent to all residential and small commercial electricity charges. The OCEB

credit is recovered monthly from the IESO as a credit on GHESI's wholesale power invoice. The OCEB amount is reconciled monthly with the Ministry of Energy and is subject to external audit.

- *Retail Transmission Rate* – The retail transmission rate represents a pass through of wholesale costs incurred by distributors in respect of the transmission of electricity from generating stations to local areas. Retail transmission rates are regulated by the OEB.

- *Wholesale Market Service Charge* – The wholesale market service charge represents a pass through of various wholesale market support costs. Retail rates for the recovery of wholesale market service charges are regulated by the OEB.

To ensure that GHESI meets its payment obligations to the IESO for wholesale market charges, GHESI is required to satisfy and maintain prudential requirements with the IESO, which include credit support with respect to outstanding market obligations in the form of letters of credit, cash deposits or guarantees from third parties with prescribed credit ratings.

GHESI is exempt from tax under the *Income Tax Act* (Canada) ("ITA") if no less than 90 per cent of the capital of the Corporation is owned by Guelph Municipal Holdings Inc. and no more than 10 per cent of the income of the Corporation is derived from activities carried on outside the municipal geographical boundaries of the City. A corporation that is exempt from tax under the ITA is also exempt from tax under the *Taxation Act, 2007* (Ontario) ("TA") and the *Corporations Tax Act* (Ontario) ("CTA").

GHESI and its affiliates are Municipal Electricity Utilities ("MEUs") for purposes of the Payment in Lieu of Corporate Taxes ("PILs") regime contained in the *Electricity Act, 1998* (Ontario) ("Electricity Act"). The Electricity Act provides that an MEU that is exempt from tax under the ITA, the CTA and the TA is required to make, for each taxation year, a PILs payment to the Ontario Electricity Financial Corporation in an amount equal to the tax that it would be liable to pay under the ITA and the TA (for years ending after 2008) or the CTA (for years ending prior to 2009) if it were not exempt from tax. The PILs regime came into effect on October 1, 2001, at which time GHESI and each of its affiliates were deemed to have commenced a new taxation year for purposes of determining their respective liabilities for PILs payments.

The *Green Energy and Green Economy Act, 2009* (Ontario) (the "Green Energy Act") was passed on May 14, 2009. The Green Energy Act, among other things, permits electricity distribution companies to own renewable energy generation facilities, obligates electricity distribution companies to provide priority connection access for renewable energy generation facilities, empowers the OEB to set CDM targets for

electricity distribution companies as a condition of license and requires electricity distribution companies to accommodate the development and implementation of a smart grid in relation to their systems.

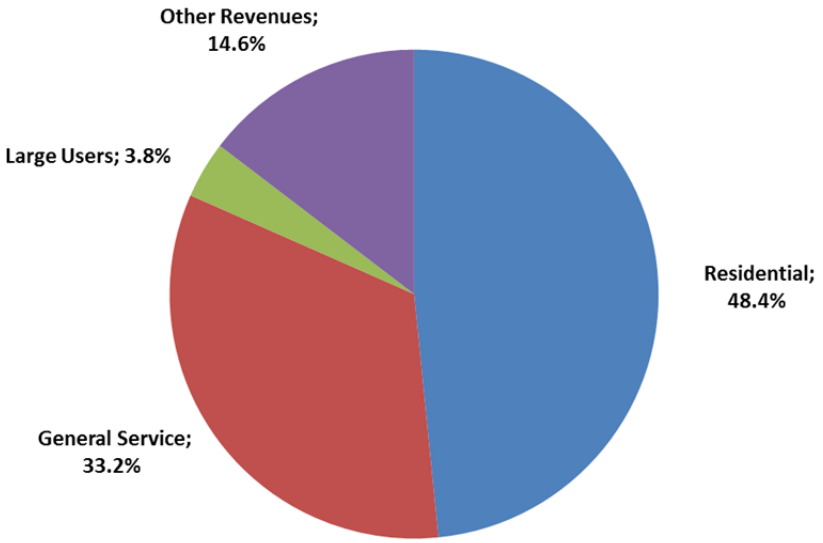
In April 2012, the Ontario Minister of Energy established the Ontario Distribution Sector Review Panel ("the Panel") to provide expert advice to the Government of Ontario ("the Province") on how to improve efficiencies in the distribution sector with the aim of reducing the financial cost of electricity distribution for electricity consumers. In its report, released in December, 2012 and titled *Renewing Ontario's Electricity Distribution Sector: Putting the Consumer First*, the Panel produced a thorough review of the sector and recommended distribution sector consolidation on a province-wide scale to be carried out initially on a voluntary basis, but followed by mandatory consolidation via legislation should voluntary consolidation not take place. The Province has not formally accepted the Panel's recommendations and has further stated its preference that consolidation in the sector should occur on a voluntary basis. GHESI continues to assess strategic opportunities that could improve efficiencies in its business, including mergers and acquisitions.

Selected Financial Data

The selected financial data presented below should be read in conjunction with the Corporation's Financial Statements.

Years ended December 31 (in thousands of dollars)	2014	2013	Change	Change, %
Electricity Sales	$212,562	$195,186	$17,376	8.90
Costs				
Cost of electricity sold and other non-distribution cost of sales	190,844	174,871	15,973	9.13
Operating & maintenance expenses	11,861	11,901	(40)	(0.34%)
General & administration expenses	9,374	10,350	(976)	(9.43%)
Income before financial expense and PILS	5,220	1,307	3,914	299.69%
Income (loss) before provision for PILS	1,806	(2006)	3,812	n/a
Provision for PILS(recovery)	364	(254)	618	n/a
Other Comprehensive Income (loss)	(774)	306	1080	n/a
Net income	**$668**	**($1,446)**	**$2,114**	**n/a**

Revenue by Rate Class, 2014



As at December 31 (in thousands of dollars)		
	2014	**2013**
Selected Balance Sheet Data		
Total assets	$177,289	$171,479
Current liabilities	31,076	26,395
Long-term liabilities	92,973	89,512
Total liabilities	124,049	115,907
Shareholder's equity	53,240	55,572
Total liabilities and shareholder's equity	**$177,289**	**$171,479**

Results of Operations — 2014 compared to 2013

Net Income/Loss

Net income for year ended December 31, 2014 was $0.7 million compared to a net loss of $1.5 million for the year ended December 31, 2013. The increase in net income was primarily due to higher distribution revenue and lower operating, maintenance and administrative expenses compared to 2013.

Under Rate Regulated Accounting ("RRA"), the timing and recognition of certain regulatory costs and billings may differ from those otherwise expected under IFRS. IFRS records these regulatory costs and billings as expenses and revenues respectively. Under RRA these items are recognized as assets and liabilities which represent current rights and obligations regarding cash flows expected to be recovered from or refunded to customers, based on decisions and approvals by the OEB. For the year ended December 31, 2014 under RRA, the excess of cost of power expenses over regulatory charges and billings caused regulatory assets to increase by $6.3 million. Under IFRS, this amount was recognized as an expense in the Corporation's Statements of Comprehensive Income.

Net Revenues

Net Revenue is defined as revenues minus the cost of electricity sold and other non-distribution costs of sales. Net revenue for the year ended December 31, 2014 was $21.7 million compared to $20.3 million for the comparable period in 2013. The higher net revenue in 2014 was mainly due to higher distribution and non-distribution revenues compared to 2013.

Other income from operations comprises income from regulated electricity distribution activities and non-regulated activities. Other income from regulated activities includes charges to customers for connection, reconnection, late payments and ancillary services such as pole attachment fees which are charges to other utility service providers for attaching their infrastructure to poles owned by GHESI. Non-regulated activities

primarily includes billings to the City of Guelph for water meter reading and billing carried out by GHESI on the City's behalf, and payments from the IESO related to the successful achievement of conservation and demand management programs. In 2014, Other income from operations was $4.7 million compared to $3.2 million in 2013.

Expenses

Operating, Maintenance and Administration expenses for the year ended December 31, 2014 were $21.2 million compared to $22.3 million for the comparable period in 2013. The lower operating costs were substantially due to lower administrative costs and lower allocated depreciation expenses compared to 2013.

Net Financing Charges

Net financing charges for the year ended December 31, 2014 were $3.4 million compared to $3.3 million for the year ended December 31, 2013. The higher interest expense was due to increased short-term borrowing arising from lower overall cash balances.

PILs (Recovery)

The provision for PILs for the year ended December 31, 2014 was $0.364 million compared to a (recovery) of $0.25 million for the year ended December 31, 2013. The change in PILs provision for the year ended December 31, 2014 was due to higher income before PILs.

Sources of Liquidity and Capital Resources

GHESI's primary sources of liquidity and capital resources are cash provided by operating activities, bank financing, interest income, and borrowings from debt issuances. GHESI's liquidity and capital resource requirements are mainly for capital expenditures to maintain and improve the electricity distribution system, purchased power and other related power costs, net financing charges, and prudential requirements.

Equity contributions from GHESI's sole shareholder, Guelph Municipal Holdings Inc., and the ultimate parent company, the City of Guelph, did not constitute a source of additional funds in 2014.

Liquidity and Capital Resources Year ended December 31 (in thousands of dollars)		
	2014	**2013**
Cash and cash equivalents, beginning of year	$620	$2,274
Net cash provided from operating activities	10,874	8,143
Net cash used from investing activities	(13,001)	(11,395)
Net cash provided from financing activities	1,507	1,598
Cash and cash equivalents, end of year	$0	$620

Net Cash Provided from Operating Activities

Net cash provided by operating activities was $10.9 million in 2014 compared to $8.1 million in 2013. The increase in net cash provided by operating activities was primarily due to a $2.6 million increase in net income in 2014 over 2013. The increase in net income was attributable to an increase in overall distribution revenue of $1.6 million ($1.2 million in the residential rate class) and an increase in other revenue of $1.5 million.

Net Cash Used in Investing Activities

Net cash used in investing activities was $13.0 million in 2014 compared to $11.5 million in 2013. The increase in net cash used from investing activities was due to higher capital expenditures on distribution plant ($1.5 million) and higher additions to intangible assets.

The following table summarizes GHESI's capital expenditures for the years indicated.

Capital Expenditures Year ended December 31 (in thousands of dollars)		
	2014	**2013**
Distribution system	$10,750	$10,245
Technology assets	1,048	531
Other	1,293	735
Total capital expenditures	**$13,091**	**$11,511**

In 2014, GHESI increased its investments in its technology assets by investing $0.4 million on its Enterprise Resource Planning system. GHESI also increased its capital investment in its fleet by $0.16 million, and increased in its investment on its building by $0.4 million relative to 2013.

Net Cash Provided from Financing Activities

Net cash used by financing activities was $1.5 million in 2014 compared to cash provided by financing activities of $1.6 million in 2013. The $0.1 million decrease in net cash provided by financing activities was primarily due to an increase in dividends paid

($1.6 million) and lower contributed capital ($0.9 million) offset by higher customer deposits ($2.4 million).

Revolving Credit Facility

GHESI has a credit facility pursuant to which the Corporation may borrow up to $10.0 million. GHESI also has a credit facility for $5.0 million (the "LC" facility) for the purpose of issuing letters of credit mainly to support prudential requirements with the IESO.

As at December 31, 2014, GHESI's $10.0 million credit facility remained undrawn (2013, $nil) and a $4.0 million letter of credit (2013, $4.0 million) had been issued by GHESI against the $5.0 million LC facility.

Dividends

GHESI paid $2.25 million in dividends to GHI and $0.75 million in dividends to GMHI in 2014.

Credit Rating

GHESI has an "A" credit rating with a stable trend from Standard & Poor's.

Corporate Developments

Distribution Rates

Regulatory developments in Ontario's electricity industry, including current and possible future consultations between the OEB and interested stakeholders, may affect GHESI's electricity distribution rates and other permitted recoveries in the future.

On June 30, 2011, GHESI submitted a rate rebasing application to the OEB for new distribution rates. On March 1, 2012, GHESI received its final Rate Order from the OEB, which approved an overall increase of 7.86 per cent to distribution rates effective January 1, 2012. The Decision incorporated GHESI's increase in fixed assets and operating expenses since the last rate rebasing application in 2008 and established rates that allow for return on invested capital of 6.80 per cent and return on equity of 9.42 per cent. Additionally, on July 24, 2012, GHESI filed its 2013 electricity distribution rates application using the OEB's 3rd Generation IRM as the basis for its application. The OEB rendered its Decision on December 6, 2012, which approved a rate increase of 1.08 per cent for all customers, effective on January 1, 2013.

On August 16, 2013, GHESI filed its 2014 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered

its Decision on December 5, 2013 which approved a distribution rate increase of 1.4 per cent for all customers effective January 1, 2014.

On August 13, 2014, GHESI filed its 2015 electricity distribution rates application using the OEB's 4th Generation IRM as the basis for its application. The OEB rendered its Decision on December 4, 2014 which approved a distribution rate increase of 1.3 per cent for all customers, effective January 1, 2015.

In addition to the distribution rate increase, the OEB approved GHESI's recovery of deferral and variance accounts balances in the amount of $6.9M to be recovered over a one-year period. These recoveries relate to past differences between the costs charged by the IESO and Hydro One (including, wholesale market, transmission connection and network, commodity, global adjustment, and low voltage charges) and OEB-approved non-distribution charges billed to GHESI's customers.

In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from IFRS 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 that are not recognized under IFRS, known as Modified IFRS or MIFRS.

In late-2014, GHESI and its parent company, GMHI, restructured the corporation's short-term credit facilities. In 2015, GHESI will have access to a credit facility pursuant to which the Corporation may borrow up to $15.0 million. GHESI's letter of credit facility for $5.0 million remains in place. This latter facility continues to be used only for issuing letters of credit to support prudential requirements with the IESO. In addition to these facilities, GHESI will also provide guarantees to GMHI for a $5.0 million credit facility and a $1.0 million letter of credit facility both of which are intended to be used to finance and support district energy investments in GHESI's unregulated affiliate, Envida Community Energy Inc. GHESI will charge 1.1 percent annually as fees for providing this guarantee. GHESI intends to reduce the $15.0 million short-term credit facility back to $10.0 million as soon as it completes a new long-term debt issue either later in 2015 or in 2016.

CDM Activities

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *OEB Act*, directed the OEB to establish CDM targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended GHESI's distribution license to require GHESI, as a condition of its license, to

achieve 79.53 gigawatt hours (GWh) of energy savings and 16.71 megawatts (MW) of summer peak demand savings over the period beginning January 1, 2011 through December 31, 2014.

Effective January 1, 2011, GHESI entered into an agreement with the OPA to deliver CDM programs in the amount of approximately $3.1 million extending from January 1, 2011 to December 31, 2014 (the “Master CDM Program Agreement”). As at July 25, 2014, GHESI had received approximately $3.1 million from the OPA for the delivery of CDM programs under the Master CDM Program Agreement. All programs to be delivered under the Master CDM Program Agreement are fully funded and paid in advance by the OPA. These programs are expected to support the achievement of the mandatory CDM targets described above.

On December 21, 2012, the OPA received direction from the Minister of Energy to proceed with a one year extension of the province-wide CDM programs to December 31, 2015. This directive also included the requirement for OPA provision of funding for the delivery of CDM programs in 2015, but details regarding the funding and CDM targets have yet to be developed.

On March 31, 2014, the OPA received direction from the Minister of Energy to develop a new Conservation First Framework (CFF) with the goal of achieving 7 TWh of province-wide electricity conservation between 2015 and 2020. The 7 TWh energy-only target would be allocated to Local Distribution Companies such as GHESI, with LDCs provided greater authority to design and deliver new and innovative CDM programs under the CFF. GHESI’s share of the 7 TWh conservation target allocation is 99.04 GWh, with a corresponding 6-year program delivery and customer incentive payment budget of approximately $24.9 million.

On December 18, 2014, GHESI’s electricity distribution license was amended to include a requirement to make CDM programs available to its customers in an effort to achieve reductions in electricity consumption. A specific electricity savings target was not included in the distribution license amendment.

Effective January 1, 2015, the OPA merged with the IESO, with the IESO taking on oversight responsibility and support of LDC Conservation First Framework CDM delivery.

The one year extension of the province-wide CDM programs to December 31, 2015 is being used as a transition year between the 2011-2014 and 2015-2020 CDM frameworks. The OPA will continue to fund the 2015 “extension period” until the time of GHESI transition to CFF new program delivery. In December GHESI submitted to the OPA a 2015 “extension period” CDM program delivery funding request for approximately

$800k for 2015 CDM program delivery.

Under the CFF, GHESI has a requirement to submit a 6 year CDM Plan to the IESO by May 1st 2015, for IESO review and acceptance.

Legal Proceedings

In the ordinary course of business, GHESI is subject to various litigation and claims with customers, suppliers, former employees and other parties. On an ongoing basis, GHESI assesses the likelihood of any adverse judgments or outcomes as well as potential ranges of probable costs and losses. A determination of the provision required, if any, for these contingencies is made after analysis of each individual issue. The provision may change in the future due to new developments in each matter or changes in approach, such as a change in settlement strategy.

An action was commenced against GHESI in November, 2013 in the Ontario Superior Court of Justice with the plaintiff seeking damages in the amount of $2.0 million as compensation for damages allegedly suffered to the plaintiff's business and reputation in relation to the supply and installation of energy efficient lighting equipment, plus $1.0 million punitive damages as a result of interference in economic relations or slander of goods. Effective August 25, 2014, this action was discontinued without prejudice.

Share Capital

The authorized share capital of GHESI consists of an unlimited number of common shares of which 1,000 common shares are issued to GMHI and outstanding as at the date hereof.

Transactions with Related Parties

GMHI is the sole shareholder of GHESI, which is in turn wholly-owned by the City of Guelph. GHESI provides certain services to the City of Guelph at commercial and regulated rates, including electricity, street lighting and energy management services. All transactions with the City are conducted at prevailing market prices and normal trade terms. Additional information with respect to related party transactions between GHESI, the City and subsidiaries of the City, is set out below.

Transactions with Related Parties Summary Year ended December 31 (in thousands of dollars)		
	2014	**2013**
Revenues	$10,461	$10,109
Expenses	1,084	2,721
Dividends	3,000	1,400
Accounts receivable, net of allowance for doubtful accounts	2,465	1,903
Accounts payable and accrued charges	$2,654	$1,352

Revenues represent amounts charged to the City primarily for electricity, water billing and street lighting services and amounts charged to subsidiaries of the City for electricity and multiple function support services. Operating expenses represent amounts charged by the City for property taxes, subcontracting work, and management services provided by GMHI.

GHESI re-financed its debt on December 6, 2010 with a private placement of unsecured debentures in the amount of $65 million at an annual coupon of 5.264 per cent. The debentures are due on December 6, 2030 and interest is calculated and payable semi-annually on June 6 and December 6. A portion of the proceeds from the financing were used to repay a $12.6 million promissory note to GHESI's parent company GMHI as well as a $30 million note to the City of Guelph. The remaining proceeds will be used by GHESI to fund ongoing capital investments.

Accounts receivable, net of allowance for doubtful accounts, represent receivables from the City primarily for the sale of electricity, water billing, subcontracting work and street lighting services, and from subsidiaries of the City for the sale of electricity and function support services. Accounts payable and accrued liabilities represent amounts payable to the City relating to property taxes, and subcontracting work, as well as planning services provided by the Board of Directors and management services provided by GMHI. See Note 4 to the Financial Statements.

Risk Factors

The Finance and Audit Committee of the Board of Directors has adopted a mandate to identify the principal risks in GHESI's business and to verify that effective control systems are in place to manage and mitigate these risks. The Chief Operating Officer and the Chief Financial Officer have a joint responsibility for the ongoing monitoring and review of the risk profile, policies and practices of GHESI and for ensuring that the risk management program is an integral part of business strategy and planning. The financial performance of GHESI is subject to a variety of risks including those described below.

Bulk Supply

The high-voltage electricity transmission infrastructure serving Guelph is aging and represents a risk to ensuring a safe and continuous electricity supply for Guelph. Hydro One has embarked on a transmission reinforcement project called the "Guelph Area Transmission Refurbishment Project" ("GATR") and has received approval by the OEB to proceed with construction of a reinforcement plan for improved system reliability and additional capacity to the area. The in-service date is targeted for Spring, 2016 and until the project is complete, GHESI will employ load shifting, conservation and split grid operations to ensure continuous supply.

Change of Ownership

The City, through its ownership of GMHI, may decide to sell all or part of GHESI. Alternatively, the Province of Ontario could mandate consolidation of the electricity distribution sector. Either of these scenarios could adversely impact GHESI's financial situation.

Macroeconomic Weakness /Socio-Economic Change

In the event of a severe and prolonged economic downturn in the economy (either in Ontario, Canada or globally) and/or major socio-economic upheaval, GHESI may not earn a fair rate of return and could experience severe financial hardship.

Regulatory Risks Related to the Electricity Distribution Business

The evolving method by which the OEB incorporates its next generation of IRM rate applications (termed "RRFE") into its rate-making policies can present regulatory risks to GHESI. The changes to the regulatory framework and rate-making policies could adversely impact distribution earnings, cash flow and valuation.

Regulatory risks could also arise from distribution consolidation. Should consolidation take place such that GHESI is sold or acquired by another distributor, or GHESI acquires another distributor, there can be no assurance that the OEB will allow the costs of such consolidation to be recovered from ratepayers.

Regulatory risk also encompasses the risk that the Province and/or the OEB could establish a regulatory regime that imposes conditions which restrict the electricity distribution business from achieving a reasonable rate of return. All requests for changes in electricity distribution charges require the approval of the OEB.

In particular, there can be no assurance that:

- the OEB will approve GHESI's electricity distribution rates under the IRM framework at levels that will permit planned capital work programs to be carried out such that reliable service to its customers is maintained and the allowed rate of return on the investment in the business can be earned;
- the full cost of providing service to distribution customers will be permitted to be recovered through GHESI's electricity distribution rates;
- the OEB will not permit competitors to provide distribution services in GHESI's licensed area, or permit loads within GHESI's service area to become electrically served by a means other than through GHESI's electricity distribution system;
- the OEB will allow recovery for revenue lost as a consequence of unanticipated effects of CDM;

- parts of GHESI's services will not be separated and opened to competition; or
- regulatory or other changes will not be made to the PILs regime.

Changes to any of the laws, rules, regulations and policies applicable to the businesses carried on by GHESI could also have a significant impact on GHESI. There can be no assurance that GHESI will be able to comply with applicable future laws, rules, regulations and policies. Failure by GHESI to comply with applicable laws, rules, regulations and policies may subject GHESI to civil or regulatory proceedings that may have a material adverse effect on the Corporation.

In a rebasing year, GHESI is also exposed to fluctuations in interest rates as its regulated rate of return is derived using a formulaic approach, which is based in part on a forecast of long-term Government of Canada bond yields and A-rated Canadian utility bond spreads. GHESI estimates that, in a rebasing year, a one per cent (100 basis points) reduction in long-term Government of Canada bond yields used to determine its regulated rate of return would reduce GHESI's return on equity by 0.5 per cent.

Market and Credit Risk

GHESI is subject to credit risk with respect to customer non-payment of electricity bills. GHESI is permitted to mitigate the risk of customer non-payment using any means permitted by law, including security deposits (including letters of credit, surety bonds, and cash deposits under terms prescribed by the OEB), late payment penalties, pre-payment, pre-authorized payment, load limiters or disconnection. In the event of an actual payment default and a corresponding bad debt expense incurred by GHESI, approximately 82 per cent of the expense would be related to commodity and transmission costs and the remainder to GHESI's distribution revenue. While GHESI would be liable for the full amount of the default, there can be no assurance that the OEB would allow recovery of the bad debt expense from remaining customers. Established practice in such cases is that the OEB would examine any electricity distributor's application for recovery of extraordinary bad debt expenses on a case-by-case basis.

As of December 31, 2014, five (5) customers accounted for approximately 16 per cent of accounts receivable (including all pass through charges). All of these customers have a good payment history with GHESI.

Liquidity Risk

Liquidity risk refers to the inability to meet financial obligations as a result of a lack of suitable access to capital or as a result of an unexpected and significant requirement for funds. Liquidity risk also refers to GHESI being unable to rely on GMHI (or GMHI's shareholder) for equity infusions should this be required. The Corporation's main source of revenue (and cash) is daily remittances from customers paying their hydro bills.

Labour Relations Risk

As at December 2014, GHESI employed 116 regular employees and 3 temporary employees including students. Approximately 67 per cent of GHESI's employees are represented by the International Brotherhood of Electrical Workers ("IBEW"). The existing collective agreement with the IBEW expires March 31, 2017. GHESI bears financial risk related to the ability to negotiate a collective agreement consistent with its rate orders. In the event of a labour dispute, GHESI could face some degree of operational risk related to continued compliance with its license requirements of providing service to customers.

Condition of Distribution Assets

GHESI's ability to continue to provide a safe work environment for its employees and reliable and safe distribution service to its customers and the general public will depend on, among other things, the OEB allowing recovery of costs in respect of GHESI's maintenance program and capital expenditure requirements for distribution plant refurbishment and replacement. GHESI's annual capital program included $3.7 million in 2014 for this work. This is derived from its comprehensive asset management plan and asset condition assessments on distribution assets. The plan is levelized over the next 20 years and factors in age of plant, normal maintenance and history of component failures.

Environmental Regulation

GHESI is subject to Canadian federal, provincial and municipal environmental regulation. Failure to comply with environmental regulation could subject GHESI to fines and other penalties. In addition, releases of hazardous substances now or in the past on or from properties owned, leased, occupied or used by GHESI, or as a result of Corporation's operations could lead to governmental orders requiring investigation, control and/or remediation of releases. The presence or release of hazardous substances could also lead to claims by third parties for harm as a result of the existence of these substances. In addition, new approvals or permits or renewals of existing approvals and permits may require environmental assessment and/or result in the imposition of conditions which may result in compliance costs.

Information Technology Infrastructure

GHESI's ability to operate effectively is, in part, dependent on the development, maintenance and management of complex information technology systems. Computer systems are employed to operate GHESI's electricity distribution system, financial and billing systems, and business systems to capture data and to produce timely and accurate reports. Failures of GHESI's financial, business, and operating systems could have a material adverse effect on GHESI's business, operating results, financial condition and prospects.

GHESI's electricity distribution infrastructure and technology systems are also potentially vulnerable to damage or interruption from cyber-attacks, which could have an adverse impact on its operations, financial conditions, brand and reputation. While GHESI has implemented protective measures to monitor the risk of a cyber-attack and mitigate its effects, there can be no assurance that such protective measures will be effective in protecting GHESI's electricity distribution infrastructure or assets from a cyber-attack or the effects thereof.

Natural and Other Unexpected Occurrences

GHESI's operations are exposed to the effects of natural and other unexpected occurrences such as severe or unexpected weather conditions, terrorism and pandemics. Although GHESI's facilities and operations are constructed, operated and maintained to withstand such occurrences, there can be no assurance that they will successfully do so in all circumstances. Any major damage to GHESI's facilities or interruption of GHESI's operations arising from these occurrences could result in lost revenues and repair costs that can be substantial. Although GHESI has insurance, if it sustained a large uninsured loss caused by natural or other unexpected occurrences, GHESI would likely apply to the OEB for the recovery of the loss. There can be no assurance that the OEB would approve, in whole or in part, such an application.

Electricity Consumption

GHESI's electricity distribution rates are comprised of a fixed charge and a usage-based (consumption) charge. The volume of electricity consumed by GHESI's customers during any period is governed by events largely outside GHESI's control (e.g., sustained periods of hot or cold weather could increase the consumption of electricity; sustained periods of mild weather could decrease the consumption of electricity, and general economic conditions could affect overall electricity consumption). Accordingly, there can be no assurance that GHESI will earn the revenue requirement approved by the OEB.

Economic conditions could also lead to lower overall electricity consumption, particularly in the commercial customer segment, which is estimated to be the most

sensitive to economic changes. Lower electricity consumption from commercial customers could negatively impact GHESI's revenue. A decrease of one per cent in electricity consumption could reduce net revenue by approximately $0.163 million.

Work Force Renewal

Over the next decade, a significant portion of GHESI's employees will become eligible for retirement, including potential retirements occurring in supervisory, trades and technical positions. Accordingly, GHESI will be required to attract, train and retain skilled employees. There can be no assurance that GHESI will be able to attract and retain the required workforce.

Insurance

Although GHESI maintains insurance, there can be no assurance that GHESI will be able to obtain or maintain adequate insurance in the future at rates it considers reasonable or that insurance will continue to be available. Further, there can be no assurance that available insurance will cover all losses or liabilities that might arise in the conduct of GHESI's business. The occurrence of a significant uninsured claim or a claim in excess of the insurance coverage limits maintained by GHESI could have a material adverse effect on GHESI's results of operations and financial position.

Credit Rating

Should GHESI's credit rating fall below "A" (minus), GHESI may be required to post additional collateral with the IESO.

Municipal Influence

The City, through its wholly-owned subsidiary, Guelph Municipal Holdings Inc., owns all of the outstanding shares of GHESI and has the power to determine the composition of the Board of Directors of GHESI, which permits the City to influence GHESI's major business and corporate decisions, including its financing programs and dividend payments.

Competition

Under the current regulatory regime, a person must obtain a license from the OEB in order to own and operate an electricity distribution system. GHESI has the right to distribute electricity in the City of Guelph and the Village of Rockwood. Although the distribution license specifies the area in which the distributor is authorized to distribute electricity, unless otherwise provided, the license does not provide exclusive distribution rights for this area.

GHESI believes the complexities and potential inefficiencies created by having

multiple electricity distributors serving a single area will ensure the continuing practice of licensing only one electricity distributor to serve a single area. In addition, GHESI believes that there are significant barriers to entry with respect to the business of electricity distribution in Ontario, including the cost of maintaining an electricity distribution system, OEB regulation of electricity distribution rates, and the level of regulatory compliance required to operate an electricity distribution system. However, GHESI recognizes that more than one distribution license could be issued for the same area and there is a possibility that, in the future some business functions or activities could be separated from GHESI and made open to competition from non-regulated business entities, or that defined geographical areas within GHESI's service area may be electrically supplied by a means other than through GHESI's electricity distribution system.

IFRS Financial Measures

GHESI's financial statements include "net operating revenue", which is defined as electricity sales minus the cost of electricity sold and other operating revenue. This measure does not have any standard meaning prescribed by IFRS and is not necessarily comparable to similarly titled measures of other companies. GHESI uses this measure to assess its performance and to make operating decisions.

Critical Accounting Estimates

The preparation of GHESI's Financial Statements, in accordance with IFRS, requires management to make estimates and assumptions which affect the reported amounts of assets, liabilities, revenues and costs, and related disclosures of commitments and contingencies. The estimates are based on historical experience, current conditions, and various other assumptions that are believed to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities, as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates and judgments under different assumptions or conditions.

The following critical accounting estimates involve the more significant estimates and judgments used in the preparation of GHESI's Financial Statements.

Employee Benefits

Employee benefits, other than pension, applicable to employees during active service and retirement include medical, dental and life insurance benefits. During active service, employees also receive the benefit of accumulated sick leave credits.

For the post-retirement non-pension benefits, the present value of the defined benefit obligation and current service cost are calculated by independent actuaries using the projected benefit method prorated on service and based on assumptions that reflect management's best estimates. As a result of amendments to International Accounting Standard 19 ("IAS 19") "Employee Benefits", the Company has changed its accounting policy with respect to the basis for determining the income or expense related to its post-employment defined benefit plans. These amendments were applied for annual periods beginning January 1, 2013. Under IAS19, actuarial gains and losses must be recognized when they occur in other comprehensive income as the option to defer the recognition of actuarial gains and losses, known as the "corridor method" is no longer available. These amendments were applied retrospectively by the Company, in accordance with IAS 19.

For the accumulated sick leave credits, the calculations have been performed on a present value basis and represent an estimate of the additional amount that the Corporation expects to pay as a result of the unused sick leave bank hours accrued by its employees at December 31, 2014. There is no assurance that actual employee's future benefits costs will not differ significantly from the estimates calculated using management's best estimate assumptions.

Revenue Recognition

Revenues from the sale of electricity are recorded on a basis of cyclical billings and also include unbilled revenues accrued in respect of electricity delivered but not yet billed. The unbilled revenue accrual at the end of each period is based on estimated customer usage since the last meter reading date in the previous period. The development of the revenue forecast requires estimates of customer growth, economic activity, and weather conditions. There is no assurance that actual unbilled revenue estimates will not differ materially from actual revenue for the period.

Significant Accounting Policies

GHESI's Financial Statements have been prepared in accordance with IFRS. See Note **3** to the Financial Statements for a detailed description of the Corporation's significant accounting policies.

Future Accounting Pronouncements

Rate-Regulated Accounting ("RRA")

Under RRA, the timing and recognition of certain regulatory costs and billings may differ from those otherwise expected under IFRS. Unlike IFRS which records these costs and billings as expenses and revenues respectively, RRA recognizes these items as assets and liabilities which represent current rights and obligations regarding cash flows expected to be recovered from or refunded to

customers, based on decisions and approvals by the OEB. For the year ended December 31, 2014 under RRA, regulatory assets increased by $6.3 million.

Guelph, Ontario, Canada

April 17, 2015

APPENDIX 1-N: Standard and Poor's Report

STANDARD & POOR'S RATINGS SERVICES
McGRAW HILL FINANCIAL

Research

Summary:

Guelph Hydro Electric Systems Inc.

Primary Credit Analyst:
Stephen R Goltz, Toronto (1) 416-507-2592; stephen.goltz@standardandpoors.com

Secondary Contacts:
Andrew Ng, Toronto 416.507.2545; andrew.ng@standardandpoors.com
Vinod Makkar, Toronto 416-507-3271; vinod.makkar@standardandpoors.com

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Outlook

Standard & Poor's Base-Case Scenario

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Liquidity

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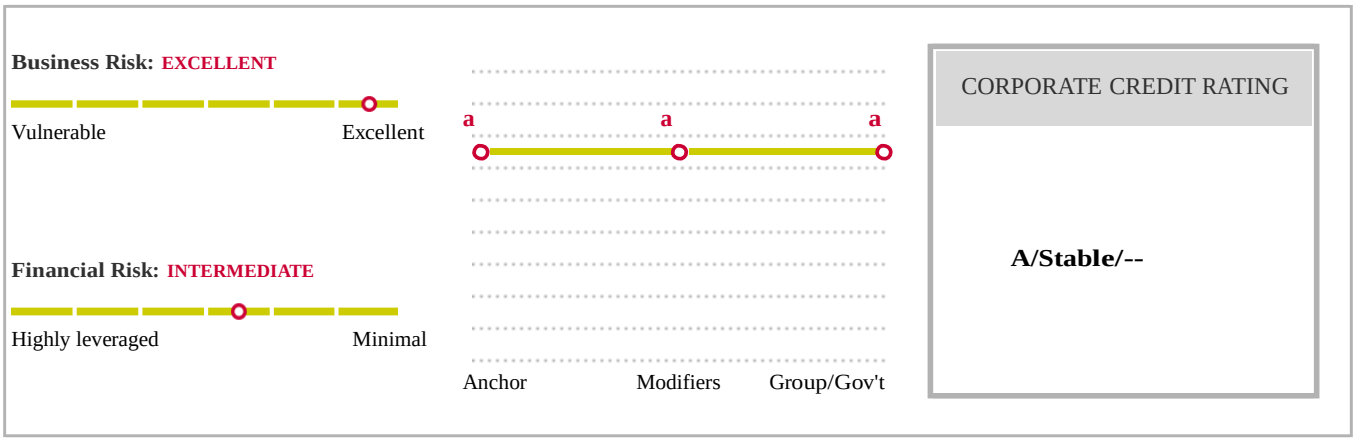
Score Snapshot Related

Criteria And Research

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Summary:

Guelph Hydro Electric Systems Inc.



Rationale

Business Risk: Excellent	Financial Risk: Intermediate
A relatively transparent and predictable regulatory regime Commodity costs are pass-through The ability to recover all fixed and variable operating costs	Stable, regulated cash flow "Low" likelihood of extraordinary government support

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Outlook: Stable

The stable outlook reflects Standard & Poor's Ratings Services' assessment of Guelph Hydro Electric Systems Inc.'s (GHESI) predictable and stable cash flows from its low-risk, regulated distribution business. The outlook also reflects our expectation that management will continue to focus on its core regulated business during our two-year outlook horizon.

Downside scenario

Although we don't expect it, a material, adverse regulatory ruling or a significant increase in leverage leading to sustained deterioration in forecast adjusted funds from operations (AFFO)-to-debt close to 13% could lead to a downgrade. Debt-financed unregulated activity exceeding 10% of total AFFO could also lead to a lower rating.

Upside scenario

We could raise the rating if we believe that GHESI will demonstrate sustainable long-term growth or deleveraging that result in AFFO-to-debt of greater than 23%.

Based on our current forecast and the company's current financial policy, which we do not expect will change, we believe the prospect of an upgrade is limited during our outlook horizon.

Standard & Poor's Base-Case Scenario

Guelph Hydro is a local electricity distribution Company (LDC) operating in City of Guelph, Ont. The rating's key driver continues to be the Ontario Energy Board's (OEB) regulatory framework and the utility's performance within it.

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Assumptions	Key Metrics

The regulatory regime will be relatively stable, and GHESI will not experience any material, adverse regulatory decisions
The company will continue to earn close to its allowed return on equity on its deemed capital structure
It will not make any material, debt-financed unregulated investments
Rates in 2014 and 2015 will be established under the OEB's relatively new incentive-rate mechanism (IRM)

2013A		2014E	2015E
AFFO/debt	8%	14%-17%	14%-17%
Debt-to-debt and equity	51.6%	50%-54%	50%-54%

Note: The AFFO/debt figure for 2013 was as a result of IFRS accounting regulation. In 2013, cost of power exceeded the regulatory charges and billings by approximately C$6.1 million, resulting in a regulatory asset of a similar amount. Under IFRS, this regulatory asset is treated as an expense therefore reducing net income and resulting in the drop of AFFO/debt metric to 8%. Based on the OEB regulatory practice, we expect that GHESI will be able to recover the C$6.1 million. The 2014E and 2015E figures above do not include the recovery of the regulatory asset.
AFFO--Adjusted funds from operations. A--Actual. E--Estimated.

Business Risk: Excellent

We view GHESI's business risk profile as "excellent", reflecting our assessment of the OEB's regulatory framework. We view the regulatory process as transparent, consistent and predictable. The board publishes details of all hearings, and the rationale supporting its decisions. Consistency and predictability are supported by the use of standard methodology applied to all utilities in its jurisdiction, including a transparent formula for allowed returns, and a consistent deemed capital structure that has not changed for many years. In addition, during times of change, the regulator follows a public process of study and consultation that allows management to adjust to new regulatory or market developments.

The regulator's mandate is to balance the needs of the customer and utility investors. To date, it has imposed no penalties in the industry, although it does monitor performance standards.

Rates are typically determined in a timely fashion and allow for the recovery of prudently incurred costs and the opportunity to earn a modest return. Furthermore, several mechanisms, including rate riders, specific adjustments under incentive based ratemaking, and (in some circumstances) an ability to request a rate-reset hearing, support timely recovery of material and unexpected capital costs.

The LDC has no obligation to ensure an adequate supply of electricity and is not burdened with the procurement process or power purchase agreements which reduce operating risk. Furthermore, commodity costs flow through rates

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thereby limiting the LDC's exposure to commodity risk and associated cash-flow volatility.

We expect the company's customer profile to remain stable because Guelph has what we view as a strong, stable public sector with a large university, schools, hospitals, and municipal, county, and provincial government offices. We believe that the public sector is less sensitive to macroeconomic stresses and business cycles. GHESI's more volatile industrial customer base accounts for less than 10% of revenues. Operating efficiency, as measured by standard industry reliability measures, is above average, although there are no penalties or incentives for performance. In our opinion, the company's unregulated cash flow from its sister company, Envida Community Energy Inc., is not material to the ratings.

Financial Risk: Inter mediate

We assess GHESI's stand-alone financial risk profile as "intermediate". For GHESI, we use the low-volatility table, reflecting the "very low" industry risk associated with regulated utilities and the supportive regulatory framework.

We do not expect the company to undergo another cost-of-service hearing and rate reset until 2016. During this IRM period, we expect rates to be adjusted annually by inflation minus a productivity factor. In our base-case scenario, we expect AFFO-to-debt to range from 14%-17%.

Although we have assumed that GHESI will continue to invest in rate-base growth that exceeds depreciation, we expect it will largely fund the growth with a mix of internally generated cash flow, cash on hand, and drawings on its revolver. We do not expect the company to increase leverage to match levels that the regulator prescribes during the current IRM period. We expect the utility's dividend policy to be stable, at the greater of C$3 million or 50% of net income (adjusted for movements in regulated assets and liabilities).

Liquidity: Adequate

GHESI's liquidity is "adequate," in our view. We expect that liquidity sources will be sufficient to cover uses more than 1.1x over the next 12 months. We expect that in the event of a 10% decline in earnings, the company's sources of funds would still exceed its uses. In our view, GHESI has sound relationships with its banks and generally prudent financial risk management.

Principal Liquidity Sources	Principal Liquidity Uses
Projected FFO of C$11 million in 2014 Committed credit facility, with C$10 million available that matures in August 2014. The company is renewing its credit facility by another year, such that it matures in August 2015. We expect that the company will be able to renew its credit facility before the maturity date	Nondeferrable annual capex of C$5 million-C$7 million Dividends of about C$3 million

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Government Influence

In accordance with our criteria for government-related entities, our view of a "low" likelihood of extraordinary government support is based on our assessment of:

"Limited importance" role as the monopoly owner and operator of the regulated electricity distribution company in Guelph, given the province has oversight of electricity regulation and that the utility role could be provided by a private enterprise
"Limited" link with Guelph, given our view that, in a stress scenario, although the city might provide some temporary liquidity support, it would be more likely to sell the utility than to support it in the long term with taxpayer dollars

The low likelihood of extraordinary government support has no rating enhancement on the 'a' stand-alone credit profile.

Ratings Score Snapshot

Corporate Credit Rating

A/Stable/--

Business risk: Excellent Country risk: Very low Industry risk: Very low

Competitive position: Strong

Financial risk: Intermediate

Cash flow/Leverage: Intermediate

Anchor: a

Modifiers

Diversification/Portfolio effect: Neutral (no impact)

Capital structure: Neutral (no impact)

Liquidity: Adequate (no impact) Financial policy: Neutral (no impact)

Management and governance: Satisfactory (no impact)

Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: a

Likelihood of government support: Low (no impact)

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Related Criteria And Research

Related Criteria

Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Jan. 2, 2014
Corporate Methodology, Nov. 19, 2013
Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010

Business And Financial Risk Matrix

	Minimal	Modest	**Intermediate**	Significant	Aggressive	Highly leveraged
Excellent			**a+/a**			
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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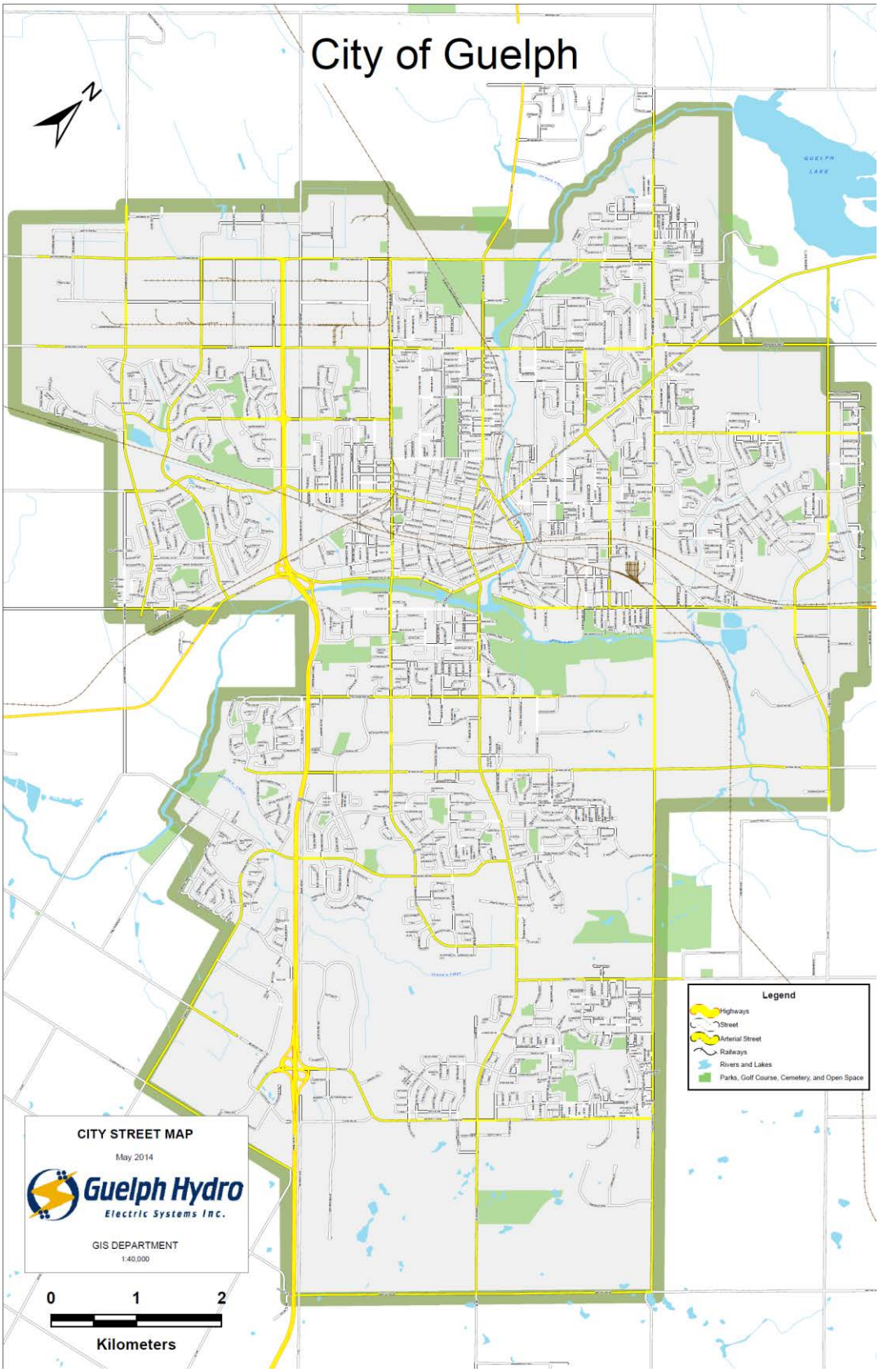
APPENDIX 1-O: KWCG Region Map

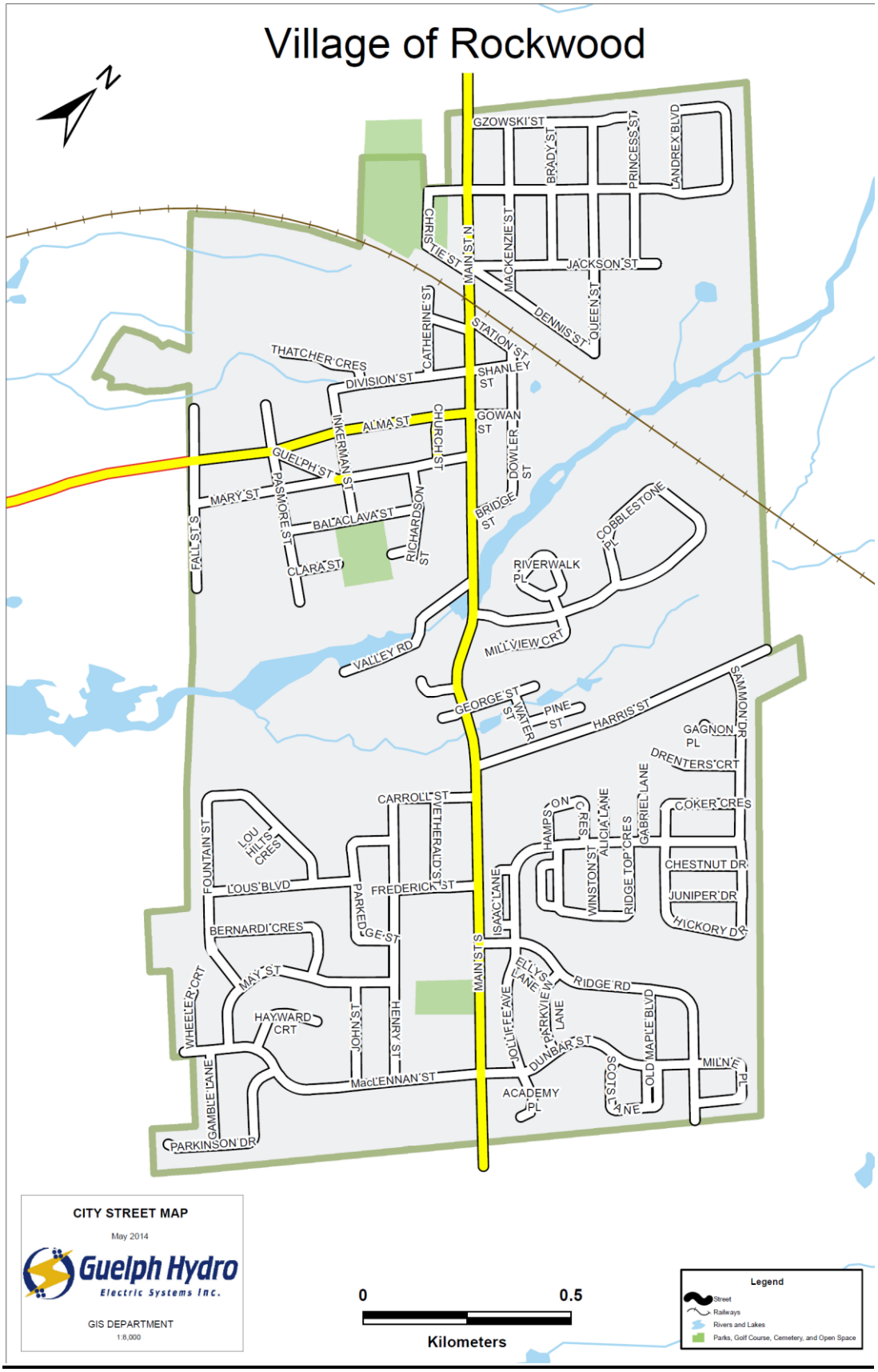
Southern Ontario



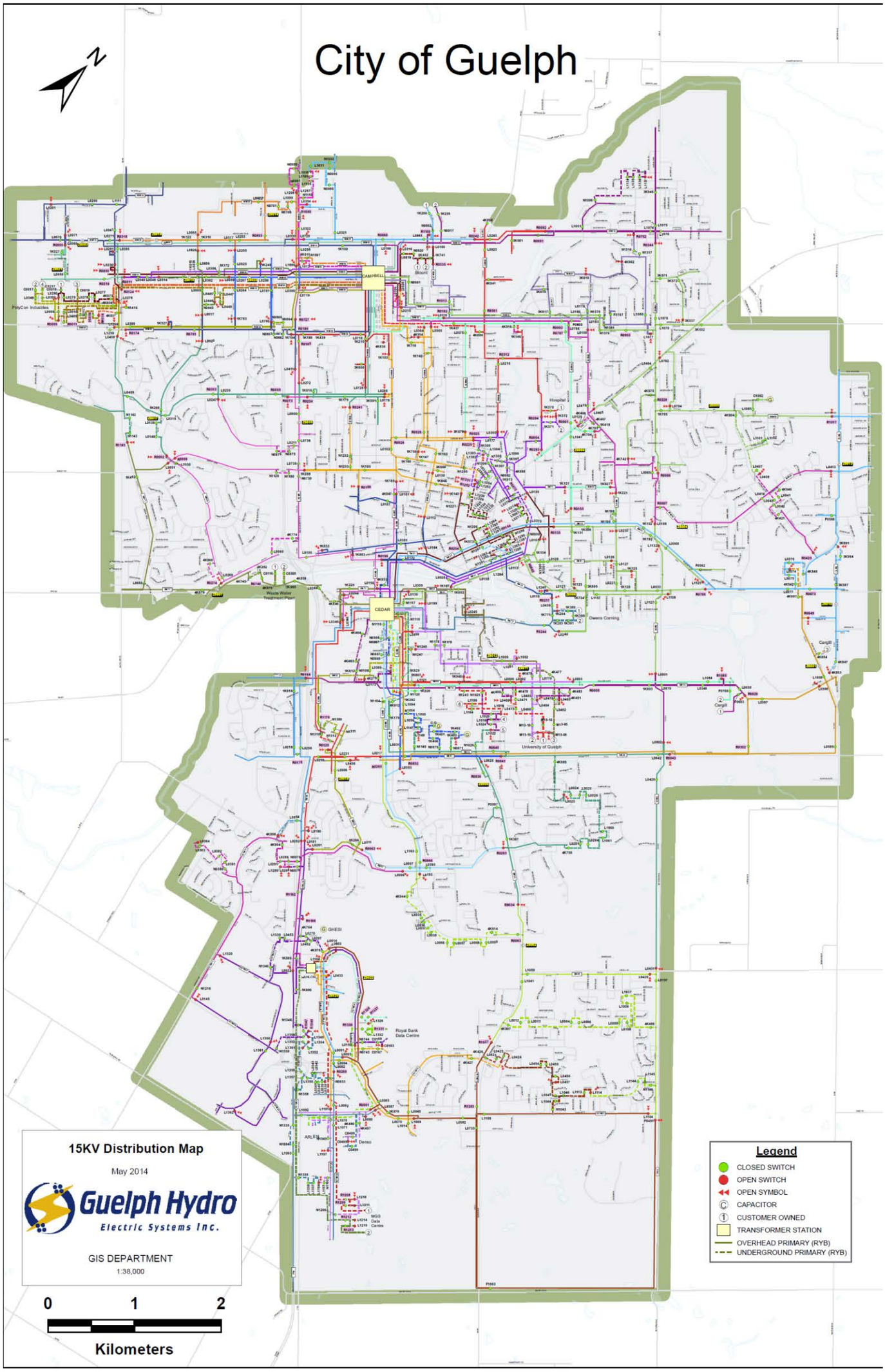
APPENDIX 1-P: Map of Distribution Service Territory

(The outlined area represents the City of Guelph and Town of Rockwood)

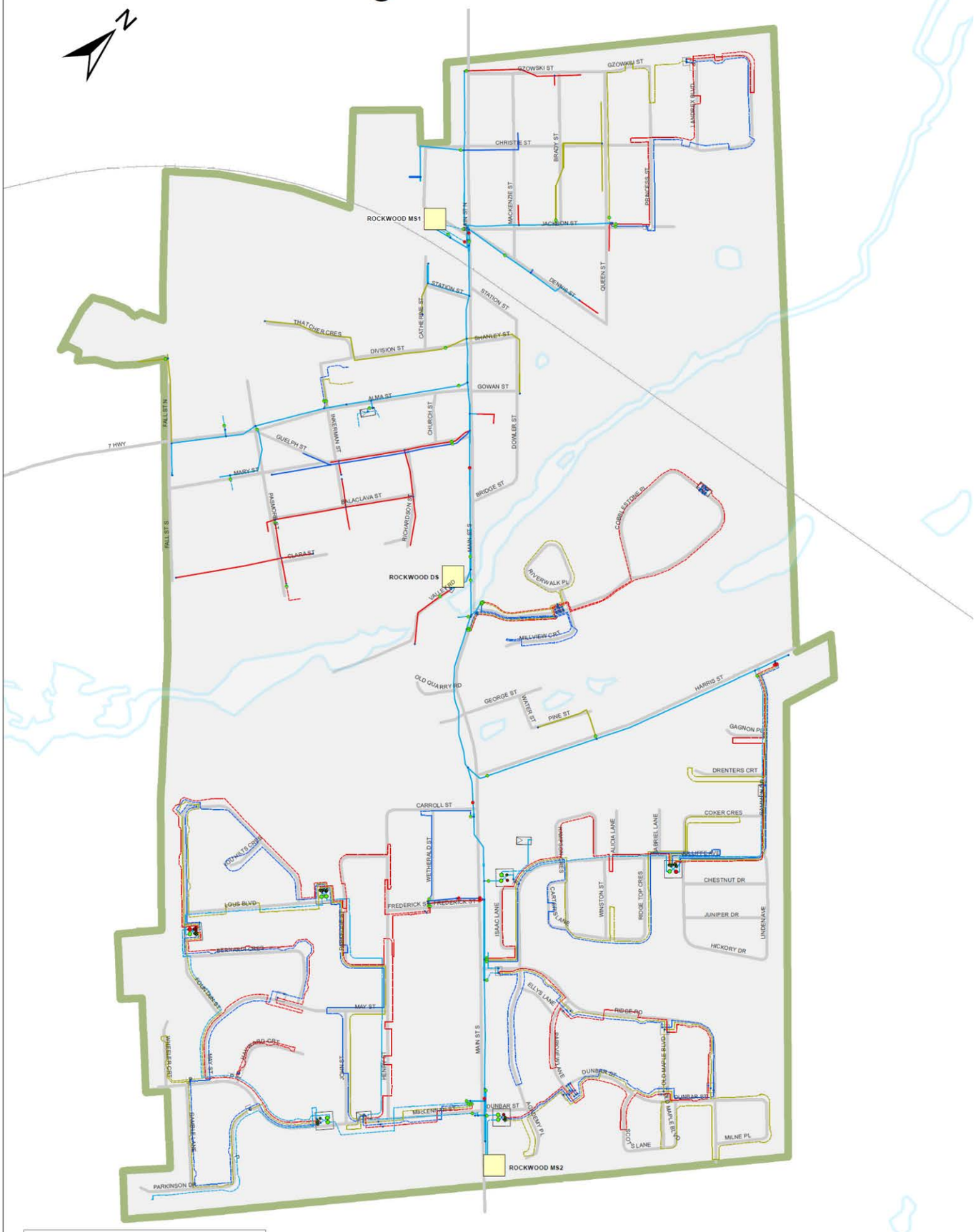

City of Guelph
N
GUELPH LAKE
Legend
Highways
Street
Arterial Street
Railways
Rivers and Lakes
Parks, Golf Course, Cemetery, and Open Space
CITY STREET MAP
May 2014
Guelph Hydro
Electric Systems Inc.
GIS DEPARTMENT
1:40,000
0
1
2
Kilometers


Village of Rockwood
N
GZOWSKI ST
BRADY ST
PRINCESS ST
ANDREX BLVD
CHRISTIE ST
MAIN ST N
MACKENZIE ST
JACKSON ST
DENNIS ST
QUEEN ST
CATHERINE ST
STATION ST
THATCHER CRES
DIVISION ST
SHANLEY ST
ALMA ST
INKERMAN ST
CHURCH ST
GOWAN ST
GUELPH ST
DOWLER ST
MARY ST
PASMORE ST
BRIDGE ST
BALACLAVA ST
RICHARDSON ST
FALL ST S
CLARA ST
COBBLESTONE PL
RIVERWALK PL
MILL VIEW CRT
VALLEY RD
GEORGE ST
WATER ST
PINE ST
HARRIS ST
SAMMON DR
GAGNON PL
DRENTERS CRT
COKER CRES
GABRIEL LANE
ALICIA LANE
HAMPSON CRES
CARROLL ST
FLETCHER AVE
FOUNTAIN ST
LOU HILTS CRES
LOUS BLVD
FREDERICK ST
PARKEDGE ST
BERNARDI CRES
ISAAC LANE
WINSTON ST
RIDGE TOP CRES
CHESTNUT DR
JUNIPER DR
HICKORY DR
MAY ST
WHEELER CRT
HAYWARD CRT
JOHN ST N
HENRY ST
MAIN ST S
ELLIS LANE
RIDGE RD
HOLLIFF AVE
PARKVIEW LANE
DUNBAR ST
OLD MAPLE BLVD
MILNE PL
SCOTSLEY LANE
MacLENNAN ST
ACADEMY PL
GAMBLE LANE
PARKINSON DR
CITY STREET MAP
May 2014
Guelph Hydro
Electric Systems Inc.
GIS DEPARTMENT
1:8,000
0
0.5
Kilometers
Legend
Street
Railways
Rivers and Lakes
Parks, Golf Course, Cemetery, and Open Space

APPENDIX 1-Q: Schematic Diagram of Guelph Hydro Electric Systems Inc. Distribution System


City of Guelph
15KV Distribution Map
May 2014
Guelph Hydro
Electric Systems Inc.
GIS DEPARTMENT
1:38,000
0
1
2
Kilometers
Legend
CLOSED SWITCH
OPEN SWITCH
OPEN SYMBOL
CAPACITOR
CUSTOMER OWNED
TRANSFORMER STATION
OVERHEAD PRIMARY (RYB)
UNDERGROUND PRIMARY (RYB)
CAMPBELL
CEDAR
Hospital
Waste Water Treatment Plant
Owens Corning
Cargill
University of Guelph
GHESI
Royal Bank Data Centre
Denso
MGS Data Centre

Village of Rockwood



Primary Distribution Map

May 2014

Guelph Hydro Electric Systems Inc.

GIS DEPARTMENT

1:8,000

0 0.5

Kilometers

Legend

- CLOSED SWITCH
- OPEN SWITCH
- M.S. / D.S.
- OVERHEAD PRIMARY (RYB)
- OVERHEAD PRIMARY (SINGLE PHASE)
- UNDERGROUND PRIMARY (RYB)
- UNDERGROUND PRIMARY (SINGLE PHASE)

APPENDIX 1-R: HRG-19 Code of Ethics Policy

Guelph Hydro Inc. And all subsidiary companies **HUMAN RESOURCES POLICY AND PROCEDURE**	**Subject:** CODE OF ETHICS **Number:** HRG-19 **Date:** April 20, 2009 **Revised:** May, 2010 **Revised/Reviewed:** May 25, 2012 June 2013 June 2014 **Page 1 of 6**
Vice-President of Human Resources	**Signature:** Nick Mallon

1.0 PURPOSE

Guelph Hydro Inc. (hereafter referred to as the "Company") is committed to conducting business in an open and ethical manner. We accomplish this by creating a workplace built on the strength of trust, accountability, and integrity in all our business practices. It is the responsibility of every employee to build and maintain this code of ethics by supporting, and actively participating in the process. This Policy identifies the Company's expectations of officers and employees and establishes guidelines for the appropriate conduct of all its officers and employees (hereafter referred to as "employees"). This Policy applies to Guelph Hydro Inc. and its affiliates (hereafter referred to as the "Company").

2.0 POLICY

All employees are obliged to comply with the Company's Code of Ethics Policy and exercise honesty, integrity, and diligence in their duties for the Company. This includes a responsibility to avoid interests, activities, or influences which might conflict with these obligations, either by the employee directly or, in some instances, by members of his or her immediate family. Independent contractors, consultants and agents working for or on behalf of the Company will also be asked to acknowledge this Policy, as it applies to their work.

3.0 COMPANY ETHICS AND VALUES

Each employee is expected to conduct his or herself according to the highest ethical standards in order to safeguard the Company's reputation, including protecting sensitive, private and confidential information. This Policy is intended as a guide to help each employee make the right choices in their day-to-day activities. This Policy goes beyond minimum legislative requirements and includes Company Values that enhance the Company's reputation.

RESPECT

The Company supports the principle of respect of individual differences, and a workplace free from harassment and discrimination as outlined under Ontario's

Human Rights Code. All employees are expected to comply with this principle and comply with Policy HRG-1, Respect in the Workplace.

HEALTH AND SAFETY

The Company and all employees have a joint responsibility for workplace health and safety, and are expected to comply and act in accordance with Ontario's health and safety legislation and all related Health and Safety Policies and Procedures.

PRIVACY AND SAFEGUARDING OF COMPANY INFORMATION AND ASSETS

The Company and all employees are expected to comply with all privacy legislation and policies. Employees are expected to protect the Company's confidential, sensitive, private, proprietary or privileged information (as well as that information entrusted to the Company by third parties such as customers, suppliers and business partners), and refrain from the using, disclosing or transmitting of such information, except for legitimate and approved work-related reasons. Employees are also expected to protect the Company's assets from fraud, theft and damage.

In addition, some employees, through the course of performing their normal duties, may have open access to all types of confidential, sensitive, private, proprietary or privileged information which their work may not directly involve. Such employees shall refrain from viewing or reading such information, however stored, including electronic and hard copies, without first getting specific direction from the appropriate senior team member accountable for that information. Such sensitive, private and confidential information, includes business information, customer specific information, and all information maintained by Human Resources, Customer Service and Credit. Examples of positions with open access include, but are not limited to, Document Management (e.g. DOCOVA, etc.), Executive Office Assistants, and Information Systems.

COMPLIANCE WITH ALL LEGISLATION

Employees are expected to be aware of, and fully comply with, all laws, rules and regulations relating to the carrying out of their day-to-day work.

ETHICAL BUSINESS CONDUCT

Employees are expected to act with honesty, integrity and impartiality. Employees shall have no direct or indirect personal or financial interest in a business or transaction that would conflict with the proper conduct of their duties. Employees shall always conduct themselves in accordance with the Company's best interests, which includes avoiding, in all work-related matters, any conflict of interest; real, perceived or potential. In addition, the Company is committed to acting in accordance with, or exceeding, the legislative requirements with respect to human rights, health and safety, and the environment, and employees are expected to act in accordance with this commitment.

Conflict of interest is a broad term used to describe situations where the actions, choices or personal circumstances of employees, actually **or** potentially, place their personal or financial interest(s) in competition with, or in opposition to, those of the Company. A conflict of interest could reasonably be seen as influencing or

interfering with the employee's duty to act in the best interests of the Company. A conflict of interest can include a potential or perceived wrongdoing as well as actual or intended wrongdoing.

In accordance with human rights legislation and applicable collective agreements, the Company recruits and selects the best candidate to fill any available position. The Company does not prohibit the hiring of employee family members if they are the best candidates; however, a 'direct family member' reporting to another 'direct family member' can give the appearance of favouritism and affect one's ability to perform his or her job responsibilities. As such, the Company will strive to avoid reporting relationships between 'direct family members'. For the purpose of this Policy, 'direct' family member is defined as a spouse, son, daughter, mother, father, brother, sister, brother-in-law, sister-in-law, mother-in-law, father-in-law, son-in-law, daughter-in-law, grandchild, grandparent, uncle, aunt, niece, and nephew (for all circumstances, the definition includes common-law or same sex partnerships, and foster and step relationships).

No employee shall:

- Use their position, authority, office, confidential information of the Company, Company employees, property, systems, equipment, supplies or time for personal gain, directly or indirectly.
- Intentionally view or read any sensitive, private, proprietary or confidential information, which has not been specifically shared with them, and which they may have direct access to because of the nature of the work they do, except if directed by the senior team leader accountable for that information (e.g. Document Management Administrator, Executive Assistants, Information Systems, etc.).
- Engage in any employment, business undertakings or professional activity, which interferes with or negatively impacts their ability to perform the duties of their position.
- Receive any item of value (e.g. remuneration, gifts, favours, services, etc.) under circumstances from which it might be reasonably inferred that such thing of value was given or offered for the purpose of influencing him/her in the discharge of his/her duties.
- Engage in theft of time or abuse sick leave or any other benefit.
- Use or sell Company property, including intellectual property or company developed computer programs, innovations, presentations, etc., other than for bona fide Company related reasons, either while in the employment of the Company or thereafter. All such property is and shall remain the exclusive property of the Company.
- Grant employment or advancement in employment – or be involved in the recruitment and/or selection process - of a 'direct' family member of the employee, or of any other employee where the employee would be directly or indirectly supervising or reporting to that 'direct' family member.
    - In accordance with its current policy, while the Company may give employees' children who meet eligibility criteria preference for some summer

student positions, students will not be allowed to report directly to a 'direct' family member.

EXAMPLES

Some examples of unethical business conduct and conflicts of interest have been set out below. The list is not exhaustive and each circumstance should be evaluated on a case-by-case basis. However, a conflict of interest or unethical business conduct may be considered to have occurred when an employee:

- Is employed for personal gain by another company, directly or as a consultant, where a conflict of interest with the Company is created;
- Has a direct financial interest in another company, which does business with the Company;
- Reports to or supervises someone with whom they have a close personal relationship, where it could be perceived to be a situation which compromises the Supervisor's ability to exercise independent judgement on behalf of the Company in relation to that employee's employment or compensation by the Company;
- Has a 'direct' family member with a financial interest (or works) in a company which does business with the Company;
- Is a director or officer of another company which does business with the Company;
- Accepts money or valuables, other than customary business courtesies of nominal value, which may influence a decision being made on behalf of the Company;
- Accepts excessive or extravagant entertainment;
- Takes part in a Company decision which might result in a private financial advantage;
- Awards a contract to a third party in which he or she has a private interest;
- Influences a decision to his or her advantage for the supply of goods or services (e.g. insurance, advertising, professional services, etc.) to the Company;
- Influences a Company decision concerning real estate or personal property that would benefit lands or property in which the employee has an interest;
- Influences a settlement of a claim against the Company to the advantage of the employee's private interests;
- Discloses confidential information to any other person without authorization to do so. Confidential information is considered to be information not available to the general public and which is obtained in the course of employment;
- Partakes in outside activities which conflict with the Company's responsibilities.
- Intentionally views or reads specific customer information stored in the Company's customer contact management system which is outside the scope of the employee's normal work function, and where there is no need to know.
- Accesses and reads information maintained by the Human Resources Department without specific direction from the Vice-President of Human Resources.

DISCLOSURE AND APPEAL

All employees are obliged to thoroughly read and understand this Policy. Employees who have any general questions relating to this Policy are expected to raise these with their Director or Vice-President. An employee should discuss with his/her Director or Vice-President any apparent discrepancies between his/her Professional Code and the Company's Policy.

Any employee who is uncertain about whether or not a conflict of interest exists or if an employee may be engaged in unethical business conduct must seek written clarification from his or her Director or Vice-President, who will respond in writing. Such requests may be discussed at the Senior Management meeting for consistency of interpretation. In the event the employee wishes to appeal the decision given by the Director or Vice-President, the employee may appeal in writing to the Chief Executive Officer (CEO) within one week. All requests and responses will be filed in the employee's Human Resources file.

All employees will be requested to sign off annually on this Policy (attached Form) starting in 2014, and a part of their orientation.

Where an employee has reason to believe that any employee is committing a serious breach of this policy, the employee should advise Management (i.e. their Supervisor, Director, Vice-President of Human Resources Chief Operating Officer or CEO) so that the matter can be investigated.

COMMUNICATION

It is the responsibility of each Vice-President, Director, Manager and Supervisor to make the policy known to all reporting employees, contractors etc., to cover the policy with new employees as part of orientation, and to ensure that the annual sign-offs are completed by all employees.

PENALTY

Contravention of any provisions of this Policy and its rules for disclosure may result in discipline up to and including termination of employment for cause, regardless of seniority, and/or legal action. It is recognized that any disciplinary action can be subject to the grievance arbitration procedure as per the Collective Agreement.

Human Resources Policy and Procedure HRG-19
Code of Ethics

Please Print or type:

Name

Position Department

Date

This form relates to the Code of Ethics Policy, HRG-19. In accordance with Section 5 of the Policy, all employees are required to review and sign off on the Policy annually. The purpose of this policy is to protect the interests of Guelph Hydro Inc. and/or its affiliates (the "Company"), its employees, its customers and the public. The Company, its employees and its customers and the public must have confidence in the integrity and honesty of the Company and all its employees. The Company and all its officers and employees must therefore be dedicated to the Company's best interest. Therefore, in order to safeguard the Company's reputation for integrity and honesty, one of its most valued assets, all its officers and employees must be independent, impartial and responsible to the general public in carrying out their duties.

Conflict of interest is a broad term used to describe situations where the actions, choices or personal circumstances of employees, actually or potentially place their personal or financial interest(s) in competition with, or in opposition to, those of the Company. A conflict of interest could reasonably be seen as influencing the employee's duty to act in the best interests of the Company. A conflict of interest can include a potential or perceived wrongdoing as well as actual or intended wrongdoing.

CERTIFICATION:
I have read and understand the Code of Ethics Policy HRG-19, and by signature below, I acknowledge and agree to act in accordance with this Policy. I further understand that I am responsible for complying with the Policy, for accessing and reading only information (however stored) I am authorized to access and read, for using information I am authorized to access for only good business reasons and have a continuing duty to update the appropriate Director, Vice-President, Chief Operating Officer or CEO promptly of any situation or fact which could create a conflict of interest (actual or perceived) and/or any unethical behaviour.

Employee Signature Date

APPENDIX 1-S: HRG-8 Code of Conduct Policy

Guelph Hydro Electric Systems Inc. HUMAN RESOURCES GENERAL POLICY	Subject: CODE OF CONDUCT Number: HRG-8 Date: JUNE 11, 2008 Revised: April 20, 2012 Page 1 of 4
Vice-President of Human Resources	Signature: Nicole Maillaux

A SHARED COMMITMENT TO HEALTHY AND RESPECTFUL RELATIONSHIPS

CODE OF CONDUCT FOR EMPLOYEES, MANAGEMENT AND THE UNION

As part of a Relationship by Objectives 3-day workshop, a group of 18 management and union employees including their IBEW union representative met offsite in 2006 and developed a list of ongoing behaviours, which foster healthy and respectful relationships.

This Code of Conduct originates from their work.

The Code of Conduct applies to all employees, all management employees, and the union, in an effort to maintain healthy and respectful relationships between employees, between employees and management, between the union and management, between the union and employees and between all employees and customers, and to make this a great place to work.

RESPECT

We believe in respect of individual differences, and believe in a workplace free of harassment and also the principles contained in the *Ontario Human Rights Code* and the *Ontario Health and Safety Act.*

We believe in management, the union and all employees showing respect towards each other, by ensuring that each other's concerns and interests are represented and treated in a timely fashion. We believe in providing timely feedback to each other and that communicating expectations and timelines shows respect.

We believe that management, the union and all existing employees can all play a positive role in setting a good example for, and welcoming new employees, in treating them as individuals, and in not prejudging their abilities based on where they were previously employed. We believe in the union also holding welcome and orientation meetings with new employees, in supervisors providing new employees with a buddy/mentor, in supervisors posting information on new employees including students, for an extended period of time,

and in supervisors covering this Code of Conduct with all new employees, within their first week of employment.

HEALTH AND SAFETY

We believe in taking initiative and being responsible for our own individual health and safety. We believe in making safety a priority in all of our day-to-day business activities, and we recognize that it is the duty and responsibility of each GHESI employee to work safely with equal concern for the safety of co-workers and customers. We will follow the "Electrical Utility Safety Rules" as published by the Infrastructure Health and Safety Association (IHSA).

TRUST

We believe that a healthy and respectful relationship can only be built on trust. We will gather complete information before making promises, and keep our promises on what can be delivered. We will act professionally, be visible and approachable at work and on worksites, and treat all employees fairly and equitably. We will build trust.
We believe that the union has a positive role to play by promoting and being fully cognizant of the value of a relationship built on trust.

CUSTOMERS

We believe that our first responsibility is to think of our customers in all the decisions that we make and in all our behaviours.

COMMUNICATIONS

We believe in timely, clear and respectful two-way communications to and from employees, to and from management and to and from the union. We believe that feedback is healthy and employees, management and the union will provide feedback when mixed messages are heard.

PROBLEM SOLVING

We believe in identifying problems early on, whether they come from customers, employees, management, or the union, brainstorming resolutions, respecting differences of opinion, and moving forward. We believe in management, the union, and all employees focusing on solutions, not problems, and issues, not personalities. We believe in collaboration and information sharing, and the holding and recording of minutes of meetings, such as production meetings, to welcome all employee input on issues that affect them at any level within the organization, such as work methods, processes and procedures.

We believe that management, supervisors and the union have a positive role to play by encouraging all employees to bring concerns and suggestions initially to their immediate supervisor at the earliest possible date. We believe that we should all strive to understand the needs, requirements and priorities of all departments, and hold inter-departmental meetings

to provide opportunities for ongoing cross-departmental communications of emerging issues, topics, etc. and share the minutes with senior management.

VISION, GOALS AND EXPECTATIONS

We believe in management and supervisors regularly communicating the company's vision, goals, expectations and roles, and how the company and employees are doing. We believe that a healthy and respectful relationship is built on management, employees and the union being positive, being aware of what they have, looking to the future, and keeping an open mind for changes. We believe in making every effort to directing our discussions on current and on future events, not lingering on past issues. We believe that whenever we can, we should promote the positive attributes of our workplace through our words and actions.

LEADERSHIP, RESPONSIBILITY AND ACCOUNTABILITY

We believe in giving our best efforts. We believe in being ready and prepared to work. We believe in being mindful of our hours of work, lunch and coffee breaks, being responsible and accountable for our work and behaviours, providing back-up when needed, and considering inter- and intra- departmental needs. We believe that the union has a positive role to play by promoting employee responsibility and accountability, by leading by example, and by encouraging employees to be team oriented and flexible in the performance of their work.

We believe that management should ensure that supervisors are experienced and qualified. We believe in empowering all employees and supervisors to be responsible and accountable. We believe in supervisors making the necessary decisions to complete their jobs, and in all employees talking directly to other employees (no silos), if necessary, to complete their tasks. We believe that the union has a positive role to play in encouraging employee participation in events, volunteering, productivity, and employees taking ownership of their actions and words to create a better working environment. We believe that union executive members should be visible, volunteer and participate in events.

REWARDS, RECOGNITION AND PERFORMANCE

We believe that it is healthy for management, supervisors, employees and the union to focus on the positive things that we all do. We believe in focusing more on rewards and recognition that recognizes stellar performance and leadership behaviours. We believe in using fair and equitable employment related processes, consistent with existing Company policies, and the Collective Agreement to manage individual performance. We believe in meeting individually with employees on personal employment related matters such as discipline and performance.

DEVELOPMENTAL AND EMLOYMENT OPPORTUNITIES

We believe in leadership training, a performance review system, succession planning along with career development and mentoring goals, resourcing the organization in a timely manner, looking at all resources available in filling positions, and providing opportunities to improve an employee's ability to do their job better through training courses and

development. We believe that the union has a positive role to play in providing input and feedback on the in-house apprenticeship-training program. We believe in encouraging all employees to grow their careers within and outside the union, by applying to internal postings.

We will fill positions by using processes, consistent with existing Company policies, job evaluation processes and the Collective Agreement. We will meet individually with employee applicants to communicate hiring decisions, and internal job postings will be consistent with the job bands. We will provide the union Unit Recorder with a copy of all union and non-union internal postings so that the union can actively encourage employees to apply.

We believe that management, the union and all existing employees can all play a positive role in setting a good example for, and welcoming new employees, in treating them as individuals, and in not prejudging their abilities based on where they were previously employed. We believe in the union also holding welcome and orientation meetings with new employees, in supervisors providing new employees with a buddy/mentor, in supervisors posting information on new employees including students, for an extended period of time, and in supervisors covering this Code of Conduct with all new employees, within their first week of employment.

APPENDIX 1-T: BD-12 Reporting Suspected Improper Conduct ("Whistle Blower") Policy

Guelph Hydro Inc. and its affiliates **WHISTLEBLOWER POLICY**	**Subject:** REPORTING SUSPECTED IMPROPER CONDUCT **Number:** BD-12 **Date:** January 2011 **Revised:** May 2011, May 16, 2014 Page 1 of 4
Approved by: Board of Directors	**Signature:** (Chair)

1. OBJECTIVE

1.1. A number of corporate policies including, in particular, the Company Ethics and Values Policy (HRG-19) enjoin directors, officers and employees to observe high standards of ethical behaviour, honesty and integrity in the conduct of their duties and responsibilities including financial reporting and respect for colleagues. It is the responsibility of all directors, officers and employees to comply with the Company Ethics and Values Policy and to report violations or suspected violations thereof.

1.2. The purpose of this Policy is to set out guidelines and procedures to be employed by all directors, officers and employees for the reporting, investigation and response to violations or suspected violations of the Company Ethics and Values Policy and/or financial reporting, accounting, internal accounting controls, human resources, safety or environmental policies. This Policy is intended to complement all of the aforesaid policies and is not intended to override any of such policies.

1.3. The Company provides a system (the "Confidential Reporting System") that ensures anonymity for those reporting suspected wrongdoing. As well, the system provides broad–based communications options, voice, web and email access, to ensure an individual can provide information in the format that is most comfortable to them.

2. DEFINITIONS

2.1. **"Board"** means the Board of Directors of the Corporation;

2.2. **"Investigator"** means the person or persons designated by the Board upon recommendation of the Chief Executive Officer with responsibility for investigating and resolving all reported complaints and allegations concerning violations or suspected violations of the Company Ethics and Values Policy and/or accounting, financial reporting, internal accounting controls, human resources, safety or environmental policies;

2.3. **"Company Ethics and Values Policy"** means the Company Ethics and Values Policy (HRG-19) of the Corporation;

2.4. **"Confidential Reporting System"** means the broad-based communications system which permits Reporters to provide information concerning Incidents to the Investigator in a confidential, anonymous format;

2.5. **"Corporation"** means Guelph Hydro Inc.;

2.6. **"Incident"** means one or more violations or suspected violations of the Company Ethics and Values Policy and/or accounting, financial reporting, internal accounting control, human resources, safety or environmental policies;

2.7. **"Policy"** means this Policy on Reporting Suspected Improper Conduct, as may be amended from time to time;

2.8. **"Chief Executive Officer"** means the Chief Executive Officer of the Corporation; and

2.9. **"Reporter"** means a director, officer, employee or other person reporting allegations of suspected improper conduct and wrongdoing in accordance with this Policy.

3. APPLICATION

3.1. This Policy applies to the Corporation and any subsidiary of the Corporation including Guelph Hydro Electric Systems Inc.

3.2. It is the responsibility of all directors, officers and employees to comply with the Company Ethics and Values Policy and to report violations or suspected violations of the Company Ethics and Values Policy and/or accounting, financial reporting, internal accounting control, human resources, safety or environmental policies in accordance with this Policy.

4. NO RETALIATION

4.1. No director, officer or employee who in good faith reports an Incident, or provides information to the Investigator in respect of an investigation of an Incident, shall suffer harassment, retaliation or adverse employment consequences, including, without limitation, termination, suspension, demotion, transfer or other forms of discrimination as a result of such reporting of an Incident.

5. COMMUNICATION

5.1. The Chief Executive Officer will ensure that all employees are informed of the Confidential Reporting System and receive regular communication and training on its use as outlined in this policy.

5.2. The Chief Executive Officer will ensure that Investigators are well grounded in the operation of the Confidential Reporting System and perform system tests on a regular basis to ensure a functioning system .

6. REPORTING INCIDENTS

6.1. Any questions, concerns, suggestions or complaints should normally be shared with someone who can address them properly, who, in most cases will be an employee's supervisor.

6.2. If an employee believes that in a particular situation it would not be appropriate to report such an Incident to their manager, the employee may report the Incident to any other director, officer or member of the Corporation's management team to whom the person believes it would be appropriate to report the Incident.

6.3. If an employee has any concerns about reporting the Incident to another director, officer or other member of the Corporation's management team, the employee may use the Confidential Reporting System provided by the Company. When an employee leaves a message in any of the three forms of communication referenced, voice, web or email, an immediate email alert is sent to the Corporate Secretary and to the Chair of the Governance Committee (each of them an Investigator). This alert does not include the content of a message, only that a message was sent and the method by which it was delivered.

7. INVESTIGATION AND OVERSIGHT

7.1. The Investigator will notify the Reporter and acknowledge receipt of the report of the Incident within two business days.

7.2. The Investigator will investigate Incidents in an independent, expeditious and confidential manner, taking all reasonable care to protect the identity of the persons involved and to ensure that the investigation is not impaired in any manner.

7.3. A Reporter who reports an Incident on the Confidential Reporting System should return to the system website following the expiry of two business days after reporting an Incident to see the response to his or her report and to respond to any follow-up questions of the Investigator.

7.4. The Investigator may involve directors, officers or other management of the Corporation in his or her investigation, as deemed appropriate. The Investigator may authorize an independent investigation or engage consultants to assist in the investigation.

7.5. The Investigator shall report any Incidents involving financial reporting, accounting, internal accounting controls, auditing or other matters deemed appropriate by the Investigator immediately to the Chair of the Finance and Audit Committee and work with the Finance and Audit Committee until the matter is resolved.

7.6. The Investigator shall report any Incidents involving human resources or safety policies or other matters deemed appropriate by the Investigator immediately to the Chair of the Human Resources and Compensation Committee and work with the Committee until the matter is resolved.

7.7. The status and outcome of an investigation of an Incident will be communicated to the Reporter in a timely manner either through direct communication if the Reporter provided his or her name, or via the Confidential Reporting System if the Reporter wishes to remain anonymous. Failure to provide sufficient information and evidence may result in the inability to investigate the Incident.

8. CONFIDENTIALITY

8.1. Reports of Incidents may be submitted on a confidential or anonymous basis and the identity of the Reporter will be kept confidential to the extent permissible by law and feasible to permit a proper investigation.

8.2. Anonymous reports of Incidents must be supported by sufficient information or evidence to enable a proper investigation since the Investigator may not be able to seek further particulars from the Reporter.

9. REPORT TO GOVERNANCE COMMITTEE AND RETENTION

9.1. The Chief Executive Officer will report annually to the Governance Committee advising of the number of reports of Incidents made pursuant to this Policy in the past year summarizing:

a. The number of Incidents reported pursuant to this Policy.
b. The number of investigations initiated in accordance with this Policy.
c. All actions taken in response to the reporting of such Incidents.
d. Communications to employees regarding the availability of and training on how to use the Confidential Reporting System.

9.2. The Corporation shall maintain a full and complete record of all Incident reports for a period commensurate with the nature of the Incident, as determined by the Governance Committee in consultation with outside counsel as required, such that all legal requirements in regard to the Incident may be properly and effectively complied with.

10. POLICY REVIEW

10.1. The Governance Committee shall review the provisions of this policy annually.

11. EFFECTIVE DATE

11.1. This policy is effective as of January 1, 2011.

APPENDIX 1-U: BD-01 Duties and Obligations

Guelph Hydro Inc. and all subsidiary companies **BOARD OF DIRECTORS** **DUTIES AND OBLIGATIONS**	**Subject:** DUTIES AND OBLIGATIONS **Number:** BD-1 **Date:** October 28, 2003 **Revised:** August 25, 2009 September 7, 2011 October 15, 2012 Page 1 of 14
Approved by: Board of Directors	**Signature:** (Chair)

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DEFINITIONS

The following definitions apply to this policy:

"Corporation" – shall mean Guelph Hydro Electric Systems Inc. (GHESI) or any of its subsidiaries as the context permits

"Board" – shall mean Board of Directors of GHESI and/or one of its subsidiary companies as the context permits

"Officer" – shall mean an Officer of GHESI and/or one of its subsidiary companies as the context permits

"Director" – shall mean Director of GHESI and/or one of its subsidiary companies as the context permits

"Family of companies" – shall mean GHESI and Envida and any other companies they may be created from time to time

"Close family member" – shall mean a spouse, son, daughter, mother, father, brother, sister, brother-in-law, sister-in-law, mother-in-law, father-in-law, son-in-law, daughter-in-law, grandchild, grandparent, uncle, aunt, niece, or nephew. For all circumstances, the definition includes common-law or same sex partnerships, and foster and step relationships.

INTRODUCTION

The Board of Directors is a body of individuals appointed by the Shareholder, Guelph Municipal Holdings Inc., responsible for the stewardship of the Corporation, who jointly oversee the activities of the Corporation and its subsidiaries. The Board has the statutory authority and obligation to protect and enhance the assets of the company in the interest of its shareholder. The Board's authority is established under the Ontario Business Corporations Act ("OBCA"), as well as the Articles and Bylaws of the Corporation.

A Board should supervise, direct or oversee the business and affairs of a Corporation, but cannot manage them in a day-to-day sense. In most respects, directors monitor rather than actively manage the corporation's business and affairs. Directors are neither required nor expected to devote their full time and attention to the Corporation's affairs. Rather, they perform their functions periodically, primarily in preparing for and attending meetings of the Board of Directors.

The Board recognizes and confirms that it is in the best interests of the Corporation that all necessary steps be taken to preserve the reputation of fairness and ethical standards which the Corporation strives to achieve.

Directors and Officers must act in all circumstances to create a positive impression of the Corporation with its stakeholders including: the Shareholder, the public, its customers and its employees. Conduct should instill and enhance:

- public confidence;

- the confidence of the stakeholders that duties are carried out diligently and with impartiality; and
- the reputation of the Board.

Should the possibility of an actual or perceived conflict of interest arise in respect of a Director or Officer it is important that a policy and processes are in place to ensure any such conflict is recognized and disclosed and that all necessary steps are taken to preserve the reputation of the Corporation and ensure the fairness of its contracting, procurement and hiring processes.

Under the OBCA, Directors and Officers are required to disclose conflicts of interest as are more particularly described in the Act (Appendix I[1]). Various examples of conflict of interest from decided cases are appended as Appendix II. This policy is not intended to supersede the provisions in the OBCA and Directors and Officers shall be required to comply with this policy in addition to their obligations under the OBCA.

OBLIGATIONS – GENERAL

To oversee the business and management's day-to-day operation of the business, the Board and the Directors have the following obligations:

- determine the Corporation's business strategy, direction, objectives and policies including those relating to the Community Energy Initiative of the City of Guelph;
- ensure competent executive and senior management teams are in place;
- succession planning;
- developing the Corporation’s approach to corporate governance;
- satisfy itself that policies are in place to ensure the availability of adequate financial resources;
- approve annual budgets;
- account to stakeholders for the organization’s performance;
- participate in setting goals for, and monitoring and evaluating the performance of management against Board expectations;
- establish risk management policies and ensure compliance in particular as regards the Shareholder Declaration and the Affiliates Relationship Code.
- prepare for, attend, and actively participate in, all scheduled Board meetings;
- have an understanding of all aspects of the business and the regulatory context;
- ensure they have the appropriate information to make knowledgeable decisions on all matters coming before the Board; and
- support, and participate on, Board Committees.

[1] The provisions of Appendix I are those in effect as of the date of revision noted above and directors are cautioned to verify with the Corporate Secretary that the provisions remain in full force and effect without amendment at the time relied upon.

The Supreme Court of Canada has stated that Directors may consider various stakeholder interests in determining whether they are acting in the best interests of the Corporation, including the interests of shareholders, employees, suppliers, creditors, consumers, governments and the environment.

POWERS

The Board exercises its powers through resolutions passed at meetings of the Board or, alternatively, in appropriate cases, through "consent resolutions", which is to say resolutions considered outside of meetings provided unanimous consent is given. The powers of the Board are vested in the Board a whole, not in individual directors. However, the law imposes obligations on directors which apply to each director separately as follows.

OBLIGATIONS - FIDUCIARY

Directors and Officers are fiduciaries and have obligations that include:

- act honestly and in good faith in the best interests of the Corporation;
- disclose conflicts of interest;
- not appropriating an opportunity that belongs to the Corporation; and
- maintaining confidentiality of the Board and the business. This extends beyond any term on the Board as a Director or the employment period of an Officer.

STANDARDS OF CARE

Directors and Officers shall exercise the care, diligence and skill of a reasonably prudent person in comparable circumstances.

DELEGATION

The Board may delegate certain matters to Board Committees. The Board expects management to conduct the day-to-day affairs of the Corporation. Pursuant to the bylaws the CEO has the general supervision of the business of the Corporation and such other powers and duties as the Board may from time to time specify. Notwithstanding the delegation to senior executives of very broad powers over a Corporation's affairs, the Board of Directors must reserve to itself the ability to intervene in management's decisions and to exercise final judgment on any matter that is material to the corporation. Although no bright line separates the duties of the Board from the duties of Senior Management, the overriding principle governing delegation is that the Directors must retain ultimate control over the Corporation. The Directors must be sufficiently familiar with the business and affairs of the Corporation to know that the Corporation is being managed in an appropriate fashion. They must exercise sufficient leadership to ensure that the Corporation is following a course that they have approved. Whether business decisions actually originate with the Directors is less central to the Board's function than whether the Directors are monitoring how these decisions are formulated and implemented.

SAFEGUARDING OF COMPANY INFORMATION AND ASSETS

Directors and Officers are expected to protect the Corporation's confidential, proprietary and privileged information including information entrusted to the Corporation by third parties such as customers, suppliers and business partners, and refrain from using, disclosing or transmitting such information except for legitimate reasons.

CONFLICT OF INTEREST

Definition

Conflict of Interest is a broad term used to describe situations where the actions, choices or personal circumstances of Directors or Officers actually or potentially place their personal or financial interests in competition with, or in opposition to, those of the Corporation. A conflict of interest could reasonably be seen as influencing or interfering with the Director or Officer's duty to act in the best interests of the Corporation.

A Conflict of Interest exists for a Director or Officer when:

- they, or a close family member, are a party to a material contract or transaction, or a proposed material contract or transaction, with the Corporation, or
- where they, or a close family member, have a material interest in an entity which has or proposes to enter into a material contract or transaction with the Corporation, or
- there is any other issue or matter that may result in a real, perceived or potential conflict of interest as determined by the Board.

Disclosure

Directors and Officers are obliged to make reasonable efforts to avoid real, perceived or potential conflicts of interest, and are required to disclose any such conflicts or possible conflicts to the Board Chair. Such disclosure can be made on a general basis or on a case-by-case specific basis as soon as the Director or Officer becomes aware of the real, perceived or potential conflict.

Determination by the Board

The determination as to whether the situation represents a real, perceived or potential Conflict of Interest and what, if any, action should be taken will be made in accordance with the procedure set forth as Appendix III. . The minutes of the meeting at which the disclosure is made shall reflect that the disclosure was made and the decision of the Board recorded.

Conduct at Meetings

If it is determined by the Board that a conflict of interest exists, the Director or Officer will not attend any part of a meeting during which the issue in question is discussed unless the Board requires additional information from the Director or Officer and cannot vote on the issue or matter that has resulted in the Conflict of Interest.

In accordance with the OBCA, if no quorum exists for the purpose of voting on a resolution to approve a contract or transaction only because a Director is not permitted to be present at that portion of the meeting by reason of a conflict, the remaining Directors constitute quorum for the purposes of such a vote. The requirement to disclose and to refrain from voting is intended to protect both the Corporation and the Director or Officer. If the transaction was reasonable and fair to the Corporation at the time it was entered into, such disclosure protects the Director or Officer from:

- having to account to the Corporation or to its shareholder for any gain that the Director or Officer may have realized on the transaction;
- having the transaction voided at the initiative of the shareholder.

Directors Applying for Employment with the Corporation

The Corporation is committed to enhancing and strengthening the high quality of the employees within the organization. When positions become available, the Corporation is committed to hiring those individuals best qualified to fill those positions.

The Board recognizes that from time to time certain employment opportunities may be of interest to an individual Director and such Directors may be desirous of applying for such positions (the "Affected Director"). Should the Affected Director become interested in applying for a position with GHESI or any of its subsidiaries, the Affected Director shall forthwith notify the Corporation of which s/he is a Director in writing and shall take all steps as prescribed by the OBCA to remove himself/herself from any meeting or discussion relating to or involving such employment position. In addition, the Affected Director may, in the discretion of the Board, be required to tender his/her resignation from the Board or take a leave of absence from the Board until such time as the employment position or material contract is awarded or transaction completed.

In exercising its discretion concerning the Affected Director, the Board shall have regard to the reputation of GHESI and its subsidiary companies, the fairness and transparency of its processes, the ability of Guelph Hydro Electric Systems Inc. to maintain compliance with the Affiliate Relationships Code, ensuring that its processes and procedures are not prejudiced or affected by inability to ensure quorum, and to maintain effective governance practices.

An Affected Director on Leave of Absence shall not attend any meeting of the Board or meeting with the Shareholder of the company nor shall the Affected Director receive minutes of meeting or materials distributed to the Board during such leave of absence.

Duties while on a Leave of Absence

A Leave of Absence taken by a Director does not absolve the Director of his/her duties under the law. A Director who is not present at a meeting at which a resolution is passed or action taken is deemed to have consented thereto unless within seven days after becoming aware of the resolution the Director causes his or her dissent to be

placed in the minutes of the meeting or sends his or her dissent by registered mail or delivers it to the registered office of GHESI or the subsidiary as the case may be. It is understood that a Director has a duty to manage and act in the best interests of the Corporation.

An Affected Director who takes a Leave of Absence in accordance with this policy recognizes that he/she, upon termination of the leave of absence, must review the minutes of the meetings that occurred during the Leave of Absence as soon as possible and register any dissents as outlined above.

If the Affected Director is awarded the employment position, the Affected Director shall resign as a Director immediately. Such resignation does not absolve the Director from the responsibility of reviewing minutes of the meetings that occurred during the Leave of Absence and registering any dissents.

Should the Affected Director have taken a Leave of Absence pursuant to this policy and not be awarded the employment position or material contract the Board may require that the Affected Director wait during a "cooling off" period of a length to be determined by the Board prior to returning from his/her leave of absence.

It is recognized that nothing in this policy shall limit the right of the Shareholder to remove and replace the Affected Director at any time.

Employees Applying for a Director Position

GHESI and its subsidiaries are committed to enhancing and strengthening the high quality of the Directors on the Boards. When Director positions become available, GHESI and its subsidiaries are committed to having the best qualified individuals appointed to fill those positions.

The Board recognizes that from time to time a Director position may be of interest to an employee of the Corporation. If the employee is involved in the Board committee that selects and/or recommends Directors to the Board, that employee will be removed from that role until the Director position is filled.

An employee must resign his/her employment position with the Corporation prior to being appointed to a Board.

Outside Employment and Interests

No Director or Officer shall have any interest, financial or otherwise, direct or indirect, or engage in any business or transaction or professional activity, which is in conflict with the proper discharge of his/her duties.

Acceptance of Gifts

No Director or Officer should accept any gift, favour, service or other thing of value under circumstances from which it might be reasonably inferred that such gift, service or other thing of value was given or offered for the purpose of influencing him/her in the discharge of his/her duties.

Use of Position or Information

No Director or Officer shall use for the purpose of personal gain, directly or indirectly, any information not generally available to members of the public which he/she receives or acquires in the course of and by reason of his/her duties. No Director or Officer shall use his/her position for personal benefit or to benefit any member of his/her family.

Examples of Conflict Scenarios

The following illustrative scenarios assume you are a Director of GHESI. In each case the situation involves a conflict of interest:

Concurrently with your role as a director of GHESI you have investments in other businesses. One of these businesses is a building contractor, Able Contractors, which has bid on a GHESI construction project. You fail to disclose your interest and vote to tender the contract to Able.

GTA Construction, an independent entrepreneur owned contractor, is known to regularly bid on contracts for GHESI projects. The principal of GTA Construction invites you to accompany him, all expenses paid, to a luxurious Super Bowl weekend.

Concurrently with your role as a GHESI Director in your full time business you are a strategy consultant to ST Meters which is bidding on a GHESI project. You have been retained by ST Meters to advise the latter on its plan to be the successful bidder.

In the course of a GHESI Board meeting you learn of a potentially lucrative CHP business opportunity which will not be pursued by GHESI in light of constrained resources. Over coffee, you casually advise your neighbor, an executive with Cambridge Hydro, of the opportunity which GHESI has abandoned.

Company Ethics and Values Policy

The provisions of Company Policy HRG-19, Company Ethics and Values, are fully applicable to Directors of the Company who are required to sign off annually on compliance with such Policy as set forth therein. However, to the extent that the provisions of Policy BD-1 and Policy HRG-19 may conflict with respect to addressing any particular situation, the provisions of this Policy BD-1 shall govern.

APPENDIX I

Excerpted from ***Business Corporations Act*** R.S.O. 1990, CHAPTER B.16

Disclosure: conflict of interest

132. (1) A director or officer of a corporation who,

(a) is a party to a material contract or transaction or proposed material contract or transaction with the corporation; or

(b) is a director or an officer of, or has a material interest in, any person who is a party to a material contract or transaction or proposed material contract or transaction with the corporation,

shall disclose in writing to the corporation or request to have entered in the minutes of meetings of directors the nature and extent of his or her interest. R.S.O. 1990, c. B.16, s. 132 (1).

by director

(2) The disclosure required by subsection (1) shall be made, in the case of a director,

(a) at the meeting at which a proposed contract or transaction is first considered;

(b) if the director was not then interested in a proposed contract or transaction, at the first meeting after he or she becomes so interested;

(c) if the director becomes interested after a contract is made or a transaction is entered into, at the first meeting after he or she becomes so interested; or

(d) if a person who is interested in a contract or transaction later becomes a director, at the first meeting after he or she becomes a director. R.S.O. 1990, c. B.16, s. 132 (2).

by officer

(3) The disclosure required by subsection (1) shall be made, in the case of an officer who is not a director,

(a) forthwith after the officer becomes aware that the contract or transaction or proposed contract or transaction is to be considered or has been considered at a meeting of directors;

(b) if the officer becomes interested after a contract is made or a transaction is entered into, forthwith after he or she becomes so interested; or

(c) if a person who is interested in a contract or transaction later becomes an officer, forthwith after he or she becomes an officer. R.S.O. 1990, c. B.16, s. 132 (3).

Where contract or transaction does not require approval

(4) Despite subsections (2) and (3), where subsection (1) applies to a director or officer in respect of a material contract or transaction or proposed material contract or transaction that, in the ordinary course of the corporation's business, would not require approval by the directors or shareholders, the director or officer shall disclose in writing to the corporation or request to have entered in the minutes of meetings of directors the nature and extent of his or her interest forthwith after the director or officer becomes aware of the contract or transaction or proposed contract or transaction. R.S.O. 1990, c. B.16, s. 132 (4).

Director not to vote

(5) A director referred to in subsection (1) shall not attend any part of a meeting of directors during which the contract or transaction is discussed and shall not vote on any resolution to approve the contract or transaction unless the contract or transaction is,

(a) one relating primarily to his or her remuneration as a director of the corporation or an affiliate;

(b) one for indemnity or insurance under section 136; or

(c) one with an affiliate. 2006, c. 34, Sched. B, s. 23 (1).

Remaining directors deemed quorum

(5.1) If no quorum exists for the purpose of voting on a resolution to approve a contract or transaction only because a director is not permitted to be present at the meeting by reason of subsection (5), the remaining directors shall be deemed to constitute a quorum for the purposes of voting on the resolution. 2006, c. 34, Sched. B, s. 23 (2).

Shareholder approval

(5.2) Where all of the directors are required to make disclosure under subsection (1), the contract or transaction may be approved only by the shareholders. 2006, c. 34, Sched. B, s. 23 (2).

Continuing disclosure

(6) For the purposes of this section, a general notice to the directors by a director or officer disclosing that he or she is a director or officer of or has a material interest in a person, or that there has been a material change in the director's or officer's interest in the person, and is to be regarded as interested in any contract made or any transaction entered into with that person, is sufficient disclosure of interest in relation to any such contract or transaction. 2006, c. 34, Sched. B, s. 23 (3).

Effect of disclosure

(7) Where a material contract is made or a material transaction is entered into between a corporation and a director or officer of the corporation, or between a corporation and another person of which a director or officer of the corporation is a director or officer or in which he or she has a material interest,

(a) the director or officer is not accountable to the corporation or its shareholders for any profit or gain realized from the contract or transaction; and

(b) the contract or transaction is neither void nor voidable,

by reason only of that relationship or by reason only that the director is present at or is counted to determine the presence of a quorum at the meeting of directors that authorized the contract or transaction, if the director or officer disclosed his or her interest in accordance with subsection (2), (3), (4) or (6), as the case may be, and the contract or transaction was reasonable and fair to the corporation at the time it was so approved. R.S.O. 1990, c. B.16, s. 132 (7).

Confirmation by shareholders

(8) Despite anything in this section, a director or officer, acting honestly and in good faith, is not accountable to the corporation or to its shareholders for any profit or gain realized from any such contract or transaction by reason only of his or her holding the office of director or officer, and the contract or transaction, if it was reasonable and fair to the corporation at the time it was approved, is not by reason only of the director's or officer's interest therein void or voidable, where,

(a) the contract or transaction is confirmed or approved by special resolution at a meeting of the shareholders duly called for that purpose; and

(b) the nature and extent of the director's or officer's interest in the contract or transaction are disclosed in reasonable detail in the notice calling the meeting or in the information circular required by section 112. R.S.O. 1990, c. B.16, s. 132 (8).

Court setting aside contract

(9) Subject to subsections (7) and (8), where a director or officer of a corporation fails to disclose his or her interest in a material contract or transaction in accordance with this section or otherwise fails to comply with this section, the corporation or a shareholder of the corporation, or, in the case of an offering corporation, the Commission may apply to the court for an order setting aside the contract or transaction and directing that the director or officer account to the corporation for any profit or gain realized and upon such application the court may so order or make such other order as it thinks fit. R.S.O. 1990, c. B.16, s. 132 (9).

APPENDIX II

Situations Giving Rise to Conflicts of Interest for Directors/Officers of a Corporation

Case	Background	Outcome
Aberdeen Railway v. Blaikie Brothers, [1843-60] All E.R. Rep. 249 (U.K.H.L.)	- Classic case on directors' conflicts of interest. - Aberdeen Railway contracted with Blaikie Bros. to supply Aberdeen Railway with a quantity of iron chairs. - At the time the contract was entered into, John Blaikie was both a partner of Blaikie Bros. and a director of Aberdeen Railway.	- Where a director of a corporation enters into a contract on behalf of the corporation with the partnership of which he is one of the members, the corporation is entitled to avoid the contract. - This is because the director's duty to his corporation imposes on him the obligation of obtaining the goods at the lowest possible price, while his personal interest leads him in the entirely opposite direction, inducing him to fix the price as high as possible.
Eden v. Ridsdales Railway Lamp & Lightning Co. (1889), 23 Q.B.D. 368 (U.K.C.A.)	- One of the directors of a corporation received a gift of shares by the corporation's promoter. - The promoter was in the process of selling a business to the corporation.	- The director was required to account for the shares to the corporation. - If a director receives a gift from a vendor at a time when the contract of sale is not completed, the director cannot retain the gift against the company, but must either hand it over to the company or pay its highest value.
Transvaal Lands Co. v. New Belgium (Transvaal) Land & Development Co., [1914] 2 Ch. 488	- Another classic case on directors' conflicts of interest. - The company's articles required "interested directors" to disclose their interest and abstain from voting. - One interested director abstained from voting but did not declare his interest. Another director voted even though he was a trustee of certain shares of the party with whom the company was contracting.	- The company was entitled to avoid the transaction. - Where the director of a corporation has an interest as a shareholder in another corporate body which is entering into an agreement with the corporation of which he is a director, the director is precluded from dealing on behalf of the corporation with the corporate body. - The director is also precluded from entering into an agreement in which the director has a personal interest conflicting, or which possibly may conflict, with the interests of those whom he is bound by fiduciary duty to protect.

R.P. Clark & Co. (Vancouver) Ltd., Re., [1932] 2 W.W.R. 370 (B.C.C.A.)	- Mrs. Clark transferred her shares in a company to a corporate entity. - The transfer of shares required approval of the board, which was obtained. However, Mrs. Clark's husband was on the board of the company, formed part of the quorum at the meeting at which the resolution was passed, and voted in favour of the resolution.	- The transfer of shares was declared invalid. - Mrs. Clark's husband acted as the business agent for his wife, making all of her business decisions, which put him in a position of conflict.
British Columbia Timber Industries Journal Ltd. v. Black, [1934] 3 D.L.R. 31 (B.C.C.A.)	- The defendant was the manager and director of the plaintiff company, which published a lumber trade journal. He was also the manager and principal shareholder of a company which published an atlas each year. - The defendant caused the plaintiff company's trade journal to provide free advertising space for his company's atlas, without advising the plaintiff.	- The B.C. Court of Appeal found that the defendant had breached his relationship with the plaintiff. - Instead of selling space, the defendant gave it away and the offence was more blameworthy because he did so for his own personal profit.
Bakal v. Petursson, [1953] 4 D.L.R. 449 (S.C.C)	Certain directors transferred the corporation's business, leasehold premises and most of its assets to themselves for no consideration.	The Supreme Court of Canada found that the transactions were fraudulent and voidable at the instance of the corporation.
Canadian Aero Service Ltd. v. O'Malley, [1973] S.C.J. No. 97 (S.C.C.)	- The plaintiff/appellant Canaero claimed that the defendants improperly took the fruits of a corporate opportunity in which Canaero had a prior and continuing interest. - Canaero alleged that two of the defendants were directors or officers of Canaero who subsequently took the corporate opportunity for themselves, in breach of their fiduciary duty to Canaero.	- The Supreme Court allowed the appeal and found a breach of fiduciary duty against two of the defendants. - A director or a senior officer is precluded from obtaining either secretly or without the approval of the corporation, any property or business advantage belonging to the company or for whom it has been negotiating. - "…this ethic disqualifies a director or senior officer from usurping for himself or diverting to another person or company with whom or with which he is associated a maturing business opportunity which his company is actively pursuing; he is also precluded from so acting even after his resignation where the resignation may fairly be said to

		have been prompted or influenced by a wish to acquire from himself the opportunity sought by the company, or where it was his position with the company rather than a fresh initiative that led him to the opportunity which he later acquired." [page 9]
Exide Canada Inc. v. Hilts (2005), 11 B.L.R. (4th) 311 (Ont. Sup. Ct.)	- A motion to set aside a contract under section 132 of the *Ontario Business Corporations Act* (*OBCA*). - The moving party, Exide, alleged that that the two defendants, while officers and directors of Exide, caused Exide to enter into a contract with Ryad, which was owned by one of the defendants. - Exide alleged that the defendants did not disclose to Exide that they had misappropriated over a million dollars of Exide's funds and directed $300,000 of those funds to Ryad.	- The court set aside the contract - A "material interest" (under section 132 of the *OBCA*) includes a personal relationship with the outside party to a material contract. Even where a director has no monetary interest but the negotiation involves a close personal friend of one of the directors, the transaction ought to be suspect. - In this case the contract was material both financially and in the "broader sense".
Zysko v. Thorarinson 2003 ABQB 911	- Two of the three directors of E.S.J. Equities granted a mortgage and other security of one million dollars. - The borrower was E.S.J. Equities Inc. and the lender was Bluebird Springs Inc. (one of the directors was the sole shareholder of the voting shares of the latter).	- The court found that there was no disclosure of the mortgage to the third director until the director's meeting and occurred in a manner contrary to section 120 of the Alberta *Business Corporations Act* (requiring disclosure of a material contract). - "Material" is a question of fact extending beyond the more commonly held notion of financially material. What is meant by material contract is that if there is a possibility that a director was to benefit from the contract more than *de minimis* then the transaction should be disclosed to the corporation. - There should be disclosure whenever the director or officer's involvement might be relevant to the corporation's decision making process. If the corporation would undertake additional due diligence to determine whether the contract

		or any of its terms is truly in its best interest or if it would assign another director or officer to handle the negotiations, then the contract is material and must be disclosed.
In the United States, Hewlett-Packard (HP) is suing its former CEO Mark Hurd, after he joined rival Oracle. HP alleges that Hurd will not be able to perform his duties for Oracle without using and disclosing HP's trade secrets and confidential information to others. The civil complaint was filed at the Superior Court in Santa Clara County in September 2010.		

Appendix III

1) A director ("the Director") involved in a situation where there is, may be, or be perceived to be a conflict of interest shall promptly disclose the situation giving rise to the conflict of interest, or perceived conflict, in confidential writing to the Board Chair. As a general rule the Board Chair shall promptly advise and collaborate with the Chair, Governance to assess whether the situation indeed does warrant further action.

2) The Board and Governance Chairs shall promptly determine whether the situation disclosed represents an actual conflict or a potential conflict and in that regard may request additional information from the Director and may solicit and rely on confidential advice of third parties, including GHESI officers, external counsel or other service providers in their discretion.

3) If Board and Governance Chairs are satisfied on a preliminary basis that the situation does present an actual or potential conflict the Director shall be so advised and may be requested to recuse him or herself from all or part of Board and Committee deliberations until final resolution of the matter by the full Board. If, on the other hand the Board and Governance Chairs are satisfied that the situation does not present an actual or potential conflict the Director shall be so advised and no further action shall be required on the part of the Director who shall be entitled to continue to serve his or her term unencumbered. In addition, the Board Chair shall report to the Board at its next scheduled meeting that it has considered a potential conflict of interest on the part of a Director and shall state the reasons the Board and Governance Chairs have not been satisfied that an actual conflict on the part of the subject Director exists.

4) In the event that the Board and Governance Chairs are satisfied that the situation does disclose a conflict or potential conflict, the Board Chair shall either convene a meeting of the Board to address the situation or, in his or her discretion, request the Board to consider the situation at its next scheduled meeting. The Board shall receive a full report, orally or in writing in its discretion, from the Board and Governance Chairs and shall make a determination as to the existence of a conflict or potential conflict.

5) In either event the Board may issue to the Director such directive as is reasonable in the circumstances including resignation of the Director from the

Board or recusal from meetings of the Board or committees for such period of time as may be appropriate in the circumstances or such other remedy as the Board in its discretion elects.

6) In the event that the Board Chair or Governance Chair is the particular Director personally concerned with a situation giving rise to a conflict of interest or perceived conflict of interest, as set forth in paragraph 1 above, then this procedure shall be deemed to refer to the vice Chair of the Board or the vice Chair of Governance, as the case may be, in lieu of the Chair of the Board or the Chair of Governance.